As submitted to the Securities and Exchange Commission confidentially on January 30, 2013
As filed with the Securities and Exchange Commission on , 2013

Registration No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-1

REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

Chimerix, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**2834**	**33-0903395**
(State or Other Jurisdiction of Incorporation or Organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

2505 Meridian Parkway, Suite 340
Durham, NC 27713
(919) 806-1074

(Address, Including Zip Code, and Telephone Number,
Including Area Code, of Registrant's Principal Executive Offices)

Kenneth I. Moch
President and Chief Executive Officer
Chimerix, Inc.
2505 Meridian Parkway, Suite 340
Durham, NC 27713
(919) 806-1074

(Name, Address, Including Zip Code, and Telephone Number,
Including Area Code, of Agent for Service)

Copies to:

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Cooley LLP	**Senior Vice President and Chief Financial Officer**	**Davis Polk & Wardwell LLP**
4401 Eastgate Mall	**Chimerix, Inc.**	**450 Lexington Avenue**
San Diego, CA 92121	**2505 Meridian Parkway, Suite 340**	**New York, NY 10017**
(858) 550-6000	**Durham, NC 27713**	**(212) 450-4000**
	(919) 806-1074	

Approximate date of commencement of proposed sale to the public: **As soon as practicable after the effective date of this registration statement.**

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended (the "Securities Act"), check the following box. o

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer o	Accelerated filer o
Non-accelerated filer x (Do not check if a smaller reporting company)	Smaller reporting company o

TABLE OF CONTENTS

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Proposed maximum aggregate offering price[(1)]	Amount of registration fee
Common Stock, $0.001 par value per share	$	$

(1) Estimated solely for the purpose of calculating the amount of the registration fee in accordance with Rule 457(o) under the Securities Act. Includes the offering price of shares that the underwriters have the option to purchase to cover over-allotments, if any.

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

TABLE OF CONTENTS

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and we are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

PROSPECTUS (Subject to Completion)
Issued , 2013

Shares

COMMON STOCK

Chimerix, Inc. is offering shares of its common stock. This is our initial public offering and no public market currently exists for our shares. We anticipate that the initial public offering price of our common stock will be between $ and $ per share.

We have applied to list our common stock on the Nasdaq Global Market under the symbol CMRX.

We are an emerging growth company as that term is used in the Jumpstart Our Business Startups Act of 2012 and, as such, have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings.

Investing in our common stock involves risks. See "Risk Factors" beginning on page 9.

PRICE $ A SHARE

	Price to Public	*Underwriting Discounts and Commissions*	*Proceeds to Company*
Per Share	*$*	*$*	*$*
Total	*$*	*$*	*$*

Chimerix, Inc. has granted the underwriters the right to purchase up to an additional shares of common stock to cover over-allotments.

The Securities and Exchange Commission and state securities regulators have not approved or disapproved these securities, or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares of common stock to purchasers on , 2013.

MORGAN STANLEY COWEN AND COMPANY

WILLIAM BLAIR LAZARD CAPITAL MARKETS

, 2013

TABLE OF CONTENTS

Neither we nor any of the underwriters has authorized anyone to provide you with information different from, or in addition to, that contained in this prospectus or any free writing prospectus prepared by or on behalf of us or to which we may have referred you in connection with this offering. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. Neither we nor any of the underwriters is making an offer to sell or seeking offers to buy these securities in any jurisdiction where or to any person to whom the offer or sale is not permitted. The information in this prospectus is accurate only as of the date on the front cover of this prospectus and the information in any free writing prospectus that we may provide you in connection with this offering is accurate only as of the date of that free writing prospectus. Our business, financial condition, results of operations and future growth prospects may have changed since those dates.

Through and including , 2013 (25 days after the commencement of this offering), all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This delivery is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to their unsold allotments or subscriptions.

This prospectus includes statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties. Industry publications and third-party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. While we believe these industry publications and third-party research, surveys and studies are reliable, we have not independently verified such data.

For investors outside the United States: neither we nor any of the underwriters has done anything that would permit this offering or possession or distribution of this prospectus or any free writing prospectus we may provide to you in connection with this offering in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourselves about and to observe any restrictions relating to this offering and the distribution of this prospectus and any such free writing prospectus outside of the United States.

PROSPECTUS SUMMARY

This summary highlights information contained in other parts of this prospectus. Because it is only a summary, it does not contain all of the information that you should consider before investing in shares of our common stock and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere in this prospectus. You should read the entire prospectus carefully, especially "Risk Factors" and our financial statements and the related notes, before deciding to buy shares of our common stock. Unless the context requires otherwise, references in this prospectus to "Chimerix", the "Company", "we", "us" and "our" refer to Chimerix, Inc.

Overview

Chimerix is a biopharmaceutical company committed to the discovery, development and commercialization of novel, oral antiviral therapeutics that are designed to transform patient care in areas of high unmet medical need. Our proprietary lipid technology has given rise to two clinical-stage compounds, CMX001 and CMX157, which have demonstrated the potential for enhanced antiviral activity and safety in convenient, orally administered dosing regimens. We have worldwide rights to our lead product candidate, CMX001, and anticipate beginning the Phase 3 SUPPRESS study in 2013 for the prevention of cytomegalovirus (CMV) infection in hematopoietic stem cell transplant (HSCT) recipients. We intend to develop CMX001 as the first broad-spectrum antiviral against double-stranded DNA (dsDNA) viruses. Our second clinical-stage compound, CMX157, is a Phase 1 product candidate for the treatment of HIV and was licensed to Merck, Sharp & Dohme Corp. (Merck) in 2012.

CMX001 is an oral nucleotide analog lipid-conjugate that utilizes our proprietary technology to deliver high intracellular concentrations of a potent antiviral drug, cidofovir-diphosphate (CDV-PP), which blocks replication of dsDNA viruses. CMX001 is absorbed through the gut and remains intact in the plasma. Circulating CMX001 is readily taken up by and delivered into cells, where it is cleaved to cidofovir and rapidly converted to CDV-PP. In contrast, an FDA approved intravenous formulation of cidofovir, Vistide®, requires high plasma concentrations to deliver cidofovir into cells, but its use is limited due to a high risk of kidney damage and bone marrow suppression.

Double-stranded DNA viral infections such as CMV are commonly transmitted in childhood and early adulthood, and generally remain latent with a functioning immune system. However, in immunocompromised patients, such as HSCT or solid organ transplant (SOT) recipients, CMV and other dsDNA viral infections are associated with significant morbidity, mortality, graft rejection and co-infection with other opportunistic infections. CMV, a human herpesvirus, is the most common infectious pathogen in HSCT, and can result in life-threatening pneumonia or other organ involvement, particularly in the first 100 days following transplant when the immune system is most vulnerable. *In vitro*, CMX001 has shown broad-spectrum antiviral activity against all families of dsDNA viruses that cause human disease, including herpesviruses, adenoviruses (AdV), polyomaviruses such as BK virus (BKV), papillomaviruses and orthopoxviruses.

In the HSCT setting, there are three paradigms for addressing viral infections: prevention, preemptive therapy and treatment of disease. Prevention is the administration of an antiviral to at-risk patients to avoid reactivation of a latent virus. Preemptive therapy is the initiation of antiviral(s) only after detection of a specific virus in the blood (viremia) in an asymptomatic patient. Treatment is the watch-and-wait approach of initiating antiviral therapy after the virus is detected in an organ system where clinical signs or symptoms are present.

No drugs are approved for prevention of CMV in HSCT recipients, primarily due to significant renal and hematological side effects. We believe that a safe and well-tolerated antiviral with demonstrated efficacy in prevention settings would provide a new standard of care for immunocompromised patients. In HSCT, a safe and effective therapy for CMV prevention could potentially replace the current practice of frequent monitoring for CMV viremia and initiation of anti-CMV preemptive therapy following detection. In addition, we believe that an antiviral that could reduce the frequency of other dsDNA viruses and avoid increasing the risk of other opportunistic infections could provide measureable clinical and pharmacoeconomic benefits for patients and the health care system.

Chimerix demonstrated the potential of CMX001 in a 230-patient Phase 2 dose-escalation study for the prevention of CMV reactivation in HSCT recipients. In this study, CMX001 or placebo was administered to HSCT recipients from stem cell engraftment through Week 13 post-transplant. A reduction of more than 50% in risk of CMV infection (the pre-defined protocol criteria for demonstrated clinical success) was observed for the subjects who received CMX001 in 100 mg doses twice weekly (BIW). Ten percent of subjects (five of 50 subjects) in the CMX001 100 mg BIW cohort met the primary endpoint, CMV disease or a positive quantitative blood test for CMV at the end of the dosing period, versus 37% of subjects (22 of 59 subjects) in the placebo cohort (p=0.002, where the p-value is the statistical probability of a result not due to chance alone). CMX001's dose-limiting toxicity was diarrhea, which was addressed with a Safety Monitoring and Management Plan (SMMP) incorporated in the final Phase 2 cohort and in subsequent studies, and which will be implemented in SUPPRESS. There was no evidence of kidney, hematologic or bone marrow toxicity in this study.

The results of this Phase 2 study, together with CMX001's overall preclinical and clinical profile, which includes a safety database of more than 800 subjects exposed to CMX001 in controlled and uncontrolled clinical studies, support the progression to a Phase 3 study of CMX001 for the prevention of CMV infection in high-risk HSCT recipients. Discussions with the FDA have resulted in a design for SUPPRESS, which we intend to initiate in 2013, pending FDA approval of our investigational new drug application (IND). The primary endpoint is a composite endpoint of either (i) CMV disease, or (ii) initiation of anti-CMV preemptive therapy triggered by a positive test for CMV in the blood (viremia), and will be assessed through Week 24 post-transplant. We intend to enroll 540 at-risk (i.e., with latent CMV infection) HSCT recipients who will be randomized to receive one of two twice-weekly doses of CMX001 or placebo. Secondary endpoints include pharmacoeconomics and the incidence of disease and reactivation of other herpesviruses, AdV, and BKV.

We intend to submit a new drug application (NDA) under an accelerated approval pathway seeking regulatory approval to market CMX001 in the United States. We also intend to seek fast track designation to support our development and commercialization strategy of CMX001 for the prevention of CMV infection. We have previously received fast track designation from the FDA for the AdV and smallpox indications for CMX001.

We believe that there is a significant commercial opportunity for an antiviral such as CMX001 with broad-spectrum activity against dsDNA viruses. According to the Center for International Blood and Marrow Transplant Research and the Organ Procurement and Transplantation Network, more than 20,000 HSCTs and 28,000 SOTs are performed annually in the United States, with similar numbers of transplants performed annually in Europe according to the European Group for Blood and Marrow Transplantation and the World Health Organization. More than 65% of stem cell transplant patients are at increased risk of CMV infection due to prior exposure to CMV (*i.e.*, seropositive). Outside the transplant population, many factors are influencing the epidemiology of dsDNA viral infections, including the use of potent immunosuppressive therapies in autoimmune and other diseases. Since 2009, Chimerix has made CMX001 available under expanded access regulations to over 80 transplant centers worldwide for the treatment of over 430 patients with life-threatening dsDNA viral infections and no satisfactory alternative treatment options, reflecting the unmet medical need in this therapeutic area. Our CMX001 Compassionate Use Program consists of the emergency investigational new drug (EIND) program which has provided treatment to 230 individuals and Study 350, the expanded access study which enrolled 215 patients meeting similar inclusion criteria as the EINDs.

If CMX001 obtains regulatory approval, we intend to build our own sales force and to commercialize CMX001. In the United States, approximately 200 institutions perform transplants, of which approximately 75% perform HSCT and 75% perform SOT. As a result, we believe we can commercialize CMX001 for prevention of CMV in HSCT recipients in the United States and Canada with a relatively small marketing and specialty sales force infrastructure of approximately 50 employees.

We are also evaluating the potential for CMX001 as a preemptive therapy for AdV infections. In December 2012, we completed enrollment of a Phase 2 placebo-controlled study of preemptive therapy for AdV viremia in 48 pediatric and adult HSCT recipients. Data on the mortality and disease endpoints for this Phase 2 study are expected during the second half of 2013. Future clinical development for CMX001 may

include a Phase 3 CMV prevention study in pediatric HSCT recipients, as well as the possible development of CMX001 for BKV infection in HSCT and SOT recipients.

CMX157, our second clinical stage compound, is an oral nucleotide analog lipid-conjugate in Phase 1 development for the treatment of HIV infection. In July 2012, we granted Merck an exclusive worldwide license to develop and commercialize CMX157 for all human uses. Merck is responsible for all development and marketing activities for CMX157 on a worldwide basis.

Our Strategy

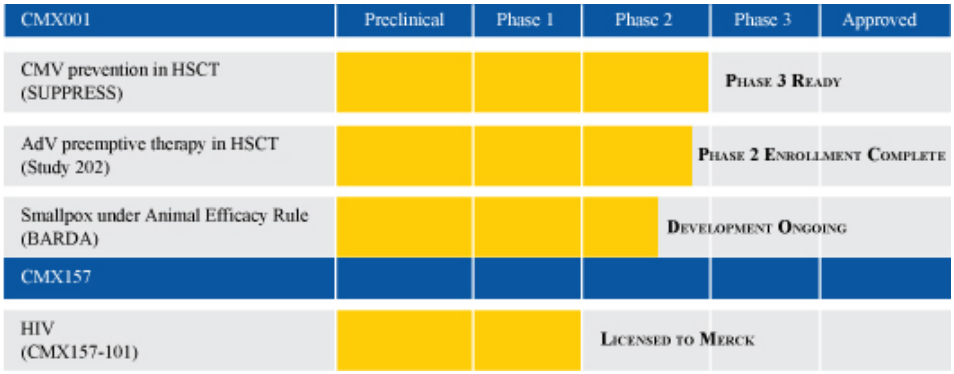
Our strategy is to discover, develop, and commercialize novel oral antiviral therapeutics in areas of significant unmet medical need. Key elements of our strategy include:

- advancing CMX001 through Phase 3 clinical development for the prevention of CMV infection in at-risk patients following HSCT;
- expanding CMX001's ability to address the unmet need in HSCT recipients through a pediatric CMV prevention study;
- leveraging the broad-spectrum profile of CMX001 in other indications including AdV and/or BKV, and in other patient populations, such as SOT recipients;
- obtaining regulatory approval for marketing of CMX001 for the prevention of CMV in the United States, Canada and key European markets;
- commercializing CMX001, initially in the United States and Canada, with a targeted marketing and specialty sales force;
- continuing development of CMX001 as a potential medical countermeasure against smallpox, subject to continuing government support, including from the Biomedical Advanced Research and Development Authority (BARDA); and
- advancing compounds from the Chimerix Chemical Library through IND-enabling studies and potential clinical development and/or partnerships.

We may enter into additional collaborations to implement our strategy.

Our Product Candidates

The following chart depicts our product candidates, their indications, and their current stage of development:



Risks Associated with Our Business

Our business is subject to numerous risks, as more fully described in the section entitled "Risk Factors" immediately following this prospectus summary. You should read these risks before you invest in our common stock. We may be unable, for many reasons, including those that are beyond our control, to implement our business strategy. In particular, risks associated with our business include:

- We have incurred significant losses since our inception. We anticipate that we will continue to incur significant losses for the foreseeable future, and we may never achieve or maintain profitability. We have never generated any revenue from sales of products and may never be profitable. We may need to raise additional capital in connection with our continuing operations, which may cause dilution to our existing stockholders, restrict our operations, or require us to relinquish rights to our technologies or product candidates.
- We depend on the success of our lead product candidate, CMX001, which is still in clinical development, and may not obtain regulatory approval or be successfully commercialized.
- We rely on third party manufacturers to produce our preclinical and clinical drug supplies, and we intend to rely on third parties to produce commercial supplies of any approved product candidates.
- If we are unable to obtain or protect intellectual property rights related to our products and product candidates, we may not be able to compete effectively in our market.
- We will need to expand our organization and we may experience difficulties in managing this growth, which could disrupt our operations.
- Our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel.

Corporate Information

We were incorporated in Delaware in April 2000. Our principal executive offices are located at 2505 Meridian Parkway, Suite 340, Durham, North Carolina 27713, and our telephone number is (919) 806-1074. Our corporate website address is *www.chimerix.com*. Information contained on or accessible through our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is an inactive textual reference only.

We have obtained a registered trademark for Chimerix® in the United States. This prospectus contains references to our trademarks and to trademarks belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus, including logos, artwork and other visual displays, may appear without the ® or ^{TM} symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other companies' trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of this offering, (b) in which we have total annual gross revenue of at least $1.0 billion, or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds $700.0 million as of the prior June 30th, and (2) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period. We refer to the Jumpstart Our Business Startups Act of 2012 in this prospectus as the "JOBS Act," and references in this prospectus to "emerging growth company" shall have the meaning associated with it in the JOBS Act.

THE OFFERING

Issuer	Chimerix, Inc., a Delaware corporation
Common stock offered by us	shares
Common stock to be outstanding after this offering	shares
Over-allotment option	We have granted to the underwriters the option, exercisable for 30 days from the date of this prospectus, to purchase up to additional shares of common stock.
Use of proceeds	We estimate that we will receive net proceeds of approximately $ million (or approximately $ million if the underwriters' over-allotment option is exercised in full) from the sale of the shares of common stock offered by us in this offering, based on an assumed initial public offering price of $ per share (the mid-point of the price range set forth on the cover page of this prospectus), and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. We intend to use the net proceeds of this offering for research and development expenses related to CMX001, general operating expenses, debt service payments and other working capital purposes. See "Use of Proceeds."
Risk factors	You should read the "Risk Factors" section of this prospectus for a discussion of certain of the factors to consider carefully before deciding to purchase any shares of our common stock.
Proposed Nasdaq Global Market symbol	CMRX

The number of shares of our common stock to be outstanding after this offering is based on 56,842,579 shares of common stock outstanding as of September 30, 2012, and excludes:

- 9,370,011 shares of common stock issuable upon the exercise of outstanding stock options as of September 30, 2012, at a weighted-average exercise price of $0.64 per share;
- 155,288 shares of common stock issuable pursuant to outstanding restricted stock units as of September 30, 2012, which will vest in connection with the consummation of this offering;
- 5,727,595 shares of common stock issuable upon the exercise of outstanding warrants as of September 30, 2012, at a weighted-average exercise price of $2.04 per share; and
- shares of common stock reserved for future issuance under our 2013 equity incentive plan (the 2013 plan) (including 1,361,527 shares of common stock reserved for issuance under our 2012 equity incentive plan (the 2012 plan) as of September 30, 2012, which shares will be added to the shares reserved under the 2013 plan upon its effectiveness), which will become effective upon the closing of this offering.

Unless otherwise indicated, all information contained in this prospectus assumes:

- the conversion of all our outstanding preferred stock as of September 30, 2012, into an aggregate of 51,404,514 shares of common stock in connection with the closing of this offering;
- the issuance of shares of common stock to holders of our Series F preferred stock upon closing of this offering in respect of the accumulated dividends on our Series F preferred stock through to the closing date of this offering (based on an assumed closing date of , 2013);

- the adjustment of outstanding warrants to purchase shares of our equity securities into warrants to purchase 5,727,595 shares of common stock upon the closing of this offering, and no exercise of any such warrants;
- no exercise by the underwriters of their over-allotment option to purchase up to an additional shares of our common stock;
- the filing of our restated certificate of incorporation and the adoption of our amended and restated bylaws immediately prior to the closing of this offering; and
- a -for- reverse stock split of our common stock effected immediately prior to the closing of this offering.

SUMMARY FINANCIAL DATA

The following summary financial data should be read together with our financial statements and related notes, "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected in the future and results of interim periods are not necessarily indicative of the results for the entire year.

We derived the following summary statement of operations data for the years ended December 31, 2009, 2010 and 2011 from our audited financial statements and related notes appearing elsewhere in this prospectus. We derived the following summary statement of operations data for the nine months ended September 30, 2011 and 2012 and balance sheet data as of September 30, 2012, from our unaudited financial statements and related notes appearing elsewhere in this prospectus.

	Year Ended December 31,			Nine Months Ended September 30,	
Statement of Operations Data:	**2009**	**2010**	**2011**	**2011**	**2012**
	(in thousands, except share and per share data)				
				(unaudited)	
Revenues:					
Collaboration and licensing revenues	$ —	$ —	$ 55	$ —	$ 17,445
Contract and grant revenues	7,810	1,715	12,046	6,746	12,694
Total revenues	7,810	1,715	12,101	6,746	30,139
Operating expenses:					
Research and development	14,617	19,413	27,369	20,016	21,713
General and administrative	6,694	7,606	9,724	7,488	7,066
Total operating expenses	21,311	27,019	37,093	27,504	28,779
Income (loss) from operations	(13,501)	(25,304)	(24,992)	(20,758)	1,360
Interest income (expense), net	136	(154)	(212)	(133)	(367)
Fair value adjustment to warrant liability	—	—	(385)	(275)	(1,073)
Other income	25	1	—	—	—
Net loss	(13,340)	(25,457)	(25,589)	(21,166)	(80)
Accretion of redeemable convertible preferred stock	—	—	(9,565)	(8,658)	(2,700)
Net loss attributable to common stockholders	$ (13,340)	$ (25,457)	$ (35,154)	$ (29,824)	$ (2,780)
Basic and diluted net loss per common share[1]	$ (2.71)	$ (4.94)	$ (6.62)	$ (5.61)	$ (0.51)
Shares used to calculate net loss per common share[1]	4,916	5,158	5,312	5,312	5,403
Pro forma net loss per common share, basic and diluted (unaudited)[2]			$		$
Shares used to calculate pro forma net loss per common share, basic and diluted (unaudited)[2]					

(1) See Note 2 to our financial statements appearing elsewhere in this prospectus for an explanation of the method used to calculate the basic and diluted net loss per common share and the number of shares used in the computation of the per share amounts.

(2) The calculations for the unaudited pro forma net loss per common share, basic and diluted, assume the conversion of all our outstanding shares of convertible preferred stock as of September 30, 2012, into an aggregate of 51,404,514 shares of our common stock, and the issuance of shares of common stock to holders of our Series F preferred stock upon closing of this offering in respect of the accumulated dividends on our Series F preferred stock through to the closing date of this offering (based on an assumed closing date of , 2013), as if such conversion and issuance had occurred at the beginning of the period presented, or the issuance date, if later.

	As of September 30, 2012		
	Actual	Pro Forma[3]	Pro Forma as Adjusted[4][5]
		(unaudited)	
		(in thousands)	
Balance Sheet Data:			
Cash and cash equivalents	$ 34,462	$	$
Working capital	29,561		
Total assets	36,952		
Loan payable[6]	14,565		
Redeemable convertible preferred stock warrant liability	7,738		
Redeemable convertible preferred stock	106,066		
Total stockholders' equity (deficit)	(95,315)		

(3) Pro forma amounts reflect the conversion of all our outstanding shares of preferred stock as of September 30, 2012, into an aggregate of 51,404,514 shares of our common stock, and the issuance of shares of common stock to holders of our Series F preferred stock upon closing of this offering in respect of the accumulated dividends on our Series F preferred stock through to the closing date of this offering (based on an assumed closing date of , 2013), and the conversion of our outstanding preferred stock warrants into common stock warrants and the related reclassification of the warrant liability to stockholders' equity (deficit).

(4) Pro forma as adjusted amounts reflect the pro forma conversion adjustments described in footnote (3) above, as well as the sale of shares of our common stock in this offering at an assumed initial public offering price of $ per share (the mid-point of the range set forth on the cover page of this prospectus), and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

(5) A $1.00 increase (decrease) in the assumed initial public offering price would increase (decrease) each of the cash, cash equivalents and marketable securities, working capital, total assets and total stockholders' equity (deficit) by $, $, $ and $, respectively, assuming the number of shares offered by us as stated on the cover of this prospectus remain unchanged and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, a one million share increase (decrease) in the number of shares offered by us, as set forth on the cover of this prospectus, would increase (decrease) each of cash, cash equivalents and marketable securities, working capital, total assets and total stockholders' equity (deficit) by $, $, $ and $, respectively, assuming the assumed initial public offering price of $ per share (the mid-point of the price range set forth on the cover of this prospectus) remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

(6) Loan payable includes the current and long-term portion of our debt, net of debt discount.

RISK FACTORS

An investment in shares of our common stock involves a high degree of risk. You should carefully consider the following information about these risks, together with the other information appearing elsewhere in this prospectus, before deciding to invest in our common stock. The occurrence of any of the following risks could have a material adverse effect on our business, financial condition, results of operations and future growth prospects. In these circumstances, the market price of our common stock could decline, and you may lose all or part of your investment.

Risks Related to Our Financial Condition and Need for Additional Capital

We have incurred significant losses since our inception. We anticipate that we will continue to incur significant losses for the foreseeable future, and we may never achieve or maintain profitability.

We are a biopharmaceutical company focused primarily on developing our lead product candidate, CMX001. We have incurred significant net losses in each year since our inception, including net losses of approximately $13.3 million, $25.5 million and $25.6 million for the fiscal years ended 2009, 2010 and 2011, respectively, and approximately $21.2 million and $80,000 for the nine months ended September 30, 2011 and 2012. As of September 30, 2012, we had an accumulated deficit of $95.3 million.

To date, we have financed our operations primarily through the sale of equity securities and, to a lesser extent, through government funding, licensing fees and debt. We have devoted most of our financial resources to research and development, including our preclinical development activities and clinical trials. We have not completed development of any product candidates. We expect to continue to incur significant and increasing losses and negative cash flows for the foreseeable future. The size of our losses will depend, in part, on the rate of future expenditures and our ability to generate revenues. In particular, we expect to incur substantial and increased expenses as we:

- continue the development of our lead product candidate, CMX001, for the prevention of CMV infection in transplant recipients;
- seek to obtain regulatory approvals for CMX001;
- prepare for the potential commercialization of CMX001;
- scale up manufacturing capabilities to commercialize CMX001 for any indications for which we receive regulatory approval;
- begin outsourcing of the commercial manufacturing of CMX001 for any indications for which we receive regulatory approval;
- establish an infrastructure for the sales, marketing and distribution of CMX001 for any indications for which we receive regulatory approval;
- expand our research and development activities and advance our clinical programs;
- maintain, expand and protect our intellectual property portfolio;
- continue our research and development efforts and seek to discover additional product candidates; and
- add operational, financial and management information systems and personnel, including personnel to support our product development and commercialization efforts and operations as a public company.

To become and remain profitable, we must succeed in developing and eventually commercializing products with significant market potential. This will require us to be successful in a range of challenging activities, including discovering product candidates, completing preclinical testing and clinical trials of our product candidates, obtaining regulatory approval for these product candidates, and manufacturing, marketing and selling those products for which we may obtain regulatory approval. We are only in the preliminary stages of some of these activities.

To date, we have not completed Phase 3 clinical trials or obtained regulatory approval for any of our product candidates, and none of our product candidates have been commercialized. We may never succeed in developing or commercializing any of our product candidates. If our product candidates are not successfully developed or commercialized, or if revenues from any products that do receive regulatory approvals are insufficient, we will not achieve profitability and our business may fail. Even if we successfully obtain regulatory approval to market our product candidates in the United States, our revenues are also dependent upon the size of markets outside of the United States, as well as our ability to obtain market approval and achieve commercial success outside of the United States.

Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would depress the value of our company and could impair our ability to raise capital, expand our business, diversify our product offerings or continue our operations. A decline in the value of our company could cause you to lose all or part of your investment.

Our ability to generate future revenues from product sales is uncertain and depends upon our ability to successfully develop, obtain regulatory approval for, and commercialize our product candidates.

Our ability to generate revenue and achieve profitability depends on our ability, alone or with collaborators, to successfully complete the development, obtain the necessary regulatory approvals and commercialize our product candidates. We do not anticipate generating revenues from sales of our product candidates for the foreseeable future, if ever. Our ability to generate future revenues from product sales depends heavily on our success in:

- obtaining favorable results for and advancing the development of CMX001, initially for the prevention of CMV in HSCT recipients, including successfully initiating and completing our Phase 3 clinical development;
- obtaining United States and foreign regulatory approvals for CMX001;
- launching and commercializing CMX001, including building a sales force and collaborating with third parties;
- achieving broad market acceptance of CMX001 in the medical community and with third-party payors; and
- generating a pipeline of product candidates.

Conducting preclinical testing and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data required to obtain regulatory approval and achieve product sales. Our anticipated development costs would likely increase if we do not obtain favorable results or if development of our product candidates is delayed. In particular, we would likely incur higher costs than we currently anticipate if development of our product candidates is delayed because we are required by the United States Food and Drug Administration (FDA) to perform studies or trials in addition to those that we currently anticipate. Because of the numerous risks and uncertainties associated with pharmaceutical product development, we are unable to predict the timing or amount of any increase in our anticipated development costs.

In addition, our product candidates, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of products that we do not expect to be commercially available for several years, if at all. Even if one or more of our product candidates is approved for commercial sale, we anticipate incurring significant costs in connection with commercialization. As a result, we cannot assure you that we will be able to generate revenues from sales of any approved product candidates, or that we will achieve or maintain profitability even if we do generate sales.

If we fail to obtain additional financing, we could be forced to delay, reduce or eliminate our product development programs, seek corporate partners for the development of our product development programs or relinquish or license on unfavorable terms, our rights to technologies or product candidates.

Developing pharmaceutical products, including conducting preclinical studies and clinical trials, is a time-consuming, expensive and uncertain process that takes years to complete. We expect our research and

development expenses to substantially increase in connection with our ongoing activities, particularly as we advance our clinical programs for CMX001.

We estimate that the net proceeds from this offering will be approximately $ million, assuming an initial public offering price of $ per share (the mid-point of the price range set forth on the cover page of this prospectus) after deducting estimated underwriting discounts and commissions and offering expenses payable by us. Based upon our current operating plan, we believe that the net proceeds from this offering, together with our existing cash, cash equivalents and short-term investments, will enable us to fund our operating expenses and capital requirements at least through mid-2015. However, changing circumstances beyond our control may cause us to consume capital more rapidly than we currently anticipate. For example, our clinical trials may encounter technical, enrollment or other difficulties that could increase our development costs more than we expected, or because the FDA requires us to perform studies or trials in addition to those that we currently anticipate. We may need to raise additional funds if we choose to initiate clinical trials for our product candidates other than CMX001. In any event, we will require additional capital to obtain regulatory approval for, and to commercialize, our product candidates.

Securing additional financing may divert our management from our day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates, including CMX001. In addition, we cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all. If we are unable to raise additional capital when required or on acceptable terms, we may be required to:

- significantly delay, scale back or discontinue the development or commercialization of our product candidates, including CMX001;
- seek corporate partners for CMX001 or any of our other product candidates at an earlier stage than otherwise would be desirable or on terms that are less favorable than might otherwise be available; or
- relinquish or license on unfavorable terms, our rights to technologies or product candidates that we otherwise would seek to develop or commercialize ourselves.

If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we will be prevented from pursuing development and commercialization efforts, which will have a material adverse effect on our business, operating results and prospects and on our ability to develop our product candidates.

Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to our technologies or product candidates.

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings, debt financings, collaborations, strategic alliances, licensing arrangements and other marketing and distribution arrangements. We do not have any committed external source of funds. Under our collaboration and license agreement with Merck, we are entitled to receive milestone and royalty payments if specified events occur, but that agreement is terminable by Merck at any time upon 90 days written notice or, in certain circumstances, immediately upon written notice.

In order to raise additional funds to support our operations, we may sell additional equity or debt securities, enter into collaborations, strategic alliances, or licensing arrangements or other marketing or distribution arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a stockholder. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures, and declaring dividends, and will impose limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business.

If we raise additional funds through collaborations, strategic alliances, or licensing arrangements or other marketing or distribution arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates, or grant licenses on terms that

may not be favorable to us. If we are unable to expand our operations or otherwise capitalize on our business opportunities, our business, financial condition and results of operations could be materially adversely affected and we may not be able to meet our debt service obligations. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or commercialization efforts, or grant others rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

We may be required to repay the outstanding indebtedness under our loan agreement if a material adverse change occurs with respect to us, which could have a materially adverse effect on our business.

As of September 30, 2012, we had $15.0 million of indebtedness outstanding under our loan and security agreement with Silicon Valley Bank (SVB) and MidCap Financial SBIC, L.P. (MidCap). Under the loan agreement, an event of default will occur if, among other things, a material adverse change in our business, operations or condition occurs, or a material impairment of the prospect of our repayment of any portion of the amounts we owe under the loan agreement occurs. An event of default would allow the lenders to, among other things, accelerate the loan and take certain action with respect to the collateral securing our obligations under the loan agreement. We may not have enough available cash or be able to raise additional funds through equity or debt financings to repay such indebtedness at the time any such event of default occurs. In this case, we may be required to delay, limit, reduce or terminate our product development or commercialization efforts or grant to others, rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves. Our business, financial condition and results of operations could be materially adversely affected as a result.

Risks Related to Clinical Development and Regulatory Approval

We depend on the success of our lead product candidate, CMX001, which is still under clinical development, and may not obtain regulatory approval or be successfully commercialized.

We have not marketed, distributed or sold any products. The success of our business depends upon our ability to develop and commercialize our lead product candidate, CMX001, which has completed Phase 2 clinical trials for the prevention of CMV infection in HSCT patients. We plan to initiate a Phase 3 clinical trial for CMX001 for the prevention of CMV infection in adult HSCT patients. We intend to use this trial as a basis to submit a new drug application (NDA) to the FDA under the accelerated approval pathway seeking regulatory approval to market CMX001 in the United States. We also intend to conduct a separate Phase 3 clinical trial for the prevention of CMV infection in pediatric HSCT recipients. There is no guarantee that our Phase 3 clinical trials will be completed or, if completed, will be successful. The success of CMX001 will depend on several factors, including the following:

- successful completion of nonclinical studies and successful enrollment and completion of clinical trials;
- receipt of marketing approvals from the FDA and similar regulatory authorities outside the United States for our product candidates;
- establishing commercial manufacturing capabilities, either by building such facilities ourselves or making arrangements with third-party manufacturers;
- launching commercial sales of the product, whether alone or in collaboration with others;
- acceptance of the product by patients, the medical community and third-party payors;
- effectively competing with other therapies;
- a continued acceptable safety profile of the product following approval; and
- obtaining, maintaining, enforcing and defending intellectual property rights and claims.

If we do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully commercialize CMX001, which would materially harm our business.

We have never obtained regulatory approval for a drug and we may be unable to obtain, or may be delayed in obtaining, regulatory approval for CMX001.

We have never obtained regulatory approval for a drug. It is possible that the FDA may refuse to accept our NDA for substantive review or may conclude after review of our data that our application is insufficient to obtain regulatory approval of CMX001. If the FDA does not accept or approve our NDA, it may require that we conduct additional clinical, nonclinical or manufacturing validation studies and submit that data before it will reconsider our application. Depending on the extent of these or any other FDA required studies, approval of any NDA or application that we submit may be delayed by several years, or may require us to expend more resources than we have available. It is also possible that additional studies, if performed and completed, may not be considered sufficient by the FDA to approve our NDA.

Any delay in obtaining, or an inability to obtain, regulatory approvals would prevent us from commercializing CMX001, generating revenues and achieving and sustaining profitability. If any of these outcomes occur, we may be forced to abandon our development efforts for CMX001, which would have a material adverse effect on our business and could potentially cause us to cease operations.

We depend on the successful completion of clinical trials for our product candidates, including CMX001. The positive clinical results obtained for our product candidates in prior clinical studies may not be repeated in future clinical studies.

Before obtaining regulatory approval for the sale of our product candidates, including CMX001, we must conduct extensive clinical trials to demonstrate the safety and efficacy of our product candidates in humans. Clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. A failure of one or more of our clinical trials can occur at any stage of testing. The outcome of preclinical testing and early clinical trials may not be predictive of the success of later clinical trials, and interim results of a clinical trial do not necessarily predict final results. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval for their products.

We have completed a Phase 2 clinical study of CMX001 for the prevention of CMV infection in HSCT patients and have an ongoing Phase 2 study of CMX001 as preemptive therapy for AdV infection in HSCT patients. In addition, we have completed an initial Phase 1 study with CMX157. However, we have never conducted a pivotal Phase 3 clinical trial. The positive results we have seen to date in our Phase 2 clinical trial of CMX001 for the prevention of CMV in HSCT patients do not ensure that later clinical trials, such as our planned Phase 3 clinical trials, will demonstrate similar results. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed satisfactorily through preclinical studies and initial clinical testing. A number of companies in the pharmaceutical and biotechnology industries, including those with greater resources and experience than us, have suffered significant setbacks in Phase 3 clinical trials, even after seeing promising results in earlier clinical trials.

We may experience a number of unforeseen events during, or as a result of, clinical trials for our product candidates, including CMX001, that could adversely affect the completion of our clinical trials, including:

- regulators or institutional review boards may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- clinical trials of our product candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon product development programs;
- the number of subjects required for clinical trials of our product candidates may be larger than we anticipate, enrollment in these clinical trials may be insufficient or slower than we anticipate or subjects may drop out of these clinical trials at a higher rate than we anticipate;
- our third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;

- we might have to suspend or terminate clinical trials of our product candidates for various reasons, including a finding that the subjects are being exposed to unacceptable health risks;
- regulators or institutional review boards may require that we or our investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements;
- the cost of clinical trials of our product candidates may be greater than we anticipate;
- the supply or quality of our product candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient or inadequate; and
- our product candidates may have undesirable side effects or other unexpected characteristics, causing us or our investigators to suspend or terminate the trials.

Negative or inconclusive results of our Phase 3 clinical trial of CMX001, which we refer to as SUPPRESS, or any other clinical trial we conduct, could cause the FDA to require that we repeat or conduct additional clinical studies. Despite the results reported in earlier clinical trials for CMX001, we do not know whether SUPPRESS or any other clinical trials we may conduct will demonstrate adequate efficacy and safety to result in regulatory approval to market our product candidates, including CMX001. If later stage clinical trials do not produce favorable results, our ability to obtain regulatory approval for our product candidates, including CMX001, may be adversely impacted.

We are developing CMX001 to treat patients who are extremely ill, and patient deaths that occur in our clinical trials could negatively impact our business even if they are not shown to be related to CMX001.

We are developing our lead product candidate, CMX001, for the prevention of CMV infection in HSCT patients and we plan on initiating SUPPRESS, which will focus on the prevention of CMV in high-risk HSCT patients. These patients receive HSCT as a potential cure or remission for many cancers and genetic disorders.

To prepare for their transplant, such patients receive a pre-transplant conditioning regimen, which involves high-dose chemotherapy and may also include radiation therapy. The conditioning regimen suppresses the patient's immune system and/or own bone marrow in order to prevent it from attacking the newly transplanted cells. Generally, patients remain at high risk during the first 100 days following their transplant and can readily acquire infections during that period, which can be serious and even life threatening due to their weakened immune systems. As a result, it is likely that we will observe severe adverse outcomes during our Phase 3 trial for CMX001, including patient death. If a significant number of study subject deaths were to occur, regardless of whether such deaths are attributable to CMX001, our ability to obtain regulatory approval for CMX001 may be adversely impacted and our business could be materially harmed.

Delays in clinical trials are common and have many causes, and any delay could result in increased costs to us and jeopardize or delay our ability to obtain regulatory approval and commence product sales.

Clinical testing is expensive, difficult to design and implement, can take many years to complete, and is uncertain as to outcome. We may experience delays in clinical trials at any stage of development and testing of our product candidates. We plan to initiate SUPPRESS in 2013. Our planned clinical trials may not begin on time, have an effective design, enroll a sufficient number of subjects, or be completed on schedule, if at all.

Events which may result in a delay or unsuccessful completion of clinical trials, including our Phase 3 clinical trial for CMX001, include:

- inability to raise funding necessary to initiate or continue a trial;
- delays in obtaining regulatory approval to commence a trial;
- delays in reaching agreement with the FDA on final trial design;
- imposition of a clinical hold following an inspection of our clinical trial operations or trial sites by the FDA or other regulatory authorities;
- delays in reaching agreement on acceptable terms with prospective contract research organizations (CROs) and clinical trial sites;

- delays in obtaining required institutional review board approval at each site;
- delays in recruiting suitable patients to participate in a trial;
- delays in having subjects complete participation in a trial or return for post-treatment follow-up;
- delays caused by subjects dropping out of a trial due to side effects or otherwise;
- clinical sites dropping out of a trial to the detriment of enrollment;
- time required to add new clinical sites; and
- delays by our contract manufacturers to produce and deliver sufficient supply of clinical trial materials.

For example, due to the specialized indication and patient population being studied in our Phase 3 clinical trial of CMX001, the number of study sites available to us is relatively limited, and therefore enrollment of suitable patients to participate in the trial may take longer than is typical for studies involving other more traditional indications. This may result in a delay or unsuccessful completion of our Phase 3 clinical trial of CMX001.

If initiation or completion of any of our clinical trials for our product candidates, including our Phase 3 clinical trial of CMX001, are delayed for any of the above reasons, our development costs may increase, our approval process could be delayed, any periods during which we may have the exclusive right to commercialize our product candidates may be reduced and our competitors may have more time to bring products to market before we do. Any of these events could impair our ability to generate revenues from product sales and impair our ability to generate regulatory and commercialization milestones and royalties, all of which could have a material adverse effect on our business.

Our product candidates may cause adverse effects or have other properties that could delay or prevent their regulatory approval or limit the scope of any approved label or market acceptance.

Adverse events (AEs) caused by our product candidates could cause us, other reviewing entities, clinical study sites or regulatory authorities to interrupt, delay or halt clinical studies and could result in the denial of regulatory approval. For example, subjects enrolled in our Phase 2 clinical trials for CMX001 have reported gastrointestinal and liver-related AEs and safety laboratory value changes. Furthermore, CMX001 is related to the approved drug cidofovir (CDV), a compound which has been shown to result in significant renal toxicity and impairment following use. There is also a risk that our other product candidates may induce AEs, many of which may be unknown at this time. If an unacceptable frequency and/or severity of AEs are reported in our clinical trials for our product candidates, our ability to obtain regulatory approval for product candidates, including CMX001, may be negatively impacted.

Furthermore, if any of our approved products cause serious or unexpected side effects after receiving market approval, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw their approval of the product or impose restrictions on its distribution in a form of a modified risk evaluation and mitigation strategy (REMS);
- regulatory authorities may require the addition of labeling statements, such as warnings or contraindications;
- we may be required to change the way the product is administered or conduct additional clinical studies;
- we could be sued and held liable for harm caused to patients; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the affected product candidate and could substantially increase the costs of commercializing our product candidates.

After the completion of our clinical trials, we cannot predict whether or when we will obtain regulatory approval to commercialize CMX001 and we cannot, therefore, predict the timing of any future revenue from CMX001.

We cannot commercialize our product candidates, including CMX001, until the appropriate regulatory authorities, such as the FDA, have reviewed and approved the product candidate. The regulatory agencies may not complete their review processes in a timely manner, or we may not be able to obtain regulatory approval for CMX001. Additional delays may result if CMX001 is brought before an FDA advisory committee, which could recommend restrictions on approval or recommend non-approval of the product candidate. In addition, we may experience delays or rejections based upon additional government regulation from future legislation or administrative action, or changes in regulatory agency policy during the period of product development, clinical studies and the review process. As a result, we cannot predict when, if at all, we will receive any future revenue from commercialization of any of our product candidates, including CMX001.

Even if we obtain regulatory approval for CMX001 and our other product candidates, we will still face extensive regulatory requirements and our products may face future development and regulatory difficulties.

Even if we obtain regulatory approval in the United States, the FDA may still impose significant restrictions on the indicated uses or marketing of our product candidates, including CMX001, or impose ongoing requirements for potentially costly post-approval studies or post-market surveillance. For example, the labeling ultimately approved for our product candidates, including CMX001, will likely include restrictions on use due to the specific patient population and manner of use in which the drug was evaluated and the safety and efficacy data obtained in those evaluations. In addition, the label for CMX001 may be required to include a boxed warning, or "black box," regarding CMX001 being carcinogenic, teratogenic and impairing fertility in animal studies, as well as a contraindication in patients who have had a demonstrated clinically significant hypersensitivity reaction to CMX001 or CDV or any component of the formulation. The CMX001 labeling may also include warnings or black boxes pertaining to gastrointestinal or liver-related AEs or safety laboratory value changes.

CMX001 and our other product candidates will also be subject to additional ongoing FDA requirements governing the labeling, packaging, storage, distribution, safety surveillance, advertising, promotion, record-keeping and reporting of safety and other post-market information. The holder of an approved NDA is obligated to monitor and report AEs and any failure of a product to meet the specifications in the NDA. The holder of an approved NDA must also submit new or supplemental applications and obtain FDA approval for certain changes to the approved product, product labeling or manufacturing process. Advertising and promotional materials must comply with FDA rules and are subject to FDA review, in addition to other potentially applicable federal and state laws. Furthermore, promotional materials must be approved by the FDA prior to use for any drug receiving accelerated approval, the pathway we are pursuing for CMX001.

In addition, manufacturers of drug products and their facilities are subject to payment of user fees and continual review and periodic inspections by the FDA and other regulatory authorities for compliance with current good manufacturing practices (cGMP), and adherence to commitments made in the NDA. If we, or a regulatory agency, discover previously unknown problems with a product, such as quality issues or AEs of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory agency may impose restrictions relative to that product or the manufacturing facility, including requiring recall or withdrawal of the product from the market or suspension of manufacturing.

If we fail to comply with applicable regulatory requirements following approval of our product candidate, a regulatory agency may:

- issue an untitled or warning letter asserting that we are in violation of the law;
- seek an injunction or impose civil or criminal penalties or monetary fines;
- suspend or withdraw regulatory approval;
- suspend any ongoing clinical trials;
- refuse to approve a pending NDA or supplements to an NDA submitted by us;

- recall and/or seize product; or
- refuse to allow us to enter into supply contracts, including government contracts.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity. The occurrence of any event or penalty described above may inhibit our ability to commercialize CMX001 and our other product candidates and inhibit our ability to generate revenues.

Even if we obtain FDA approval for CMX001 or any of our other products in the United States, we may never obtain approval for or commercialize CMX001 or any of our other products outside of the United States, which would limit our ability to realize their full market potential.

In order to market any products outside of the United States, we must establish and comply with numerous and varying regulatory requirements on a country-by-country basis regarding safety and efficacy. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions. In addition, clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not guarantee regulatory approval in any other country. Approval processes vary among countries and can involve additional product testing and validation and additional administrative review periods. Seeking foreign regulatory approval could result in difficulties and costs for us and require additional preclinical studies or clinical trials which could be costly and time consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our products in those countries. We do not have any product candidates approved for sale in any jurisdiction, including international markets, and we do not have experience in obtaining regulatory approval in international markets. If we fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals, or if regulatory approvals in international markets are delayed, our target market will be reduced and our ability to realize the full market potential of our products will be unrealized.

Our relationships with customers and payors will be subject to applicable anti-kickback, fraud and abuse and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm and diminished profits and future earnings.

Healthcare providers, physicians and others play a primary role in the recommendation and prescription of any products for which we obtain marketing approval. Our future arrangements with third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute our products for which we obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations, include the following:

- the federal healthcare anti-kickback statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under federal healthcare programs such as Medicare and Medicaid;
- the federal False Claims Act imposes criminal and civil penalties, including civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- the federal Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act, imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program and also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;

- the federal false statements statute prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services;
- the federal transparency requirements under the Health Care and Education Reconciliation Act of 2010 (Health Care Reform Law) require manufacturers of drugs, devices, biologics and medical supplies to report to the Department of Health and Human Services information related to physician payments and other transfers of value and physician ownership and investment interests; and
- analogous state laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers, and some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring manufacturers to report information related to payments to physicians and other health care providers or marketing expenditures.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, exclusion from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. If any of the physicians or other providers or entities with whom we expect to do business are found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

Recently enacted and future legislation may increase the difficulty and cost for us to obtain marketing approval of and commercialize our product candidates and affect the prices we may obtain.

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any products for which we obtain marketing approval.

In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (Medicare Modernization Act) changed the way Medicare covers and pays for pharmaceutical products. The legislation expanded Medicare coverage for drug purchases by the elderly and introduced a new reimbursement methodology based on average sales prices for physician administered drugs. In addition, this legislation provided authority for limiting the number of drugs that will be covered in any therapeutic class. Cost reduction initiatives and other provisions of this legislation could decrease the coverage and price that we receive for any approved products. While the Medicare Modernization Act applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates. Therefore, any reduction in reimbursement that results from the Medicare Modernization Act may result in a similar reduction in payments from private payors.

More recently, in March 2010, the Health Care Reform Law was enacted to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for health care and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms. The Health Care Reform Law revises the definition of "average manufacturer price" for reporting purposes, which could increase the amount of Medicaid drug rebates to states. Further, the new law imposes a significant annual fee on companies that manufacture or import branded prescription drug products. New provisions affecting compliance have also been enacted, which may affect our business practices with health care practitioners. We will not know the full effects of the Health Care Reform Law until applicable federal and state agencies issue regulations or guidance under the new law. Although it is too early to determine the effect of the Health Care Reform Law,

the new law appears likely to continue the pressure on pharmaceutical pricing, especially under the Medicare program, and may also increase our regulatory burdens and operating costs.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. We are not sure whether additional legislative changes will be enacted, or whether the FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of our product candidates, if any, may be.

Risks Related to Our Reliance on Third Parties

We rely on third-party manufacturers to produce our preclinical and clinical drug supplies, and we intend to rely on third parties to produce commercial supplies of any approved product candidates.

We do not own or operate, and we do not expect to own or operate, facilities for product manufacturing, storage and distribution, or testing. In the past we have relied on third-party manufacturers for supply of our preclinical and clinical drug supplies. We expect that in the future we will continue to rely on such manufacturers for supply of drug supplies that will be used in clinical trials of our product candidates, including CMX001, and for commercialization of any of our product candidates that receive regulatory approval.

Our reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured our product candidates ourselves, including:

- the inability to meet our product specifications and quality requirements consistently;
- a delay or inability to procure or expand sufficient manufacturing capacity;
- manufacturing and product quality issues related to scale-up of manufacturing;
- costs and validation of new equipment and facilities required for scale-up;
- a failure to comply with cGMP and similar foreign standards;
- the inability to negotiate manufacturing agreements with third parties under commercially reasonable terms;
- termination or nonrenewal of manufacturing agreements with third parties in a manner or at a time that is costly or damaging to us;
- the reliance on a limited number of sources, and in some cases, single sources for product components, such that if we are unable to secure a sufficient supply of these product components, we will be unable to manufacture and sell our product candidates in a timely fashion, in sufficient quantities or under acceptable terms;
- the lack of qualified backup suppliers for those components that are currently purchased from a sole or single source supplier;
- operations of our third-party manufacturers or suppliers could be disrupted by conditions unrelated to our business or operations, including the bankruptcy of the manufacturer or supplier;
- carrier disruptions or increased costs that are beyond our control; and
- the failure to deliver our products under specified storage conditions and in a timely manner.

Any of these events could lead to clinical study delays, failure to obtain regulatory approval or impact our ability to successfully commercialize our products. Some of these events could be the basis for FDA action, including injunction, recall, seizure, or total or partial suspension of production.

We rely on limited sources of supply for the drug component for our lead product candidate, CMX001, and any disruption in the chain of supply may cause delay in developing and commercializing CMX001.

Currently we use one established supplier of drug substance and one established supplier for drug product for our lead product candidate, CMX001. It is our expectation that only one supplier of drug substance and one supplier of drug product will be qualified as vendors with the FDA. If supply from an approved vendor is

interrupted, there could be a significant disruption in commercial supply of CMX001. An alternative vendor would need to be qualified through an NDA supplement which could result in further delay. The FDA or other regulatory agencies outside of the United States may also require additional studies if a new drug substance or drug product supplier is relied upon for commercial production.

These factors could cause the delay of clinical trials, regulatory submissions, required approvals or commercialization of CMX001, and cause us to incur additional costs. Furthermore, if our suppliers fail to deliver the required commercial quantities of active pharmaceutical ingredient on a timely basis and at commercially reasonable prices, and we are unable to secure one or more replacement suppliers capable of production at a substantially equivalent cost, our clinical trials for CMX001 may be delayed, which could inhibit our ability to generate revenues.

Manufacturing issues may arise that could increase product and regulatory approval costs or delay commercialization of CMX001.

We have validated the drug substance production process for CMX001 at our current manufacturer at a scale of 100 kg, and have validated the manufacturing of clinical trial material at a 165 kg commercial scale. However, we are currently conducting stability studies and analyses that may reveal previously unknown impurities which could require resolution in order to proceed with our planned clinical trials and obtain regulatory approval for the commercial marketing of CMX001. In the future, we may identify significant impurities, which could result in increased scrutiny by the regulatory agencies, delays in clinical program and regulatory approval for CMX001, increases in our operating expenses, or failure to obtain or maintain approval for CMX001.

We rely on third parties to conduct, supervise and monitor our clinical studies, and if those third parties perform in an unsatisfactory manner, it may harm our business.

We rely on CROs and clinical trial sites to ensure the proper and timely conduct of our clinical trials. While we have agreements governing their activities, we have limited influence over their actual performance. We have relied and plan to continue to rely upon CROs to monitor and manage data for our ongoing clinical programs for CMX001 and our other product candidates, as well as the execution of nonclinical studies. We control only certain aspects of our CROs' activities. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol, legal, regulatory and scientific standards and our reliance on the CROs does not relieve us of our regulatory responsibilities.

We and our CROs are required to comply with the FDA's guidance, which follows the International Conference on Harmonization Good Clinical Practice (ICH GCP), which are regulations and guidelines enforced by the FDA for all of our product candidates in clinical development. The FDA enforces the ICH GCP through periodic inspections of trial sponsors, principal investigators and clinical trial sites. If we or our CROs fail to comply with the ICH GCP, the clinical data generated in our clinical trials may be deemed unreliable and the FDA may require us to perform additional clinical trials before approving our marketing applications. For example, upon inspection, the FDA may determine that our Phase 3 clinical trial for CMX001, SUPPRESS, does not comply with the ICH GCP. In addition, our Phase 3 clinical trials for CMX001 will require a sufficiently large number of test subjects to evaluate the safety and effectiveness of CMX001. Accordingly, if our CROs fail to comply with these regulations or fail to recruit a sufficient number of subjects, we may be required to repeat these Phase 3 clinical trials, which would delay the regulatory approval process.

Our CROs are not our employees, and we cannot control whether or not they devote sufficient time and resources to our ongoing clinical and nonclinical programs. These CROs may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical studies, or other drug development activities which could harm our competitive position. We face the risk of potential unauthorized disclosure or misappropriation of our intellectual property by CROs, which may reduce our trade secret protection and allow our potential competitors to access and exploit our proprietary technology. If our CROs do not successfully carry out their contractual duties or obligations, fail to meet expected deadlines, or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for any other reasons, our clinical trials may be extended,

delayed or terminated, and we may not be able to obtain regulatory approval for, or successfully commercialize CMX001 or our other product candidates. As a result, our financial results and the commercial prospects for CMX001 and any other product candidates that we develop would be harmed, our costs could increase, and our ability to generate revenues could be delayed.

We depend on continuing our current collaboration with Merck to develop and commercialize CMX157.

In July 2012, we entered into a collaboration and licensing arrangement with Merck, whereby Merck is responsible for the future development and commercialization of CMX157. Under this arrangement, Merck is responsible for conducting preclinical studies and clinical trials and obtaining required regulatory approvals for CMX157 and manufacturing and commercializing CMX157. Our right to receive milestone and royalty payments under the licensing agreement depends on the achievement of certain development, regulatory and commercial milestones by Merck.

As a result, the development and commercialization of CMX157 would be delayed, and our ability to receive potential milestone and royalty payments under the license agreement with Merck, would be adversely affected if Merck:

- fails to gain the requisite regulatory approvals for CMX157;
- does not successfully commercialize CMX157;
- does not conduct its activities in a timely manner;
- does not devote sufficient time and resources to the development and commercialization of CMX157;
- terminates its collaboration with us (which it is entitled to do at any time on 90 days written notice or, in certain circumstances, immediately upon written notice);
- develops, either alone or with others, products that compete with CMX157;
- disputes our respective allocations of rights to CMX157 or technology developed during our collaboration;
- does not effectively pursue and enforce intellectual property rights relating to CMX157; or
- merges with a third-party that wants to terminate the collaboration.

Furthermore, disagreements with Merck could lead to litigation or arbitration, which would be time-consuming and expensive. If any of these issues arise, it may delay the development and commercialization of CMX157 and, ultimately, impair our ability to generate revenues from regulatory and commercialization milestones and royalties based on further development and sales of CMX157.

Risks Related to Commercialization of Our Product Candidates

The commercial success of CMX001 and our other product candidates will depend upon the acceptance of these products by the medical community, including physicians, patients and health care payors.

If any of our product candidates, including CMX001, receive marketing approval, they may nonetheless not gain sufficient market acceptance by physicians, patients, healthcare payors and others in the medical community. If these products do not achieve an adequate level of acceptance, we may not generate significant product revenues and we may not become profitable. The degree of market acceptance of any of our product candidates, including CMX001, will depend on a number of factors, including:

- demonstration of clinical safety and efficacy in our clinical trials;
- the relative convenience, ease of administration and acceptance by physicians, patients and health care payors;
- the prevalence and severity of any AEs;
- limitations or warnings contained in the FDA-approved label for the relevant product candidate;

- availability of alternative treatments;
- pricing and cost-effectiveness;
- the effectiveness of our or any future collaborators' sales and marketing strategies;
- our ability to obtain hospital formulary approval; and
- our ability to obtain and maintain sufficient third-party coverage or reimbursement, which may vary from country to country.

If any of our product candidates, including CMX001, is approved but does not achieve an adequate level of acceptance by physicians, patients and health care payors, we may not generate sufficient revenue and we may not become or remain profitable.

If we are unable to establish sales and marketing capabilities or enter into agreements with third parties to market and sell our product candidates, we may be unable to generate any revenue.

We currently do not have an organization for the sales, marketing and distribution of pharmaceutical products and the cost of establishing and maintaining such an organization may exceed the cost-effectiveness of doing so. In order to market any products that may be approved, including CMX001, we must build our sales, marketing, managerial and other non-technical capabilities or make arrangements with third parties to perform these services. We intend to enter into strategic partnerships with third parties to commercialize our product candidates outside of the United States, including for CMX001. We intend to build our own sales force and to commercialize CMX001, but we will also consider the option to enter into strategic partnerships for our product candidates in the United States.

Our strategy for CMX001 is to develop a hospital-directed sales force and/or collaborate with third parties to promote the product to healthcare professionals and third-party payors in the United States. Our future collaboration partners, if any, may not dedicate sufficient resources to the commercialization of our product candidates or may otherwise fail in their commercialization due to factors beyond our control. If we are unable to establish effective collaborations to enable the sale of our product candidates to healthcare professionals and in geographical regions, including the United States, that will not be covered by our own marketing and sales force, or if our potential future collaboration partners do not successfully commercialize our product candidates, our ability to generate revenues from product sales, including sales of CMX001, will be adversely affected.

If we are unable to build our own sales force or negotiate a strategic partnership for the commercialization of CMX001 in the United States, we may be forced to delay the potential commercialization of CMX001, reduce the scope of our sales or marketing activities for CMX001 or undertake the commercialization activities for CMX001 at our own expense. If we elect to increase our expenditures to fund commercialization activities ourselves, we will need to obtain additional capital, which may not be available to us on acceptable terms, or at all. If we do not have sufficient funds, we will not be able to bring CMX001 to market or generate product revenue.

If we are unable to establish adequate sales, marketing and distribution capabilities, whether independently or with third parties, we may not be able to generate sufficient product revenue and may not become profitable. We will be competing with many companies that currently have extensive and well-funded marketing and sales operations. Without an internal team or the support of a third party to perform marketing and sales functions, we may be unable to compete successfully against these more established companies.

In addition, there are risks involved with both establishing our own sales and marketing capabilities and entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force is expensive and time-consuming and could delay any product launch. If the commercial launch of a product candidate for which we recruit a sales force and establish marketing capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel.

If we obtain approval to commercialize any products outside of the United States, a variety of risks associated with international operations could materially adversely affect our business.

If our product candidates are approved for commercialization, we intend to enter into agreements with third parties to market those product candidates outside the United States, including for CMX001. We expect that we will be subject to additional risks related to entering into international business relationships, including:

- different regulatory requirements for drug approvals in foreign countries;
- reduced protection for intellectual property rights;
- unexpected changes in tariffs, trade barriers and regulatory requirements;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenues, and other obligations incident to doing business in another country;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geopolitical actions, including war and terrorism, or natural disasters including earthquakes, typhoons, floods and fires.

We have no prior experience in these areas. In addition, there are complex regulatory, tax, labor and other legal requirements imposed by both the European Union and many of the individual countries in Europe with which we will need to comply. Many U.S.-based biopharmaceutical companies have found the process of marketing their own products in Europe to be very challenging.

We face significant competition from other biotechnology and pharmaceutical companies and our operating results will suffer if we fail to compete effectively.

The biotechnology and pharmaceutical industries are intensely competitive. We have competitors both in the United States and internationally, including major multinational pharmaceutical companies, biotechnology companies and universities and other research institutions.

Currently the only approved antiviral treatment for CMV in HSCT patients is Cytovene® (ganciclovir), although other antivirals, such as Valcyte® (valganciclovir), Foscavir® (foscarnet), Zovirax® (acyclovir) and Vistide® (cidofovir) are used. Ganciclovir, foscarnet and cidofovir are currently generically available. We are aware of several companies that are working specifically to develop drugs that would compete against CMX001, including Merck's development of letermovir, Viropharma Incorporated's development of maribavir and Vical Incorporated's and Astellas Pharma US, Inc.'s development of TransVax. Many of our competitors have substantially greater financial, technical, commercial and other resources, such as larger research and development staff, stronger intellectual property portfolios and experienced marketing and manufacturing organizations. Additional mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated in our competitors.

Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these industries. Our competitors may succeed in developing, acquiring or licensing, on an exclusive basis, drug products that are more effective or less costly than CMX001 or any other drug candidate that we are currently developing or that we may develop.

We will face competition from other drugs currently approved or that will be approved in the future for the same indications. Therefore, our ability to compete successfully will depend largely on our ability to:

- discover and develop medicines that are superior to other products in the market;
- demonstrate through our clinical trials that our product candidates, including CMX001, is differentiated from existing and future therapies;
- attract qualified scientific, product development and commercial personnel;
- obtain patent and/or other proprietary protection for our medicines and technologies;
- obtain required regulatory approvals;
- successfully collaborate with pharmaceutical companies in the discovery, development and commercialization of new medicines; and
- negotiate competitive pricing and reimbursement with third-party payors.

The availability of our competitors' products could limit the demand, and the price we are able to charge, for CMX001 and any other product candidate we develop. We will not achieve our business plan if the acceptance of CMX001 is inhibited by price competition or the reluctance of physicians to switch from existing drug products to CMX001, or if physicians switch to other new drug products or choose to reserve CMX001 for use in limited circumstances. The inability to compete with existing or subsequently introduced drug products would have a material adverse impact on our business, financial condition and prospects.

Established pharmaceutical companies may invest heavily to accelerate discovery and development of novel compounds or to in-license novel compounds that could make our product candidates, including CMX001, less competitive. In addition, any new product that competes with an approved product must demonstrate compelling advantages in efficacy, convenience, tolerability and safety in order to overcome price competition and to be commercially successful. Accordingly, our competitors may succeed in obtaining patent protection, receiving FDA approval or discovering, developing and commercializing medicines before we do, which would have a material adverse impact on our business.

Hospital formulary approval and reimbursement may not be available for CMX001 and our other product candidates, which could make it difficult for us to sell our products profitably.

Obtaining hospital formulary approval can be an expensive and time consuming process. We cannot be certain if and when we will obtain formulary approval to allow us to sell our product candidates, including CMX001, into our target markets. Failure to obtain timely formulary approval will limit our commercial success.

Furthermore, market acceptance and sales of CMX001, or any other product candidates that we develop, will depend in part on the extent to which reimbursement for these products and related treatments will be available from government health administration authorities, private health insurers and other organizations. Government authorities and third-party payors, such as private health insurers, hospitals and health maintenance organizations, decide which drugs they will pay for and establish reimbursement levels. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and these third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. Increasingly, third-party payors are requiring that companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. We cannot be sure that reimbursement will be available for any product that we commercialize and, if reimbursement is available, what the level of reimbursement will be. Reimbursement may impact the demand for, or the price of, any product for which we obtain marketing approval. Obtaining reimbursement for our products may be particularly difficult because of the higher prices often associated with products administered under the supervision of a physician. We cannot be sure that reimbursement will be available for CMX001, or any other product candidates. Also, reimbursement amounts may reduce the demand for, or the price of,

our products. If reimbursement is not available, or is available only to limited levels, we may not be able to successfully commercialize CMX001, or any other product candidates that we develop.

There have been a number of legislative and regulatory proposals to change the healthcare system in the United States and in some foreign jurisdictions that could affect our ability to sell any future products profitably. These legislative and regulatory changes may negatively impact the reimbursement for any future products, following approval. The availability of generic treatments may also substantially reduce the likelihood of reimbursement for any future products, including CMX001. The application of user fees to generic drug products will likely expedite the approval of additional generic drug treatments. We expect to experience pricing pressures in connection with the sale of CMX001 and any other product candidate that we develop, due to the trend toward managed healthcare, the increasing influence of health maintenance organizations and additional legislative changes.

In addition, there may be significant delays in obtaining reimbursement for approved products, and coverage may be more limited than the purposes for which the product is approved by the FDA or regulatory authorities in other countries. Moreover, eligibility for reimbursement does not imply that any product will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Interim payments for new products, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Payment rates may vary according to the use of the product and the clinical setting in which it is used, may be based on payments allowed for lower cost products that are already reimbursed, and may be incorporated into existing payments for other services. Net prices for products may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of products from countries where they may be sold at lower prices than in the United States. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies.

Our inability to promptly obtain coverage and profitable payment rates from both government funded and private payors for any of our product candidates, including CMX001, could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

We may expend our limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

The success of our business depends primarily upon our ability to identify, develop and commercialize product candidates. Because we have limited financial and managerial resources, we focus on research programs and product candidates for specific indications. As a result, we may forego or delay pursuit of opportunities with other product candidates or other indications that later prove to have greater commercial potential. Our research programs may initially show promise in identifying potential product candidates, yet fail to yield product candidates for clinical development for a number of reasons, including:

- our research methodology or that of our collaboration partners may be unsuccessful in identifying potential product candidates;
- potential product candidates may be shown to have harmful side effects or may have other characteristics that may make the products unmarketable or unlikely to receive marketing approval; and
- our collaboration partners may change their development profiles for potential product candidates or abandon a therapeutic area.

If any of these events occur, we may be forced to abandon our development efforts for a program or programs, which would have a material adverse effect on our business and could potentially cause us to cease operations. Research programs to identify new product candidates require substantial technical, financial and human resources. We may focus our research efforts and resources on potential programs or product candidates that ultimately prove to be unsuccessful.

If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been advantageous for us to retain sole development and commercialization rights.

Risks Related to Our Intellectual Property

If we are unable to obtain or protect intellectual property rights related to our products and product candidates, we may not be able to compete effectively in our market.

We rely upon a combination of patents, trade secret protection and confidentiality agreements to protect the intellectual property related to our products and product candidates. The strength of patents in the biotechnology and pharmaceutical field involves complex legal and scientific questions and can be uncertain. The patent applications that we own or in-license may fail to result in issued patents with claims that cover the products in the United States or in other countries. If this were to occur, early generic competition could be expected against CMX001, CMX157 and other product candidates in development. There is no assurance that all of the potentially relevant prior art relating to our patents and patent applications has been found, which can invalidate a patent or prevent a patent from issuing based on a pending patent application. Even if patents do successfully issue, third parties may challenge their validity, enforceability or scope, which may result in such patents being narrowed or invalidated. Furthermore, even if they are unchallenged, our patents and patent applications, may not adequately protect our intellectual property or prevent others from designing around our claims. If the patent applications we hold or license with respect to CMX001 and CMX157 fail to issue or if their breadth or strength of protection is threatened, it could dissuade companies from collaborating with us to develop, and threaten our ability to commercialize, our products. We cannot offer any assurances about which, if any, patents will issue or whether any issued patents will be found not invalid and not unenforceable, will go unthreatened by third parties or will adequately protect our products and product candidates. Further, if we encounter delays in regulatory approvals, the period of time during which we could market CMX001 and CMX157 under patent protection could be reduced. Since patent applications in the United States and most other countries are confidential for a period of time after filing, and some remain so until issued, we cannot be certain that we or our licensors were the first to file any patent application related to CMX001, CMX157 or our other product candidates. Furthermore, if third parties have filed such patent applications, an interference proceeding in the United States can be provoked by a third party or instituted by us to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. An unfavorable outcome could require us to cease using the related technology or to attempt to license it from the prevailing party, which may not be possible.

In addition to the protection afforded by patents, we rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable, processes for which patents are difficult to enforce and other elements of our drug discovery and development processes that involve proprietary know-how, information or technology that is not covered by patents. Although we expect all of our employees to assign their inventions to us, and all of our employees, consultants, advisors and any third parties who have access to our proprietary know-how, information or technology to enter into confidentiality agreements, we cannot provide any assurances that all such agreements have been duly executed, that such agreements provide adequate protection and will not be breached, that our trade secrets and other confidential proprietary information will not otherwise be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. If we are unable to prevent material disclosure of the non-patented intellectual property related to our technologies to third parties, and there is no guarantee that we will have any such enforceable trade secret protection, we may not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, results of operations and financial condition.

Further, the laws of some foreign countries do not protect patents and other proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property abroad. We may also fail to pursue or obtain patents and other intellectual property protection relating to our products and product candidates in all foreign countries.

Finally, certain of our activities and our licensors' activities have been funded, and may in the future be funded, by the U.S. federal government. When new technologies are developed with U.S. federal government funding, the government obtains certain rights in any resulting patents, including a nonexclusive license authorizing the government to use the invention for non-commercial purposes. These rights may permit the government to disclose our confidential information to third parties and to exercise "march-in" rights to use or allow third parties to use our patented technology. The government can exercise its march-in rights if it determines that action is necessary because we fail to achieve practical application of the U.S. government-funded technology, because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations or to give preference to U.S. industry. In addition, U.S. government-funded inventions must be reported to the government, U.S. government funding must be disclosed in any resulting patent applications, and our rights in such inventions may be subject to certain requirements to manufacture products in the United States.

Third-party claims of intellectual property infringement may prevent or delay our development and commercialization efforts or otherwise affect our business.

Our commercial success depends in part on our avoiding infringement and other violations of the patents and proprietary rights of third parties. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interferences, oppositions and inter party reexamination proceedings before the United States Patent and Trademark Office (U.S. PTO) and its foreign counterparts. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we and our collaborators are developing product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, and as we gain greater visibility and market exposure as a public company, the risk increases that our product candidates or other business activities may be subject to claims of infringement of the patent and other proprietary rights of third parties.

Third parties may assert that we are employing their proprietary technology without authorization. There may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of CMX001 and CMX157 and/or our other product candidates. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our product candidates may infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of any of our product candidates, any molecules formed during the manufacturing process or any final product itself, the holders of any such patents may be able to block our ability to commercialize such product candidate unless we obtained a license under the applicable patents, or until such patents expire. Similarly, if any third-party patent were held by a court of competent jurisdiction to cover aspects of our formulations, processes for manufacture or methods of use, including combination therapy, the holders of any such patent may be able to block our ability to develop and commercialize the applicable product candidate unless we obtained a license or until such patent expires. In either case, such a license may not be available on commercially reasonable terms or at all. In addition, we may be subject to claims that we are infringing other intellectual property rights, such as trademarks or copyrights, or misappropriating the trade secrets of others, and to the extent that our employees, consultants or contractors use intellectual property or proprietary information owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

Parties making claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize one or more of our product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful infringement or other intellectual property claim against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties or redesign our affected products, which may be impossible or require substantial time and monetary expenditure. We cannot predict whether any such license would be available at all or whether it would be available on commercially reasonable terms. Furthermore, even in the absence of litigation, we may need to obtain licenses

from third parties to advance our research or allow commercialization of our product candidates, and we have done so from time to time. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. In that event, we would be unable to further develop and commercialize one or more of our product candidates, which could harm our business significantly. We cannot provide any assurances that third-party patents do not exist which might be enforced against our products or product candidates, resulting in either an injunction prohibiting our sales, or, with respect to our sales, an obligation on our part to pay royalties and/or other forms of compensation to third parties.

We license certain key intellectual property from third parties, and the loss of our license rights could have a materially adverse effect on our business.

We are a party to a number of technology licenses that are important to our business and expect to enter into additional licenses in the future. For example, we rely on an exclusive license to certain patents, proprietary technology and know-how from The Regents of the University of California (UC), which we believe cover CMX001 and CMX157. If we fail to comply with our obligations under our agreement with UC or our other license agreements, or we are subject to a bankruptcy, the licensor may have the right to terminate the license, in which event we would not be able to develop or market products covered by the license, including in the case of the UC license, CMX001 and CMX157, which would have a materially adverse effect on our business.

We may be involved in lawsuits to protect or enforce our patents, the patents of our licensors or our other intellectual property rights, which could be expensive, time consuming and unsuccessful.

Competitors may infringe or otherwise violate our patents, the patents of our licensors or our other intellectual property rights. To counter infringement or unauthorized use, we may be required to file legal claims, which can be expensive and time-consuming. In addition, in an infringement proceeding, a court may decide that a patent of ours or our licensors is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing. The initiation of a claim against a third party may also cause the third party to bring counter-claims against us.

We may not be able to prevent, alone or with our licensors, misappropriation of our intellectual property rights, particularly in countries where the laws may not protect those rights as fully as in the United States. Our business could be harmed if in a litigation the prevailing party does not offer us a license on commercially reasonable terms. Any litigation or other proceedings to enforce our intellectual property rights may fail, and even if successful, may result in substantial costs and distract our management and other employees.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of our common stock.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees on any issued patent are due to be paid to the U.S. PTO and foreign patent agencies in several stages over the lifetime of the patent. The U.S. PTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in

abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we or our licensors that control the prosecution and maintenance of our licensed patents fail to maintain the patents and patent applications covering our product candidates, we may lose our rights and our competitors might be able to enter the market, which would have a material adverse effect on our business.

Risks Related to Our United States Government Contracts and Grants

All of our immediately foreseeable future revenues to support the development of CMX001 for the treatment of smallpox are dependent upon our contract with BARDA, and if we do not receive all of the funds under the BARDA contract we anticipate that we will suspend or terminate our smallpox program.

Substantially all of our revenues that support the development of CMX001 for the treatment of smallpox have been derived from prior government grants and our current contract with BARDA. Our contract with BARDA is for the development of CMX001 for the treatment of smallpox. It is divided into a base segment and four option segments. We are currently performing the base segment of the contract. BARDA has the right, exercisable in its sole discretion, to extend the contract for successive option segments following the base segment. We anticipate renegotiating certain aspects of the smallpox animal plan to take into account recent guidance from the FDA for development of CMX001 under the FDA's Animal Efficacy Rule. There can be no assurance that we will reach agreement with BARDA on the most appropriate development pathway or that the FDA will ultimately agree with the experiments which we perform or the appropriateness of the results of these experiments for licensure of CMX001 for smallpox. We do not anticipate continuing this program without ongoing support from BARDA.

Additionally, the contract provides for reimbursement of the costs of the development of CMX001 for the treatment of smallpox that are allowable under the Federal Acquisition Regulation (FAR), plus the payment of a fixed fee. It does not include the manufacture of CMX001 for the Strategic National Stockpile. There can be no assurances that this contract will continue, that BARDA will extend the contract for successive option segments following the base segment, that any such extension would be on favorable terms, or that we will be able to enter into new contracts with the United States government to support our smallpox program. Changes in government budgets and agendas may result in a decreased and de-prioritized emphasis on supporting the discovery and development of CMX001 for the treatment of smallpox. In such event, BARDA is not required to continue funding our existing contract. Any such reduction in our revenues from BARDA or any other government contract could materially adversely affect our financial condition and results of operations. In addition, if we do not receive all of the funds under the BARDA contract, we anticipate that we will suspend or terminate our program for the development of CMX001 for the treatment of smallpox.

Unfavorable provisions in government contracts, including our contract with BARDA, may harm our business, financial condition and operating results.

United States government contracts typically contain unfavorable provisions and are subject to audit and modification by the government at its sole discretion, which will subject us to additional risks. For example, under our contract with BARDA, the U.S. government has the power to unilaterally:

- audit and object to any BARDA contract-related costs and fees on grounds that they are not allowable under the FAR, and require us to reimburse all such costs and fees;
- suspend or prevent us for a set period of time from receiving new contracts or extending our existing contract based on violations or suspected violations of laws or regulations;
- claim nonexclusive, nontransferable rights to product manufactured and intellectual property developed under the BARDA contract and may, under certain circumstances, such as circumstances involving public health and safety, license such inventions to third parties without our consent;
- cancel, terminate or suspend our BARDA contract based on violations or suspected violations of laws or regulations;
- terminate our BARDA contract in whole or in part for the convenience of the government for any reason or no reason, including if funds become unavailable to the applicable governmental agency;

- reduce the scope and value of our BARDA contract;
- decline to exercise an option to continue the BARDA contract;
- direct the course of a development program in a manner not chosen by the government contractor;
- require us to perform the option segments even if doing so may cause us to forego or delay the pursuit of other opportunities with greater commercial potential;
- take actions that result in a longer development timeline than expected; and
- change certain terms and conditions in our BARDA contract.

The U.S. government also has the right to terminate the BARDA contract if termination is in the government's interest, or if we default by failing to perform in accordance with the milestones set forth in the contract. Termination-for-convenience provisions generally enable us to recover only our costs incurred or committed (plus a portion of the agreed fee) and settlement expenses on the work completed prior to termination. Except for the amount of services received by the government, termination-for-default provisions do not permit recovery of fees.

In addition, we must comply with numerous laws and regulations that affect how we conduct business with the United States government. Among the most significant government contracting regulations that affect our business are:

- the FAR, and agency-specific regulations supplements to the FAR, which comprehensively regulate the procurement, formation, administration and performance of government contracts and implement federal procurement policy in numerous areas, such as employment practices, protection of the environment, accuracy and retention periods of records, recording and charging of costs, treatment of laboratory animals and human subject research;
- the business ethics and public integrity obligations, which govern conflicts of interest and the hiring of former government employees, restrict the granting of gratuities and funding of lobbying activities and incorporate other requirements such as the Anti-Kickback Act and the Foreign Corrupt Practices Act;
- export and import control laws and regulations; and
- laws, regulations and executive orders restricting the use and dissemination of information classified for national security purposes and the exportation of certain products and technical data.

Furthermore, we may be required to enter into agreements and subcontracts with third parties, including suppliers, consultants and other third-party contractors, in order to satisfy our contractual obligations pursuant to our agreements with the U.S. government. Negotiating and entering into such arrangements can be time-consuming and we may not be able to reach agreement with such third parties. Any such agreement must also be compliant with the terms of our government contract. Any delay or inability to enter into such arrangements or entering into such arrangements in a manner that is non-compliant with the terms of our contract, may result in violations of our contract.

As a result of these unfavorable provisions, we must undertake significant compliance activities. The diversion of resources from commercial programs to these compliance activities, as well as the exercise by the U.S. government of any rights under these provisions, could materially harm our business.

Our business is subject to audit by the U.S. government, including under our contract with BARDA, and a negative audit could adversely affect our business.

United States government agencies such as the Department of Health and Human Services (DHHS), routinely audit and investigate government contractors and recipients of federal grants, including our contract with BARDA. These agencies review a contractor's performance under its contracts, cost structure and compliance with applicable laws, regulations and standards.

The DHHS can also review the adequacy of, and a contractor's compliance with, its internal control systems and policies, including the contractor's purchasing, property, estimating, compensation and

management information systems. Any costs found to be improperly allocated to a specific contract will not be reimbursed, while such costs already reimbursed must be refunded. If an audit uncovers improper or illegal activities, we may be subject to civil and criminal penalties and administrative sanctions, including:

- termination of contracts;
- forfeiture of profits;
- suspension of payments;
- fines; and
- suspension or prohibition from conducting business with the U.S. government.

In addition, we could suffer serious reputational harm if allegations of impropriety were made against us by the U.S. government, which could adversely affect our business.

Agreements with government agencies may lead to claims against us under the Federal False Claims Act, and these claims could result in substantial fines and other penalties.

The biopharmaceutical industry is, and in recent years has been, under heightened scrutiny as the subject of government investigations and enforcement actions. Our BARDA contract is subject to substantial financial penalties under the Federal Civil Monetary Penalties Act and the Federal Civil False Claims Act (False Claims Act). Under the False Claims Act's "whistleblower" provisions, private enforcement of fraud claims against businesses on behalf of the U.S. government has increased due in part to amendments to the False Claims Act that encourage private individuals to sue on behalf of the government. These whistleblower suits, known as qui tam actions, may be filed by private individuals, including present and former employees. The False Claims Act provides for treble damages and up to $11,000 per false claim. If our operations are found to be in violation of any of these laws, or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines, exclusion from the Medicare and Medicaid programs, and the curtailment or restructuring of our operations. Any penalties, damages, fines, exclusions, curtailment, or restructuring of our operations could adversely affect our ability to operate our business and our financial results.

Risks Related to Our Business Operations and Industry

Our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel.

We are highly dependent on principal members of our executive team listed under "Management." While we have entered into employment agreements or offer letters with each of our executive officers, any of them could leave our employment at any time, as all of our employees are "at will" employees. We do not maintain "key person" insurance for any of our executives or other employees. Recruiting and retaining other qualified employees for our business, including scientific and technical personnel, will also be critical to our success. There is currently a shortage of skilled executives in our industry, which is likely to continue. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. As a result, competition for skilled personnel is intense and the turnover rate can be high. We may not be able to attract and retain personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. In addition, failure of any of our clinical studies may make it more challenging to recruit and retain qualified personnel. The inability to recruit or loss of the services of any executive or key employee may adversely affect the progress of our research, development and commercialization objectives.

In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us, which could also adversely affect the progress of our research, development and commercialization objectives.

We will need to expand our organization, and we may experience difficulties in managing this growth, which could disrupt our operations.

As of December 31, 2012, we had 46 full-time employees. As our company matures, we expect to expand our employee base to increase our managerial, clinical, scientific and engineering, operational, sales, and marketing teams. Future growth would impose significant additional responsibilities on our management, including the need to identify, recruit, maintain, motivate and integrate additional employees, consultants and contractors. Also, our management may need to divert a disproportionate amount of its attention away from our day-to-day activities and devote a substantial amount of time to managing these growth activities. We may not be able to effectively manage the expansion of our operations, which may result in weaknesses in our infrastructure, give rise to operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Our expected growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of product candidates. If our management is unable to effectively manage our growth, our expenses may increase more than expected, our ability to generate and/or grow revenues could be reduced, and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize CMX001 and our other product candidates and compete effectively will depend, in part, on our ability to effectively manage any future growth.

Potential product liability lawsuits against us could cause us to incur substantial liabilities and to limit commercialization of any products that we may develop.

The use of our product candidates, including CMX001, in clinical studies and the sale of any products for which we obtain marketing approval exposes us to the risk of product liability claims. Product liability claims might be brought against us by consumers, health care providers, pharmaceutical companies or others selling or otherwise coming into contact with our products. On occasion, large judgments have been awarded in class action lawsuits based on drugs that had unanticipated adverse effects. If we cannot successfully defend against product liability claims, we could incur substantial liability and costs. In addition, regardless of merit or eventual outcome, product liability claims may result in:

- impairment of our business reputation and significant negative media attention;
- withdrawal of participants from our clinical studies;
- significant costs to defend the related litigation and related litigation;
- distraction of management’s attention from our primary business;
- substantial monetary awards to patients or other claimants;
- the inability to commercialize our product candidates, including CMX001; and
- decreased demand for our product candidates, if approved for commercial sale.

We currently carry $5.0 million in product liability insurance covering our clinical trials. Our current product liability insurance coverage may not be sufficient to reimburse us for any expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive and in the future we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. If and when we obtain marketing approval for our product candidates, we intend to expand our insurance coverage to include the sale of commercial products; however, we may be unable to obtain product liability insurance on commercially reasonable terms or in adequate amounts. A successful product liability claim or series of claims brought against us could cause our stock price to decline and, if judgments exceed our insurance coverage, could adversely affect our results of operations and business.

Risks Related to this Offering and Ownership of Our Common Stock

The market price of our common stock is likely to be volatile, and you may not be able to resell your shares at or above the initial public offering price.

The trading price of our common stock is likely to be volatile. Our stock price could be subject to wide fluctuations in response to a variety of factors, including the following:

- results of clinical trials of our product candidates or those of our competitors;
- any delay in filing an NDA for any of our product candidates and any adverse development or perceived adverse development with respect to the FDA's review of that NDA;
- failure to successfully develop and commercialize our product candidates, including CMX001;
- inability to obtain additional funding;
- regulatory or legal developments in the United States and other countries applicable to our product candidates;
- adverse regulatory decisions;
- changes in the structure of healthcare payment systems;
- inability to obtain adequate product supply for our product candidates, or the inability to do so at acceptable prices;
- introduction of new products, services or technologies by our competitors;
- failure to meet or exceed financial projections we provide to the public;
- failure to meet or exceed the estimates and projections of the investment community;
- changes in the market valuations of similar companies;
- market conditions in the pharmaceutical and biotechnology sectors, and the issuance of new or changed securities analysts' reports or recommendations;
- announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us or our competitors;
- significant lawsuits (including patent or stockholder litigation), and disputes or other developments relating to proprietary rights (including patents, litigation matters and our ability to obtain patent protection for our technologies);
- additions or departures of key scientific or management personnel;
- sales of our common stock by us or our stockholders in the future;
- trading volume of our common stock;
- general economic, industry and market conditions; and
- the other factors described in this "Risk Factors" section.

In addition, the stock market in general, and the Nasdaq Global Market in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance.

An active trading market for our common stock may not develop.

Prior to this offering, there has not been a public market for our common stock. Although our common stock has been approved for listing on the Nasdaq Global Market, an active trading market for our shares may never develop or be sustained following this offering. If an active market for our common stock does not develop, you may not be able to sell your shares quickly or at the market price. The initial public offering

price for the shares will be determined by negotiations between us and representatives of the underwriters and may not be indicative of prices that will prevail in the trading market.

Our principal stockholders and management own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

Our executive officers, directors, 5% stockholders and their affiliates beneficially own approximately 81% of our voting stock and, upon the closing of this offering, that same group will beneficially own approximately % of our voting stock, excluding any shares of our common stock that these stockholders may purchase in the offering. Therefore, even after this offering these stockholders will have the ability to substantially influence us through this ownership position. For example, these stockholders, if they choose to act together, may be able to control elections of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This concentration of voting power could delay or prevent an acquisition of our company on terms that other stockholders may desire.

We are an "emerging growth company," and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies," including exemption from compliance with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002 (Sarbanes-Oxley Act), reduced disclosure obligations regarding executive compensation in this prospectus and our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of this offering, (b) in which we have total annual gross revenue of at least $1.0 billion, or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds $700.0 million as of the prior June 30th, and (2) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period.

Even after we no longer qualify as an emerging growth company, we may still qualify as a "smaller reporting company" which would allow us to take advantage of many of the same exemptions from disclosure requirements including exemption from compliance with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and reduced disclosure obligations regarding executive compensation in this prospectus and our periodic reports and proxy statements. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

We will incur significant increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives.

As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act, as well as rules subsequently implemented by the Securities and Exchange Commission (SEC), and the Nasdaq Global Market have imposed various requirements on public companies. In July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), was enacted. There are significant corporate governance and executive compensation related provisions in the Dodd-Frank Act that require the SEC to adopt additional rules and regulations in these areas such as "say on pay" and proxy access. Stockholder activism, the current political

environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact (in ways we cannot currently anticipate) the manner in which we operate our business. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect that these rules and regulations will make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain our current levels of such coverage.

If you purchase our common stock in this offering, you will incur immediate and substantial dilution in the book value of your shares.

Investors purchasing common stock in this offering will pay a price per share that substantially exceeds the pro forma book value (deficit) per share of our tangible assets after subtracting our liabilities. As a result, investors purchasing common stock in this offering will incur immediate dilution of $ per share, based on an assumed initial public offering price of $ per share (the mid-point of the price range set forth on the cover page of this prospectus) and our pro forma net tangible book value (deficit) as of September 30, 2012. Further, based on these assumptions, investors purchasing common stock in this offering will contribute approximately % of the total amount invested by stockholders since our inception, but will own only approximately % of the shares of common stock outstanding. For information on how the foregoing amounts were calculated, see “Dilution.”

This dilution is due to the substantially lower price paid by our investors who purchased shares prior to this offering as compared to the price offered to the public in this offering, and the exercise of stock options granted to our employees. In addition, as of September 30, 2012, options to purchase 9,370,011 shares of our common stock at a weighted-average exercise price of $0.64 per share were outstanding, restricted stock units to acquire 155,288 shares of our common stock were outstanding and warrants to purchase 5,727,595 shares of our common stock at a weighted-average exercise price of $2.04 per share were outstanding. The exercise of any of these options or warrants, and the issuance of shares pursuant to these restricted stock units (which will vest in connection with the consummation of this offering), would result in additional dilution. As a result of the dilution to investors purchasing shares in this offering, investors may receive significantly less than the purchase price paid in this offering, if anything, in the event of our liquidation.

A significant portion of our total outstanding shares are restricted from immediate resale but may be sold into the market in the near future. This could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that sales may have on the prevailing market price of our common stock.

After this offering, we will have outstanding shares of common stock based on the number of shares outstanding as of September 30, 2012. This includes the shares that we are selling in this offering, which may be resold in the public market immediately without restriction, unless purchased by our affiliates. Of the remaining shares, shares are currently restricted as a result of securities laws or lock-up agreements but will be able to be sold after the offering as described under the “Shares Eligible for Future Sale.”

Substantially all of our existing stockholders, optionholders, restricted stock unit holders and warrantholders are subject to lock-up agreements with the underwriters of this offering that restrict their ability to transfer shares of our common stock or securities convertible into or exercisable or exchangeable for shares of our common stock for at least 180 days from the date of this prospectus. The lock-up agreements limit the number of shares of common stock that may be sold immediately following the public offering. Subject to certain limitations, approximately shares will become eligible for sale upon expiration of the lock-up period, as calculated and described in more detail in the section entitled “Shares Eligible for Future Sale.” In addition, shares issued or issuable upon exercise of options, restricted stock units and warrants vested as of the expiration of the lock-up period will be eligible for sale at that time. Sales of stock by these stockholders could have a material adverse effect on the trading price of our common stock.

Certain holders of our securities are entitled to rights with respect to the registration of their shares under the Securities Act, subject to the 180-day lock-up arrangement described above. At any time after 180 days of this offering but not before six months after this offering, holders of the registrable securities then outstanding, will have rights, subject to some conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act, except for shares held by our affiliates as defined in Rule 144 under the Securities Act. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock.

We also intend to register all shares of common stock that we may issue under our equity compensation plans. Once we register these shares, they can be freely sold in the public market upon issuance, subject to volume limitations applicable to affiliates and the lock-up agreements described in the "Underwriting" section of this prospectus.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

Our management will have broad discretion in the application of the net proceeds, including for any of the purposes described in the section entitled "Use of Proceeds," and you will not have the opportunity as part of your investment decision to assess whether our management are using the net proceeds appropriately. Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. The failure by our management to apply these funds effectively could result in financial losses that could have a material adverse effect on our business, cause the price of our common stock to decline and delay the development of our product candidates. Pending their use, we may invest the net proceeds from this offering in short-term, investment-grade, interest-bearing securities. These investments may not yield a favorable return to our stockholders.

Volatility in our stock price could subject us to securities class action litigation.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because pharmaceutical companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

Under Section 382 of the Internal Revenue Code of 1986, as amended (Code), if a corporation undergoes an "ownership change," generally defined as a greater than 50% change (by value) in its equity ownership over a three year period, the corporation's ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes (such as research tax credits) to offset its post-change income may be limited. We have determined that a Section 382 ownership change occurred in 2002 and 2007 resulting in limitations of at least $64,000 and $762,000, respectively, of losses incurred prior to the respective ownership change dates. We are currently evaluating Section 382 ownership changes that may have occurred subsequent to 2007. We believe that, with our initial public offering, our most recent private placement and other transactions that have occurred since 2007, we may have triggered an ownership change limitation. We may also experience ownership changes in the future as a result of subsequent shifts in our stock ownership. As a result, if we earn net taxable income, our ability to use our pre-change net operating loss carryforwards to offset United States federal taxable income may be subject to limitations, which could potentially result in increased future tax liability to us.

Because we do not anticipate paying any cash dividends on our common stock in the foreseeable future, capital appreciation, if any, would be your sole source of gain.

We have never declared or paid any cash dividends on our common stock. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not

anticipate declaring or paying any cash dividends for the foreseeable future. As a result, capital appreciation, if any, of our common stock would be your sole source of gain on an investment in our common stock for the foreseeable future.

Provisions in our corporate charter documents and under Delaware law could make it more difficult for a third party to acquire us or increase the cost of acquiring us, even if doing so would benefit our stockholders and may prevent attempts by our stockholders to replace or remove our current management.

Some provisions of our charter documents and Delaware law may have anti-takeover effects that could discourage an acquisition of us by others, even if an acquisition would be beneficial to our stockholders and may prevent attempts by our stockholders to replace or remove our current management. These provisions include:

- authorizing the issuance of "blank check" preferred stock, the terms of which may be established and shares of which may be issued without stockholder approval which could be used to institute a "poison pill" that would work to dilute the stock ownership of a potential hostile acquirer, effectively preventing acquisitions that have not been approved by our board of directors;
- allowing the authorized number of our directors to be changed only by resolution of our board of directors;
- limiting the removal of directors;
- creating a staggered board of directors;
- requiring that stockholder actions must be effected at a duly called stockholder meeting and prohibiting stockholder actions by written consent;
- eliminating the ability of stockholders to call a special meeting of stockholders; and
- establishing advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at duly called stockholder meetings.

The amendment of any of these provisions, with the exception of the ability of our board of directors to issue shares of preferred stock and designate any rights, preferences and privileges thereto, would require the affirmative vote of the holders of at least 66 2/3% of the voting power of all of our then outstanding common stock.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, we are subject to Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with an interested stockholder for a period of three years following the date on which the stockholder became an interested stockholder, unless such transactions are approved by our board of directors. This provision could have the effect of delaying or preventing a change of control, whether or not it is desired by or beneficial to our stockholders. Further, other provisions of Delaware law may also discourage, delay or prevent someone from acquiring us or merging with us.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the sections entitled "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business," contains forward-looking statements. We may, in some cases, use word such as "anticipate," "believe," "could," "estimate," "expects," "intend," "may," "plan," "potential," "predict," "project," "should," "will," "would" or the negative of those terms, and similar expressions that convey uncertainty of future events or outcomes to identify these forward-looking statements. Any statements contained herein that are not statements of historical facts may be deemed to be forward-looking statements. Forward-looking statements in this prospectus include, but are not limited to, statements about:

- the success, cost and timing of our product development activities and clinical trials;
- our ability to obtain and maintain regulatory approval of our product candidates, and any related restrictions, limitations, and/or warnings in the label of an approved product candidate;
- our ability to obtain funding for our operations, including funding necessary to complete the Phase 3 clinical trials required to file our NDA for CMX001;
- our plans to research, develop and commercialize our product candidates;
- our ability to attract collaborators with development, regulatory and commercialization expertise;
- the size and growth potential of the markets for our product candidates, and our ability to serve those markets;
- our ability to successfully commercialize our product candidates;
- the rate and degree of market acceptance of our product candidates;
- our ability to develop sales and marketing capabilities, whether alone or with potential future collaborators;
- regulatory developments in the United States and foreign countries;
- the performance of our third-party suppliers and manufacturers;
- the success of competing therapies that are or may become available;
- the loss of key scientific or management personnel;
- our expectations regarding the period during which we qualify as an emerging growth company under the JOBS Act;
- our use of the proceeds from this offering;
- the accuracy of our estimates regarding expenses, future revenues, capital requirements and needs for additional financing; and
- our expectations regarding our ability to obtain and maintain intellectual property protection for our product candidates.

These forward-looking statements reflect our management's beliefs and views with respect to future events and are based on estimates and assumptions as of the date of this prospectus and are subject to risks and uncertainties. We discuss many of these risks in greater detail under "Risk Factors." Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. Given these uncertainties, you should not place undue reliance on these forward-looking statements.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in this prospectus by these cautionary statements. Except as required by law, we undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.

MARKET, INDUSTRY AND OTHER DATA

This prospectus also contains estimates, projections and other information concerning our industry, our business and relevant antiviral markets, including data regarding the estimated size of relevant antiviral markets, patient populations, projected diagnosis rates and the perceptions and preferences of patients and physicians regarding certain therapies, as well as data regarding market research and estimates. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances that are assumed in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources that we believe to be reliable. In some cases, we do not expressly refer to the sources from which this data is derived. In that regard, when we refer to one or more sources of this type of data in any paragraph, you should assume that other data of this type appearing in the same paragraph is derived from the same sources, unless otherwise expressly stated or the context otherwise requires.

USE OF PROCEEDS

We estimate that we will receive net proceeds of approximately $ million (or approximately $ million if the underwriters' over-allotment option is exercised in full) from the sale of the shares of common stock offered by us in this offering, based on an assumed initial public offering price of $ per share (the mid-point of the price range set forth on the cover page of this prospectus), and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

A $1.00 increase (decrease) in the assumed initial public offering price of $ per share would increase (decrease) the net proceeds to us from this offering by approximately $ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Similarly, a one million share increase (decrease) in the number of shares offered by us, as set forth on the cover of this prospectus, would increase (decrease) the net proceeds to us by $, assuming the assumed initial public offering price of $ per share (the mid-point of the price range set forth on the cover of this prospectus), remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The principal purposes of this offering are to obtain additional capital to support our operations, to create a public market for our common stock and to facilitate our future access to the public equity markets. We anticipate that we will use the net proceeds of this offering for the following purposes:

- approximately $45.0 million to fund our Phase 3 development of CMX001, including internal salaries and external costs related to completion of our Phase 3 clinical trial, SUPPRESS, and costs associated with initial NDA preparatory work; and
- the remainder to fund general operating expenses, debt service payments and other working capital purposes.

We may also use a portion of the remaining net proceeds to in-license, acquire, or invest in complementary businesses, technologies, products or assets. However we have no current commitments or obligations to do so.

The amount and timing of our actual expenditures will depend upon numerous factors, including the ongoing status and results of SUPPRESS. Furthermore, we anticipate that we will need to secure additional funding for the further development of CMX001 for other indications, and for the development of any of our other product candidates.

Our expected use of net proceeds from this offering represents our current intentions based upon our present plans and business condition. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering, or the amounts that we will actually spend on the uses set forth above. The amounts and timing of our actual use of the net proceeds will vary depending on numerous factors, including our ability to obtain additional financing, the relative success and cost of our research, preclinical and clinical development programs, the amount and timing of additional revenues, if any, received from our collaboration and licensing agreement with Merck, whether we are able to enter into future licensing arrangements, and whether we are able to extend our agreement with BARDA. As a result, our management will have broad discretion in the application of the net proceeds, and investors will be relying on our judgment regarding the application of the net proceeds of this offering. In addition, we might decide to postpone or not pursue clinical trials or preclinical activities (including SUPPRESS) if the net proceeds from this offering and the other sources of cash are less than expected.

Pending their use, we plan to invest the net proceeds from this offering in short- and intermediate-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings to support our operations and finance the growth and development of our business. We do not intend to pay cash dividends on our common stock for the foreseeable future. Any future determination related to our dividend policy will be made at the discretion of our board of directors and will depend upon, among other factors, our results of operations, financial condition, capital requirements, contractual restrictions, business prospects and other factors our board of directors may deem relevant.

CAPITALIZATION

The following table sets forth our cash and cash equivalents, and our capitalization as of September 30, 2012:

- on an actual basis;
- on a pro forma basis, giving effect to (1) the conversion of all our outstanding convertible preferred stock as of September 30, 2012 into an aggregate of 51,404,514 shares of our common stock upon closing of this offering, (2) the issuance of shares of common stock to holders of our Series F preferred stock upon closing of this offering in respect of the accumulated dividends on our Series F preferred stock through to the closing date of this offering (based on an assumed closing date of , 2013), and (3) the conversion of our outstanding preferred stock warrants into common stock warrants, and the related reclassification of the warrant liability to stockholders' equity (deficit); and
- on a pro forma as adjusted basis, reflecting the pro forma adjustments discussed above and giving further effect to the sale by us of shares of our common stock at an assumed initial public offering price of $ per share (the mid-point of the range set forth on the cover of this prospectus), and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma information below is illustrative only and our capitalization following the closing of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. You should read this table together with "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and the related notes appearing elsewhere in this prospectus.

	As of September 30, 2012		
	Actual	Pro Forma	Pro Forma As Adjusted[1]
	(unaudited) (in thousands, except per share amounts)		
Cash and cash equivalents	$ 34,462		$
Redeemable convertible preferred stock:			
Redeemable convertible preferred stock warrant liability	$ 7,738	$	$
Redeemable convertible preferred stock; $0.001 par value: 69,679,299 shares authorized, 51,404,514 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma; no shares authorized, issued or outstanding, pro forma as adjusted	106,066		
Stockholders' deficit:			
Common stock, $0.001 par value; 89,700,000 shares authorized, 5,438,065 shares issued and outstanding, actual; shares authorized, shares issued and outstanding, pro forma; 200,000,000 shares authorized, shares issued and outstanding, pro forma as adjusted	5		
Additional paid-in capital	—		
Accumulated other comprehensive income	—		
Accumulated deficit	(95,320)		
Total stockholders' equity (deficit)	(95,315)		
Total capitalization	$ 18,489	$	$

(1) Each $1.00 increase or decrease in the assumed initial public offering price of $ per share (the mid-point of the price range set forth on the cover page of this prospectus) would increase or decrease, respectively, the amount of cash, cash equivalents and marketable securities, additional paid-in capital and total capitalization by approximately $ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering costs payable by us.

The number of common shares shown as issued and outstanding on a pro forma as adjusted basis in the table is based on the number of shares of our common stock outstanding as of September 30, 2012, and excludes:

- 9,370,011 shares of common stock issuable upon the exercise of outstanding stock options as of September 30, 2012, at a weighted-average exercise price of $0.64 per share;
- 155,288 shares of common stock issuable pursuant to outstanding restricted stock units as of September 30, 2012, which will vest in connection with the consummation of this offering;
- 5,727,595 shares of common stock issuable upon the exercise of outstanding warrants as of September 30, 2012, at a weighted-average exercise price of $2.04 per share; and
- shares of common stock reserved for future issuance under the 2013 plan (including 1,361,527 shares of common stock reserved for issuance under the 2012 plan as of September 30, 2012, which shares will be added to the shares reserved under the 2013 plan upon its effectiveness), which will become effective upon the closing of this offering.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the initial public offering price per share of our common stock and the pro forma net tangible book value per share of our common stock after this offering.

Our historical net tangible book value (deficit) as of September 30, 2012, was approximately $(95.3) million, or $(17.53) per share of our common stock. Our historical net tangible book value (deficit) is the amount of our total tangible assets less our liabilities and convertible preferred stock which is not included within equity. Net historical tangible book value (deficit) per share is our historical net tangible book value (deficit) divided by the number of shares of common stock outstanding as of September 30, 2012.

Our pro forma net tangible book value (deficit) as of September 30, 2012, was $ million, or $ per share of common stock. Pro forma net tangible book value (deficit) gives effect to the conversion of all of our outstanding convertible preferred stock as of September 30, 2012, into an aggregate of 51,404,514 shares of our common stock and the reclassification of our preferred stock warrant liability into permanent equity, both of which will occur automatically upon the closing of this offering, and the issuance of shares of common stock to our holders of Series F preferred stock upon closing of this offering in respect of the accumulated dividends on our Series F preferred stock through to the closing date of this offering (based on an assumed closing date of , 2013).

Pro forma as adjusted net tangible book value is our pro forma net tangible book value (deficit), plus the effect of the sale of shares of our common stock in this offering at an assumed initial public offering price of $ per share (the mid-point of the range set forth on the cover of this prospectus), and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. This amount represents an immediate increase in pro forma as adjusted net tangible book value of $ per share to our existing stockholders, and an immediate dilution of $ per share to new investors participating in this offering.

The following table illustrates this dilution on a per share basis:

Assumed initial public offering price per share		$
Historical net tangible book value (deficit) per share as of September 30, 2012	$ (17.53)	
Pro forma increase in net tangible book value per share as of September 30, 2012 attributable to the conversion of convertible preferred stock		
Pro forma increase in net tangible book value per share as of September 30, 2012 attributable to the issuance of shares of common stock to holders of our Series F preferred stock upon closing of this offering in respect of the accumulated dividends on our Series F preferred stock through to the closing date of this offering (based on an assumed closing date of , 2013)		
Increase in pro forma net tangible book value per share attributable to new investors participating in this offering		
Pro forma as adjusted net tangible book value per share after this offering		
Dilution per share to new investors participating in this offering		$

A $1.00 increase (decrease) in the assumed initial public offering price of $ per share (the mid-point of the price range set forth on the cover page of this prospectus) would increase (decrease) the pro forma as adjusted net tangible book value (deficit) per share after this offering by approximately $ per share and the dilution in pro forma per share to investors participating in this offering by approximately $ per share, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Similarly, a one million share increase (decrease) in the number of shares offered by us, as set forth on the cover of this prospectus, would increase (decrease) the pro forma as adjusted net tangible book value (deficit) per share after this offering by approximately $ and the dilution in pro forma per share to

investors participating in this offering by approximately $, assuming the assumed initial public offering price of $ per share (the mid-point of the price range set forth on the cover of this prospectus) remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters exercise their over-allotment option in full to purchase additional shares of our common stock in this offering, the pro forma as adjusted net tangible book value will increase to $ per share, representing an immediate increase in pro forma as adjusted net tangible book value (deficit) to existing stockholders of $ per share and an immediate dilution of $ per share to new investors participating in this offering.

The following table summarizes, on a pro forma as adjusted basis as of September 30, 2012, the number of shares purchased or to be purchased from us, the total consideration paid or to be paid to us, and the average price per share paid or to be paid to us by existing stockholders and new investors participating in this offering at an assumed initial public offering price of $ per share (the mid-point of the range set forth on the cover of this prospectus), before deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. As the table below shows, new investors participating in this offering will pay an average price per share substantially higher than our existing stockholders paid.

	Total Shares		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
	(in thousands, except percents and per share data)				
Existing stockholders before this offering		%	$	%	$
Investors participating in this offering					
Total		100%	$	100%	

A $1.00 increase (decrease) in the assumed initial public offering price of $ per share (the mid-point of the price range set forth on the cover page of this prospectus) would increase (decrease) the total consideration paid by new investors, total consideration paid by all stockholders and the average price per share paid by all stockholders by approximately $, $ and $, respectively, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Similarly, a one million share increase (decrease) in the number of shares offered by us, as set forth on the cover of this prospectus, would increase (decrease) the total consideration paid by new investors, total consideration paid by all stockholders and the average price per share paid by all stockholders by approximately $, $ and $, respectively, assuming the assumed initial public offering price of $ per share (the mid-point of the price range set forth on the cover of this prospectus) remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters exercise their over-allotment option in full to purchase additional shares of our common stock in this offering, the number of shares of common stock held by existing stockholders will be reduced to , or % of the total number of shares of common stock to be outstanding after this offering, and the number of shares of common stock held by investors participating in this offering will be further increased to , or % of the total number of shares of common stock to be outstanding after this offering.

The foregoing discussion and tables are based on shares of common stock outstanding as of September 30, 2012, after giving effect to the conversion of our outstanding convertible preferred stock as of September 30, 2012, into an aggregate of 51,404,514 shares of common stock, and the issuance of shares of common stock to holders of our Series F preferred stock upon closing of this offering in respect of the accumulated dividends on our Series F preferred stock through to the closing date of this offering (based on an assumed closing date of , 2013), and excludes:

- 9,370,011 shares of common stock issuable upon the exercise of outstanding stock options as of September 30, 2012, at a weighted-average exercise price of $0.64 per share;
- 155,288 shares of common stock issuable pursuant to outstanding restricted stock units as of September 30, 2012, which will vest in connection with the consummation of this offering;
- 5,727,595 shares of common stock issuable upon the exercise of outstanding warrants as of September 30, 2012, at a weighted-average exercise price of $2.04 per share; and
- shares of common stock reserved for future issuance under the 2013 plan (including 1,361,527 shares of common stock reserved for issuance under the 2012 plan as of September 30, 2012, which shares will be added to the shares reserved under the 2013 plan upon its effectiveness), which will become effective upon the closing of this offering.

Effective immediately upon closing of this offering, an aggregate of shares of our common stock will be reserved for issuance under the 2013 plan (including 1,361,527 shares of common stock reserved for issuance under our 2012 plan as of September 30, 2012, which shares will be added to the shares reserved under the 2013 plan upon its effectiveness) and this share reserve will also be subject to an automatic annual increase in accordance with the terms of the 2013 plan. Furthermore, we may choose to raise additional capital through the sale of equity or convertible debt securities due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that any of these options are exercised, new options are issued under our equity incentive plans or we issue additional shares of common stock or other equity or convertible debt securities in the future, there will be further dilution to investors participating in this offering.

SELECTED FINANCIAL DATA

The following selected financial data should be read together with our financial statements and related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing elsewhere in this prospectus. The selected financial data in this section are not intended to replace our financial statements and the related notes. Our historical results are not necessarily indicative of the results that may be expected in the future and results of interim periods are not necessarily indicative of the results for the entire year.

The selected statement of operations data for the years ended December 31, 2009, 2010 and 2011 and the selected balance sheet data as of December 31, 2010 and 2011 are derived from our financial statements appearing elsewhere in this prospectus. The selected statement of operations data for the nine months ended September 30, 2011 and 2012 and the selected balance sheet data as of September 30, 2012, are derived from our unaudited financial statements appearing elsewhere in this prospectus. The unaudited financial statements have been prepared on a basis consistent with our audited financial statements included in this prospectus and include, in our opinion, all adjustments, consisting only of normal recurring adjustments, necessary for the fair presentation of the financial information in those statements. The pro forma basic and diluted net loss per common share data are computed using the weighted-average number of shares of common stock outstanding, after giving effect to the conversion (using the as if-converted method) of all shares of our convertible preferred stock into common stock and the issuance of shares of common stock to holders of our Series F preferred stock upon closing of this offering in respect of the accumulated dividends on our Series F preferred stock through to the closing date of this offering (based on an assumed closing date of , 2013).

	Years Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
	(in thousands, except share and per share data)				
				(unaudited)	
Statement of Operations:					
Revenues:					
Collaboration and licensing revenues	$ —	$ —	$ 55	$ —	$ 17,445
Contract and grant revenues	7,810	1,715	12,046	6,746	12,694
Total revenues	7,810	1,715	12,101	6,746	30,139
Operating expenses:					
Research and development	14,617	19,413	27,369	20,016	21,713
General and administrative	6,694	7,606	9,724	7,488	7,066
Total operating expenses	21,311	27,019	37,093	27,504	28,779
Income (loss) from operations	(13,501)	(25,304)	(24,992)	(20,758)	1,360
Other (expense) income:					
Interest income (expense)	136	(154)	(212)	(133)	(367)
Fair value adjustments to warrant liability	—	—	(385)	(275)	(1,073)
Other income	25	1	—	—	—
Net loss	(13,340)	(25,457)	(25,589)	(21,166)	(80)
Accretion of redeemable convertible preferred stock	—	—	(9,565)	(8,658)	(2,700)
Net loss attributable to common shareholders	$(13,340)	$(25,457)	$(35,154)	$(29,824)	$ (2,780)
Net loss per share, basic and diluted	$ (2.71)	$ (4.94)	$ (6.62)	$ (5.61)	$ (0.51)
Weighted-average shares outstanding:					
Basic and diluted	4,916	5,158	5,312	5,312	5,403
Pro forma net loss per share basic and diluted (unaudited):			$		$
Weighted-average pro forma shares outstanding, basic and diluted (unaudited):					

	As of December 31,		As of September 30,
	2010	2011	2012
	(in thousands, except share and per share data)		
			(unaudited)
Balance Sheet Data:			
Cash and cash equivalents	$ 3,306	$ 19,525	$ 34,462
Working capital (deficit)	(2,460)	18,010	29,561
Total assets	4,683	25,432	36,952
Loan payable[(1)]	4,566	2,601	14,565
Redeemable convertible preferred stock warrant liability	—	6,491	7,738
Redeemable convertible preferred stock	55,131	103,366	106,066
Accumulated deficit	(61,504)	(93,681)	(95,320)
Total stockholders' deficit	(59,607)	(93,680)	(95,315)

(1) Loan payable includes the current and long-term portion of our debt, net of debt discount.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis should be read in conjunction with "Selected Financial Data" and our financial statements and related notes included elsewhere in this prospectus. This discussion and analysis and other parts of this prospectus contain forward-looking statements based upon current beliefs, plans and expectations that involve risks, uncertainties and assumptions, such as statements regarding our plans, objectives, expectations, intentions and projections. Our actual results and the timing of selected events could differ materially from those anticipated in these forward-looking statements as a result of several factors, including those set forth under "Risk Factors" and elsewhere in this prospectus. You should carefully read the "Risk Factors" section of this prospectus to gain an understanding of the important factors that could cause actual results to differ materially from our forward-looking statements. Please also see the section entitled "Special Note Regarding Forward-Looking Statements."

Overview

Chimerix is a biopharmaceutical company committed to the discovery, development and commercialization of novel, oral antiviral therapeutics that are designed to transform patient care in areas of high unmet medical need. Our proprietary lipid technology has given rise to two clinical-stage compounds, CMX001 and CMX157, which have demonstrated the potential for enhanced antiviral activity and safety in convenient, orally administered dosing regimens. We have worldwide rights to our lead product candidate, CMX001, and anticipate beginning the Phase 3 SUPPRESS study in 2013 for the prevention of CMV infection in HSCT recipients. We intend to develop CMX001 as the first broad-spectrum antiviral against dsDNA viruses. Our second clinical-stage compound, CMX157, is a Phase 1 product candidate for the treatment of HIV and was licensed to Merck in 2012.

To date, we have devoted substantially all of our resources to our research and development efforts relating to our product candidates, including conducting clinical trials with our product candidates, providing general and administrative support for these operations and protecting our intellectual property. We do not have any products approved for sale and have not generated any revenue from product sales. From our inception through September 30, 2012, we have funded our operations primarily through:

- the private placement of preferred stock, common stock, and warrants to purchase preferred stock totaling $100.4 million;
- the receipt of government grants and contracts totaling approximately $62.1 million;
- the receipt of $21.0 million in loan proceeds from financial institutions; and
- the receipt of $17.5 million of up-front proceeds under our collaboration and license agreement with Merck.

We have incurred net losses in each year since our inception in 2000. Our net losses were approximately $13.3 million, $25.5 million, and $25.6 million for the years ended December 31, 2009, 2010 and 2011, respectively, and $21.2 million and $80,000 for the nine months ended September 30, 2011 and 2012, respectively. As of September 30, 2012, we had an accumulated deficit of approximately $95.3 million. Substantially all our net losses resulted from costs incurred in connection with our research and development programs and from general and administrative costs associated with our operations.

We expect to continue to incur significant expenses and increasing operating losses for at least the next several years. We anticipate that our expenses will increase substantially as we:

- continue the development of our lead product candidate, CMX001, for the prevention of CMV infection in transplant recipients;
- seek to obtain regulatory approvals for CMX001;
- prepare for the potential commercialization of CMX001;
- scale up manufacturing capabilities to commercialize CMX001 for any indications for which we receive regulatory approval;

- begin outsourcing of the commercial manufacturing of CMX001 for any indications for which we receive regulatory approval;
- establish an infrastructure for the sales, marketing and distribution of CMX001 for any indications for which we receive regulatory approval;
- expand our research and development activities and advance our clinical programs;
- maintain, expand and protect our intellectual property portfolio;
- continue our research and development efforts and seek to discover additional product candidates; and
- add operational, financial and management information systems and personnel, including personnel to support our product development and commercialization efforts and operations as a public company.

We do not expect to generate revenue from product sales unless and until we successfully complete development and obtain marketing approval for one or more of our product candidates, which we expect will take a number of years and is subject to significant uncertainty. Accordingly, we anticipate that we will need to raise additional capital in addition to the net proceeds of this offering prior to the commercialization of CMX001 or any of our other product candidates. Until such time that we can generate substantial revenue from product sales, if ever, we expect to finance our operating activities through a combination of equity offerings, debt financings, government or other third-party funding, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements. However, we may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms or at all, which would have a negative impact on our financial condition and could force us to delay, limit, reduce or terminate our research and development programs or commercialization efforts. Failure to receive additional funding could cause us to cease operations, in part or in full.

Financial Overview

Revenue

To date, we have not generated any revenue from product sales. All of our revenue to date has been derived from government grants and contracts and the receipt of up-front proceeds under our collaboration and license agreement with Merck.

In September 2003, we were awarded a $36.3 million grant from the National Institute of Allergy and Infectious Diseases (NIAID) to support our development of an oral drug for the treatment of smallpox. The work performed under this grant resulted in our selection of CMX001 as a lead product candidate for commercial development. The grant, and our activities conducted in connection therewith, were substantially complete in early 2010. However, the grant was not formally terminated until February 2011.

In February 2011, we entered into a contract with BARDA, a U.S. governmental agency that supports the advanced research and development, manufacturing, acquisition, and stockpiling of medical countermeasures. The contract consists of an initial performance period, referred to as the base performance segment, which ends in March 2013, plus up to four extension periods of around one year each, referred to as option segments, each of which may be exercised at BARDA's sole discretion. The contract is a cost plus fixed fee development contract. Under the contract as currently in effect, if each follow-on option segment is exercised by BARDA, we may receive up to an aggregate of $81.1 million in expense reimbursement and fees. We are currently completing the base performance segment of the contract under which we may receive up to a total of approximately $31.0 million. As of September 30, 2012, we had recognized revenue in aggregate of $24.7 million with respect to the base performance segment.

In July 2012, we entered into a collaboration and license agreement granting Merck exclusive worldwide rights to CMX157, our lipid acyclic nucleoside phosphonate currently being evaluated to treat HIV infection. Under the terms of the agreement, Merck receives an exclusive worldwide license for any human use of CMX157 and is responsible for future development and commercialization of CMX157. Following execution of the agreement, we received a $17.5 million upfront payment. In addition, we are eligible to receive payments up to $151.0 million upon the achievement of certain development and regulatory milestones, as

well as tiered royalties on net sales escalating from high single digit to low double digits based on the volume of sales. Such royalties continue through the later of expiration of our patent rights or ten years from the first commercial sale on a country-by-country basis.

In the future, we may generate revenue from a combination of product sales, license fees, milestone payments and royalties from the sales of products developed under licenses of our intellectual property. We expect that any revenue we generate will fluctuate from quarter to quarter as a result of the timing and amount of license fees, milestone and other payments, and the amount and timing of payments that we receive upon the sale of our products, to the extent any are successfully commercialized. If we fail to complete the development of our product candidates in a timely manner or obtain regulatory approval for them, our ability to generate future revenue, and our results of operations and financial position, would be materially adversely affected.

Research and Development Expenses

Since our inception, we have focused our resources on our research and development activities, including conducting preclinical studies and clinical trials, manufacturing development efforts and activities related to regulatory filings for our product candidates. We recognize research and development expenses as they are incurred. Our research and development expenses consist primarily of:

- salaries and related overhead expenses, which include stock option compensation and benefits, for personnel in research and development functions;
- fees paid to consultants and CROs, including in connection with our preclinical and clinical trials, and other related clinical trial fees, such as for investigator grants, patient screening, laboratory work, clinical trial database management, clinical trial material management and statistical compilation and analysis;
- costs related to acquiring and manufacturing clinical trial materials (including continued testing such as process validation and stability of drug product);
- depreciation of leasehold improvements, laboratory equipment and computers;
- costs related to compliance with regulatory requirements; and
- license fees for and milestone payments related to licensed products and technologies.

From our inception through September 30, 2012, we have incurred approximately $94.5 million in research and development expenses. We plan to increase our research and development expenses for the foreseeable future as we continue the development of CMX001 for the prevention of CMV infection in HSCT and other indications and to further advance the development of our other product candidates, subject to the availability of additional funding.

To date, our research and development expenses have related predominately to the development of CMX001. In the years ended December 31, 2009, 2010 and 2011, and the nine months ended September 30, 2011 and 2012, we spent $14.6 million, $19.4 million, $27.4 million, $20.0 million and $21.7 million, respectively, on research and development expenses. Our direct research and development expenses consist principally of external costs, such as fees paid to investigators, consultants, central laboratories and CROs, in connection with our clinical trials, and costs related to acquiring and manufacturing clinical trial materials. We typically use our employee and infrastructure resources across multiple research and development programs.

The successful development of our clinical and preclinical product candidates is highly uncertain. At this time, we cannot reasonably estimate the nature, timing or costs of the efforts that will be necessary to complete the remainder of the development of any of our clinical or preclinical product candidates or the period, if any, in which material net cash inflows from these product candidates may commence. This is due to the numerous risks and uncertainties associated with the development of our product candidates, including:

- the uncertainty of the scope, rate of progress and expense of our ongoing, as well as any additional, clinical trials and other research and development activities;
- the potential benefits of our candidates over other therapies;

- our ability to market, commercialize and achieve market acceptance for any of our product candidates that we are developing or may develop in the future;
- future clinical trial results;
- the timing and receipt of any regulatory approvals; and
- the filing, prosecuting, defending and enforcing of patent claims and other intellectual property rights, and the expense of doing so.

A change in the outcome of any of these variables with respect to the development of a product candidate could mean a significant change in the costs and timing associated with the development of that product candidate. For example, if the FDA or another regulatory authority were to require us to conduct clinical trials beyond those that we currently anticipate will be required for the completion of clinical development of a product candidate, or if we experience significant delays in enrollment in any of our clinical trials, we could be required to expend significant additional financial resources and time with respect to the development of that product candidate.

CMX001

The majority of our research and development resources are currently focused on our Phase 3 clinical trial for CMX001, SUPPRESS, and our other planned clinical and preclinical studies and other work needed to submit CMX001 for regulatory approval in the United States and Canada. We have incurred and expect to continue to incur significant expense in connection with these efforts, including expenses related to:

- enrollment and conduct of a Phase 2 clinical trial in patients with AdV, Study 202; and
- data analysis and study report generation for our Phase 1 clinical trial to evaluate the effect of CMX001 on the heart's electrical cycle, and an additional Phase 1 clinical trial to evaluate the effect of food on CMX001 blood levels.

In addition, pursuant to our contract with BARDA, we are evaluating CMX001 for the treatment of smallpox. During the base performance segment of the contract, we incurred significant expense in connection with the development of orthopox virus animal models, the demonstration of efficacy and pharmacokinetics of CMX001 in the animal models, the conduct of an open label clinical safety study for subjects with dsDNA infections, and the manufacture and process validation of bulk drug substance and 100 mg tablets.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and related costs for employees in executive, finance, corporate development and human resources and administrative support functions, including stock-based compensation expenses and benefits. Other significant general and administrative expenses include accounting and legal services, expenses associated with obtaining and maintaining patents, cost of various consultants, occupancy costs and information systems.

We expect that our general and administrative expenses will increase as we operate as a public company and due to the potential commercialization of our product candidates. We believe that these increases will likely include increased costs for director and officer liability insurance, costs related to the hiring of additional personnel and increased fees for outside consultants, lawyers and accountants. We also expect to incur increased costs to comply with corporate governance, internal controls, investor relations and disclosures, and similar requirements applicable to public companies.

Interest Income (Expense), Net

Interest income consists of interest earned on our cash, cash equivalents and short-term investments. We expect our interest income to increase following the completion of this offering as we invest the net proceeds from this offering pending their use in our operations.

Interest expense pertains primarily of interest accrued or paid on amounts outstanding under our loan and security agreement with SVB and MidCap.

Critical Accounting Policies and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our financial statements, which we have prepared in accordance with generally accepted accounting principles in the United States (GAAP). The preparation of our financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of our financial statements, as well as the reported revenues and expenses during the reported periods. We evaluate these estimates and judgments on an ongoing basis. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are more fully described in Note 2 to our financial statements appearing elsewhere in this prospectus, we believe that the following accounting policies related to revenue recognition, clinical trial expenses, valuation of stock-based compensation and restricted stock units are the most critical for fully understanding and evaluating our financial condition and results of operations.

Revenue Recognition

We derive our revenues from two sources: contracts and grants, and collaborations and licensing. Contract and grant revenues are revenues generated pursuant to federal contracts and other awarded grants. Collaboration and licensing revenues are revenues related to license and collaboration agreements. We recognize revenue in accordance with the criteria outlined in the SEC's Topic 13 and Accounting Standards Codification (ASC) 605-25 and by the Financial Accounting Standards Board (FASB). Following these accounting pronouncements, revenue is recognized when all four of the following criteria are met: (i) persuasive evidence of an arrangement exists; (ii) delivery of the products and/or services has occurred and risk of loss has passed; (iii) the selling price is fixed or determinable; and (iv) collectability is reasonably assured.

For arrangements that involve the delivery of more than one element, each product, service and/or right to use assets is evaluated to determine whether it qualifies as a separate unit of accounting. This determination is based on whether the deliverable has "stand-alone value" to the customer. The consideration that is fixed or determinable is then allocated to each separate unit of accounting based on the relative selling prices of each deliverable. The consideration allocated to each unit of accounting is recognized as the related goods and services are delivered, limited to the consideration that is not contingent upon future deliverables. If the arrangement constitutes a single unit of accounting, the revenue recognition policy must be determined for the entire arrangement and the consideration received is recognized over the period of inception through the date the last deliverable within the single unit of accounting is expected to be delivered. Revisions to the estimated period of recognition are reflected in revenue prospectively.

Non-refundable upfront fees are recorded as deferred revenue and recognized into revenue as license fees from collaborations on a straight-line basis over the estimated period of our substantive performance obligations. If we do not have substantive performance obligations, we recognize non-refundable upfront fees into revenue through the date the deliverable is satisfied. Analyzing the arrangement to identify deliverables requires the use of judgment, and each deliverable may be an obligation to deliver services, a right or license to use an asset, or another performance obligation.

Milestone payments are recognized when earned, provided that (i) the milestone event is substantive, (ii) there is no ongoing performance obligation related to the achievement of the milestone earned, and (iii) it would result in additional payments. Milestone payments are considered substantive if all of the following conditions are met: the milestone payment is non-refundable; achievement of the milestone was not reasonably assured at the inception of the arrangement; substantive effort is involved to achieve the milestone; and the amount of the milestone appears reasonable in relation to the effort expended, the other milestones in the arrangement and the related risk associated with the achievement of the milestone. Contingent based event payments we may receive under a license or collaboration agreement will be recognized when received.

From our inception through September 30, 2012, we have not generated any revenue from product sales. For the same period, we have generated $62.1 million in grant and contract revenue. We recognize revenue

under government grants and contracts as qualifying research activities are conducted based on invoices received from company vendors. Any amounts received in advance of performance are recorded as deferred revenue until earned.

We entered into a collaboration and license agreement with Merck in July 2012. The agreement provides for various types of payments, including a $17.5 million non-refundable upfront license fee, contingent event-based milestone payments and future royalties on net product sales. We recognized the upfront license fee payment from Merck as revenue for the nine months ended September 30, 2012, as our remaining performance obligations under the contract are not considered substantive. The contingent event-based payments pursuant to our agreement with Merck do not meet the definition of a milestone as achievement of the triggering event for such payments is based on the performance of Merck and not our performance. Therefore the milestone method will not be applied to any such payments.

Clinical Trial Accruals

As part of the process of preparing financial statements, we are required to estimate our expenses resulting from our obligation under contracts with vendors and consultants and clinical site agreements in connection with conducting clinical trials. The financial terms of these contracts are subject to negotiations which vary contract to contract and may result in payment flows that do not match the periods over which materials or services are provided to us under such contracts. Our clinical trial accrual is dependent upon the timely and accurate reporting of contract research organizations and other third-party vendors.

Our objective is to reflect the appropriate clinical trial expenses in our financial statements by matching those expenses with the period in which services and efforts are expended. We account for these expenses according to the progress of the trial as measured by patient progression and the timing of various aspects of the trial. We determine accrual estimates through discussion with applicable personnel and outside service providers as to the progress or state of communication of trials, or the services completed. During the course of a clinical trial, we adjust the rate of clinical trial expense recognition if actual results differ from the estimates. We make estimates of our accrued expenses as of each balance sheet date in our financial statements based on facts and circumstances known at that time. Although we do not expect that our estimates will be materially different from amounts actually incurred, our understanding of status and timing of services performed relative to the actual status and timing of services performed may vary and may result in us reporting amounts that are too high or too low for any particular period. Through September 30, 2012, there had been no material adjustments to our prior period estimates of accrued expenses for clinical trials. However, due to the nature of estimates, we cannot assure you that we will not make changes to our estimates in the future as we become aware of additional information about the status or conduct of our clinical trials.

Valuation of Stock-Based Compensation

We record the fair value of stock options issued to employees as of the grant date as compensation expense. We recognize compensation expense over the requisite service period, which is equal to the vesting period. For non-employees, we also record the fair value of stock options as of the grant date as compensation expense. We then periodically re-measure the awards to reflect the current fair value at each reporting period until the non-employee completes the performance obligation or the date on which a performance commitment is reached. Expense is recognized over the related service period.

Stock-based compensation expense includes stock options granted to employees and non-employees and has been reported in our statements of operations as follows:

	Years Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
			(in thousands)		
				(unaudited)	
Research and development					
Employee	$ 165	$ 299	$ 315	$ 252	$ 234
Non-employee	—	—	—	—	59
General and administrative					
Employee	266	454	651	492	781
Non-employee	—	—	—	—	59
Total	$ 431	$ 753	$ 966	$ 744	$ 1,133

We calculate the fair value of stock-based compensation awards using the Black-Scholes option-pricing model. The Black-Scholes option-pricing model requires the use of subjective assumptions, including volatility of our common stock, the expected term of our stock options, the risk free interest rate for a period that approximates the expected term of our stock options and the fair value of the underlying common stock on the date of grant. In applying these assumptions, we considered the following factors:

- We do not have sufficient history to estimate the volatility of our common stock price. We calculate expected volatility based on reported data for selected reasonably similar publicly traded companies for which the historical information is available. For the purpose of identifying peer companies, we consider characteristics such as industry, length of trading history, similar vesting terms and in-the-money option status. We plan to continue to use the guideline peer group volatility information until the historical volatility of our common stock is relevant to measure expected volatility for future option grants.
- The assumed dividend yield is based on our expectation of not paying dividends for the foreseeable future.
- We determine the average expected life of stock options based on the simplified method in accordance with SEC Staff Accounting Bulletin Nos. 107 and 110, as our common stock to date has not been publicly traded. We expect to use the simplified method until we have sufficient historical exercise data to provide a reasonable basis upon which to estimate expected term.
- We determine the risk-free interest rate by reference to implied yields available from U.S. Treasury securities with a remaining term equal to the expected life assumed at the date of grant.
- We estimate forfeitures based on our historical analysis of actual stock option forfeitures.

The assumptions used in the Black-Scholes option-pricing model for the years ended December 31, 2009, 2010 and 2011, and the nine months ended September 30, 2011 and 2012 are set forth below:

Employee Stock Options

	Years Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
				(unaudited)	
Volatility	95.00%	91.00%	82.00%	82.10%	80.00%
Expected term (in years)	7.0	7.0	7.0	7.0	6.0
Risk-free interest rate	2.73%	2.69%	2.85%	2.85%	0.90%
Expected dividend yield	0%	0%	0%	0%	0%
Weighted-average option value per share	$ 0.56	$ 0.71	$ 0.50	$ 0.49	$ 0.46

Non-employee Stock Options

	Years Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
				(unaudited)	
Volatility	—	—	77.80%	82.10%	80.00%
Expected term (in years)	—	—	2.7	1.5	5.8
Risk-free interest rate	—	—	0.40%	0.21%	0.78%
Expected dividend yield	—	—	0%	0%	0%
Weighted-average option value per share	—	—	$ 1.04	$ 0.75	$ 0.92

Common Stock Fair Value

The fair value of our common stock for purposes of determining the exercise price for stock option grants was determined on each grant date by our board of directors, or by a committee of our board of directors acting under delegated authority, with input from management. All options to purchase shares of our common stock were intended to be granted with an exercise price per share no less than the fair value per share of our common stock underlying those options on the date of grant, determined in good faith and based on the information known to us on the date of grant. In the absence of a public trading market for our common stock, on each grant date, our board of directors, or a committee of our board of directors acting under delegated authority, considered various objective and subjective factors, along with input from management, to determine the fair value of our common stock, including:

- external market conditions affecting the biotechnology industry;
- trends within the biotechnology industry;
- the prices at which we sold shares of preferred stock to third-party investors;
- the superior rights and preferences of the preferred stock relative to our common stock at the time of each grant;
- our results of operations, financial position, status of our research and development efforts, stage of development and business strategy;
- the lack of an active public market for our common and our preferred stock; and
- the likelihood of achieving a liquidity event in light of prevailing market conditions, such as an initial public offering or sale of our company.

Our board of directors, or a committee of our board of directors acting under delegated authority, also considered and relied upon appraisals of the value of our stock from an independent third-party valuation specialist who conducted a thorough analysis using methodologies, approaches and assumptions consistent with the American Institute of Certified Public Accountants (AICPA) Audit and Accounting Practice Aid Series: Valuation of Privately Held Company Equity Securities Issued as Compensation (AICPA Practice Guide). The independent third-party valuation specialist provided appraisals containing the valuation analyses described below as to the fair value of our common stock as of June 1, 2009, February 15, 2011, December 31, 2011 and September 30, 2012.

The June 1, 2009 Valuation

The valuation analysis as of June 1, 2009, identified three primary components of our business: CMX001 for the smallpox indication, CMX001 for commercial indications, and CMX157 for HIV and other assets.

The valuation of CMX001 for the smallpox indication involved combining a Monte Carlo simulation with an income approach that reflected the significant business risk associated with procuring government contracts and receiving the expected base revenue going forward. Separately, as part of our long-range planning, we developed expense and potential sales projections that indicated the expected growth path of

research and development expenditures. This data was used as input to a compound option-pricing model which was then used to estimate values of CMX001 for commercial indications and CMX157 for HIV and other assets.

In addition, the AICPA guidelines require the examination of the implied value of our equity when a financing occurs on or very close to the valuation date. Since our Series E preferred stock financing was expected to occur shortly following the valuation date, this was used as a basis for determining the total value of our equity following the financing event. The valuation analysis yielded a fair value of our common stock of $0.89 per share as of June 1, 2009.

Our board of directors, or a committee of our board of directors acting under delegated authority, granted stock options on the dates set forth in the table below in reliance on the valuation analysis as of June 1, 2009, and the other objective and subjective factors described above:

Grant Dates	Number of Common Shares Underlying Options Granted	Exercise Price per Common Share	Fair Value per Common Share	Intrinsic Value per Grant
January 15, 2010	147,500	$ 0.89	$ 0.89	—
February 5, 2010	5,300	$ 0.89	$ 0.89	—
April 14, 2010	833,444	$ 0.89	$ 0.89	—
April 20, 2010	200,000	$ 0.89	$ 0.89	—
May 11, 2010	25,300	$ 0.89	$ 0.89	—
May 24, 2010	140,000	$ 0.89	$ 0.89	—
July 6, 2010	140,000	$ 0.89	$ 0.89	—
July 20, 2010	187,000	$ 0.89	$ 0.89	—
August 12, 2010	50,000	$ 0.89	$ 0.89	—

The February 15, 2011 Valuation

AICPA guidelines require that when a financing event takes place close to the valuation date, the implied value of equity within that financing must be considered in the valuation analysis. Since our Series F preferred stock financing closed in early February 2011, this event was used as a basis for this valuation. Our value of equity was calculated by back-solving for the overall equity value implied in the financing. Our Series F preferred stock financing resulted in gross proceeds of $45.0 million, approximately 62% of which was raised from new outside investors. Because this investment was a significant amount, where a portion was made by informed investors that had no prior investment in us, we determined that this investment represented the fair value of our Series F preferred stock and the related warrants to purchase Series F preferred stock issued in connection therewith. After setting up the contingent claims allocation model to be representative of the total interests of each class of equity security then-outstanding, the model was back-solved, holding the claims of each equity security constant relative to one another, in order to determine the fair value of our equity. The valuation analysis yielded a fair value of our common stock of $0.66 per share as of February 15, 2011.

Our board of directors, or a committee of our board of directors acting under delegated authority, granted stock options to purchase our common stock on the dates set forth in the table below in reliance on the valuation analysis as of February 15, 2011, and the other objective and subjective factors described above:

Grant Dates	Number of Common Shares Underlying Options Granted	Exercise Price per Common Share	Fair Value per Common Share	Intrinsic Value per Grant
April 7, 2011	2,516,500	$ 0.66	$ 0.66	—
April 8, 2011	45,000	$ 0.66	$ 0.66	—
May 10, 2011	141,000	$ 0.66	$ 0.66	—
June 20, 2011	50,000	$ 0.66	$ 0.66	—
August 15, 2011	50,000	$ 0.66	$ 0.66	—
September 6, 2011	12,000	$ 0.66	$ 0.66	—
September 30, 2011	56,000	$ 0.66	$ 0.66	—
November 17, 2011	250,000	$ 0.66	$ 0.66	—
February 22, 2012[(1)]	6,000	$ 0.66	$ 0.70	$ 240
February 28, 2012[(1)]	15,000	$ 0.66	$ 0.70	$ 600

Grant Dates	Number of Common Shares Underlying Options Granted	Exercise Price per Common Share	Fair Value per Common Share	Intrinsic Value per Grant
March 29, 2012(1)	50,000	$ 0.66	$ 0.70	$ 2,000
April 18, 2012(1)	50,000	$ 0.66	$ 0.70	$ 2,000

(1) The December 31, 2011, valuation analysis described below was not completed until late April 2012, and therefore was not available at the time the February 22 and 28, March 29 and April 18, 2012 stock option grants were made. The board of directors or a committee of the board of directors, as applicable, determined the exercise price of these option grants in good faith based on all of the information known to them at the time of such grants.

The December 31, 2011 Valuation

The valuation analysis at December 31, 2011, was completed in two stages. Using a contingent claims model in combination with our sale of Series F preferred stock, which occurred in February 2011, the fair value of total equity and all components of our capital structure, including our common stock, was determined as of the time of the financing event. Using this value as a starting point, a series of equity values and associated probabilities were calculated using simulation methodologies that incorporated both Monte Carlo and risk neutral frameworks. Based on assessments of expected returns and volatilities that are consistent with the expectations of market participants, a distribution of equity values was produced which covered the range of events that an informed market participant might expect. These outcomes were organized into ranges and a probability was calculated based on the percent of the total falling into each range. This process created a range of equity values. Using a contingent claims framework, each equity value in the array was allocated to the various components of the capital structure, including our common stock. The value of our common stock was weighted by its respective probability to determine the final fair value of our common stock as of December 31, 2011. The valuation analysis yielded a fair value of our common stock of $0.67 per share as of December 31, 2011.

Our board of directors, or a committee of our board of directors acting under delegated authority, granted stock options on the dates set forth in the table below in reliance on the valuation analysis as of December 31, 2011, and the other objective and subjective factors described above.

Grant Dates	Number of Common Shares Underlying Options Granted	Exercise Price per Common Share	Fair Value per Common Share	Intrinsic Value per Grant
May 16, 2012	5,000	$ 0.67	$ 0.95	$ 1,400
June 1, 2012	50,000	$ 0.67	$ 0.95	$ 14,000
June 13, 2012	436,723	$ 0.67	$ 0.95	$ 122,282
June 27, 2012	3,000	$ 0.67	$ 0.95	$ 840
July 16, 2012	50,000	$ 0.67	$ 0.95	$ 14,000
August 17, 2012	25,000	$ 0.67	$ 1.20	$ 13,250
September 17, 2012	10,000	$ 0.67	$ 1.20	$ 5,300

The September 30, 2012 Valuation

The valuation analysis at September 30, 2012, was completed in two stages. Using a contingent claims model in combination with our sale of Series F preferred stock, which occurred in February 2011, the fair value of total equity and all components of our capital structure, including our common stock, was determined as of the time of the financing event. Using this value as a starting point, a series of equity values and associated probabilities were calculated using simulation methodologies that incorporate both Monte Carlo and risk neutral frameworks. Based on assessments of expected returns and volatilities that are consistent with the expectations of market participants, a distribution of equity values was produced which covered the range of events that an informed market participant might expect. These outcomes were organized into ranges and a probability was calculated based on the percent of the total falling into each range. This process created a range of equity values.

In addition to the range of simulation outcomes associated with the firm as a going concern, an additional outcome was assigned to reflect the increased likelihood of the occurrence of an initial public offering. As a

result of an in-depth management assessment regarding developments in our business, a 20% probability of an initial public offering was assigned. In particular, during the period from December 31, 2011, through September 30, 2012, the following events occurred which increased the likelihood of the occurrence of an initial public offering:

- in February 2012, we announced positive results from Study 201, our CMX001 Phase 2 study in CMV;
- in May 2012, a positive End-of-Phase 2 meeting was held with the FDA with respect to CMX001 for the prevention of CMV infection in HSCT recipients; and
- in July 2012, we announced the execution of an exclusive license and collaboration agreement with Merck for the out-license of CMX157, pursuant to which we received $17.5 million in upfront fees.

Using a contingent claims framework, each equity value in the array was allocated to the various components of the capital structure, including our common stock. The value of our common stock was weighted by its respective probability to determine the final fair value of our common stock as of September 30, 2012. The valuation analysis yielded a fair value of our common stock of $1.20 per share as of September 30, 2012.

In connection with the preparation of the financial statements necessary for inclusion in the registration statement related to this offering, we reassessed the estimated fair value of our common stock on a retrospective basis for financial reporting purposes. Based on the September 30, 2012, valuation report, we concluded that stock options granted during 2012 had an exercise price (which was determined in good faith based on all available information as of the date of grant, rather than based on retrospective analysis) that was different than the reassessed fair value of the common stock at the date of grant. We used these fair value reassessments to determine stock-based compensation expense which is recorded in our financial statements. The difference between the reassessed fair value of the common stock versus the exercise price of the stock options is reflected as intrinsic value in the applicable tables above.

The intrinsic value of all outstanding vested and unvested options as of September 30, 2012, was as follows:

	Number of Options	Aggregate Intrinsic Value
		(in thousands)
Unvested	3,341,020	$ 1,699
Vested	6,028,991	$ 3,585

Restricted Stock Units (RSUs)

In 2012, we issued RSUs to certain employees which vest immediately upon the earlier of (i) a change of control and (ii) the effective date of a registration statement for our initial public offering, subject to the employee's continuous service with us from the grant date through the applicable vesting event. The RSUs entitle the employee upon or shortly following vesting to receive a number of shares of common stock that is equal to the number of RSUs granted. We only record compensation expense attributable to the RSUs if it is probable that the performance criteria will be satisfied. As of September 30, 2012, there were a total of 155,288 RSUs outstanding. The grant date fair value of the RSUs was $0.70 per unit. As of September 30, 2012, no compensation has been recorded as it was not considered probable that the performance criteria will be met.

Fair Value Adjustments to Warrant Liability

We issued warrants to purchase shares of our Series F preferred stock in connection with (i) a loan and security agreement entered into with SVB and MidCap in January 2012, and (ii) an equity financing agreement with certain investors for the sale of Series F preferred stock, which occurred in February 2011. As discussed in Note 2 to our financial statements appearing elsewhere in this prospectus, the warrants to purchase shares of our Series F preferred stock are classified as a liability and are required to be measured at fair value. The adjustment to the fair valuation of the warrants resulted in other expense of $385,000 for the year ended December 31, 2011 and $275,000 and $1.1 million for the nine months ending September 30, 2011 and 2012, respectively. The warrants were valued using a two stage process. Using a contingent claims

model, the fair value of total equity and all components of our capital structure, including the warrants, was determined as of the time of our sale of Series F preferred stock. Using this value as a starting point, a series of equity values and associated probabilities were calculated using simulation methodologies that incorporated both Monte Carlo and risk neutral frameworks. Using a contingent claims framework, each equity value in the array was allocated to the various components of the capital structure including the warrants. Each warrant value was weighted by its respective probability to determine the final fair value of the warrants as of December 31, 2011 and September 30, 2012. The key unobservable inputs used in the determination of the September 30, 2012 fair value are (i) volatility – 78%, (ii) range of implied fair value of the Series F redeemable convertible preferred stock – $2.15 to $2.88, (iii) time to liquidity – 8 months to 5 years, and (iv) range of probabilities of liquidity event outcomes – 4% to 32%.

Upon completion of this offering, these warrants will be adjusted to fair value with any changes recorded in other income (expense). The warrant liability will then be reclassified as common stock warrants. At such time, the warrant liability will also be reclassified to additional paid-in capital, and no further revaluations will be necessary.

Utilization of Net Operating Loss Carryforwards

At December 31, 2010 and 2011, we had net operating loss carryforwards for federal and state tax purposes of approximately $57.4 million and $52.2 million, and $80.2 million and $75.9 million, respectively, which begin to expire in 2020 and 2018, respectively. In addition, we had tax credit carryforwards for federal tax purposes of approximately $0.9 million as of December 31, 2011, which begin to expire in 2022. The future utilization of net operating loss and tax credit carryforwards may be limited due to changes in ownership. In general, if we experience a greater than 50% point aggregate change in ownership of certain significant stockholders over a three-year period (a Section 382 ownership change), utilization of our pre-change net operating loss carryforwards is subject to an annual limitation under Section 382 of the Code (and similar state laws). The annual limitation generally is determined by multiplying the value of our stock at the time of such ownership change (subject to certain adjustments) by the applicable long-term tax-exempt rate. Such limitations may result in expiration of a portion of the net operating loss carryforwards before utilization and may be substantial. Our ability to use our net operating loss carryforwards may be limited or lost if we experience a Section 382 ownership change in connection with this offering or as a result of future changes in our stock ownership.

JOBS Act

On April 5, 2012, the JOBS Act was enacted. Section 107 of the JOBS Act provides that an “emerging growth company” can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. In other words, an “emerging growth company” can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this extended transition period and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

We are in the process of evaluating the benefits of relying on other exemptions and reduced reporting requirements provided by the JOBS Act. Subject to certain conditions set forth in the JOBS Act, as an “emerging growth company,” we intend to rely on certain of these exemptions, including without limitation, (i) providing an auditor’s attestation report on our system of internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act, and (ii) complying with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements, known as the auditor discussion and analysis. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of this offering, (b) in which we have total annual gross revenue of at least $1.0 billion, or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds $700.0 million as of the prior June 30th, and (2) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period.

Results of Operations

Comparison of the Years Ended December 31, 2010 and 2011

	Years Ended December 31,		Increase (Decrease)	% Increase (Decrease)
	2010	2011		
	(in thousands, except percentages)			
Revenues:				
Collaboration and license revenue	$ —	$ 55	$ 55	*
Contract and grant revenue	1,715	12,046	10,331	602.4%
Operating expenses:				
Research and development	19,413	27,369	7,956	41.0%
General and administrative	7,606	9,724	2,118	27.8%
Loss from operations	(25,304)	(24,992)	312	1.2%
Interest expense, net	(154)	(212)	58	37.7%
Fair value of warrant adjustment	—	(385)	385	*
Other income	1	—	(1)	*
Net loss	$ (25,457)	$ (25,589)	$ 132	0.5%

* Not meaningful or not calculable

Contract and Grant Revenue

For the year ended December 31, 2011, we recorded $12.0 million in revenue for services performed pursuant to the BARDA contract that was awarded in February 2011. In the year ended December 31, 2010, our revenue consisted of amounts paid pursuant to our grant from the NIAID and a $491,000 federal research and development tax credit.

Research and Development Expenses

Research and development expenses were $19.4 million and $27.4 million for the years ended December 31, 2010 and 2011, respectively. The increase in research and development expenses during this period of $8.0 million, or 41.0%, was primarily due to:

- an increase in clinical trial costs by $4.3 million due to the initiation of our Phase 2 study for CMX001;
- an increase in compound manufacturing costs by $2.3 million as we began our efforts to manufacture and process validation of bulk drug substance and 100 mg tablets under the BARDA contract; and
- an increased in compensation costs by $1.6 million as we added ten additional employees in our clinical, regulatory and program management departments.

General and Administrative

General and administrative expenses were $7.6 million and $9.7 million for the years ended December 31, 2010 and 2011, respectively. The increase in general and administrative expenses during this period of $2.1 million, or 27.8%, was primarily due to:

- an increase in legal fees in the amount of $509,000 primarily due to activities related to BARDA;
- an increase in business development expenses in the amount of $446,000;
- an increase in consultant fees in the amount of $680,000 primarily due to a reimbursable one-time contract implementation required to support the BARDA contract and general staffing support; and
- an increase in various general expense associated with the expansion of our organization.

Interest Expense, Net

Interest expense, net was $154,000 and $212,000 for the years ended December 31, 2010 and 2011, respectively. The increase of $58,000, or 37.7%, relates to interest expense attributable to a full year of

interest payments made in 2011 in connection of the loan we incurred in March 2010, as compared to eight months of interest payments made in 2010.

Fair Value of Warrant Adjustment

Some of our outstanding warrants are deemed to be derivative instruments that require liability classification and mark-to-market accounting. As such, at the end of each reporting period, the fair value of the warrants were determined by us using a two-stage contingent claims model, resulting in the recognition of additional losses of $385,000 for the year ended December 31, 2011. The loss is due to the increased value of the warrants due to increased likelihood of the occurrence of a liquidity event. We did not have any warrants outstanding at December 31, 2010 that were deemed to be derivative instruments.

Comparison of the Years Ended December 31, 2009 and 2010

	Years Ended December 31,		Increase (Decrease)	% Increase (Decrease)
	2009	2010		
	(in thousands, except percentages)			
Revenue:				
Contract and grant revenue	$ 7,810	$ 1,715	$ (6,095)	(78.0)%
Operating expenses:				
Research and development	14,617	19,413	4,796	32.8%
General and administrative	6,694	7,606	912	13.6%
Loss from operations	(13,501)	(25,304)	11,803	87.4%
Interest income (expense), net	136	(154)	(290)	(213.2%)
Other income	25	1	(24)	(96.0)%
Net loss	$ (13,340)	$ (25,457)	$ 12,117	90.8%

Contract and Grant Revenue

For the years ended December 31, 2009 and 2010, we recorded $7.8 million and $1.7 million, respectively, of revenue related to our grant from the NIAID. The decrease of $6.1 million, or 78.0%, was due to decreased grant revenues as the NIAID grant was substantially completed in early 2010, as compared to 2009 where the grant was in effect for the entire year.

Research and Development Expenses

Research and development expenses were $14.6 million and $19.4 million for the years ended December 31, 2009 and 2010, respectively. The net increase in research and development expenses of $4.8 million, or 32.8%, was primarily due to:

- an increase in clinical development expense in the amount of $4.3 million due to increased clinical development activity for CMX001, including the initiation of our Study 350 clinical trial and increased efforts for our Phase 2 study for CMX001; and
- an increase in compensation costs of $759,000 due to the addition of six employees in research and development.

General and Administrative

General and administrative expenses were $6.7 million and $7.6 million for the years ended December 31, 2009 and 2010, respectively. The increase of $912,000, or 13.6%, was primarily due to an increase in compensation costs of $1.1 million due to increased headcount as we added four additional employees and incurred full year compensation costs for two employees, one of whom was our chief executive officer who started in mid-2009. The increase was partially offset by a reduction of $204,000 in costs related to consultants who were replaced with full-time employees in 2010.

Interest Income (Expense), Net

Interest income (expense), net was $136,000 and $(154,000) for the years ended December 31, 2009 and 2010, respectively. The decrease of $290,000, or 213.2%, relates to decreased interest income as a result of

lower average cash and cash equivalents for the year ended December 31, 2010 and interest expense in 2010 on our loan that was incurred in March 2010.

Comparison of the Nine Months Ended September 30, 2011 and 2012 (Unaudited)

The following table summarizes our results of operations for each of the nine months ended September 30, 2011 and 2012:

	Nine Months Ended September 30,		Increase (Decrease)	% Increase (Decrease)
	2011	2012		
	(in thousands, except percentages)			
	(unaudited)			
Revenues:				
Collaboration and license revenue	$ —	$ 17,445	$ 17,445	*
Contract and grant revenue	6,746	12,694	5,948	88.2%
Operating expenses:				
Research and development	20,016	21,713	1,697	8.5%
General and administrative	7,488	7,066	(422)	(5.6)%
Income (loss) from operations	(20,758)	1,360	22,118	106.5%
Interest expense, net	(133)	(367)	234	175.9%
Fair value of warrant adjustment	(275)	(1,073)	798	290.2%
Net loss	$ (21,166)	$ (80)	$ (21,086)	(99.6)%

* Not meaningful or not calculable

Collaboration and License Revenue

Collaboration and license fee revenue for the nine months ended September 30, 2012, consisted of revenue from an upfront license payment related to our exclusive collaboration and license arrangement with Merck for the rights to CMX157. The upfront license payment was fully recognized in the quarter in which execution of a definitive agreement took place. We did not have significant collaboration and license revenue during the nine month period ending on September 30, 2011.

Contract and Grant Revenue

Contract and grant revenues for the nine months ended September 30, 2011 and 2012, were $6.7 million and $12.7 million, respectively, and primarily consisted of revenue related to our BARDA contract. Revenue increased $5.9 million, or 88.2%, during this period due to the timing of our research activities and the level of services required to be performed under our BARDA contract. In the nine months ended September 30, 2012, we were fully engaged in conducting Chemistry, Manufacturing and Controls validation, pre-clinical testing, and program management in connection with our BARDA contract; whereas in the nine months ending September 30, 2011, our revenues were lower as the work performed under our BARDA contract was more “start-up” in nature and for a smaller reimbursable amount.

Research and Development Expenses

During the nine months ended September 30, 2011 and 2012, our research and development expenses were $20.0 million and $21.7 million, respectively, representing an increase of $1.7 million, or 8.5%. This increase in research and development expense primarily reflected:

- increased reimbursements for animal model testing of $1.4 million related to the BARDA contract;
- increased reimbursements for consulting expenses of $949,000; and
- increased reimbursements for drug substance stability and formulation testing of $493,000 required under the BARDA contract.

The above costs were partially offset by a $1.2 million decrease in clinical trial costs primarily driven by the status of our Phase 2 clinical trial for CMX001, which was completed in early 2012.

General and Administrative Expenses

During the nine months ended September 30, 2011 and 2012, our general and administrative expenses were $7.5 million and $7.1 million, respectively, representing a decrease of $422,000, or 5.6%. This decrease in general and administrative expenses was due primarily to decreased spending in consulting expenses of $470,000 for the initial set-up of the systems required to manage and report under the BARDA contract.

Interest Expense, Net

During the nine months ended September 30, 2011 and 2012, our interest expense, net was $133,000 and $367,000, respectively, representing an increase of $234,000. During the nine months ended September 30, 2012, as compared to the nine months ended September 30, 2011, the net interest expense increased primarily due to the addition of non-cash amortization of finance charges associated with entering into a loan and security agreement in January 2012.

Fair Value of Warrant Adjustment

Some of our outstanding warrants are deemed to be derivative instruments that require liability classification and mark-to-market accounting. As such, at the end of each reporting period, we determined the fair value of the warrants were determined using a two-stage, contingent claims model, resulting in the recognition of additional losses of $275,000 and $1.1 million for the nine months ended September 30, 2011 and 2012, respectively. These losses are primarily due to the increased value of the warrants due to increased likelihood of the occurrence of a liquidity event.

Liquidity and Capital Resources

We have incurred losses since our inception in 2000 and as of September 30, 2012, we had an accumulated deficit of $95.3 million. We anticipate that we will continue to incur losses for at least the next several years. We expect that our research and development and general and administrative expenses will continue to increase and, as a result, we will need additional capital to fund our operations, which we may obtain through one or more of equity offerings, debt financings, government or other third-party funding, strategic alliances and licensing or collaboration arrangements.

Since our inception through September 30, 2012, we have funded our operations principally through the receipt of funds from the private placement of approximately $100.4 million of equity securities, approximately $37.4 million of research funding from our various NIAID awards and approximately $24.7 million in revenue from our BARDA contract, debt financings totaling $21.0 million, and $17.5 million of licensing revenue under our collaboration agreement with Merck. As of September 30, 2012, we had cash and cash equivalents of approximately $34.5 million. Cash in excess of immediate requirements is invested in accordance with our investment policy, primarily with a view to liquidity and capital preservation.

During 2012, we entered into a loan and security agreement with SVB and MidCap allowing for borrowings up to $15.0 million. In January 2012, we borrowed $3.0 million under this agreement which had an interest only period for twelve months, followed by a thirty month principal and interest period at a rate of 8.25%. In September 2012, we borrowed an additional $12.0 million under this agreement that had an interest only period of six months followed with a thirty-two month principal interest period at 8.25%.

Cash Flows

	Years Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
			(in thousands)		
				(unaudited)	
Net cash (used in) provided by operating activities	$ (12,195)	$ (21,681)	$ (26,279)	$ (19,607)	$ 2,773
Net cash provided by (used in) investing activities	10,449	(236)	(6,236)	(13,013)	5,773
Net cash provided by financing activities	16,187	4,603	42,816	43,311	12,309
Net increase (decrease) in cash and cash equivalents	$ 14,441	$ (17,314)	$ 10,301	$ 10,691	$20,855

Operating Activities

Net cash used in operating activities of $12.2 million during the year ended December 31, 2009, was primarily a result of our $13.3 million net loss, offset by net changes in our operating assets and liabilities of $543,000 and the add-back of non-cash expenses of $431,000 for stock-based compensation and $178,000 for depreciation. The net change in our operating assets and liabilities included a decrease in grant receivable of $1.2 million and an increase in prepaid expenses of $648,000.

Net cash used in operating activities of $21.7 million during the year ended December 31, 2010, was primarily a result of our $25.5 million net loss, offset by net changes in our operating assets and liabilities of $2.7 million and the add-back of non-cash expenses of $753,000 for stock-based compensation, $213,000 for depreciation, and $119,000 amortization of investment discount. The net change in our operating assets and liabilities included a decrease of grant receivable of $937,000 and $181,000 of prepaid expenses and an increase in accounts payable and accrued liabilities of $1.6 million.

Net cash used in operating activities of $26.3 million during the year ended December 31, 2011, was primarily a result of our $25.6 million net loss, offset by net changes in our operating assets and liabilities of $2.6 million and the add-back of non-cash expenses of $1.1 million for stock-based compensation, $270,000 for depreciation, $385,000 increase in assets due to revaluation of our warrant liabilities, and $117,000 in amortization of investment discount. The net change in our operating assets and liabilities included increases in grant receivables of $4.2 million and prepaid expenses of $442,000, offset in part by an increase in accounts payable and accrued liabilities of $2.1 million.

Net cash used in operating activities of $19.6 million during the nine months ended September 30, 2011, was primarily a result of our $21.2 million net loss, offset by net changes in our operating assets and liabilities of $159,000 and the add-back of non-cash expenses of $833,000 for stock-based compensation, $194,000 for depreciation, and $275,000 increase in assets due to revaluation of our warrant liabilities. The net change in our operating assets and liabilities included increases in our grant receivable of $488,000 and prepaid expenses of $136,000, offset in part by an increase in accounts payable and accrued liabilities of $783,000.

Net cash provided by operating activities of $2.8 million for the nine months ended September 30, 2012, was primarily the result of our net loss of $80,000, offset by net changes in our operating assets and liabilities of $232,000 and the add-back non-cash items of $1.1 million for stock-based compensation, $1.1 million increase in assets due to revaluation of our warrant liabilities, $210,000 for depreciation, and $151,000 of amortization for fees paid in connection with our loan. The net change in our operating assets and liabilities include decreases in our receivables of $3.2 million, prepaid expenses of $171,000 offset by increases in accounts payable and accrued liabilities of $3.1 million.

Investing Activities

Net cash used in investing activities during the periods presented primarily reflect our use of cash to purchase short-term investments, offset by sales and maturities of short-term investments.

Financing Activities

Net cash provided by financing activities in the year ended December 31, 2009, primarily consisted of approximately $16.1 million of net proceeds from the sale of our Series E preferred stock in August 2009. Net cash provided by financing activities in the year ended December 31, 2010, primarily consisted of approximately $4.6 million of net loan proceeds, which we received in March 2010. Net cash provided by financing activities for the year ended December 31, 2011 primarily consisted of approximately $44.8 million of net proceeds from the sale of our Series F preferred stock, offset by an approximately $2.0 million repayment of indebtedness. Net cash provided by financing activities for the nine months ended September 30, 2011, primarily consisted of approximately $44.8 million of net proceeds from the sale of our Series F preferred stock, offset by an approximately $1.5 million in repayment of indebtedness. Net cash provided by financing activities for the nine months ended September 30, 2012, primarily consisted of approximately $12.4 million of net loan proceeds related to a loan agreement we entered into in January 2012.

Future Funding Requirements

To date, we have not generated any revenue from product sales. We do not know when, or if, we will generate any revenue from product sales. We do not expect to generate significant revenue from product sales unless and until we obtain regulatory approval of and commercialize CMX001 or any of our other product candidates. At the same time, we expect our expenses to increase in connection with our ongoing development activities, particularly as we continue the research, development and clinical trials of, and seek regulatory approval for, our product candidates. Upon the closing of this offering, we expect to incur additional costs associated with operating as a public company. In addition, subject to obtaining regulatory approval of any of our product candidates, we expect to incur significant commercialization expenses for product sales, marketing, manufacturing and distribution. We anticipate that we will need substantial additional funding in connection with our continuing operations.

Based upon our current operating plan, we believe that the net proceeds from this offering, together with our existing cash, cash equivalents and short-term investments, will enable us to fund our operating expenses and capital requirements through at least mid-2015. We intend to devote the net proceeds from this offering to fund our Phase 3 clinical trial, SUPPRESS, and any additional clinical or preclinical studies necessary to support and to submit an application for CMX001 for the prevention of CMV infection in HSCT patients. We have based our estimates on assumptions that may prove to be wrong, and we may use our available capital resources sooner than we currently expect. Because of the numerous risks and uncertainties associated with the development and commercialization of our product candidates, we are unable to estimate the amounts of increased capital outlays and operating expenditures necessary to complete the development of our product candidates.

Our future capital requirements will depend on many factors, including:

- the progress, costs, results and timing of SUPPRESS, and the clinical development of CMX001 for other potential indications;
- the willingness of the FDA to accept SUPPRESS, as well as our other completed and planned clinical and preclinical studies and other work, as the basis for review and approval of CMX001 for the prevention of CMV and for other potential indications;
- the outcome, costs and timing of seeking and obtaining FDA and any other regulatory approvals;
- the achievement of milestones under our agreement with Merck;
- the number and characteristics of product candidates that we pursue, including our product candidates in preclinical development;
- the ability of our product candidates to progress through clinical development successfully;
- our need to expand our research and development activities;
- the costs associated with securing, establishing and maintaining commercialization and manufacturing capabilities;

- the costs of acquiring, licensing or investing in businesses, products, product candidates and technologies;
- our ability to maintain, expand and defend the scope of our intellectual property portfolio, including the amount and timing of any payments we may be required to make, or that we may receive, in connection with the licensing, filing, prosecution, defense and enforcement of any patents or other intellectual property rights;
- our need and ability to hire additional management and scientific and medical personnel;
- the effect of competing technological and market developments;
- our need to implement additional internal systems and infrastructure, including financial and reporting systems; and
- the economic and other terms, timing and success of our existing licensing arrangements and any collaboration, licensing or other arrangements into which we may enter in the future.

Until such time, if ever, as we can generate substantial revenue from product sales, we expect to finance our cash needs through a combination of equity offerings, debt financings, government or other third-party funding, marketing and distribution arrangements, or other collaborations, strategic alliances or licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interests of our common stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through government or other third-party funding, marketing and distribution arrangements or other collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable to us.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations at December 31, 2012:

	Total	Less Than 1 Year	1 – 3 Years	3 – 5 Years	More Than 5 Years
			(In thousands)		
Operating leases[1]	$ 187	$ 169	$ 18	—	—
Loan payable and interest[2]	18,278	6,042	12,236	—	—
Minimum royalties[3]	$ 1,550	—	50	500	1,000
Total	$ 20,015	$ 6,211	$ 12,304	$ 500	$ 1,000

(1) Consists of our corporate headquarters leases encompassing 14,500 square feet of office space that expires in February 2013, and our laboratory lease encompassing 4,600 square feet that expires in February 2014, both of which are located in Durham, North Carolina.

(2) Consists of our loan and security agreement with SVB and MidCap, pursuant to which we have borrowed $15.0 million in principal which bears interest at a rate of 8.25% and is repayable through 2015.

(3) Consists of amounts payable under a license agreement with the University of Michigan for certain intellectual property related to the Chimerix Chemical Library.

In addition to the amounts set forth in the table above, we have payment obligations under license agreements that are contingent upon future events such as our achievement of specified development, regulatory and commercial milestones. Under our license agreement with UC, we made milestone and sublicense payments totaling approximately $1.2 million through December 31, 2012. We will be required to make additional payments when certain milestones are achieved and we are obligated to pay royalties based on future product sales. As of December 31, 2012, we were unable to estimate the timing or likelihood of achieving the milestones or making future product sales and, therefore, any related payments are not included

in the table above. Under our license agreement with the University of Michigan, we are required to pay minimum royalties from 2016 through the expiration of the last licensed patent (which we estimate will occur in 2024) which are included in the table above, but any additional royalties that may be payable under the University of Michigan agreement are not estimable and therefore not included in the table above.

Additionally, we enter into contracts in the normal course of business with CROs for clinical trials and clinical supply manufacturing and with vendors for preclinical research studies and other services and products for operating purposes, which generally provide for termination or cancellation within 30 days of notice, and therefore are not included in the table above. We also have an employment agreement with our chief executive officer that requires the funding of specific payments, if certain events occur, such as a change in control or the termination of his employment without cause. These potential payment obligations, which are described in "Executive and Director Compensation — Potential Payments Upon Termination or Change of Control", are not included in the table above.

Off-Balance Sheet Arrangements

During the periods presented we did not have, nor do we currently have, any off-balance sheet arrangements as defined under SEC rules.

Recent Accounting Pronouncements

In May 2011, the FASB issued Accounting Standards Update (ASU) 2011-04, Fair Value Measurement (Topic 820): Amendments to Achieve Common Fair Value Measurements and Disclosure Requirement in U.S. GAAP and IFRS. This guidance includes amendments that clarify the intent regarding the application of existing fair value measurements and disclosures, and amendments that change a particular principle or requirement for measuring fair value or for disclosing information about fair value measurements. This guidance is effective for interim and annual periods beginning after December 15, 2011. The standard was adopted as of January 1, 2012, and the retrospective application of this standard did not have a material impact on our financial statements.

In June 2011, the FASB issued ASU 2011-05, Comprehensive Income (Topic 220): Presentation of Comprehensive Income. This guidance requires that all non-owner changes in stockholders' equity be presented either in a single continuous statement of comprehensive income or in two separate but consecutive statements. This guidance is effective for interim and annual periods beginning after December 15, 2011. This standard was adopted as of January 1, 2012, and the retrospective application of this standard did not have a material impact on our financial statements.

Basic and Diluted Net Loss Attributable to Common Stockholders per Common Share

Our Series A preferred stock, Series B preferred stock, Series B-1 preferred stock, Series C preferred stock, Series D preferred stock, Series E preferred stock and Series F preferred stock represent participating securities. However, since we operate at a loss, and losses are not allocated to our preferred stock, the two class method does not affect our calculation of earnings per share. We had a net loss for all periods presented. Accordingly, the inclusion of stock options to purchase common stock and warrants exercisable for common stock would be anti-dilutive.

Dilutive common stock equivalents would include the dilutive effect of convertible securities, stock options to purchase common stock and warrants exercisable for common stock. Potentially dilutive common stock equivalents totaled approximately 19,863,426 shares, 24,074,522 shares and 39,171,199 shares for the years ended December 31, 2009, 2010 and 2011, respectively. Potentially dilutive common stock equivalents were excluded from the diluted earnings per share denominator for all periods because of their anti-dilutive effect. Therefore, the weighted-average shares used to calculate both basic and diluted earnings per share are the same.

Quantitative and Qualitative Disclosure About Market Risk

Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of U.S. interest rates. Due to the short-term duration of our investment portfolio and the low risk profile of our investments, an immediate 10.0% change in interest rates would not have a material effect on

the fair market value of our portfolio. Accordingly, we would not expect our operating results or cash flows to be affected to any significant degree by the effect of a sudden change in market interest rates on our investment portfolio.

We do not believe that our cash, cash equivalents and available-for-sale investments have significant risk of default or illiquidity. While we believe our cash and cash equivalents and certificates of deposit do not contain excessive risk, we cannot provide absolute assurance that in the future our investments will not be subject to adverse changes in market value. In addition, we maintain significant amounts of cash and cash equivalents at one or more financial institutions that are in excess of federally insured limits.

Inflation generally affects us by increasing our cost of labor and clinical trial costs. We do not believe that inflation has had a material effect on our results of operations during 2010 or 2011 or through the nine months ended September 30, 2012.

BUSINESS

Overview

Chimerix is a biopharmaceutical company committed to the discovery, development and commercialization of novel, oral antiviral therapeutics that are designed to transform patient care in areas of high unmet medical need. Our proprietary lipid technology has given rise to two clinical-stage compounds, CMX001 and CMX157, which have demonstrated the potential for enhanced antiviral activity and safety in convenient, orally administered dosing regimens. We have worldwide rights to our lead product candidate, CMX001, and anticipate beginning the Phase 3 SUPPRESS study in 2013 for the prevention of cytomegalovirus (CMV) infection in hematopoietic stem cell transplant (HSCT) recipients. We intend to develop CMX001 as the first broad-spectrum antiviral against double-stranded DNA (dsDNA) viruses. Our second clinical-stage compound, CMX157, is a Phase 1 product candidate for the treatment of HIV and was licensed to Merck, Sharp & Dohme Corp. (Merck) in 2012.

CMX001 is an oral nucleotide analog lipid-conjugate that utilizes our proprietary technology to deliver high intracellular concentrations of a potent antiviral drug, cidofovir-diphosphate (CDV-PP), which blocks replication of dsDNA viruses. CMX001 is absorbed through the gut and remains intact in the plasma. Circulating CMX001 is readily taken up by and delivered into cells, where it is cleaved to cidofovir and rapidly converted to CDV-PP. In contrast, an FDA approved intravenous formulation of cidofovir, Vistide®, requires high plasma concentrations to deliver cidofovir into cells, but its use is limited due to a high risk of kidney damage and bone marrow suppression.

Double-stranded DNA viral infections such as CMV are commonly transmitted in childhood and early adulthood, and generally remain latent with a functioning immune system. However, in immunocompromised patients, such as HSCT or solid organ transplant (SOT) recipients, CMV and other dsDNA viral infections are associated with significant morbidity, mortality, graft rejection and co-infection with other opportunistic infections. CMV, a human herpesvirus, is the most common infectious pathogen in HSCT, and can result in life-threatening pneumonia or other organ involvement, particularly in the first 100 days following transplant when the immune system is most vulnerable. *In vitro*, CMX001 has shown broad-spectrum antiviral activity against all families of dsDNA viruses that cause human disease, including herpesviruses, adenoviruses (AdV), polyomaviruses such as BK virus (BKV), papillomaviruses and orthopoxviruses.

In the HSCT setting, there are three paradigms for addressing viral infections: prevention, preemptive therapy and treatment of disease. Prevention is the administration of an antiviral to at-risk patients to avoid reactivation of a latent virus. Preemptive therapy is the initiation of antiviral(s) only after detection of a specific virus in the blood (viremia) in an asymptomatic patient. Treatment is the watch-and-wait approach of initiating antiviral therapy after the virus is detected in an organ system where clinical signs or symptoms are present.

No drugs are approved for prevention of CMV in HSCT recipients, primarily due to significant renal and hematological side effects. We believe that a safe and well-tolerated antiviral with demonstrated efficacy in prevention settings would provide a new standard of care for immunocompromised patients. In HSCT, a safe and effective therapy for CMV prevention could potentially replace the current practice of frequent monitoring for CMV viremia and initiation of anti-CMV preemptive therapy following detection. In addition, we believe that an antiviral that could reduce the frequency of other dsDNA viruses and avoid increasing the risk of other opportunistic infections could provide measureable clinical and pharmacoeconomic benefits for patients and the health care system.

Chimerix demonstrated the potential of CMX001 in a 230-patient Phase 2 dose-escalation study for the prevention of CMV reactivation in HSCT recipients. In this study, CMX001 or placebo was administered to HSCT recipients from stem cell engraftment through Week 13 post-transplant. A reduction of more than 50% in risk of CMV infection (the pre-defined protocol criteria for demonstrated clinical success) was observed for the subjects who received CMX001 in 100 mg doses twice weekly (BIW). Ten percent of subjects (five of 50 subjects) in the CMX001 100 mg BIW cohort met the primary endpoint, CMV disease or a positive quantitative blood test for CMV at the end of the dosing period, versus 37% of subjects (22 of 59 subjects) in the placebo cohort (p=0.002, where the p-value is the statistical probability of a result not due to chance alone). CMX001's dose-limiting toxicity was diarrhea, which was addressed with a Safety Monitoring and

Management Plan (SMMP) incorporated in the final Phase 2 cohort and in subsequent studies, and which will be implemented in SUPPRESS. There was no evidence of kidney, hematologic or bone marrow toxicity in this study.

The results of this Phase 2 study, together with CMX001's overall preclinical and clinical profile, which includes a safety database of more than 800 subjects exposed to CMX001 in controlled and uncontrolled clinical studies, support the progression to a Phase 3 study of CMX001 for the prevention of CMV infection in high-risk HSCT recipients. Discussions with the FDA have resulted in a design for SUPPRESS, which we intend to initiate in 2013, pending FDA approval of our investigational new drug application (IND). The primary endpoint is a composite endpoint of either (i) CMV disease, or (ii) initiation of anti-CMV preemptive therapy triggered by a positive test for CMV in the blood (viremia), and will be assessed through Week 24 post-transplant. We intend to enroll 540 at-risk (i.e., with latent CMV infection) HSCT recipients who will be randomized to receive one of two twice-weekly doses of CMX001 or placebo. Secondary endpoints include pharmacoeconomics and the incidence of disease and reactivation of other herpesviruses, AdV, and BKV.

We intend to submit a new drug application (NDA) under an accelerated approval pathway seeking regulatory approval to market CMX001 in the United States. We also intend to seek fast track designation to support our development and commercialization strategy of CMX001 for the prevention of CMV infection. We have previously received fast track designation from the FDA for the AdV and smallpox indications for CMX001.

We believe that there is a significant commercial opportunity for an antiviral such as CMX001 with broad-spectrum activity against dsDNA viruses. According to the Center for International Blood and Marrow Transplant Research and the Organ Procurement and Transplantation Network, more than 20,000 HSCTs and 28,000 SOTs are performed annually in the United States, with similar numbers of transplants performed annually in Europe according to the European Group for Blood and Marrow Transplantation and the World Health Organization. More than 65% of stem cell transplant patients are at increased risk of CMV infection due to prior exposure to CMV (*i.e.*, seropositive). Outside the transplant population, many factors are influencing the epidemiology of dsDNA viral infections, including the use of potent immunosuppressive therapies in autoimmune and other diseases. Since 2009, Chimerix has made CMX001 available under expanded access regulations to over 80 transplant centers worldwide for the treatment of over 430 patients with life-threatening dsDNA viral infections and no satisfactory alternative treatment options, reflecting the unmet medical need in this therapeutic area. Our CMX001 Compassionate Use Program consists of the emergency investigational new drug (EIND) program which has provided treatment to 230 individuals and Study 350, the expanded access study which enrolled 215 patients meeting similar inclusion criteria as the EINDs.

If CMX001 obtains regulatory approval, we intend to build our own sales force and to commercialize CMX001. In the United States, approximately 200 institutions perform transplants, of which approximately 75% perform HSCT and 75% perform SOT. As a result, we believe we can commercialize CMX001 for prevention of CMV in HSCT recipients in the United States and Canada with a relatively small marketing and specialty sales force infrastructure of approximately 50 employees.

We are also evaluating the potential for CMX001 as a preemptive therapy for AdV infections. In December 2012, we completed enrollment of a Phase 2 placebo-controlled study of preemptive therapy for AdV viremia in 48 pediatric and adult HSCT recipients. Data on the mortality and disease endpoints for this Phase 2 study are expected during the second half of 2013. Future clinical development for CMX001 may include a Phase 3 CMV prevention study in pediatric HSCT recipients, as well as the possible development of CMX001 for BKV infection in HSCT and SOT recipients.

CMX157, our second clinical stage compound, is an oral nucleotide analog lipid-conjugate in Phase 1 development for the treatment of HIV infection. In July 2012, we granted Merck an exclusive worldwide license to develop and commercialize CMX157 for all human uses. Merck is responsible for all development and marketing activities for CMX157 on a worldwide basis.

Our Strategy

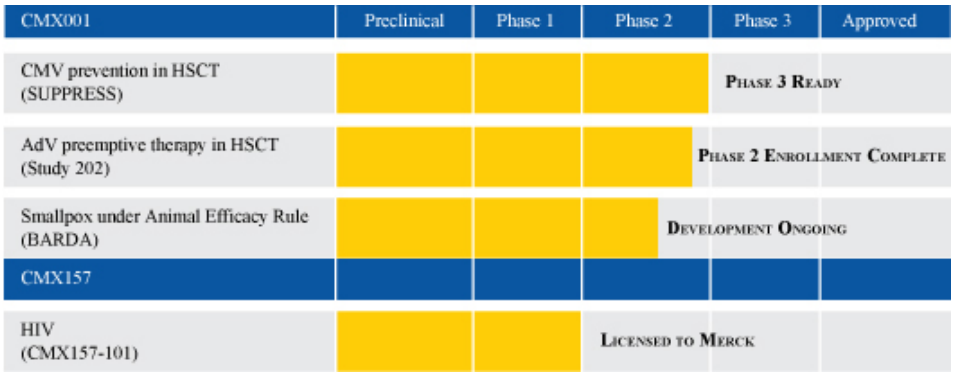
Our strategy is to discover, develop, and commercialize novel oral antiviral therapeutics in areas of significant unmet medical need. Key elements of our strategy include:

- advancing CMX001 through Phase 3 clinical development for the prevention of CMV infection in at-risk patients following HSCT;
- expanding CMX001's ability to address the unmet need in HSCT recipients through a pediatric CMV prevention study;
- leveraging the broad-spectrum profile of CMX001 in other indications including AdV and/or BKV, and in other patient populations, such as SOT recipients;
- obtaining regulatory approval for marketing of CMX001 for the prevention of CMV in the United States, Canada and key European markets;
- commercializing CMX001, initially in the United States and Canada, with a targeted marketing and specialty sales force;
- continuing development of CMX001 as a potential medical countermeasure against smallpox, subject to continuing government support, including from the Biomedical Advanced Research and Development Authority (BARDA); and
- advancing compounds from the Chimerix Chemical Library through IND-enabling studies and potential clinical development and/or partnerships.

We may enter into additional collaborations to implement our strategy.

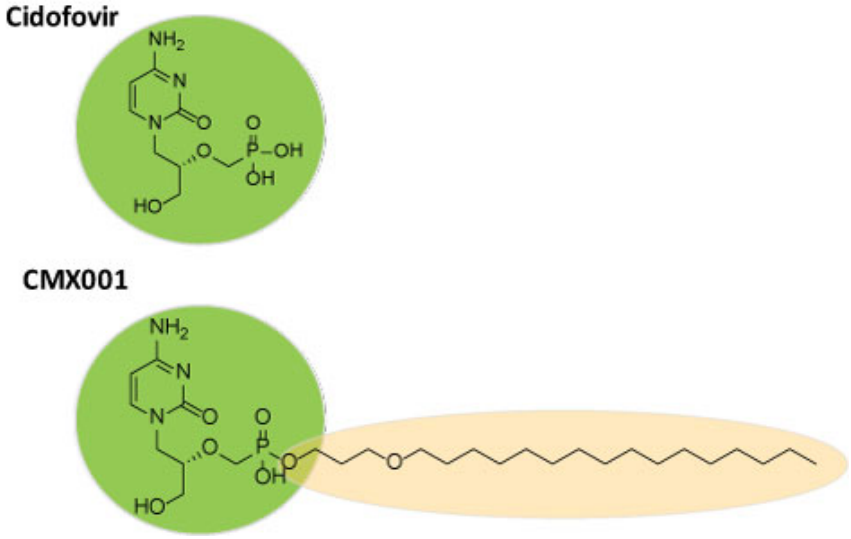
Our Product Candidates

The following chart depicts our product candidates, their indications, and their current stage of development:



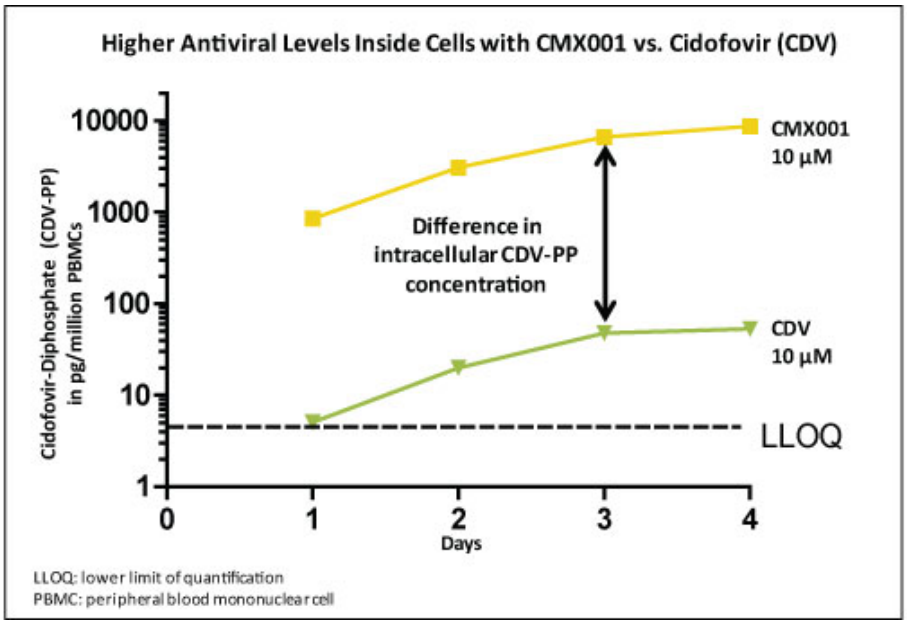
Advantages of CMX001

Our lead product candidate, CMX001, is a broad-spectrum antiviral anticipated to enter Phase 3 clinical development in 2013 for CMV prevention in adult HSCT recipients. Utilizing our proprietary lipid technology, this nucleotide analog lipid-conjugate is dosed orally in tablet or liquid form. CMX001's safety and tolerability profile supports its continued investigation as a potential antiviral against multiple dsDNA viruses for which there are either limited or no therapeutic options. The structures of cidofovir and CMX001 are graphically depicted below.



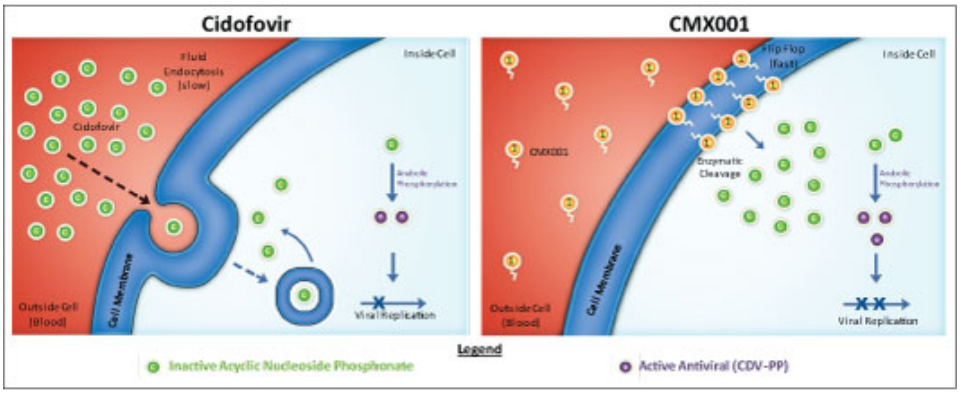
We believe CMX001 has the following advantages that support its rapid development:

1. *Our proprietary technology results in higher intracellular levels of the active antiviral CDV-PP, while avoiding the known cidofovir-related kidney and bone marrow toxicities*. As a result of its phospholipid structure, CMX001 remains intact in the plasma, is cleaved to cidofovir only after entering cells, and is then converted to CDV-PP, the active antiviral which blocks replication of dsDNA viruses by polymerase inhibition. By more efficiently delivering drug inside cells, our technology allows for more cidofovir to be delivered to the site of viral replication while minimizing the amount of free cidofovir in the plasma, which in turn decreases the risk of nephrotoxicity. The chart below illustrates the amount of CDV-PP formed after *in vitro* exposure of cells to CMX001 and cidofovir. Exposure of cells *in vitro* to CMX001 results in a greater than 100-fold increase in intracellular concentration of CDV-PP relative to the same level of exposure to cidofovir.



Additionally, dosing with CMX001 results in levels of CDV-PP detectable in the cells for a long period of time. This allows for less frequent dosing and a low pill burden, potentially important advantages for patients.

The graphic below demonstrates the intracellular activation and site of action of CMX001, and the intracellular and plasma concentrations of CMX001 versus cidofovir.



2. *We believe CMX001 is the most potent antiviral compared with those marketed or in development, with the broadest activity against dsDNA viruses.* In our *in vitro* studies, CMX001 demonstrated antiviral activity against all five families of dsDNA viruses that affect humans: herpesviruses, adenoviruses, polyomaviruses, orthopoxviruses and papillomaviruses. Beyond the positive effect CMX001 demonstrated in CMV prevention in our Phase 2 study, CMX001 has also demonstrated positive clinical benefit in patients infected with AdV or BKV, two pathogenic viruses with no available therapies. In our Phase 2 CMV study, CMX001-treated subjects with evidence of BKV at enrollment had improvements in kidney function and hematuria (blood in the urine) when compared to placebo-treated subjects, suggesting CMX001 may reduce BKV-associated bladder and renal damage. Through our EIND program, pediatric and adult HSCT recipients with life-threatening AdV

infection received CMX001 treatment, and had improved survival rates as compared to historical mortality rates. These data supported the initiation of our ongoing Phase 2 AdV study in pediatric and adult HSCT recipients.

3. *The clinical development program for CMX001 is currently supported by a large safety database of over 800 subjects exposed to date, a completed clinical pharmacology program, short and long-term toxicology program, validated commercial-scale manufacturing, and an extensive patent estate.* We have seen no evidence to date of hematologic, bone marrow, or kidney toxicity in our CMX001 clinical program, and have developed a safety management algorithm to address the CMX001-related diarrhea observed in the Phase 2 study. We also observed low-level, asymptomatic increases in serum levels of the liver enzyme alanine aminotransferase (ALT), which were reversible after stopping CMX001 treatment. Similar changes in ALT were observed across all preclinical species and were considered non-adverse based on the absence of any histopathology.

4. *A concentrated prescriber base should allow us to commercialize CMX001 independently*. Approximately 200 hospitals in the United States perform HSCT and/or SOT. We estimate that a full commercial infrastructure of approximately 50 employees would allow us to efficiently market CMX001 in both HSCT and SOT in the United States and Canada.

Development Strategy for CMX001

In a placebo-controlled Phase 2 study in high-risk HSCT patients, CMX001 100 mg BIW was demonstrated to be superior to placebo for the prevention of CMV infection ($p<0.002$). There was no evidence of hematologic or bone marrow toxicity. Additionally, consistent with our preclinical data, there was no evidence of on-therapy or follow-up kidney toxicity. The dose-limiting toxicity, diarrhea, was addressed with an SMMP in the final cohort of the Phase 2 study and in subsequent studies.

We anticipate initiating SUPPRESS, our planned Phase 3 study of CMX001 for the prevention of CMV infection in CMV seropositive (R+) adults undergoing HSCT, in 2013. The primary endpoint is a composite endpoint of (i) CMV disease or (ii) the initiation of preemptive anti-CMV therapy triggered by a positive test for CMV viremia. Subjects will be randomized 1:1:1 to one of two doses of CMX001 or placebo, will take study drug from engraftment through Week 14, and will be monitored from enrollment through Week 24 post-transplant. We believe the following factors increase SUPPRESS's probability of success:

- our Phase 2 CMX001 study, Study 201, demonstrated clinically and statistically significant evidence for the effectiveness of CMX001 for the prevention of CMV at relevant doses;
- the 100 mg BIW CMX001 dose and dosing regimen included in SUPPRESS demonstrated clinically relevant decreases in the frequency of multiple endpoints versus placebo in Study 201;
- antivirals have demonstrated a higher rate of clinical success in Phase 3 after success in Phase 2, compared with compounds in most other therapeutic areas;
- the SUPPRESS study population is consistent with the subjects enrolled in Study 201 (seropositive patients undergoing HSCT, including patients at increased risk of CMV reactivation);
- CMX001's safety profile to date shows no evidence of bone marrow toxicity or renal toxicity, which are primary limitations of currently available preemptive therapies;
- SUPPRESS will incorporate the SMMP developed in Study 201 for the side effect of diarrhea;
- CMX001 delivers the same active antiviral, CDV-PP, as intravenous cidofovir which demonstrated clinical antiviral efficacy; and
- CMV viremia is clinically accepted as a trigger for initiation of preemptive therapy in order to avoid progression to CMV disease.

We intend to submit an NDA under an accelerated approval pathway seeking regulatory approval to market CMX001 for the prevention of CMV infection in HSCT recipients in the United States. We also intend to seek fast track designation to support our development and commercialization strategy for the prevention of CMV infection.

As part of our overall development program for CMX001, we are pursuing the development of CMX001 against other dsDNA viruses:

- We are developing CMX001 as a preemptive therapy for AdV disease in HSCT recipients. We have recently completed enrollment of a placebo-controlled Phase 2 study in 48 pediatric and adult HSCT recipients. Data are expected during the second half of 2013.
- We are exploring the use of CMX001 for BKV and JC virus (JCV) in HSCT, SOT and other immunosuppressed patient populations. Through our placebo-controlled clinical studies and compassionate use program, we have early evidence of clinical benefit of CMX001 for these dsDNA polyomaviruses. We have undertaken a preclinical program to better understand CMX001's mechanism of action in polyomaviruses.
- We are developing CMX001 as a potential medical countermeasure against smallpox, an orthopoxvirus that is considered by the United States government to be a Category A bioterror agent, under the financial sponsorship of BARDA. CMX001 has shown encouraging activity in relevant animal models of smallpox, and we anticipate renegotiating certain aspects of the smallpox animal plan to take into account recent guidance from the FDA for development of CMX001 under the Animal Efficacy Rule. However, the results of this negotiation are uncertain and we do not anticipate continuing this program without ongoing support from BARDA.

We believe that a well-tolerated antiviral with demonstrated efficacy in prevention would provide a new standard of care for patients with various forms of immune suppression, including HSCT and SOT recipients. Additionally, the current and future epidemiology of dsDNA viral infections, influenced by the increasingly widespread use of potent immunosuppressants, the evolution of viral resistance, and the role of childhood and adult vaccines may provide additional lifecycle opportunities for CMX001 based on its broad-spectrum antiviral activity.

Market Overview

Background on dsDNA Viruses

Viruses are among the simplest infectious agents and can replicate only inside the living cells of a host. Although it is estimated that there are millions of unique virus types, only a few thousand have been well described. Viruses are typically classified into groups based on the nature of their genetic material (e.g., single- or double-stranded DNA, or single- or double-stranded RNA).

Five families of dsDNA viruses are of particular importance as causes of human illness:

- Herpesviruses, which include CMV, herpes simplex virus (HSV), Epstein-Barr virus (EBV) and varicella zoster virus (VZV);
- Adenoviruses, of which there are over 50 subspecies;
- Polyomaviruses, which include BKV and JCV;
- Papillomaviruses (HPV); and
- Poxviruses, which include vaccinia (VACV), monkeypox (MPXV), and smallpox (variola or VARV).

A large percentage of the world's population has been exposed to one or more dsDNA viruses, usually as a mild viral syndrome during childhood or early adulthood. Viruses may remain dormant for the rest of a person's life as long as the immune system is intact. However, clinically significant viral reactivation can occur in immunocompromised patient populations, including patients who are being treated with immune-modulating therapies following transplantation, during intensive cancer chemotherapy, or as therapy for autoimmune disorders.

Although our initial regulatory strategies are focused on HSCT and SOT, clinical indications for a broad-spectrum antiviral in many other areas of immune suppression may provide additional opportunities.

Viral infections pose a serious threat to the health of patients who have undergone HSCT or SOT. In these settings, the patient's immune system is intentionally destroyed or suppressed to prevent stem cell or

organ rejection, putting the patient at risk for reactivation of viruses that are dormant within their bodies. This can result in serious or fatal viral-induced disease, co-infection with other opportunistic viral, bacterial or fungal infections, and damage to or loss of the graft. The growing use of potent immunosuppressive drugs has successfully reduced transplant rejection and mortality rates but has also placed patients at greater risk for viral infections and their sequelae.

In the transplant setting and based on data from our CMX001 Compassionate Use Program, three dsDNA viruses are responsible for the majority of viral infections of concern: CMV, AdV and BKV. The effect of many other dsDNA viruses, each independently having a low incidence, can collectively increase morbidity and mortality within HSCT, SOT, and other immunocompromised populations.

Background on the HSCT Market and HSCT Therapies

HSCT

Stem cell transplants replace the blood forming (hematopoietic) system in patients who have malignant, damaged or defective bone marrow, offering a potential cure or remission for many cancers and genetic disorders. HSCTs are defined by the donor of the stem cells (allogeneic and autologous transplants), the source of the stem cells (bone marrow, peripheral blood or cord blood) and the conditioning regimen used prior to the transplantation (myeloablative, reduced intensity or non-myeloablative).

Allogeneic HSCTs use cells from a family member or unrelated donor and can cure or improve outcomes in a wide variety of diseases, including leukemia, lymphoma, myeloproliferative disorders, myelodysplastic syndrome, and congenital immunodeficiencies. However, allogeneic HSCT is associated with significant morbidity and mortality due to procedure-related toxicities, infection, and graft versus host disease (GVHD, a process whereby the injected stem cells (the graft) attack the tissues in the body of the transplant patient (the host)). In general, the greater the difference in the donor and recipient's genetic make-up, the greater the risk for GVHD and the greater the need to immunosuppress patients after their transplant. Autologous HSCTs use the patient's own cells and can improve outcomes in neoplastic diseases and autoimmune conditions. As with allogeneic HSCT, autologous HSCT therapeutic regimens and infections contribute to morbidity and mortality.

At transplantation, the donor's cells are infused into the body through a vein and form new cells of the bone marrow, where they begin to grow and produce new red blood cells, white blood cells and platelets during a process called engraftment. Engraftment typically occurs within the first month following transplantation. Until engraftment occurs, patients have very few white blood cells to fight infections and can easily acquire serious or life-threatening infections due to their weakened immune systems. Even after engraftment, patients are at high risk for complications during the first 100 days following their transplant, particularly if ongoing immunosuppression is necessary.

Growth of the HSCT Market

HSCT remains underutilized, with many patients referred for a transplant only when they reach an advanced stage of disease. In order to increase the number of patients who could potentially benefit from HSCT, there has been significant focus on alternative stem cells sources such as unrelated donors and umbilical cord blood stem cells. However, use of unrelated donors for stem cell results in higher risk of reactivation of dsDNA viruses such as CMV.

Overall, the number of stem cell transplants being performed in the United States has grown at approximately 5% annually since 2000. Of the allogeneic transplants, the unrelated donor subset has been growing at a higher rate than other subsets within HSCT.

Viral Diseases Associated with HSCT

CMV in HSCT

CMV, a human herpesvirus, is the most common infectious threat in HSCT, with 80% of CMV-seropositive (R+) allogeneic transplant recipients developing detectable CMV in the blood, which is known to correlate with progression to disease and death, if untreated. Common manifestations of active CMV infection in immunosuppressed patients are pneumonia, gastrointestinal (GI) disease, hepatitis, and retinitis. In addition, because CMV itself is immunosuppressive, reactivation of the virus can predispose a patient to other opportunistic infections.

Rather than waiting for evidence of CMV disease, the most commonly accepted intervention for CMV is frequent monitoring for CMV in the blood and initiation of anti-CMV preemptive therapy with intravenous ganciclovir or valganciclovir, available antivirals with the side-effect of suppression of neutrophils and an associated increased risk for bacterial and fungal infections.

The initial indication for which we are seeking regulatory approval for CMX001 is prevention of CMV infection in recipients of allogeneic HSCT who are seropositive for CMV. To the extent that the risk-benefit ratio for CMX001 is established in SUPPRESS, particularly in prevention of clinical manifestations of other dsDNA viral infections, indications in patient populations with more moderate CMV risk estimates may be pursued. Based on a survey of recent literature, we believe that the following table reflects the risk of CMV reactivation in HSCT patients:

Risk Assessment for CMV Reactivation in HSCT

Type	CMV Serostatus[1]	Risk of CMV Infection[2]	Non-Relapse Mortality[3]
Allogeneic	R+	80%	21%
	D-/R-	<5%	17%
	D+/R-	30%	18%
Autologous	R+	40%	27%

(1) "R+" refers to recipient seropositive for CMV, "R-" refers to recipient seronegative, "D+" refers to donor seropositive, and "D-" refers to donor seronegative.

(2) "Risk of CMV infection" is defined as likelihood of detectable CMV in blood.

(3) "Non-relapse mortality" is defined as death in the first year following HSCT that are not due to relapse of the underlying disease.

AdV in HSCT

Although AdV infection is much less frequent than CMV in HSCT, disseminated AdV has a high mortality rate of 80%, and no approved therapies for prevention, preemptive therapy or treatment. AdV is more frequent in pediatric HSCT patients who have not been as widely exposed to the many AdV subspecies as have adults. Manifestations of serious AdV infection besides AdV pneumonitis include acute hemorrhagic cystitis, liver failure, and renal damage such as nephritis or obstructive nephropathy. AdV infection is also associated with graft failure or delayed engraftment in HSCT.

BKV in HSCT

BKV, a polyomavirus, is a dsDNA virus that can be a significant medical problem in HSCT and has no approved therapy. The virus establishes lifelong latency in the kidneys and urinary tract following primary infection. While BKV rarely causes disease in healthy adults, in HSCT recipients BKV reactivation can lead to hemorrhagic cystitis, a painful condition that often requires hospitalization for pain control or bladder irrigation. Little data on epidemiology of BKV exist in the HSCT population. Our prospective data from Study 201 found a greater than 50% incidence of BKV in urine in subjects with CMV infection and showed evidence of worsening renal function through a decrease in glomerular filtration rate (GFR) and an increase in serum creatinine for BKV-positive subjects randomized to placebo.

Background on the SOT Market and SOT Therapies

SOT of the kidney, liver, pancreas, heart, and lung has become standard therapy for selected end-stage diseases. Although quality of life and survival rates following organ transplantation have improved greatly due to advances in surgical technique, immunosuppressive therapy, and medical management, complications such as infection and graft rejection remain major causes of morbidity and mortality following SOT. Management

of infections after transplantation involves antiviral therapy and reduction in immunosuppressive therapy, a balancing act between controlling the infection and avoiding rejection of the new organ. More than 28,000 SOTs are performed annually in the United States, and a comparable number of procedures are performed each year in Europe.

CMV in SOT

CMV remains the most frequent opportunistic infection affecting the overall outcome of SOT, and typically reactivates during the first six months following transplantation. Furthermore, a recent study has shown that 37% of patients on Valcyte for prevention of CMV in high-risk kidney, kidney-pancreas and heart transplants developed late-onset CMV within 12 months post-transplant. In addition to directly causing morbidity and occasional mortality, CMV also influences short and long term complications that collectively contribute to reduced graft and patient survival. Prevention of CMV infection and disease in SOT is a critical step forward towards improved patient outcomes but is limited by the side effects, need for monitoring and restricted addressable population of current antivirals.

BKV in SOT

BKV infection affects 20-40% of kidney transplant recipients and can lead to BKV-associated nephropathy (BKVAN), a disease resulting in loss of the new kidney in 30-65% of affected patients. The incidence of BKVAN appears to be on the rise, related to the increased use of immunosuppressive drugs. Progression to BKVAN is generally asymptomatic. However, BKV DNA can often be detected in blood or urine for several months prior to the development of renal dysfunction, which may represent an opportunity for earlier intervention with antiviral therapy.

Background on Antiviral Therapies in Transplant Patients

Antiviral therapeutics are differentiated in general based on several characteristics, the most important of which are:

- safety and tolerability;
- dosing schedule and duration;
- route of administration;
- potency;
- spectrum of antiviral coverage; and
- viral resistance.

Currently available therapies have significant shortcomings with respect to many of these characteristics. In particular, existing therapies are limited by their lack of broad-spectrum efficacy as well as their major side effects, notably nephrotoxicity and myelosuppression. These limitations can lead to increased hospitalizations, severe and life-threatening neutropenia, renal impairment, use of expensive granulocyte colony-stimulating factor (G-CSF) therapies, platelet and blood transfusions, need for dialysis, and life-threatening secondary bacterial and fungal infections. The prevalence of disease and the limitations of existing therapies contribute to the significant unmet medical need for effective and better tolerated antivirals.

CMX001's differentiated product profile has the potential to address many of these unmet medical needs. See the table titled "Key Characteristics of CMX001 and Approved and Investigational Antivirals" on page 83.

Unmet Medical Need in HSCT Antiviral Therapy

There are three paradigms commonly used for addressing viral infections in the transplant setting, prevention, preemptive therapy and treatment.

- Prevention is the administration of an antiviral to at-risk patients in an effort to avoid reactivation of a latent virus. The goal of prevention is to eliminate the need for preemptive therapy by suppressing reactivation of the virus, with the collateral benefit of decreasing the need for frequent monitoring of virus in the blood.

In order to be approved for prevention, a therapy must be generally safe and well-tolerated without toxicities that overlap with the inherent risks of the patient population. Currently available antivirals cannot be used for prevention of common dsDNA viral diseases because they have toxicities that risk the function or survival of the new graft.

- Preemptive therapy is the initiation of antiviral(s) only after detection of a specific virus in the blood (viremia) in an asymptomatic patient. The goal of preemptive therapy is to avoid progression to symptomatic disease.

  Because preemptive therapy is initiated only after the level of virus in the blood reaches a threshold associated with progression to disease, limited drug toxicities may be more acceptable as disease and mortality risks are more substantial.

- Treatment is the watch-and-wait approach of initiating antiviral therapy after the virus is detected in an organ system where symptoms are present. For CMV, treatment after the onset of clinical signs and symptoms has a limited impact on mortality, and is no longer considered the standard of care.

Prevention

Within the field of infectious diseases, prevention of disease with a safe and well-tolerated therapeutic is an acceptable paradigm. Precedents for prevention in other viral indications include the approval of valacyclovir for the prevention of transmission of herpes simplex infection based on the well-established safety profile of acyclovir and valacyclovir. In children at high risk of disease from respiratory syncytial virus (RSV), the monoclonal antibody palizumivab was approved for prevention.

In spite of trials conducted with ganciclovir for CMV prevention, ganciclovir is approved for use only as a preemptive therapy or treatment for CMV in HSCT. Ganciclovir was limited in its ability to be used as a preventive therapy by the risk of significant neutropenia, which has multiple consequences including an increased risk of invasive bacterial and fungal infections, an increased risk of late-onset CMV disease, or even loss of the graft itself. These observations have been confirmed in multiple studies, and highlight the need for a safe and well-tolerated antiviral for use as a prevention in HSCT.

Preemptive Therapy — The Current Standard of Care in HSCT

Rather than waiting for evidence of CMV disease, the most commonly accepted intervention for CMV involves frequent monitoring for CMV viremia and initiation of anti-CMV preemptive therapy upon detection. Approximately 30-40% of HSCT recipients require preemptive therapy in response to CMV viremia, making this the most commonly used strategy to prevent the development of CMV disease in HSCT recipients. The most commonly utilized preemptive therapy is ganciclovir, which is administered intravenously and requires close monitoring for hematologic and other toxicities. Valganciclovir is an orally administered prodrug of ganciclovir with a similar toxicity profile. Second-line therapies of foscarnet or intravenous cidofovir have recognized renal toxicity. As noted above, ganciclovir initiated as preemptive therapy demonstrated a decrease in CMV disease, but is limited in overall benefit by neutropenia and resulting susceptibility to secondary invasive bacterial and fungal infections, as well as the emergence of CMV resistance.

Treatment

CMV treatment after the onset of clinical signs and symptoms has a limited impact on mortality and is no longer considered the standard of care.

The Potential for a Broad-Spectrum Antiviral

The prevention of CMV with CMX001 provides us the opportunity to simultaneously explore the prevention and control of other dsDNA viral infections in the transplant setting. Although each of these additional viral infections has a lower incidence than does CMV in HSCT or SOT, individually and in aggregate they have a meaningful impact on clinical endpoints and healthcare utilization.

We believe prevention of reactivation of CMV and other dsDNA viruses represents a significant unmet medical need. In addition to AdV, BKV and CMV, other human herpesviruses such as EBV, herpes simplex virus types 1 and 2 (HSV-1, HSV-2), varicella-zoster virus (VZV), and human herpes virus type 6 (HHV-6) contribute to the overall morbidity and mortality in HSCT. The risks and clinical presentation of specific

dsDNA viruses have been reviewed for the HSCT and SOT patient populations, but for an individual patient, multiple dsDNA viruses contribute to the risk of disease, dependent on prior exposure and current level of immunosuppression.

We believe that an ideal antiviral in the transplant setting would have broad-spectrum potential to prevent CMV and other viral infections, particularly AdV and BKV as there are no approved therapies for these two viral infections.

BKV establishes lifelong latency in urogenital epithelial cells, but rarely causes disease in healthy adults. However, BKV causes significant disease in patients with prolonged immunosuppression, particularly BKVAN in renal transplant patients and hemorrhagic cystitis (HC) in HSCT recipients. Although rarely fatal, episodes of HC can vary in severity, can be very painful, can be associated with significant hematuria and clotting, may prolong hospitalization, and can result in the impairment of kidney and/or bladder function.

EBV has long been recognized as the most common causative agent of post-transplant lymphoproliferative disorder, a condition which is especially prevalent in the pediatric population and in certain SOT populations. Over the past several years, an increasing number of clinical syndromes, including those with neurological disease and pulmonary involvement, have been attributed to EBV infection. The increase in frequency of EBV infections has been linked to several risk factors, particularly the use of cord blood and T-cell depleted grafts.

The Competitive Landscape

Currently Available Antiviral Therapies

We believe that a well-tolerated antiviral with demonstrated efficacy as prevention would provide a new standard of care for immunocompromised patients. In HSCT, an effective CMV prevention could potentially replace the current practice of frequent monitoring for CMV viremia and initiation of CMV-specific preemptive therapy. In addition, an antiviral for CMV prevention that could reduce the frequency of other opportunistic viral infections would provide an additional measureable clinical and pharmacoeconomic benefit for patients.

To date, the safety and tolerability limitations of current therapies have precluded their use as prevention in the HSCT patient population.

Because of the importance of CMV as a pathogen in HSCT recipients, a number of companies have pursued clinical studies to assess the effectiveness of antiviral agents administered as prevention. Randomized clinical studies examining the potential of ganciclovir for CMV prevention demonstrated a significant reduction in early CMV disease, but no survival benefit due to the increased occurrence of invasive fungal and bacterial infections and late onset CMV disease. Twenty-one percent of patients had severe neutropenia with a lowest value of less than 500 cells/μL for at least two consecutive days. In this study, neutropenia was associated with an increase in infections and was a negative predictor of overall and event-free survival. Ganciclovir has also been associated with delayed engraftment and specifically a decrease in lymphocytes which protect against viral infections.

Valganciclovir (marketed as Valcyte®), an oral prodrug for delivery of ganciclovir, is approved for CMV prevention for many high-risk recipients of SOT. Sufficient risk-benefit ratios for use of valganciclovir as prevention have been demonstrated in SOT for high-risk adult and pediatric kidney and heart transplant patients, and for high-risk adult kidney-pancreas transplant patients. However, the known impact of ganciclovir on white blood cells requires frequent monitoring for evidence of asymptomatic neutropenia and related risk of invasive bacterial and fungal infections. Given the need for continued monitoring for adverse effects with current antivirals, a significant need exists for an antiviral for CMV prevention with superior safety, tolerability and resistance profiles.

Second-line Therapies: Cidofovir and Foscarnet

Administration of intravenous cidofovir (marketed as Vistide®) has become standard in some transplant centers for renal transplant patients with BKVAN, despite the limitations of the efficacy and safety profile. Anecdotal reports have claimed clearance of BKV from both the blood and allograft of renal transplant recipients treated with intravenous cidofovir combined with reduction in immunosuppression. However, other

retrospective analyses have failed to demonstrate antiviral benefit from cidofovir therapy for BKV infection. The high potential for cidofovir to cause nephrotoxicity in patients who are already experiencing renal insufficiency remains a serious concern for treating physicians.

In the Phase 2 study of CMX001 for CMV prevention, preemptive therapy with ganciclovir or valganciclovir was necessary in 32% of subjects (74 of 230), primarily subjects who received either an inactive dose of CMX001 or placebo. Data available for 71 subjects demonstrate the clinical limitations and pharmacoeconomic implications of preemptive therapy:

- 70% of subjects had moderate to severe decreases of white blood cells;
- 41% experienced decreased levels of white blood cells putting them at risk of fungal and bacterial infections;
- 25% experienced some decrease in kidney function;
- 23% had severe adverse events requiring hospitalization;
- 18% had life-threatening adverse events including bacterial/fungal infections, bone marrow, or kidney toxicity;
- 15% required injected medications (G-CSF) to increase their white blood cell count;
- 14% needed to switch to second line therapy (foscarnet or cidofovir) due to the toxicity of the initial regimen; and
- 7% required red blood cell transfusions, and 3% required platelet transfusions.

We believe that there is an unmet medical need for safe and effective antiviral therapies to replace current preemptive therapies in order to improve outcomes and decrease transplant-related costs.

Investigational Agents for CMV

Several companies are pursuing the development of new therapies for CMV disease.

Letermovir

Letermovir is a viral terminase inhibitor with specific activity for CMV that is being developed as an oral antiviral for the prevention and treatment of CMV. AiCuris GmbH & Co. KG (AiCuris), which licensed letermovir to Merck in 2012, completed a Phase 2 study for CMV prevention in 2012 in which letermovir was tested in HSCT recipients with a limited number of underlying diseases. Based on publicly available information, mismatched or cord blood transplant recipients, and those with GVHD or with impaired liver or renal function, were excluded from the study.

Publicly presented data from letermovir's Phase 2 study showed a benefit of letermovir versus placebo in preventing CMV reactivation during therapy. However, publicly presented letermovir data do not address the post-therapy follow-up period. While no clinical data on letermovir resistance have been published or presented to date, resistance to letermovir was generated *in vitro* after a single passage.

Maribavir

Maribavir is an oral antiviral that inhibits CMV protein kinase UL97, thereby preventing viral encapsulation for CMV specifically. ViroPharma Incorporated (ViroPharma) previously discontinued development of maribavir after Phase 3 studies failed to show benefit in HSCT and liver transplant recipients for the prevention of CMV infection versus placebo and oral ganciclovir, respectively. ViroPharma is now evaluating maribavir in Phase 2 studies for the treatment of refractory CMV infection in transplant recipients using doses of 400, 800 and 1,200 mg twice daily, doses that are significantly higher than those tested in their previous Phase 3 studies. CMV resistance against maribavir has been described and published.

TransVax

TransVax is being developed by Vical Incorporated (Vical) and Astellas Pharma US, Inc. (Astellas) for the prevention of CMV disease reactivation in transplant patients. This DNA vaccine is specifically targeted at enhancing immunity against CMV by using CMV antigens. TransVax is currently entering Phase 3

development for the HSCT population and Phase 2 development for the SOT population. Although the publicly available Phase 2 data indicate that the vaccine prevented CMV infection in 69% of the subjects who received active vaccine versus 38% of the subjects randomized to placebo, this positive effect did not reach statistical significance in the Phase 2 study.

Key Characteristics of CMX001

Key characteristics of CMX001 along with comparative data for five approved therapies, two investigational antivirals, and one DNA-based vaccine specific for prevention of CMV in the transplant setting are presented below. Of the five therapies that are currently approved for human use, none is approved for the prevention of CMV infection in HSCT recipients.

Based on publicly available information, the table below highlights the key differentiating characteristics for CMX001, in particular the potent and broad-spectrum activity of CMX001 compared with the CMV-specific activity of a majority of other antivirals.

Key Characteristics of CMX001 and Approved and Investigational Antivirals

	CMX001	Cidofovir (CDV)	Valganciclovir (vGCV)[3]	Ganciclovir (GCV)[3]	Acyclovir (ACV)	Foscarnet (FOS)	Letermovir	Maribavir	TransVax
Safety and Tolerability	Diarrhea; managed through dose interruption	Nephrotoxicity, myelotoxicity	Myelotoxicity	Myelotoxicity		Nephrotoxicity	No signal reported	Dysgeusia; unknown at current dose	Local reaction
Route of Administration	Oral	IV, hydration, probenecid	Oral	IV	Oral, IV	IV, hydration	Oral	Oral	Injection
Dosing Schedule and duration	Twice weekly	Weekly	Daily	Twice daily	Twice daily	Twice daily	Daily	Twice daily	Every 3 months
Potency[1] (EC50 against CMV in vitro, μM)	0.0009	0.4	3.8	3.8	> 200	50	0.005	0.31	No data
Resistance in CMV[2]	None in Phase 2; difficult to generate *in vitro*	Rare	Up to 10%	Up to 10%	-	Rare	None in Phase 2 study[4]	None in Phase 3 study	No data
Spectrum of Coverage for dsDNA Viruses	All 5 families	All 5 families	CMV, HSV, VZV, HHV-6	CMV, HSV, VZV, HHV-6	CMV, HSV, VZV, EBV	CMV, HSV	CMV specific	CMV, EBV	CMV specific
Regulatory Status	In development	Approved for human use	Approved for human use	Approved for human use	Approved for human use	Approved for human use	In development	In development	In development

(1) "Potency" refers to the concentrations of each antiviral required to reduce viral replication by 50% *in vitro* (effective concentration, EC_{50}).

(2) "Resistance" means the emergence of specific mutations in the virus which decrease the antiviral activity of the drug.

(3) Valganciclovir is rapidly converted to ganciclovir *in vivo*. Accordingly, ganciclovir is the relevant compound for cell activity studies.

(4) The selection of resistant virus *in vitro* after a single passage of CMV in the presence of letermovir has been reported.

Preclinical and Clinical Development for CMX001

Building on positive data from our Phase 2 study for the prevention of CMV disease in HSCT recipients, we anticipate beginning our Phase 3 study, SUPPRESS, in 2013, pending FDA approval of our IND.

Preclinical Program for CMX001

In Vitro Efficacy and Resistance Data

CMX001's broad-spectrum potency against dsDNA viruses has been characterized *in vitro* in cell culture systems and *in vivo* in multiple animal models. In cell culture assays, CMX001 is typically 50- to 100-fold more potent than cidofovir against dsDNA viruses, including herpesviruses, adenoviruses, polyomaviruses, papillomaviruses, and orthopoxviruses.

The following table shows the concentrations of CMX001 and each of the approved and investigational antivirals required to reduce viral replication by 50% *in vitro*. Smaller numbers depict a more potent molecule than larger numbers, and results depicted by ">" in general are above a threshold that would indicate antiviral activity (i.e., adequate *in vitro* data do not exist to support pursuing a clinical indication). Data are compiled from multiple sources and include multiple materials and methodologies; comparisons should be limited to general trends in orders of magnitude differences in *in vitro* potency.

Broad Spectrum Activity of CMX001 versus Approved and Investigational Antivirals (EC_{50} in µM)

Viral Family	Virus	CMX001 EC_{50} (µM)	Cidofovir EC_{50} (µM)	Ganciclovir* EC_{50} (µM)	Foscarnet EC_{50} (µM)	Acyclovir EC_{50} (µM)	Maribavir EC_{50} (µM)	Letermovir EC_{50} (µM)
Herpes	Cytomegalovirus (CMV)	0.001	0.4	3.8	50	> 200	0.31	0.005
	Epstein-Barr Virus (EBV)	0.04	>108	0.9	< 500	8.5	0.63	> 10
	Human Herpesvirus 6A (HHV-6A)	0.003	2.7	5.9	16	100	No data	> 10
	Human Herpesvirus 8 (HHV-8)	0.02	2.6	2.7	177	>75	Inactive	No data
	Herpes Simplex Virus 1 (HSV-1)	0.01	3.0	0.7	92-95	3.8	Inactive	> 10
	Herpes Simplex Virus 2 (HSV-2)	0.02	6.5	2.5	91-96	4.4	Inactive	> 10
	Varicella Zoster Virus (VZV)	0.0004	0.5	1.3	> 50	3.6	Inactive	> 10
Adenovirus	Adenovirus 5 (AdV 5)	0.02	1.3	4.5-33	Inactive	> 100	No data	> 10 (Ad2)
Polyoma	BK Virus (BKV)	0.13	115	> 200	No data	> 200	No data	No data
	JC Virus (JCV)	0.045	> 0.1	No data	No data	No data	No data	No data
Papilloma	Human Papillomavirus 11 (HPV-11)	17	>200	Inactive	No data	Inactive	No data	No data
Pox	Variola	0.1	27	No data	No data	No data	No data	No data
	Vaccinia	0.8	46	Inactive	Inactive	>300	No data	No data

(1) Valganciclovir is rapidly converted to ganciclovir *in vivo*. Accordingly, ganciclovir is the relevant compound for cell activity studies.

Although CMX001 delivers the same active antiviral, CDV-PP, as intravenous cidofovir, the ability of CMX001 to deliver CDV intracellularly through the lipid-conjugate technology results in CMX001 demonstrating approximately 800-fold improvement *in vitro* in activity against BKV, more than 400-fold more activity against CMV, 65-fold more activity against AdV and 250-fold more activity against variola major, the causative agent of smallpox.

CMX001 has a high barrier to viral resistance, and no resistance-associated mutations were detected in Study 201. *In vitro* CMX001-resistant CMV is slow to emerge, involves a unique mutation, and has reduced fitness compared to wild-type CMV. We have completed a 39-week chronic toxicology study in monkeys and 26-additional studies in mice, rabbits, rats, dogs, and monkeys. Based on results from these studies, we do not currently plan to conduct additional toxicology studies. We have also completed 41 Absorption, Distribution, Metabolism and Excretion (ADME) studies which demonstrate that CMX001 is readily absorbed and widely distributed after oral administration in animals. *In vitro* cytochrome P450 and drug transporter inhibition studies indicated low-to-moderate potential for drug-drug interactions. In the development of Vistide®, Gilead identified mammary rat tumors that led to the inclusion of potential carcinogenicity in a black box warning. We observed similar findings with CMX001 and may have a black box warning for CMX001.

Clinical Development Program for CMX001

We are developing CMX001 initially for the prevention and preemptive therapy of clinically significant infection and disease, including as a potential therapy for CMV and AdV infection and as a possible countermeasure for smallpox. To date, over 800 subjects have received CMX001 in controlled and uncontrolled studies and under EIND regulations in the United States and foreign equivalent regulations outside the United States.

Our CMX001 clinical program to date has been comprised of the following studies:

- *Phase 1 and Clinical Pharmacology Studies*. Evaluations of safety, tolerability and pharmacokinetics (PK) in healthy subjects and subjects with hepatic impairment, drug metabolism in healthy subjects, and food effects on PK (completed). Additional clinical pharmacology studies to support the Phase 3 program have completed dosing, including a thorough QTc study, a food effect study, and a drug interaction study with midazolam.
- *Study 201*: Phase 2 evaluation of once weekly (QW) and BIW dosing regimens of CMX001 for the prevention of CMV infection in 230 adult HSCT recipients (completed).
- *Study 202*: Phase 2 evaluation of QW or BIW dosing regimens of CMX001 for the preemptive therapy of AdV infection in 48 pediatric and adult HSCT recipients (enrollment complete).
- *Compassionate Use Program: EINDs and Study 350*. EINDs allowed the treatment of more than 220 patients in over 80 medical centers. Study 350 enrolled 215 subjects with one or more life-threatening dsDNA viral infections (completed).
- *Study 301: SUPPRESS*. Phase 3 evaluation of CMX001 for the prevention of CMV infection in 540 adult HSCT recipients (planned).
- *Study 311*: Phase 3 evaluation of CMX001 for the prevention of CMV infection in pediatric HSCT recipients (planned).
- *Study 333*: Long-term (three-year) follow up study of previously enrolled subjects in a Phase 3 study of CMX001 (planned).

Based on our End-of-Phase 2 meeting and subsequent feedback from FDA, we intend to conduct SUPPRESS, our Phase 3 study which will evaluate CMX001 for the prevention of CMV infection in adult HSCT recipients. Assuming a positive outcome, the study may be sufficient for accelerated approval of CMX001. Future clinical development for CMX001 may include a Phase 3 CMV prevention study in pediatric HSCT recipients as well as the possible development of CMX001 for BKV infection in HSCT and SOT recipients. We are also evaluating potential development activities in Europe and other key markets.

Study 201: Prevention of CMV Infection in HSCT Recipients

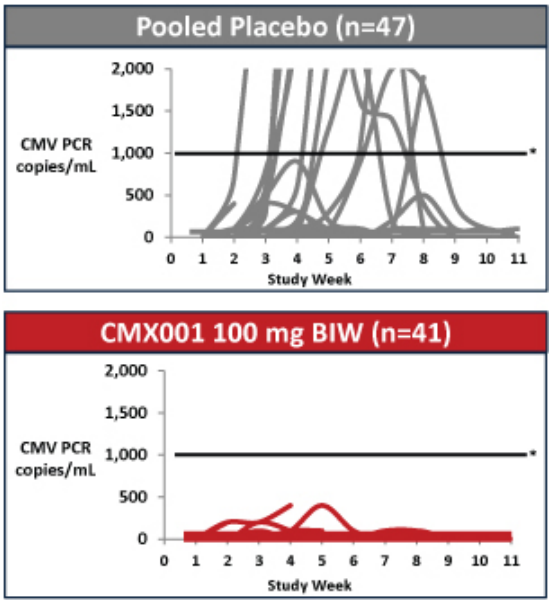
The key efficacy findings from our development program to date include the demonstration of superiority of CMX001 over placebo for the prevention of CMV in HSCT recipients in Study 201. Additionally, Study 201 showed evidence of positive clinical outcomes in patients co-infected with BKV in addition to CMV.

Study 201 was a randomized, placebo-controlled, dose-escalation study in CMV seropositive (R+) allogeneic HSCT recipients, evaluating the ability of CMX001 to prevent CMV infection. Subjects in five dosing groups received either placebo or oral CMX001, in doses ranging from 40 mg once weekly to 200 mg BIW. The primary endpoint was defined as (i) the incidence of CMV disease at any time during therapy, or (ii) a CMV polymerase chain reaction (PCR) assay result of greater than 200 copies/mL at the time of the last dose of study drug. All subjects who received at least one dose of drug or placebo and had at least one efficacy evaluation post baseline were included in the primary analysis, regardless of their CMV PCR status (negative or positive) at baseline (modified intent to treat, or mITT, population).

All CMX001 doses and dose regimens in Study 201 demonstrated antiviral activity when compared to placebo, with the exception of the lowest dose, 40 mg QW. The proportion of subjects who developed CMV disease or a CMV PCR positive result at the end of 100 mg BIW dosing period was 10% (five of 50 subjects) versus 37% (22 of 59 subjects) for placebo-treated subjects ($p=0.002$).

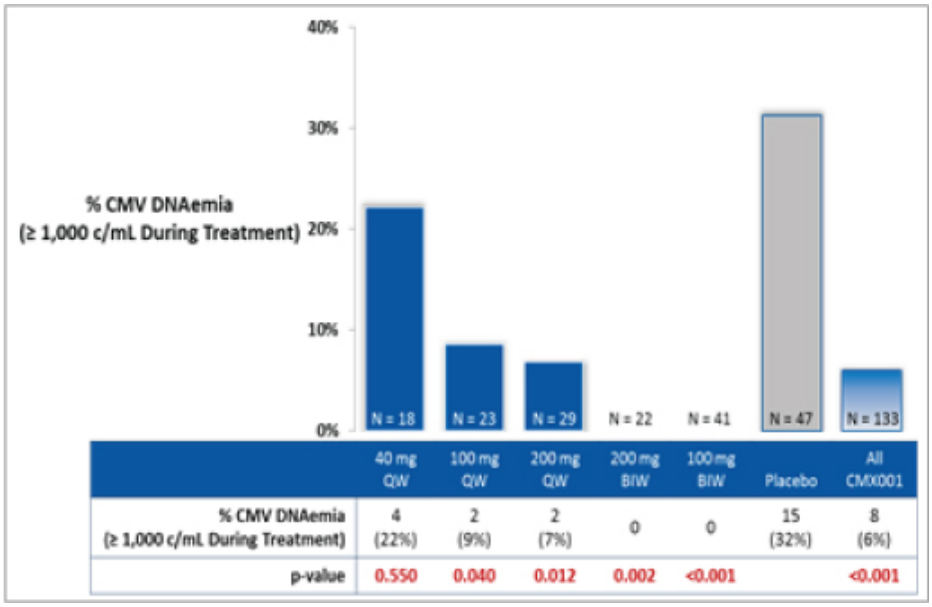
In a pre-specified subgroup analysis of subjects who were CMV negative at baseline, zero of 41 subjects (0%) in the CMX001 100 mg BIW group developed CMV PCR of 1,000 copies/mL or more during the CMX001 dosing period, compared to 15 of 47 (32%) of subjects in the placebo cohort ($p<0.001$) (see figures below). When individual subject data were examined (CMV PCR copies/mL over time), the CMX001 100 mg BIW dose regimen resulted in lower frequency and/or lower overall levels of CMV PCR.

Study 201: CMV PCR for Individual Subjects Over Time



* Represents the clinically relevant threshold.

Percentage of Subjects in Study 201 with CMV PCR of 1,000 Copies per mL or Greater



	40 mg QW	100 mg QW	200 mg QW	200 mg BIW	100 mg BIW	Placebo	All CMX001
% CMV DNAemia (≥ 1,000 c/mL During Treatment)	4 (22%)	2 (9%)	2 (7%)	0	0	15 (32%)	8 (6%)
p-value	0.550	0.040	0.012	0.002	<0.001		<0.001

Overall Safety and Tolerability for CMX001

In Study 201, CMX001 100 mg BIW and CMX001 200 mg QW were sufficiently well-tolerated to warrant further evaluation. There was no indication of nephrotoxicity or myelotoxicity associated with CMX001, regardless of dose and dosing frequency.

Because of the severity of their underlying illnesses and the multiple drugs administered to HSCT patients both pre- and post-transplant, there is a high background level of AEs in this patient population. Of the AEs reported in Study 201 in 20% or more of subjects, GI-associated events (including diarrhea, nausea, vomiting and abdominal pain) and elevated ALT levels generally increased in frequency with increasing doses of CMX001.

At a dose of CMX001 200 mg BIW, increased GI AEs were reported, particularly diarrhea. Diarrhea in the transplant setting has the potential to originate from a variety of sources, including conditioning regimens, concomitant medications, and infections. At this time, the FDA requested that doses of CMX001 be limited to a total weekly dose of 200 mg or less. As part of the FDA's request, we implemented a program-wide SMMP that included interruption of study drug for subjects who experienced Grade 3 or higher GI AEs. In our Phase 2 study at a dose of CMX001 100 mg BIW, 10% of the subjects discontinued CMX001 due to GI AEs, compared to 4% in the placebo group. A decrease in serum albumin from baseline provided an additional marker for discriminating drug-related diarrhea from diarrhea of other etiologies. We believe that monitoring of serum albumin concentrations coupled with dose interruption is an appropriate strategy to decrease the severity of GI AEs without loss of antiviral activity and could allow for completion of the intended therapy duration. Following the introduction of the SMMP in our ongoing clinical studies, less than 10% of subjects have discontinued from CMX001 due to GI AEs. The SMMP will be included in the Phase 3 SUPPRESS study.

A dose-related, transient increase in ALT was associated with CMX001 therapy. When present, the ALT increases follow a predictable pattern and return to baseline levels following completion of therapy. Few clinical hepatobiliary AEs were reported in association with CMX001 therapy and most were mild or moderate in intensity. The ALT increases observed in Study 201 were consistent with ALT elevations observed across all preclinical species exposed to CMX001, a finding considered non-adverse as there was no histopathologic evidence of liver injury or hepatic necrosis.

There has been no evidence of nephrotoxicity with CMX001 pre-clinically. The mechanism of nephrotoxicity for intravenous cidofovir is directly related to high plasma concentrations of intravenous cidofovir needed to reach therapeutic intracellular levels of CDV-PP. Cidofovir is rapidly taken up by cells in the kidney by a receptor called the human organic anion transporter one (hOAT-1), which leads to high concentrations of cidofovir in the duct system in the kidneys and subsequent renal toxicity. CMX001 is not a substrate for hOAT-1.

The lack of nephrotoxicity observed with CMX001 in preclinical *in vitro* and animal studies is supported by clinical data. Based on the pharmacokinetic data generated in our Compassionate Use Program, the FDA granted a waiver for the conduct of a renal insufficiency clinical pharmacology study. A further indication of CMX001's lack of nephrotoxicity was observed in Study 201, where there was a dose-related improvement in estimated GFR in the 50% of CMV patients co-infected with BKV for subjects receiving CMX001 as compared with subjects on placebo. The effect was most pronounced in patients who were infected with both CMV and BKV, providing a clinical correlate to the hypothesis of CMX001's activity against BKV which has been demonstrated *in vitro*.

Study 202: Preemptive Therapy for AdV in HSCT Recipients

In June 2011, we initiated Study 202, a randomized, placebo-controlled, multi-site study evaluating CMX001 as a preemptive therapy for AdV disease in HSCT recipients. Although AdV infection is much less frequent than CMV in HSCT, disseminated AdV has a high mortality rate of 80%. The incidence of AdV viremia in HSCT is poorly documented but is estimated at 5 – 7% during the first 100 days post-transplant based on screening data from Study 202. Evaluation of CMX001 as a prevention for AdV would require a study size of thousands of patients, an unrealistic goal given the number of at-risk pediatric HSCTs performed annually in the United States. As such, we are evaluating the safety, tolerability and efficacy of QW and BIW regimens of CMX001 versus placebo for the preemptive management of asymptomatic AdV viremia in 48 pediatric and adult HSCT recipients at 29 transplant centers in the United States. We completed enrollment of the 48 planned subjects in December 2012. Data from Study 202 are expected in the second half of 2013.

Study 202 participants were randomized to receive up to 12 weeks of preemptive therapy with CMX001 or placebo, followed by a four-week post-therapy follow-up period. Adults or children weighing 50 kg or greater receive CMX001 tablets at doses of 100 mg BIW or 200 mg QW. Pediatric subjects (*i.e.*, patients weighing less than 50 kg) receive CMX001 as a liquid formulation at doses of 2 mg/kg BIW or 4 mg/kg QW. The total dose in pediatric patients does not exceed 200 mg weekly.

The primary endpoint in Study 202 is treatment failure, a composite endpoint consisting of (i) progression to probable or definitive AdV disease, or (ii) increasing AdV viremia during randomized therapy that requires discontinuation from randomized therapy. Participants who are assessed as failures at any time during the randomized therapy phase of the study are offered open-label treatment with CMX001 for a period of up to 12 weeks.

We are also evaluating multiple secondary endpoints, including incidence and time to mortality, the percentage of subjects on randomized therapy with undetectable plasma AdV PCR measured at various time points, and the percentage of subjects who have emergence or progression of CMV, EBV or BKV viremia or disease during therapy.

Open-Label Studies

Since 2009, Chimerix has made CMX001 available to over 80 transplant centers worldwide through our Compassionate Use Program, including EINDs or foreign equivalents and our formal open-label expanded access study, Study 350. Through these programs, we made CMX001 available to treat life-threatening dsDNA viral diseases in patients who had exhausted all available therapeutics or for whom there were no therapeutic options.

EINDs

Clinical testing of therapeutic agents prior to approval must be performed pursuant to an IND submitted to and approved by the FDA. In addition, the FDA may allow non-approved drugs to be administered to patients in certain situations utilizing a set of regulations known as expanded access. One such type of expanded access is the EIND application. A physician may request use of an investigational antiviral product through a single-patient EIND application if:

- the physician considers the product may be urgently needed for the patient's serious or life-threatening condition;
- no satisfactory alternative therapy is available; and
- the patient cannot receive the product through any existing clinical trials or expanded access protocols.

Since 2009, when the first EIND was granted for CMX001, over 200 patients have been treated with CMX001 under EINDs or foreign equivalent regulations for severe, life-threatening dsDNA viral infections. Viruses treated with CMX001 include all major dsDNA viruses, including CMV, AdV, BKV, EBV, JCV, HHV-6, HHV-8, HSV-1, HSV-2, VZV, HPV, moscullum, and vaccinia. Over 80 international transplant centers have requested CMX001. In this EIND population, approximately 40% of patients infected with CMV were infected with at least one other dsDNA virus, the most common being BKV and AdV.

In 2010, we focused our Compassionate Use Program efforts on Study 350 and significantly curtailed the availability of CMX001 under the EIND program in an effort to standardize the data collected from patients receiving CMX001 under the expanded access regulations.

Study 350

Study 350, a multicenter, open-label clinical study of CMX001, evaluated the safety, tolerability and antiviral activity of CMX001 in 135 adult and 80 pediatric patients with various severe, life-threatening dsDNA viral infections at 36 transplant centers in the United States. Patients must have failed all other available treatment options in order to qualify for this study. Patient ages ranged from one to 78 years, and were treated for dsDNA viral infections including CMV, HSV, EBV, AdV, BKV, JCV, and HHV6. The average period of dosing in Study 350 was approximately two months. Safety data has not revealed any unidentified safety signals associated with CMX001 administration in a complex and highly compromised patient population.

Data from Study 350 are under analysis and expected in 2013.

Phase 3 Study: SUPPRESS

Our Phase 3 study, SUPPRESS, will be a placebo-controlled study in CMV seropositive (R+) adults undergoing HSCT, evaluating the safety and efficacy of CMX001 to prevent CMV infection. Subjects will be randomized to receive one of two twice-weekly doses of CMX001 (*i.e.*, 75 mg BIW or 100 mg BIW) or placebo. The primary endpoint for SUPPRESS will be the development of clinically significant CMV infection, defined as either:

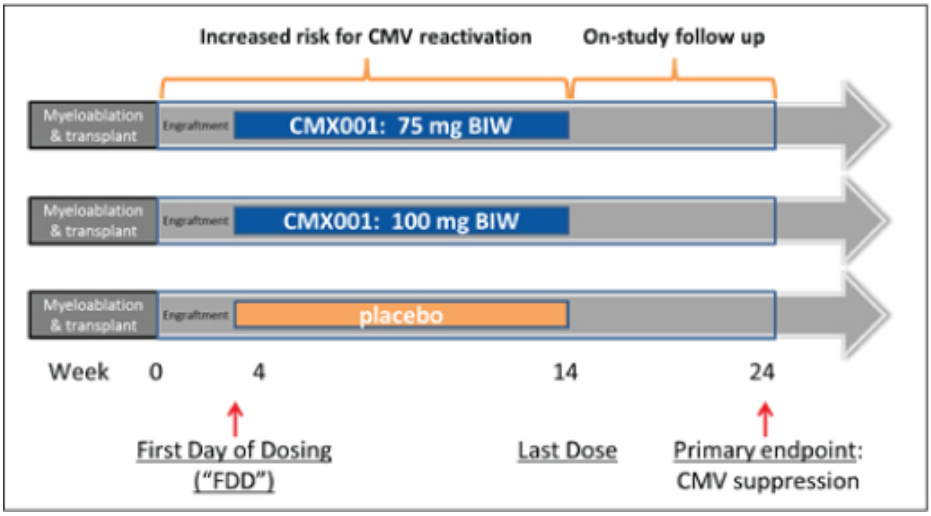
- CMV disease (*i.e.*, evidence of CMV in an affected organ); or
- the initiation of CMV-specific preemptive therapy based on a positive test for viremia as reported by the central laboratory.

Based on data from Study 201, we estimate that at least 30% of patients in populations similar to the intended SUPPRESS population will require initiation of CMV-specific preemptive therapy. SUPPRESS will be powered to detect a 50% difference between the cohort randomized to receive placebo and either cohort randomized to CMX001. We hope to show that either of the two doses of CMX001 in SUPPRESS result in a clinically meaningful and statistically significant reduction in the risk of needing preemptive therapy, thus avoiding the morbidity, mortality and costs associated with these therapies.

We plan to conduct SUPPRESS at 30 to 40 transplant centers in the United States and enroll 540 patients who have undergone HSCT and who have prior exposure to CMV. Inclusion and exclusion criteria will be similar to Study 201, including high risk HSCT patients. Dosing of CMX001 or placebo will begin in the early post-transplant period and will continue through Week 14 post-transplant. Subjects will be monitored weekly for CMV viremia from enrollment through Week 14 post-transplant, and then every three weeks until Week 24 post-transplant.

As part of SUPPRESS, we plan to evaluate multiple secondary endpoints, including treatment-emergent resistance, incidence of non-CMV dsDNA viruses and comparison of pharmacoeconomic and health-related qualify of life outcome parameters between CMX001- and placebo-treated subjects.

Study 301: SUPPRESS Study Design



Based on completed and planned studies, we anticipate that more than 950 adult subjects will have been exposed to at least one dose of CMX001 through the end of SUPPRESS in both controlled and uncontrolled studies, including nearly 600 adult subjects enrolled in randomized, placebo-controlled studies. Of these, over 500 subjects will have received doses of at least 150 mg per week for at least 10 weeks in controlled studies upon our anticipated submission for CMX001 for the prevention of CMV in HSCT recipients.

Based on our interactions with the FDA, we believe, but cannot guarantee, that with the successful completion of SUPPRESS, we will have completed the preclinical and clinical studies necessary to submit an NDA for the prevention of CMV in HSCT recipients. We intend to submit an NDA under an accelerated approval pathway seeking regulatory approval to market CMX001 in the United States. If CMX001 receives accelerated approval, it may be necessary for us to conduct a post-approval Phase 3 study in order to receive full approval of CMX001.

We intend to seek fast track designation with the FDA to support our development and commercialization strategy in the United States for CMX001 for the prevention of CMV in HSCT recipients. We have previously received fast track designation from the FDA for the AdV and smallpox indications of CMX001.

Additionally, we plan to seek regulatory approval for marketing of CMX001 for the prevention of CMV in HSCT recipients in Canada and key European markets.

Future clinical development for CMX001 may include a Phase 3 CMV prevention study in pediatric HSCT recipients (Study 311) as well as the possible development of CMX001 for BKV infection in HSCT and SOT recipients.

CMX001 as a Medical Countermeasure Against Smallpox

The Department of Homeland Security (DHS) has declared smallpox to be a material threat to national security and the U.S. Centers for Disease Control and Prevention classifies smallpox as a Category A bioterror agent. Consequently, smallpox was identified as a high-priority threat by the Public Health Emergency Medical Countermeasure Enterprise (PHEMCE). An antiviral is needed, in particular, for patients who cannot be vaccinated due to conditions that prevent them from mounting an appropriate immune response to a smallpox vaccine.

We received our initial funding for the medical countermeasure development of CMX001 from the NIAID. In February 2011, we were awarded a Broad Agency Announcement (BAA) contract by BARDA to fund development of CMX001 for treatment of smallpox in the event of a smallpox outbreak. See "— Commercial Agreements" below for more information on this contract.

Variola virus, the dsDNA virus that causes smallpox, is an orthopoxvirus that infects only humans. CMX001 demonstrated high potency in inhibiting variola virus replication in cultured cells as well as related viruses that have been used to create animal models of smallpox including ectromelia in mice, rabbitpox, monkeypox and vaccinia. *In vivo*, the antiviral activity of CMX001 has been characterized in an animal model of smallpox. In this model, a dose of CMX001 was identified that provided protection against mortality from an otherwise lethal viral inoculum. Under the base performance segment of the BARDA contract described below, we have devoted a substantial amount of effort to develop animal models of smallpox and to explore efficacy in these models.

In December 2011, we presented a summary of studies of CMX001 conducted in mouse, rabbit and monkey models of smallpox and the current animal efficacy development plan to a Smallpox Advisory Committee convened by FDA to provide guidance on acceptable models of smallpox. Based on the information provided at that meeting, FDA provided specific guidance to Chimerix on the development of CMX001 for smallpox under the Animal Efficacy Rule. The FDA provided feedback on the animal models that could be used for studies that may lead to approval for a smallpox treatment indication. Specifically, the FDA suggested the mouse ectromelia model and the rabbit rabbitpox model would be appropriate for CMX001. In addition, FDA and Chimerix agreed that no additional work would be conducted in the currently available monkey models of smallpox. An updated animal efficacy development plan incorporating this feedback was submitted to the FDA in August 2012 in advance of a Type C meeting in September 2012.

As part of progressing the clinical and non-clinical development of CMX001 for the smallpox indication, the base performance segment of the BARDA contract also supported Study 350. This study provided safety data for CMX001 relevant to the smallpox indication.

CMX001 has shown encouraging activity in relevant animal models of smallpox, and we anticipate renegotiating certain aspects of the smallpox animal plan to take into account recent guidance from the FDA for the development of CMX001 under the Animal Efficacy Rule. However, the results of this negotiation are uncertain and we do not anticipate continuing this program without ongoing support from BARDA.

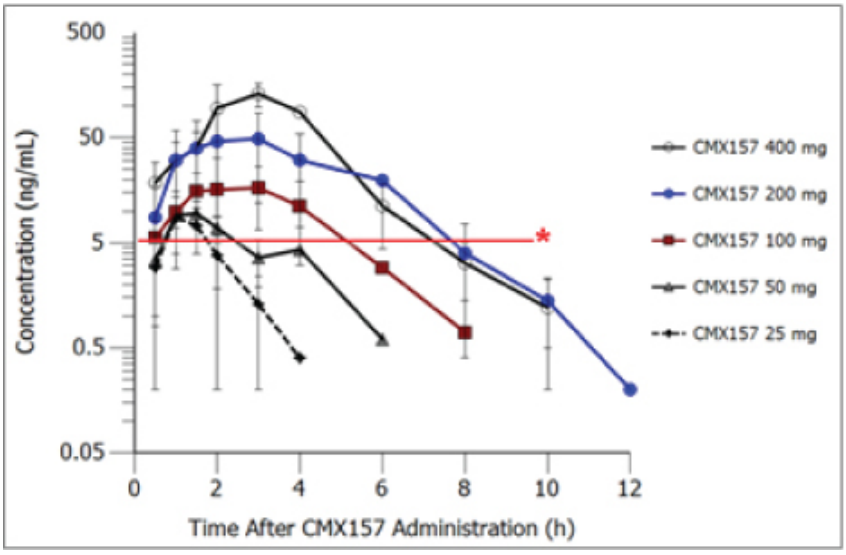
CMX157

CMX157, our second oral nucleotide analog lipid-conjugate, uses the same proprietary lipid technology as CMX001 to deliver high intracellular concentrations of another potent antiviral drug, tenofovir. CMX157 is being developed for the treatment of HIV infection, and was licensed to Merck in July 2012.

CMX157 is a novel lipid-conjugate of the acyclic nucleoside phosphonate, tenofovir, the active molecule underlying the prodrug Viread®. Viread, which is marketed in the United States by Gilead Sciences, Inc. (Gilead), is the most widely used nucleotide reverse transcriptase inhibitor (NRTI), approved for the treatment of HIV and chronic hepatitis. Based on supportive preclinical data, we believe CMX157 has the potential for higher intracellular concentrations in target tissues of tenofovir-diphosphate (TFV-PP), the active form of both CMX157 and Viread®, as well as a decreased frequency of dosing and an improved safety profile over existing NRTIs. CMX157 is more than 200-fold more potent *in vitro* versus tenofovir against all major HIV subtypes resistant to current therapies, which may allow activity against tenofovir-resistant viruses and against Hepatitis B. CMX157's structure results in decreased circulating levels of tenofovir, lowering systemic exposure and thereby reducing the potential for renal side effects.

Prior to the transaction with Merck, we completed a Phase 1 clinical study of CMX157 in healthy subjects, demonstrating a favorable safety, tolerability and drug distribution profile. This study demonstrated plasma concentrations of CMX157 that exceeded target levels at doses of 100 mg and higher after a single dose. TFV-PP was measurable in peripheral blood mononuclear cells in all subjects after a single dose of 400 mg of CMX157, but not so after a standard dose of Viread. TFV-PP remained detectable for up to six days after dosing, suggesting the possibility for infrequent dosing. In the study, CMX157 was well-tolerated and no safety issues were observed. No trends in clinical laboratory results, vital signs or electrocardiogram parameters were noted, and no severe adverse events were reported. The chart below presents peak plasma concentrations after oral administration of CMX157 in the Phase 1 study.

Plasma Concentrations After Oral Administration of CMX157



*Concentration that equaled TFV-PP level produced by TFV peak concentration *in vitro*.

Chimerix Chemical Library

The Chimerix Chemical Library contains over 10,000 heterocyclic ring systems and nucleosides that were originally synthesized in the laboratory of Dr. Leroy Townsend at the University of Michigan. We are currently screening the library for activity against more than thirty viruses including flaviviruses, influenza, herpesviruses and polyomaviruses. Lead chemical series have been identified for influenza and novel compounds with promising activity are being evaluated. Screening has also been completed for antifungals and a lead chemical series has been identified with broad-spectrum antifungal activity. We believe that several compounds active against key pathogens are amenable to enhancement using our proprietary lipid technology.

Commercial Agreements

Merck

In July 2012, we entered into a collaboration and license agreement granting Merck exclusive worldwide rights to CMX157, our novel lipid acyclic nucleoside phosphonate currently being evaluated to treat HIV infection. Under the terms of the agreement, Merck received an exclusive worldwide license for any human use of CMX157 and has agreed to use commercially reasonable efforts to develop and commercialize CMX157 in the United States and at least three major European markets. Following execution of the agreement, we received a $17.5 million upfront payment from Merck.

As additional consideration, we are eligible to receive up to a total of $151.0 million in milestone payments if certain development and regulatory milestones are achieved by Merck for products utilizing CMX157, as well as tiered royalties on net sales ranging from high single digits to low double digits, depending upon the volume of sales of each applicable product, if CMX157 is successfully commercialized. Milestone payments are triggered upon the completion of various stages of the regulatory approval process for each of the first two indications for CMX157, with the final milestones reached upon approval in the United States and three major European markets. Royalties for any given product will continue on a country-by-country basis through the later of the expiration of our patent rights applicable to such product or ten years from the first commercial sale of such product. As of December 31, 2012, other than the upfront payment received upon execution of the agreement, we have not received any payments from Merck pursuant to the agreement.

Unless earlier terminated, the agreement continues in effect until the termination of Merck's royalty payment obligations. The agreement allows for termination by Merck in its entirety, or on a region-by-region basis, upon 90 days advance written notice, or, with respect to a particular product, immediately upon written notice if Merck has a safety concern regarding such product. In addition, either party may terminate for the other party's material breach of the agreement which remains uncured for 90 days. In the event of termination by us for material breach by Merck or termination by Merck upon written notice to us (other than termination due to safety concerns with respect to a particular product), Merck would be required to assign to us certain clinical data and regulatory materials related to CMX157 and, upon written request, grant to us a limited, non-exclusive license to Merck's patent rights covering CMX157. In such event, we would be required to pay to Merck a tiered, low single digit royalty on net sales depending on any such product's development stage at the time of such termination.

BARDA

In February 2011, we entered into a contract with BARDA for the advanced development of CMX001 as a medical countermeasure in the event of a smallpox release (Contract Number HHSO100201100013C). BARDA is a division of the U.S. Department of Health and Human Services (HHS) in the Office of the Assistant Secretary for Preparedness and Response that supports the advanced research and development, manufacturing, acquisition and stockpiling of medical countermeasures. The scope of work for the contract includes preclinical, clinical and manufacturing development activities that fall into the following areas: non-clinical animal efficacy studies; clinical activities; manufacturing activities; and all associated regulatory, quality assurance, management, and administrative activities. The contract has been amended several times, most recently on November 26, 2012, to expand the scope of work, update key personnel and change the periods of performance, benefits and the amount of base costs.

Under the contract, BARDA will reimburse our costs, plus pay us a fixed fee, for the research and development of CMX001 as a treatment of smallpox infections. The contract consists of an initial performance period, referred to as the base performance segment, plus up to four extension periods of around one year each, referred to as option segments, each of which may be exercised at BARDA's sole discretion. We must complete agreed upon milestones and deliverables in each discrete work segment before the next option segment is eligible to be exercised. Under the contract as currently in effect, if each follow-on option segment is exercised by BARDA, we may receive up to an aggregate of $81.1 million in expense reimbursement and fees.

We are currently completing the base performance segment of the contract under which we may receive up to a total of $31.0 million. The term of the base segment ends on March 31, 2013. BARDA must notify us at least 30 days before the end of the current base performance segment if it intends to exercise the first option segment of the contract. If all option segments are exercised by BARDA, the term of the contract would be extended to February 15, 2016.

Pursuant to the contract, the U.S. government retains a nonexclusive, nontransferable, irrevocable, paid up license to any invention made in the performance of our work under the contract; provided, however, that the U.S. government may, under certain circumstances, including circumstances involving public health and safety, license such inventions to third parties without our consent. There have been no inventions made to date under the BARDA contract.

The contract may be terminated by BARDA ten days after giving us notice of a material default which remains uncured for ten days. In addition, BARDA is also permitted under applicable law to terminate the contract if it is in the U.S. government's best interest.

We anticipate renegotiating certain aspects of the smallpox animal plan to take into account recent guidance from the FDA for development of CMX001 under the Animal Efficacy Rule. The results of this negotiation are uncertain and we do not anticipate continuing this program without ongoing support from BARDA.

NIAID

In September 2003, we were awarded a $36.3 million grant from the NIAID to support our development of an oral drug for the treatment of smallpox. The work performed under this grant resulted in our selection of CMX001 as a lead product candidate for commercial development. The grant, and our activities conducted in connection therewith, were concluded in February 2011.

The U.S. government retained "march-in" and other rights with respect to inventions developed by us under the NIAID contract, and if the U.S. government exercised these rights, we could be obligated, for example, to license intellectual property developed by us on terms unfavorable to us, and there can be no assurance that we would receive compensation from the U.S. government for the exercise of such rights.

Commercialization, Marketing and Sales

Given our stage of development, we have not yet established a commercial organization or distribution capabilities.

Due to the complexity of HSCT and SOT treatment regimens, treating physicians are readily identifiable and are well informed, which may make it easier to identify potential prescribers after a drug is approved. Patients who receive HSCT and SOTs will mostly likely be treated at a small number of major medical centers by specialized teams of physicians. In the United States, there are approximately 200 institutions at which transplants are performed, of which approximately 75% perform HSCTs and 75% perform SOTs. Due to the different requirements and treatment regimens for HSCT and SOT patients, only approximately one-third of these hospitals perform both HSCT and SOTs. Of the approximately 150 hospitals that perform HSCTs, approximately 50 perform both pediatric and adult transplants, approximately 60 perform adult transplants only and approximately 40 perform pediatric HSCTs only.

The management of therapies for transplant patients is largely the responsibility of the transplant physicians and an even smaller subset of specialists in infectious diseases who oversee post-transplant therapies. In many hospitals, the infectious disease physicians are responsible for only HSCT or only SOT

patients, and often further sub-specialize to pediatric versus adult transplant patients. Overall, transplant and transplant infectious disease treatment is a small clinical discipline with a clearly identified group of key opinion leaders. While the standard of care for post-transplant therapies varies from institution to institution and from country to country, it is often driven by research activities or publications of these key opinion leaders from academic transplant research centers. Many of these key opinion leaders have participated in our clinical trials and/or have experience using CMX001 through our Compassionate Use Program.

If approved for the prevention of CMV in patients who have received HSCT, we believe that it will be possible for us to commercialize CMX001 for this indication with a relatively small specialty sales force that calls on a limited and focused group of physicians. For the United States and Canada, we foresee the need for a full commercial infrastructure of approximately 50 people. While our commercialization efforts would initially be focused on physicians who are responsible for HSCT patients, this sales and marketing infrastructure would serve as the foundation for an expanded focus on physicians who are responsible for SOT patients, subject to marketing approval in this patient population.

Outside of the United States, subject to obtaining necessary marketing approvals, we likely will seek to commercialize CMX001 through distribution or other collaboration arrangements. If we elect to develop CMX001 for other dsDNA indications, we would plan to do so selectively either on our own or by establishing alliances with one or more pharmaceutical company collaborators, depending on, among other things, the applicable indications, the related development costs and our available resources.

Competition

Our industry is highly competitive and subject to rapid and significant technological change. Our potential competitors include large pharmaceutical and biotechnology companies, specialty pharmaceutical and generic drug companies, academic institutions, government agencies and research institutions. We believe that the key competitive factors that will affect the development and commercial success of CMX001 and the product candidates that we develop are efficacy, safety and tolerability profile, convenience in dosing, product labeling, value, price and the availability of reimbursement from the government and other third-parties. Our commercial opportunity could be reduced or eliminated if our competitors have products which are better in one or more of these categories.

We expect that, if approved, CMX001 would compete with a number of existing products and other product candidates that target serious viral infections. Many of our potential competitors have substantially greater financial, technical, commercial and human resources than we do and significantly more experience in the discovery, development and regulatory approvals of product candidates, and the commercialization of those products. Accordingly, our competitors may be more successful than we may be in obtaining FDA approval for product candidates and achieving widespread market acceptance. Our competitors' products and product candidates may be more effective, or more effectively marketed and sold, than any product candidate we may commercialize, which could render CMX001 or any other product candidate that we develop obsolete or non-competitive before we can recover the expenses of developing and commercializing any such product candidate. We anticipate that we will face intense and increasing competition as new products enter the market, as advanced technologies become available and as generic forms of currently branded products become available. Finally, the development of new treatment methods for the diseases we are targeting could render our product candidates non-competitive or obsolete. Changes in the health care system may limit our ability to price CMX001 or our other products at a level that would allow recovery of our research and development costs and may impede our ability to generate or maintain a profit.

We anticipate that, if approved, CMX001 will compete with other antiviral products, including drugs and vaccines which demonstrate efficacy against viruses that affect our target patient populations. These include both oral and intravenous ganciclovir, a drug that is sold by generic manufacturers; Valcyte® (valganciclovir), a prodrug of ganciclovir that is marketed by Hoffmann-La Roche Inc.; Cytogam®, a pooled CMV hyperimmuneglobulin, marketed by CSL Limited; Vistide® (cidofovir for injection), marketed by Gilead; and Foscavir® (foscarnet sodium for injection), marketed by Clinigen Group plc and generic manufacturers.

We are aware of several product candidates currently in development that may compete against CMX001, including letermovir, an anti-CMV drug being developed pursuant to an exclusive worldwide license agreement between AiCuris and Merck.

We are aware of several therapeutic vaccine candidates that are being studied for the prevention or mitigation of CMV infection in a variety of settings. One such vaccine, TransVax, was licensed to Astellas from Vical and is being developed by Astellas and Vical. Other vaccine products are being developed by GlaxoSmithKline plc (GlaxoSmithKline), Novartis International AG, sanofi-aventis Group (Aventis), and a variety of university and governmental organizations.

Other products used against the same viruses targeted by CMX001 include valacyclovir, an antiviral drug marketed by GlaxoSmithKline and a number of generic manufacturers; leflunomide, a drug approved for rheumatoid arthritis and sold in the United States by Aventis under the brand name Arava®; and quinolone antibiotics, which are manufactured by a variety of branded pharmaceutical companies and generic manufacturers.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than CMX001 or any other product candidate that we may develop. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours. In addition, our ability to compete may be affected because in many cases insurers or other third-party payers seek to encourage the use of generic products.

We believe that CMX001 has potential benefits over these competitive products as described in more detail under "Business — CMX001 Background and Development Strategy." As a result, we believe that CMX001 should be well placed to capture market share from competing products if we obtain the required regulatory approvals for CMX001. However, even with those benefits, we may not be able to make promotional claims that CMX001 is superior to these competing products, and CMX001 may be unable to compete successfully against these products. See "Risk Factors — Risks Related to Commercialization of Our Product Candidates."

Intellectual Property

We strive to protect and enhance the proprietary technologies that we believe are important to our business, and seek to obtain and maintain patents intended to cover our products and compositions, their methods of use and any other inventions that are important to the development of our business. We are not currently aware of any third-party patents (other than patents we have licensed) encompassing our proprietary compounds CMX001 and CMX157.

Our success will depend significantly on our ability to obtain and maintain patent and other proprietary protection for commercially important technology, inventions and know-how related to our business, defend and enforce our patents, maintain our licenses to use intellectual property owned by third parties, preserve the confidentiality of our trade secrets and operate without infringing the valid and enforceable patents and other proprietary rights of third parties. We also rely on know-how, continuing technological innovation and in-licensing opportunities to develop, strengthen, and maintain our proprietary position in the field of nucleoside phosphonates.

We believe that we have a strong intellectual property position and substantial know-how relating to the development and commercialization of our lipid-antiviral conjugates, including CMX001, CMX157, and derivatives of CMX001 or CMX157, consisting of patents or patent applications that we own or have in-licensed from third parties. We cannot be sure that patents will be granted with respect to any of our pending patent applications or with respect to any patent applications filed by us in the future, nor can we be sure that any of our existing patents or any patents that may be granted to us in the future will be commercially useful in protecting our technology.

Our objective is to continue to expand our intellectual property estate by filing patent applications directed to dosage forms, methods of treatment, and identification of additional nucleoside phosphonate compounds and their derivatives, in order to protect our lipid-antiviral conjugate therapeutics and to maintain our position in the antiviral field. Specifically, we seek patent protection in the United States and in certain other jurisdictions for novel compositions of matter covering CMX001 and CMX157, and chemistries which facilitate the synthesis of nucleoside phosphonate compounds, including CMX001 and CMX157, as well as uses of these compounds in a variety of anti-viral therapies, where available and when appropriate. Our policy

is to pursue, maintain, and defend patent rights, whether developed internally or licensed from third parties, and to protect the technology, inventions, and improvements that are commercially important to the development of our business. We are also expanding our intellectual property estate into the area of novel anti-fungal nucleoside phosphonates.

CMX001

The patent portfolio for CMX001 is directed to cover compositions of matter, formulation, manufacturing methods, and methods of use. This patent portfolio includes issued U.S. patents, pending U.S. patent applications, and corresponding foreign national and regional counterpart patents and patent applications. The patents and patent applications relating to CMX001 include patent applications owned by us, as well as patents and patent applications in-licensed (exclusive license) from The Regents of the University of California. The issued composition of matter patents (U.S. Patent Nos. 6,716,825; 7,034,014; 7,094,772; and 7,790,703), if the appropriate maintenance, renewal, annuity, and other government fees are paid, are expected to expire in 2020. The issued methods of use patents (U.S. Patent Nos. 6,716,825; 7,452,898; and 7,790,703), if the appropriate maintenance, renewal, annuity, and other government fees are paid, are expected to expire in 2020. Based on our current development plan, we believe that an additional term of up to five years for one of the CMX001 U.S. patents may result from the patent term extension provision of the Hatch-Waxman Amendments of 1984 (the Hatch-Waxman Act). We expect that the patent applications in this portfolio, if issued, and if appropriate maintenance, renewal, annuity, and other governmental fees are paid, would expire between 2020 and 2031, excluding any additional term from patent term adjustment or patent term extension. Assuming one of the U.S. composition of matter or method of use patents covering CMX001 were awarded the maximum patent term extension, the term of that patent could extend to December 2025. The patent term calculation method and the provisions under the Hatch-Waxman Act are described under "— Patent Term" below.

The term of issued CMX001 composition of matter patents in other jurisdictions (Australia, Canada, Europe, Hong Kong, India, Japan, Mexico, Russia, and South Africa) and methods of use patents and patent applications (if applicable) relating to CMX001 (in Australia, Canada, China, Europe, Hong Kong, India, Japan, Mexico, Russia, and South Africa), if the appropriate maintenance, renewal, annuity, and other government fees are paid, are expected to expire between 2020 and 2031. These patents and patent applications (if applicable), depending on the national laws, may benefit from extension of patent term in individual countries. In the European Union member countries, for example, a supplementary protection certificate (SPC), if obtained, provides a maximum five years of market exclusivity. The duration of the SPC can be extended to five and a half years when the SPC relates to a human medicinal product for which data from clinical trials conducted in accordance with an agreed Pediatric Investigation Plan (PIP) have been submitted. Likewise, in Japan, the term of a patent may be extended by a maximum of five years in certain circumstances.

CMX157

The patent portfolio for CMX157 is directed to cover compositions of matter, formulation, and methods of use. This patent portfolio includes issued U.S. patents, pending U.S. patent applications, and corresponding foreign national and regional counterpart patents and patent applications. The patents and patent applications relating to CMX157 include patent applications owned by us, as well as patents and patent applications in-licensed (exclusive license) from The Regents of the University of California. The issued composition of matter patents (U.S. Patent Nos. 6,716,825; 7,034,014; 7,094,772; 7,790,703; and 7,687,480), if the appropriate maintenance, renewal, annuity, and other government fees are paid, are expected to expire in 2020. The issued methods of use patents (U.S. Patent Nos. 6,716,825; 7,790,703; and 7,687,480), if the appropriate maintenance, renewal, annuity, and other government fees are paid, are expected to expire in 2020. We believe that an additional term of up to five years for one of the CMX157 U.S. patents may result from the patent term extension provision of the Hatch-Waxman Act. We expect that the patent applications in this portfolio, if issued, and if appropriate maintenance, renewal, annuity, and other governmental fees are paid, would expire between 2020 and 2031, excluding any additional term from patent term adjustment or patent term extension. The patent term calculation method and the provisions under the Hatch-Waxman Act are described in the "Patent Term" section below.

The term of issued CMX157 composition of matter patents in other jurisdictions (Australia, Canada, Europe, Hong Kong, India, Japan, Mexico, Russia, and South Africa) and methods of use patents and patent applications (if applicable) relating to CMX157 (in Australia, Canada, China, Europe, Hong Kong, India, Japan, Mexico, Russia, and South Africa), if the appropriate maintenance, renewal, annuity, and other government fees are paid, are expected to expire between 2020 and 2031. Like the patents relating to CMX001, the patents and patent applications (if applicable), covering CMX157, depending on the national laws, may also benefit from extension of patent term in individual countries.

Other Product Candidates

In addition to CMX001 and CMX157, we have a chemical library of more than 10,000 heterocyclic compounds purchased from the University of Michigan which includes approximately 3,500 nucleoside analog candidates for lipid conjugation. We also license certain intellectual property rights relating to these compounds from the University of Michigan, in exchange for which we agree, among other things, to use commercially reasonable efforts to develop and commercialize products utilizing the licensed intellectual property, and to pay certain royalties and other fees to the University of Michigan. Focused screening of the library has identified viable hits against multiple pathogens including compounds with activity against influenza, clinically important fungi and compounds with activity against both CMV and BKV. Lead selection is in progress for the antifungal and dual active CMV/BKV programs. We believe additional nucleoside phosphonate antiviral compounds, unrelated to CMX001 and CMX157, are protected under U.S. Patents 7,994,143 and 7,749,983, which are expected to expire between 2027 and 2028, if the appropriate maintenance, renewal, annuity, and other government fees are paid.

Patent Term

The term of individual patents and patent applications listed in previous sections will depend upon the legal term of the patents in the countries in which they are obtained. In most countries, the patent term is 20 years from the date of filing of the patent application (or parent application, if applicable). For example, if an international (PCT) application is filed, any patent issuing from the PCT application in a specific country expires 20 years from the filing date of the PCT application. In the United States, however, if a patent was in force on June 8, 1995, or issued on an application that was filed before June 8, 1995, that patent will have a term that is the greater of twenty years from the filing date or seventeen years from the date of issue.

Under the Hatch-Waxman Act, the term of a patent that covers an FDA-approved drug may also be eligible for patent term extension (PTE). PTE permits patent term restoration of a U.S. patent as compensation for the patent term lost during the FDA regulatory review process. The Hatch-Waxman Act permits a patent term extension of up to five years beyond the expiration of the patent. The length of the patent term extension is related to the length of time the drug is under regulatory review. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only one patent applicable to an approved drug may be extended. Similar provisions may be available in Europe and certain other foreign jurisdictions to extend the term of a patent that covers an approved drug. When possible, depending upon the length of clinical trials and other factors involved in the filing of a new drug application (NDA) we expect to apply for patent term extensions for patents covering nucleoside phosphonates and their derivatives, and their use in treating various diseases. As a specific example, if we are awarded the maximum length of PTE, our U.S. granted composition of matter patents relating to CMX001 would have an expected expiration date of December 20, 2025. However, depending on any changes in our clinical path, the PTE may not be granted, or may be less than the maximum.

For additional information on patent term extension and the BPCA, see “Business — Government Regulation and Product Approval.”

Proprietary Rights and Processes

We may rely, in some circumstances, on proprietary technology and processes (including trade secrets) to protect our technology. However, these can be difficult to protect. We seek to protect our proprietary technology and processes, in part, by entering into confidentiality agreements with our employees, consultants, scientific advisors, contractors, and collaborators. We also seek to preserve the integrity and confidentiality of our proprietary technology and processes by maintaining physical security of our premises and physical and

electronic security of our information technology systems. While we have confidence in these individuals, organizations and systems, agreements or security measures may be breached, and we may not have adequate remedies for any breach. In addition, our proprietary technology and processes may otherwise become known or be independently discovered by competitors. To the extent that our employees, consultants, scientific advisors, contractors, or collaborators use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions. For this and more comprehensive risks related to our proprietary technology and processes, please see the section on "Risk Factors — Risks Related to Our Intellectual Property."

Technology Licenses

The Regents of the University of California

In May 2002, we entered into a license agreement with The Regents of the University of California (UC) under which we obtained an exclusive, worldwide license to UC's patent rights in certain inventions (the UC Patent Rights) related to lipid-conjugated antiviral compounds and their use, including certain patents relating to CMX001 and CMX157. The agreement was amended in September 2002 in order to expand the scope of the license and again in December 2010 in order to modify certain financial terms. The agreement was amended a third time in September 2011 to add additional patents related to certain metabolically stable lipid-conjugate compounds. A fourth amendment was executed in July 2012 to alter the rights and obligations of the parties in light of our current business plans.

Under the license agreement, we are permitted to research, develop, manufacture and commercialize products utilizing the UC Patent Rights for all human and veterinary uses, and to sublicense such rights. UC retained the right, on behalf of itself and other non-profit institutions, to use the UC Patent Rights for educational and research purposes and to publish information about the UC Patent Rights.

In consideration for the rights granted to us under the license agreement, we have issued UC an aggregate of 230,000 shares of our common stock. As additional consideration, we are required to pay certain cash milestone payments in connection with the development and commercialization of compounds that are covered by the UC Patent Rights, plus certain annual fees to maintain such patents until we commercialize a product utilizing UC Patent Rights. In addition, upon commercialization of any product utilizing the UC Patent Rights (which would include the commercialization of CMX001 or CMX157), we will be required to pay low single digit royalties on net sales of such product.

In the event we sublicense a UC Patent Right (including UC Patent Rights relating to CMX001 or CMX157), we are obligated to pay to UC a fee, which amount will vary depending upon the size of any upfront payment we receive and the clinical development stage of the compound being sublicensed, but which could be up to approximately 50% of the sublicense fee in certain circumstances. In addition, we will also be required to pay to UC a low single digit sublicense royalty on net sales of products that use the sublicensed UC Patent Rights, but in no event will we be required to pay more than 50% of the royalties we receive in connection with the relevant sublicense. Any such royalty payment will be reduced by other payments we are required to make to third parties until a minimum royalty has been reached. As of September 30, 2012, we had paid an aggregate of approximately $1.2 million to UC pursuant to the license agreement.

The license agreement requires that we diligently develop, manufacture and commercialize compounds that are covered by the UC Patent Rights, and we have agreed to meet certain development and commercialization milestones. UC may, at its option, either terminate the license agreement or change the license granted from an exclusive license to a non-exclusive license if we fail to meet such development and commercialization milestones. We are currently in compliance with these milestone requirements.

We may terminate the license agreement upon 90 days' notice to UC. UC may terminate the license agreement in the event of our nonperformance or breach of the license agreement which remains uncured after 60 days of receiving written notice of such nonperformance or breach. Absent early termination, the license agreement will automatically terminate upon the later of the expiration date of the longest-lived patent right included in the UC Patent Rights, which is currently expected to be in October 2028, or the 21st anniversary of the effective date of the agreement, which would be May 2023.

Other

We also license intellectual property from certain other parties that we believe to be necessary or useful for the conduct of our business, including from the University of Michigan, and may enter into additional license agreements in the future.

Manufacturing

We do not own or operate and we do not expect to own or operate, facilities for product manufacturing, storage and distribution, or testing. In the past, we have relied on third-party manufacturers for supply of our lead product candidate, CMX001, as well as our other product candidates. We expect that in the future we will rely on such manufacturers for supply of drug substance and product that will be used in clinical trials of CMX001. When produced on a commercial scale, we expect that cost-of-goods-sold relating to CMX001 will generally be in-line with that of other small-molecule pharmaceutical compounds.

The manufacturing process for CMX001 is relatively straight-forward and generally in-line with other small molecule pharmaceutical compounds in terms of cost and complexity. The process is robust and reproducible, does not require dedicated reactors or specialized equipment, uses common synthetic chemistry and readily available materials, and is readily transferable.

Our current drug substance supply chain for CMX001 involves various contractors that supply the raw materials for the drug substance process and a contract manufacturer for the drug substance. We have validated the drug substance production process for CMX001 at our current manufacturer at a scale of 100 kilograms, which is an amount that far exceeds our anticipated commercial requirements. We believe that our current contractor has the scale, the systems and the experience to supply all our expected requirements of preclinical and clinical CMX001 drug substance. We are continuously evaluating our requirements for CMX001 drug substance with respect to both our clinical and anticipated commercial programs. Changes in our requirements may require revalidation of the manufacturing process at a different scale and potentially at a different contractor depending on the necessary scale, infrastructure and technical capabilities. To ensure continuity in our supply chain, we plan to establish supply arrangements with alternative suppliers for certain portions of our supply chain, as appropriate.

Our drug products (tablets and suspension) are also manufactured under contract. We have validated manufacturing of CMX001 clinical trial material at our current manufacturer at a 165 kg commercial scale. In addition, stability data are available to support sufficient commercial shelf life. We have also developed a suspension formulation for CMX001 and have manufactured that formulation at our current manufacturer at pilot scale.

Manufacturing is subject to extensive regulations that impose various procedural and documentation requirements, which govern record keeping, manufacturing processes and controls, personnel, quality control and quality assurance, among others. Our systems and contractors are required to be in compliance with these regulations, and this is assessed regularly through monitoring of performance and a formal audit program. We have personnel with extensive technical, manufacturing, analytical and quality experience and strong project management discipline to oversee contract manufacturing and testing activities, and to compile manufacturing and quality information for our regulatory submissions.

Pursuant to our license agreement with Merck, the manufacture of CMX157 is under the control and direction of Merck.

Government Regulation and Product Approval

Government authorities in the United States at the federal, state and local level, and in other countries extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing and export and import of products such as those we are developing. CMX001 and any other drug candidate that we develop must be approved by the FDA before they may be legally marketed in the United States and by the corresponding foreign regulatory agencies before they may be legally marketed in foreign countries.

United States Drug Development Process

In the United States, the FDA regulates drugs under the Federal Food, Drug and Cosmetic Act (FDCA) and implementing regulations. Drugs are also subject to other federal, state and local statutes and regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations requires the expenditure of substantial time and financial resources. Failure to comply with the applicable requirements at any time during the product development process, approval process or after approval, may subject an applicant to a variety of administrative or judicial sanctions, such as the FDA's refusal to approve pending applications, withdrawal of an approval, imposition of a clinical hold, issuance of warning letters, product recalls, product seizures, total or partial suspension of production or distribution injunctions, fines, refusals of government contracts, restitution, disgorgement of profits or civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us. The process required by the FDA before a drug may be marketed in the United States generally involves the following:

- completion of preclinical laboratory tests, animal studies and formulation studies according to Good Laboratory Practices or other applicable regulations;
- submission to the FDA of an IND, which must become effective before human clinical trials may begin;
- approval by an independent institutional review board (IRB) at each clinical site before each trial may be initiated;
- performance of adequate and well-controlled human clinical trials according to the FDA's guidance which follows the International Conference on Harmonization Good Clinical Practice (ICH GCP), to establish the safety and efficacy of the proposed drug for its intended use;
- submission to the FDA of an NDA for a new drug;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities where the drug is produced to assess compliance with the FDA's current good manufacturing practice standards (cGMP), to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity;
- potential FDA audit of the nonclinical and clinical trial sites that generated the data in support of the NDA; and
- FDA review and approval of the NDA prior to any commercial marketing, sale or shipment of the drug.

The lengthy process of seeking required approvals and the continuing need for compliance with applicable statutes and regulations require the expenditure of substantial resources and approvals are inherently uncertain.

Before testing any compounds with potential therapeutic value in humans, the drug candidate enters the preclinical testing stage. Preclinical tests include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies to assess the potential safety and activity of the drug candidate. The conduct of the preclinical tests must comply with federal regulations and requirements including good laboratory practices. The IND sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and a proposed clinical protocol, among other things, to the FDA as part of the IND. The IND automatically becomes effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to one or more proposed clinical trials and places the trial on a clinical hold within that 30-day time period. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. The FDA may also impose clinical holds on a drug candidate at any time before or during clinical trials due to safety concerns or non-compliance. Accordingly, we cannot be sure that submission of an IND will result in the FDA allowing clinical trials to begin, or that, once begun, issues will not arise that suspend or terminate such trial. We have provided CMX001 to individual patients under expanded access and comparable compassionate use programs outside the United States.

Clinical trials involve the administration of the drug candidate to healthy subjects or patients with the target disease under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor's control. Clinical trials are conducted under written study protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria, and the parameters to be used to monitor subject safety. Each protocol must be submitted to the FDA as part of the IND. Clinical trials must be conducted in accordance with the FDA's regulations which embody the ICH GCP requirements. Further, each clinical trial must be reviewed and approved by an IRB at or servicing each institution at which the clinical trial will be conducted. An IRB is charged with protecting the welfare and rights of trial participants and considers such items as whether the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the informed consent form that must be provided to each clinical trial subject or his or her legal representative and must monitor the clinical trial until it is completed.

Human clinical trials are typically conducted in three sequential phases that may overlap or be combined:

- *Phase 1.* The drug is initially introduced into healthy human subjects and tested for safety, dosage tolerance, absorption, metabolism, distribution and excretion. In the case of some products for severe or life-threatening diseases, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted only in patients having the specific disease.
- *Phase 2.* The drug is evaluated in a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance, optimal dosage and dosing schedule for patients having the specific disease.
- *Phase 3.* The drug is administered to an expanded patient population in adequate and well-controlled clinical trials to generate sufficient data to statistically confirm the efficacy and safety of the product for approval, to establish the overall risk-benefit profile of the product, and to provide adequate information for the labeling of the product. Generally, at least two adequate and well-controlled Phase 3 clinical trials are required by the FDA for approval of an NDA. In some cases, the FDA has approved a drug based on the results of a single adequate and well-controlled study of excellent design and which provided highly reliable and statistically strong evidence of important clinical benefit, such as an effect on survival, and a confirmatory study would have been difficult to conduct on ethical grounds.

Post-approval studies, or Phase 4 clinical trials, may be conducted after initial marketing approval. These studies are used to gain additional experience from the treatment of patients in the intended therapeutic indication and may be required by the FDA as part of the approval process.

Progress reports detailing the status of drug development and results of the clinical trials must be submitted at least annually to the FDA and written IND safety reports must be submitted to the FDA and the investigators for serious and unexpected adverse events or any finding from tests in laboratory animals that suggests a significant risk for human subjects or patients. Phase 1, Phase 2 and Phase 3 clinical trials may not be completed successfully within any specified period, if at all. The FDA or the sponsor or its data safety monitoring board may suspend a clinical trial at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug has been associated with unexpected serious harm to study subjects.

Concurrent with clinical trials, companies usually complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the drug as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the drug candidate and, among other things, the manufacturer must develop methods for testing the identity, strength, quality and

purity of the final drug product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the drug candidate does not undergo unacceptable deterioration over its shelf life.

The Animal Efficacy Rule

The FDA amended its regulations, effective June 30, 2002, to include what is frequently referred to as the "Animal Efficacy Rule" whereby the FDA may approve for marketing certain new drug and biological products used to reduce or prevent the toxicity of chemical, biological, radiological, or nuclear agents not otherwise naturally present in circumstances that would permit the typical clinical testing regime, based on evidence of safety in healthy subjects and evidence of effectiveness derived only from appropriate animal studies and any additional supporting data. In addition to seeking approval for the prevention of CMV infection after the conduct of clinical studies, we anticipate that we will seek approval for therapeutic use of CMX001 in the treatment of smallpox using the animal efficacy rule.

U.S. FDA Review and Approval Processes

The results of product development, preclinical studies and clinical trials, along with descriptions of the manufacturing process, analytical tests conducted on the chemistry of the drug, proposed labeling and other relevant information are submitted to the FDA as part of an NDA requesting approval to market the product. The submission of an NDA is subject to the payment of substantial user fees; a waiver of such fees may be obtained under certain limited circumstances.

In addition, under the Pediatric Research Equity Act (PREA) an NDA or supplement to an NDA must contain data to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may grant deferrals for submission of pediatric data or full or partial waivers. Unless otherwise required by regulation, PREA does not apply to any drug for an indication for which orphan designation has been granted.

The FDA reviews all NDAs submitted before it accepts them for filing and may request additional information rather than accepting an NDA for filing. Once the submission is accepted for filing, the FDA begins an in-depth review of the NDA. Under the goals and policies agreed to by the FDA under the Prescription Drug User Fee Act (PDUFA) the FDA has 12 months after submission of an NDA in which to complete its initial review of a standard NDA and respond to the applicant, and eight months for a priority review NDA. The FDA does not always meet its PDUFA goal dates for review of standard and priority review NDAs. The review process and the PDUFA goal date may be extended by three months if the FDA requests or the NDA sponsor otherwise provides additional information or clarification regarding information already provided in the submission at any time during the review cycle.

The FDA reviews the NDA to determine, among other things, whether the proposed product is safe and effective for its intended use, and whether the product is being manufactured in accordance with cGMP to assure and preserve the product's identity, strength, quality and purity. The FDA may refer applications for novel drug or biological products or drug or biological products which present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions. During the drug approval process, the FDA also will determine whether a risk evaluation and mitigation strategy (REMS) is necessary to assure the safe use of the drug. If the FDA concludes a REMS is needed, the sponsor of the NDA must submit a proposed REMS; the FDA will not approve the NDA without a REMS, if required.

Before approving an NDA, the FDA will inspect the facilities at which the product is to be manufactured. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with FDA regulations regarding conduct of clinical trials for the product's

trials. If the FDA determines that the application, manufacturing process or manufacturing facilities are not acceptable, it will outline the deficiencies in the submission and often will request additional testing or information.

The NDA review and approval process is lengthy and difficult and the FDA may refuse to approve an NDA if the applicable regulatory criteria are not satisfied or may require additional clinical data or other data and information. Even if such data and information is submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval. Data obtained from clinical trials are not always conclusive and the FDA may interpret data differently than we interpret the same data, which could delay, limit or prevent regulatory approval. The FDA will issue a "complete response" letter if the agency decides not to approve the NDA. The complete response letter usually describes all of the specific deficiencies in the NDA identified by the FDA. The deficiencies identified may be minor, for example, requiring labeling changes, or major, for example, requiring additional clinical trials. Additionally, the complete response letter may include recommended actions that the applicant might take to place the application in a condition for approval. If a complete response letter is issued, the applicant may either resubmit the NDA, addressing all of the deficiencies identified in the letter, or withdraw the application.

If a product receives regulatory approval, the approval may be significantly limited to specific diseases and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. Further, the FDA may require that certain contraindications, warnings or precautions be included in the product labeling. In addition, the FDA may require Phase 4 testing, which involves clinical trials designed to further assess a product's safety and effectiveness and may require testing and surveillance programs to monitor the safety of approved products that have been commercialized.

Expedited Development and Review Programs

The FDA has a "Fast Track" program that is intended to expedite or facilitate the process for reviewing new drug products that meet certain criteria. Specifically, new drug products are eligible for Fast Track designation if they are intended to treat a serious or life-threatening condition and demonstrate the potential to address unmet medical needs for the condition. Fast Track designation applies to the combination of the product and the specific indication for which it is being studied. Unique to a Fast Track product, the FDA may consider for review sections of the NDA on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the NDA, the FDA agrees to accept those sections and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the NDA.

Any product submitted to the FDA for marketing approval, including those submitted to a Fast Track program, may also be eligible for other types of FDA programs intended to expedite development and review, such as priority review and accelerated approval. Any product is eligible for priority review if it has the potential to provide safe and effective therapy where no satisfactory alternative therapy exists or there is a significant improvement in the treatment, diagnosis or prevention of a disease compared with marketed products. The FDA will attempt to direct additional resources to the evaluation of an application for a new drug product designated for priority review in an effort to facilitate the review. Additionally, a product may be eligible for accelerated approval. Drug products studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may receive accelerated approval, which means that they may be approved on the basis of adequate and well-controlled clinical studies establishing that the product has an effect on a surrogate endpoint that is reasonably likely to predict a clinical benefit, or on the basis of an effect on a clinical endpoint other than survival or irreversible morbidity. As a condition of approval, the FDA generally requires that a sponsor of a drug product receiving accelerated approval perform adequate and well-controlled post-marketing clinical studies to establish safety and efficacy for the approved indication. Failure to conduct such studies, or conducting such studies that do not establish the required safety and efficacy, may result in revocation of the original approval. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch or subsequent marketing of the product. Fast Track designation, priority review and accelerated approval do not change the standards for approval but may expedite the development or approval process.

Post-Approval Requirements

Any drug products for which we receive FDA approvals are subject to continuing regulation by the FDA, including, among other things, record-keeping requirements, reporting of adverse experiences with the product, providing the FDA with updated safety and efficacy information, product sampling and distribution requirements, complying with certain electronic records and signature requirements and complying with FDA promotion and advertising requirements. These promotion and advertising requirements include, among other things, standards for direct-to-consumer advertising, prohibitions against promoting drugs for uses or in patient populations that are not described in the drug's approved labeling (known as "off-label use"), rules for conducting industry-sponsored scientific and educational activities, and promotional activities involving the internet. Failure to comply with FDA requirements can have negative consequences, including adverse publicity, enforcement letters from the FDA, mandated corrective advertising or communications with doctors, and civil or criminal penalties. Although physicians may prescribe legally available drugs for off-label uses, manufacturers may not market or promote such off-label uses.

We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our products as discussed under "— Manufacturing" above. Manufacturers of our products are required to comply with applicable FDA manufacturing requirements contained in the FDA's cGMP regulations. cGMP regulations require among other things, quality control and quality assurance as well as the corresponding maintenance of records and documentation. Drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are also required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP and other laws. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance. Discovery of problems with a product after approval may result in restrictions on a product, manufacturer, or holder of an approved NDA. These restrictions may include suspension of a product until the FDA is assured that quality standards can be met, continuing oversight of manufacturing by the FDA under a "consent decree," which frequently includes the imposition of costs and continuing inspections over a period of many years, as well as possible withdrawal of the product from the market. In addition, changes to the manufacturing process generally require prior FDA approval before being implemented. Other types of changes to the approved product, such as adding new indications and additional labeling claims, are also subject to further FDA review and approval.

The FDA also may require post-marketing testing, known as Phase 4 testing, as well as risk minimization action plans and surveillance to monitor the effects of an approved product or place conditions on an approval that could otherwise restrict the distribution or use of the product.

Europe/Rest of World Government Regulation

In addition to regulations in the United States, we will be subject to a variety of regulations in other jurisdictions governing, among other things, clinical trials and any commercial sales and distribution of our products.

Whether or not we obtain FDA approval for a product, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical trials or marketing of the product in those countries. Certain countries outside of the United States have a similar process that requires the submission of a clinical trial application much like the IND prior to the commencement of human clinical trials. In the European Union, for example, a clinical trial application (CTA) must be submitted to each country's national health authority and an independent ethics committee, much like the FDA and IRB, respectively. Once the CTA is approved in accordance with a country's requirements, clinical trial development may proceed.

The requirements and process governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, the clinical trials are conducted in accordance with the ICH GCP and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

To obtain regulatory approval of an investigational drug or biological product under European Union regulatory systems, we must submit a marketing authorization application to the European Medicines Agency. The application used to submit the NDA in the United States is similar to that required in the European Union, with the exception of, among other things, country-specific document requirements. For other countries outside of the European Union, such as countries in Eastern Europe, Latin America or Asia, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, again, the clinical trials are conducted in accordance with applicable regulatory requirements, ICH GCP and the ethical principles that have their origin in the Declaration of Helsinki.

If we fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

Pharmaceutical Coverage, Pricing and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any drug candidates for which we obtain regulatory approval. In the United States and markets in other countries, sales of any products for which we receive regulatory approval for commercial sale will depend in part on the availability of reimbursement from third-party payors. Third-party payors include government health administrative authorities, managed care providers, private health insurers and other organizations. The process for determining whether a payor will provide coverage for a drug product may be separate from the process for setting the price or reimbursement rate that the payor will pay for the drug product. Third-party payors may limit coverage to specific drug products on an approved list, or formulary, which might not include all of the FDA-approved drug products for a particular indication. Third-party payors are increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. We may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain the FDA approvals. Our drug candidates may not be considered medically necessary or cost-effective. A payor's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development.

In 2003, the United States government enacted legislation providing a partial prescription drug benefit for Medicare recipients, which became effective at the beginning of 2006. Government payment for some of the costs of prescription drugs may increase demand for any products for which we receive marketing approval. However, to obtain payments under this program, we would be required to sell products to Medicare recipients through prescription drug plans operating pursuant to this legislation. These plans will likely negotiate discounted prices for our products. Federal, state and local governments in the United States continue to consider legislation to limit the growth of healthcare costs, including the cost of prescription drugs. Future legislation could limit payments for pharmaceuticals such as the drug candidates that we are developing.

The containment of healthcare costs has become a priority of federal, state and foreign governments, and the prices of drugs have been a focus in this effort. Third-party payors are increasingly challenging the prices charged for medical products and services and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. If these third-party payors do not consider our products to be cost-effective compared to other available therapies, they may not cover our products after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow us to sell our products at a profit. The U.S. government, state legislatures and foreign governments have shown significant interest in implementing cost containment programs to limit the growth of government-paid health care costs, including price controls, restrictions on reimbursement and requirements for substitution of generic products for branded prescription drugs. Adoption of such controls and measures, and tightening of restrictive policies in jurisdictions with existing controls and measures, could limit payments for pharmaceuticals such as the drug candidates that we are developing and could adversely affect our net revenue and results.

Different pricing and reimbursement schemes exist in other countries. In the European Community, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national health care systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost-effectiveness of a particular drug candidate to currently available therapies. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits. The downward pressure on health care costs in general, particularly prescription drugs, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country. There can be no assurance that any country that has price controls or reimbursement limitations for drug products will allow favorable reimbursement and pricing arrangements for any of our products.

The marketability of any drug candidate for which we receive regulatory approval for commercial sale may suffer if the government and third-party payors fail to provide adequate coverage and reimbursement. In addition, emphasis on managed care in the United States has increased and we expect will continue to increase the pressure on drug pricing. Coverage policies, third-party reimbursement rates and drug pricing regulation may change at any time. In particular, the Patient Protection and Affordable Care Act was enacted in the United States in March 2010 and contains provisions that may reduce the profitability of drug products, including, for example, increased rebates for drugs sold to Medicaid programs, extension of Medicaid rebates to Medicaid managed care plans, mandatory discounts for certain Medicare Part D beneficiaries and annual fees based on pharmaceutical companies' share of sales to federal health care programs. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Third-Party Reimbursement and Pricing

In the United States and elsewhere, sales of pharmaceutical products depend in significant part on product availability, or formulary access, and reimbursement from payors, such as government and private insurance plans. To allow access to CMX001, we will work with payors and reimbursement bodies to demonstrate the potential benefits of CMX001 (including improved, cost-effective patient care and comparative effectiveness of CMX001), which we believe will differentiate CMX001 from competitive therapies. We intend to price CMX001 in the United States on a course of therapy basis consistent with other branded antiviral products.

In markets outside the United States, including the countries in the EU, pricing of pharmaceutical products may be subject to governmental control. Evaluation criteria used by many EU government agencies for the purposes of pricing and reimbursement typically focus on a product's degree of innovation and its ability to meet a clinical need unfulfilled by currently available therapies. We believe that, if approved, the clinical profile and patient friendly dosing of CMX001 will enable us to negotiate a competitive price for CMX001 in countries where pricing is set by a government agency, and to obtain reimbursement for CMX001 from the responsible agencies in each market. As in the United States, we intend to price CMX001 in the EU on a course of therapy basis consistent with other branded antiviral products.

Project BioShield

The Project BioShield Act of 2004 and related 2006 federal legislation (Project BioShield) provides expedited procedures for bioterrorism related procurement and awarding of research grants, making it easier for the HHS to quickly commit funds to countermeasure projects. Project BioShield initially provided appropriations of $5.6 billion to be expended over ten years into a special reserve fund for procurement of countermeasures for the Strategic National Stockpile (SNS). BARDA is one of the U.S. government agencies responsible for awarding procurement contracts for biomedical countermeasures under Project BioShield.

Project BioShield relaxes procedures under the Federal Acquisition Regulation (FAR) for procuring property or services used in performing, administering or supporting biomedical countermeasure research and development. In addition, if the Secretary of HHS deems that there is a pressing need, Project BioShield

authorizes the Secretary to use an expedited award process, rather than the normal peer review process, for grants, contracts and cooperative agreements related to biomedical countermeasure research and development activity.

Under Project BioShield, the Secretary of HHS, with the concurrence of DHS and upon the approval of the President, can contract to purchase unapproved countermeasures for the SNS in specified circumstances. The U.S. Congress is notified of a recommendation for a stockpile purchase after Presidential approval. Project BioShield specifies that a company supplying the countermeasure to the SNS is paid on delivery of a substantial portion of the countermeasure. To be eligible for purchase under these provisions, the Secretary of HHS must determine that there are sufficient and satisfactory clinical results or research data, including data, if available, from preclinical and clinical trials, to support a reasonable conclusion that the countermeasure will qualify for approval or licensing within eight years. Project BioShield also allows the Secretary of HHS to authorize the emergency use of medical products that have not yet been approved by the FDA. To exercise this authority, the Secretary of HHS must conclude that:

- the agent for which the countermeasure is designed can cause serious or life-threatening disease;
- the product may reasonably be believed to be effective in detecting, diagnosing, treating or preventing the disease;
- the known and potential benefits of the product outweigh its known and potential risks; and
- there is no adequate alternative to the product that is approved and available.

Although this provision permits the Secretary of HHS to circumvent the FDA approval process, we believe its use would be limited to rare circumstances.

Reauthorization of Project BioShield is currently pending before Congress in connection with H.R. 307, the Pandemic and All-Hazards Preparedness Reauthorization Act of 2013.

Other U.S. Healthcare Laws and Compliance Requirements

In the United States, our activities are potentially subject to regulation by various federal, state and local authorities in addition to the FDA, including the Centers for Medicare and Medicaid Services, other divisions of the United States Department of Health and Human Services (e.g., the Office of Inspector General), the United States Department of Justice and individual United States Attorney offices within the Department of Justice, and state and local governments. For example, sales, marketing and scientific/educational grant programs must comply with the anti-fraud and abuse provisions of the Social Security Act, the False Claims Act, the privacy provisions of the Health Insurance Portability and Accountability Act (HIPAA) and similar state laws, each as amended. Pricing and rebate programs must comply with the Medicaid rebate requirements of the Omnibus Budget Reconciliation Act of 1990 and the Veterans Health Care Act of 1992 (VHCA), each as amended. If products are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply. Under the VHCA, drug companies are required to offer certain drugs at a reduced price to a number of federal agencies including United States Department of Veterans Affairs and United States Department of Defense, the Public Health Service and certain private Public Health Service designated entities in order to participate in other federal funding programs including Medicare and Medicaid. Recent legislative changes purport to require that discounted prices be offered for certain United States Department of Defense purchases for its TRICARE program via a rebate system. Participation under the VHCA requires submission of pricing data and calculation of discounts and rebates pursuant to complex statutory formulas, as well as the entry into government procurement contracts governed by the Federal Acquisition Regulations.

In order to distribute products commercially, we must comply with state laws that require the registration of manufacturers and wholesale distributors of pharmaceutical products in a state, including, in certain states, manufacturers and distributors who ship products into the state even if such manufacturers or distributors have no place of business within the state. Some states also impose requirements on manufacturers and distributors to establish the pedigree of product in the chain of distribution, including some states that require manufacturers and others to adopt new technology capable of tracking and tracing product as it moves through the distribution chain. Several states have enacted legislation requiring pharmaceutical companies to establish

marketing compliance programs, file periodic reports with the state, make periodic public disclosures on sales, marketing, pricing, clinical trials and other activities, or register their sales representatives, as well as prohibiting pharmacies and other healthcare entities from providing certain physician prescribing data to pharmaceutical companies for use in sales and marketing, and prohibiting certain other sales and marketing practices. All of our activities are potentially subject to federal and state consumer protection and unfair competition laws.

We are subject to various environmental, health and safety regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous substances. From time to time, and in the future, our operations may involve the use of hazardous materials.

U.S. Marketing Exclusivity

Hatch-Waxman Exclusivity

Market exclusivity provisions under the FDCA can also delay the submission or the approval of certain applications of other companies seeking to reference another company's NDA. If the new drug is a new chemical entity subject to an NDA, the FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to obtain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an abbreviated new drug application (ANDA) or a 505(b)(2) NDA submitted by another company for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval. However, such an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement to one of the patents listed with the FDA by the innovator NDA holder. The FDCA also provides three years of marketing exclusivity for an NDA, or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example new indications, dosages or strengths of an existing drug. This three-year exclusivity covers only the conditions associated with the new clinical investigations and does not prohibit the FDA from approving ANDAs for drugs containing the original active agent. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

Pediatric Exclusivity

Pediatric exclusivity is another type of regulatory market exclusivity in the United States. Pediatric exclusivity, if granted, adds six months to existing exclusivity periods and patent terms. This six-month exclusivity, which runs from the end of other exclusivity protection or patent term, may be granted based on the voluntary completion of a pediatric trial in accordance with an FDA-issued "Written Request" for such a trial.

Orphan Drug Designation and Exclusivity

Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug or biological product intended to treat a rare disease or condition, which is generally defined as a disease or condition that affects fewer than 200,000 people in the United States, or more than 200,000 individuals in the United States, but are not expected to recover the costs of developing and marketing a treatment drug. Orphan drug designation must be requested before submitting an NDA. After the FDA grants orphan drug designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

The first NDA applicant to receive FDA approval for a particular active ingredient to treat a particular disease with FDA orphan drug designation is entitled to a seven year exclusive marketing period in the United States for that product, for that indication. During the seven year exclusivity period, the FDA may not approve any other applications to market the same drug or biological product for the same indication, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity in that it is shown to be safer, more effective or makes a major contribution to patient care. Orphan drug exclusivity

does not prevent the FDA from approving a different drug or biologic for the same disease or condition, or the same drug or biologic for a different disease or condition. A designated orphan drug may not receive orphan product exclusivity if it is approved for a use that is broader than the indication for which it received orphan designation. In addition, orphan drug exclusive marketing rights in the United States may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the drug to meet the needs of patients with the rare disease or condition. Orphan drug status in the European Union has similar but not identical benefits as those in the United States.

Employees

As of December 31, 2012, we had 46 full-time employees, consisting of research, process development, manufacturing, regulatory affairs, program management, finance, human resources, administration and business development personnel. We also regularly use independent contractors and other temporary employees across the organization to augment our regular staff. None of our employees are covered by collective bargaining agreements and we consider relations with our employees to be good. We believe that our future success will depend in part on our continued ability to attract, hire and retain qualified personnel.

Legal Proceedings

From time to time, we are involved in various legal proceedings arising in the ordinary course of our business. We are not presently a party to any legal proceedings the outcome of which, if determined adversely to us, would individually or in the aggregate have a material adverse effect on our business, operating results or financial condition.

Incorporation/Facilities

We were incorporated in the State of Delaware in April 2000. Our corporate headquarters are located in Durham, North Carolina in a facility we lease encompassing approximately 14,500 square feet of office space. The leases for this facility expire in February 2013. We separately lease an additional 4,600 square feet of laboratory space in Durham, North Carolina. The lease for this facility expires in February 2014. We expect our growth will require us to obtain additional laboratory and office space in the United States in the next 12 months.

MANAGEMENT

Executive Officers, Key Employees and Directors

The following table sets forth certain information regarding our executive officers, key employees and directors:

Name	Age	Position(s)
Executive Officers and Key Employees		
Kenneth I. Moch	58	President, Chief Executive Officer and Director
Timothy W. Trost	55	Senior Vice President, Chief Financial Officer and Corporate Secretary
M. Michelle Berrey, M.D., M.P.H.	46	Chief Medical Officer
Hervé Momméja-Marin, M.D.	41	Vice President, Clinical Research
Non-Employee Directors		
James Niedel, M.D., Ph.D.(2)(3)	68	Chairman of the Board of Directors
Farah Champsi(1)(3)	51	Director
Martha J. Demski(1)	60	Director
Wende Hutton(2)	53	Director
Arthur M. Pappas(1)	65	Director
Timothy J. Wollaeger(2)(3)	69	Director

(1) Member of the audit committee.

(2) Member of the compensation committee.

(3) Member of the nominating and corporate governance committee.

Executive Officers and Key Employees

Kenneth I. Moch. Mr. Moch joined us in June 2009 as Chief Operating Officer and has served as our President and Chief Executive officer since April 2010. Mr. Moch has served as one of our directors since May 2010. From January 2008 to June 2009, Mr. Moch served as President at Euclidean Life Science Advisors, a provider of strategic advisory services to life sciences companies, and concurrently served as President and Chief Executive Officer of BioMedical Enterprises, Inc., a medical device manufacturer, from January 2009 to June 2009. From October 2006 to January 2008, Mr. Moch served as Managing Director, Healthcare Investment Banking at ThinkEquity Partners, an investment banking firm. From 1998 to 2006, Mr. Moch served as President and Chief Executive Officer at Alteon Inc., a biotechnology company specializing in small molecule therapeutics for cardiovascular aging and diabetic complications, having joined in 1995 as SVP, Finance and Business Development and Chief Financial Officer. Mr. Moch served as Chairman of the Board of Directors of Alteon, Inc. from 2001 to 2006. Mr. Moch also served as a member of the board of directors of Emisphere Technologies, Inc., a drug development company, from December 2008 to November 2009. Mr. Moch earned an A.B. in biochemistry from Princeton University and an M.B.A. from the Stanford University Graduate School of Business. Our board of directors believes that Mr. Moch's more than 30 years of experience in managing and financing biomedical technologies and having played a key role in building several life science companies qualifies him to serve on our board of directors.

Timothy W. Trost. Mr. Trost joined us in March 2011 as our Senior Vice President, Chief Financial Officer, and has also served as our Corporate Secretary since February 2012. Prior to serving as an employee, since July 2010 Mr. Trost served as a consultant in connection with our Series F preferred stock financing and our contract with BARDA. From July 2002 to February 2010, Mr. Trost served as Vice President and Chief Financial Officer at Argos Therapeutics, Inc., a venture-backed immunotherapy company. From March 1997 to June 2002, Mr. Trost served as Senior Vice President and Chief Financial Officer at InteCardia, Inc., a venture-backed cardiac imaging company that was acquired by Syncor International Corporation (NASDAQ: SCOR) in September 2001. From March 1994 to March 1997, Mr. Trost served as Executive Vice President and Chief Financial Officer of Coastal Physician Group, Inc. (NYSE: DR), a contract provider of emergency room physicians, having joined as Vice President of Corporate Development. From October 1992 to March 1994, Mr. Trost served as Vice President of Finance at Morganite North America, Inc. From July 1980

through September 1992, Mr. Trost was with PricewaterhouseCoopers LLP, last serving as a Senior Manager in the Research Triangle practice. Mr. Trost holds a B.S. in accounting from the University of Illinois at Urbana-Champaign and is a Certified Public Accountant.

M. Michelle Berrey, M.D., M.P.H. Dr. Berrey has served as our Chief Medical Officer since November 2012. From January 2007 to January 2012, Dr. Berrey served as Chief Medical Officer at Pharmasset, Inc., a company that focused on the development of nucleotide analogs for the treatment of hepatitis C. From January 2004 to January 2007, Dr. Berrey served as Vice President, Viral Diseases, Clinical Pharmacology & Discovery Medicine at GlaxoSmithKline, where she was responsible for the early development of compounds for the treatment of HIV, hepatitis viruses and hepatic fibrosis. Dr. Berrey earned a B.A. in English from Emory University, an M.D. from the Medical College of Georgia and an M.P.H. from Emory University. Dr. Berrey completed her internship and residency in Internal Medicine at the University of North Carolina, Chapel Hill, and was a Senior Fellow in Infectious Diseases at the University of Washington, Seattle, where she conducted research in HIV transmission and acute HIV infection. Dr. Berrey is board certified in internal medicine and infectious diseases.

Hervé Mommeja-Marin, M.D. Dr. Mommeja-Marin has served as our Vice President, Clinical Research since July 2010. From September 2006 to June 2010, Dr. Mommeja-Marin served as Senior Medical Director, Infectious Diseases, for i3 Research Limited, a contract research organization, where he was the lead therapeutic expert in infectious diseases. From June 2005 to September 2006, Dr. Mommeja-Marin served in various roles, most recently as Director of Clinical Research at Gilead Sciences, Inc., where he was responsible for the global development of hepatitis B and hepatitis C programs. Dr. Mommeja-Marin received a medical degree from Paris VII University, France. Dr. Mommeja-Marin received his French certifications in internal medicine and multiple subspecialties.

Non-Employee Directors

James Niedel, M.D., Ph.D. Dr. Niedel has served as one of our directors since February 2011. Since 2005, Dr. Niedel has served as Managing Director at New Leaf Venture Partners, a healthcare technology fund focused on biopharmaceutical investments. From 2002 to 2005, Dr. Niedel was a venture partner at Sprout Group, a healthcare and information technology fund. During 2001, Dr. Niedel was Chief Science and Technology Officer for GlaxoSmithKline, a global healthcare company. From 1995 to 2001, Dr. Niedel was a member of the board of directors of Glaxo Wellcome plc with responsibility for Global Research and Development, Information Technology and Product Strategy. From 1988 to 1995, Dr. Niedel was V.P. Research and S.V.P. R&D for the U.S. subsidiary of GlaxoSmithKline. Before joining the pharmaceutical industry, Dr. Niedel was employed by the Duke University Medical Center from 1973 to 1989 as Professor of Medicine and Chief of the Division of Clinical Pharmacology, in which time he had completed an Internal Medicine residency and a Hematology-Oncology fellowship. Dr. Niedel received M.D. and Ph.D. (Biochemistry) degrees from the University of Miami and is a fellow of the Royal College of Physicians (London). Our board of directors believes that Dr. Niedel's expertise and experience in the biopharmaceutical industry qualifies him to serve on our board of directors.

Farah Champsi. Ms. Champsi has served as one of our directors since July 2010. Ms. Champsi joined Alta Partners, a venture capital firm, in 2000 and serves as Managing Director where she focuses her efforts on biopharmaceutical and medical technology companies. Ms. Champsi also serves on the board of directors of Portola Pharmaceuticals, Inc. and Trevena, Inc., both biopharmaceutical companies. Prior to Alta Partners, Ms. Champsi served as an investment banker at Robertson Stephens & Company from 1987 to 1999 and was elected a general partner in 1992 and head of the global life sciences investment banking group in 1995, where she focused on biotechnology and other life sciences companies. Ms. Champsi earned a B.A. in Economics from Smith College and an M.B.A. from the Stanford University Graduate School of Business. Our board of directors believes that Ms. Champsi's experience and expertise in investment banking in biopharmaceutical companies, as well as being responsible for building a successful life sciences investment banking franchises, qualifies her to serve on our board of directors.

Martha J. Demski. Ms. Demski has served as one of our directors since 2005. Since August 2011, Ms. Demski has served as Senior Vice President and Chief Financial Officer of Althea Technologies, Inc., a fully-integrated contract development and manufacturing organization. From July 2008 to December 2010,

Ms. Demski served as the Interim Chief Operating Officer and Chief Financial Officer of the Sidney Kimmel Cancer Center (SKCC), a non-profit corporation engaged in biomedical research, which voluntarily filed for Chapter 11 bankruptcy in 2009. From April 2006 to May 2008, Ms. Demski served as Senior Vice President of U.S. Trust. From 2005 to July 2008, Ms. Demski served on the Board of Trustees at SKCC, as well as Chair of the Audit Committee and Chair of the Governance and Nominating Committee. Ms. Demski earned a B.A. from Michigan State University and M.B.A. from The University of Chicago Booth School of Business. Our board of directors believes that Ms. Demski's more than 30 years experience in the fields of finance and biotechnology as well her experience in conducting financing transactions qualifies her to serve on our board of directors.

Wende Hutton. Ms. Hutton has served as one of our directors since February 2012. Since 2004, Ms. Hutton has served as General Partner at Canaan Partners, a global venture capital firm. Ms. Hutton earned an A.B. in human biology from Stanford University and an M.B.A. from Harvard Business School, where she was a Baker Scholar. Our board of directors believes that Ms. Hutton's experience in finance and diverse expertise from across the entire medical spectrum, as well as facilitating the market entrance of more than 12 novel and lifesaving medical devices, new drugs and diagnostics, qualifies her to serve on our board of directors.

Arthur M. Pappas. Mr. Pappas has served as one of our directors since February 2011. Since 1994, Mr. Pappas has served as a managing partner of Pappas Ventures, a company investing in the life sciences, biotechnology, specialty pharmaceuticals, drug delivery, medical devices and related ventures. Mr. Pappas earned a B.S. in Biology from Ohio State University and an M.B.A. in Finance from Xavier University. Our board of directors believes that Mr. Pappas' more than 30 years of operating experience as a pharmaceutical and biotechnology industry executive and venture capital investor in life science companies, as well being responsible for the development, licensing, and launch of a number of key global products, qualifies him to serve on our board of directors.

Timothy J. Wollaeger. Mr. Wollaeger has served as one of our directors since 2002. Since 2002, M. Wollaeger has served as a Managing Director of Sanderling Ventures, an investment firm dedicated to building new biomedical companies. Mr. Wollaeger earned a B.A. in Economics from Yale and earned an M.B.A. from the Stanford University Graduate School of Business. Our board of directors believes that Mr. Wollaeger's nearly 40 years of experience in the biotechnology and medical products fields in both corporate management and venture capital qualifies him to serve on our board of directors.

Board Composition

Our business and affairs are organized under the direction of our board of directors, which currently consists of seven members. The primary responsibilities of our board of directors are to provide oversight, strategic guidance, counseling and direction to our management. Our board of directors meets on a regular basis and additionally as required.

Our board of directors has determined that six of our seven directors, Ms. Champsi, Ms. Demski, Ms. Hutton, Dr. Niedel, Mr. Pappas and Mr. Wollaeger are independent directors, as defined by Rule 5605(a)(2) of the Nasdaq Listing Rules.

In accordance with the terms of our amended and restated certificate of incorporation and bylaws, which will be effective immediately prior to consummation of this offering, our board of directors will be divided into three classes, class I, class II and class III, with members of each class serving staggered three-year terms.

Effective upon the closing of this offering, our board of directors will be comprised of the following classes:

- Class I, which will consist of Ms. Champsi, Ms. Hutton and Mr. Pappas, whose terms will expire at our annual meeting of stockholders to be held in 2014;
- Class II, which will consist of Ms. Demski and Dr. Niedel, and whose terms will expire at our annual meeting of stockholders to be held in 2015; and
- Class III, which will consist of Mr. Moch and Mr. Wollaeger, and whose terms will expire at our annual meeting of stockholders to be held in 2016.

At each annual meeting of stockholders to be held after the initial classification, the successors to directors whose terms then expire will serve until the third annual meeting following their election and until their successors are duly elected and qualified. The authorized size of our board of directors is currently seven members. The authorized number of directors may be changed only by resolution by a majority of the board of directors. Any additional directorships resulting from an increase in the number of directors will be distributed between the three classes so that, as nearly as possible, each class will consist of one-third of the directors. This classification of the board of directors may have the effect of delaying or preventing changes in our control or management. Our directors may be removed for cause by the affirmative vote of the holders of at least 66 2/3% of our voting stock.

Board Leadership Structure

Our board of directors is currently chaired by Dr. Niedel. As a general policy, our board of directors believes that separation of the positions of Chairman and Chief Executive Officer reinforces the independence of the board of directors from management, creates an environment that encourages objective oversight of management's performance and enhances the effectiveness of the board of directors as a whole. As such, Mr. Moch serves as our President and Chief Executive Officer while Dr. Niedel serves as our Chairman of the board of directors but is not an officer. We expect and intend the positions of Chairman of the board of directors and Chief Executive Officer to continue to be held by two individuals in the future.

Role of the Board in Risk Oversight

One of the key functions of our board of directors is informed oversight of our risk management process. The board of directors does not have a standing risk management committee, but rather administers this oversight function directly through the board of directors as a whole, as well as through various standing committees of our board of directors that address risks inherent in their respective areas of oversight. In particular, our board of directors is responsible for monitoring and assessing strategic risk exposure and our audit committee has the responsibility to consider and discuss our major financial risk exposures and the steps our management has taken to monitor and control these exposures, including guidelines and policies to govern the process by which risk assessment and management is undertaken. The audit committee also monitors compliance with legal and regulatory requirements. Our nominating and corporate governance committee monitors the effectiveness of our corporate governance practices, including whether they are successful in preventing illegal or improper liability-creating conduct. Our compensation committee assesses and monitors whether any of our compensation policies and programs has the potential to encourage excessive risk-taking.

Board Committees

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee.

Audit Committee

Our audit committee consists of Ms. Demski, Ms. Champsi and Mr. Pappas. Our board of directors has determined that each of the members of our audit committee satisfies the Nasdaq Stock Market and SEC independence requirements.

Ms. Demski serves as the chair of our audit committee. Our board of directors has determined that Ms. Demski qualifies as an audit committee financial expert within the meaning of SEC regulations and meets the financial sophistication requirements of the Nasdaq Listing Rules. In making this determination, our board has considered Ms. Demski's formal education and previous and current experience in financial roles. Both our independent registered public accounting firm and management periodically meet privately with our audit committee.

The functions of this committee include, among other things:

- evaluating the performance, independence and qualifications of our independent auditors and determining whether to retain our existing independent auditors or engage new independent auditors;
- reviewing and approving the engagement of our independent auditors to perform audit services and any permissible non-audit services;
- monitoring the rotation of partners of our independent auditors on our engagement team as required by law;
- prior to engagement of any independent auditor, and at least annually thereafter, reviewing relationships that may reasonably be thought to bear on their independence, and assessing and otherwise taking the appropriate action to oversee the independence of our independent auditor;
- reviewing our annual and quarterly financial statements and reports, including the disclosures contained under the caption "Management's Discussion and Analysis of Financial Condition and Results of Operations," and discussing the statements and reports with our independent auditors and management;
- reviewing with our independent auditors and management significant issues that arise regarding accounting principles and financial statement presentation and matters concerning the scope, adequacy and effectiveness of our financial controls;
- reviewing with management and our auditors any earnings announcements and other public announcements regarding material developments;
- establishing procedures for the receipt, retention and treatment of complaints received by us regarding financial controls, accounting or auditing matters and other matters;
- preparing the report that the SEC requires in our annual proxy statement;
- reviewing and providing oversight of any related-person transactions in accordance with our related person transaction policy and reviewing and monitoring compliance with legal and regulatory responsibilities, including our code of business conduct and ethics;
- reviewing our major financial risk exposures, including the guidelines and policies to govern the process by which risk assessment and risk management is implemented;
- reviewing on a periodic basis our investment policy; and
- reviewing and evaluating on an annual basis the performance of the audit committee, including compliance of the audit committee with its charter.

We believe that the composition and functioning of our audit committee complies with all applicable requirements of the Sarbanes-Oxley Act, and all applicable SEC and Nasdaq rules and regulations. We intend to comply with future requirements to the extent they become applicable to us.

Compensation Committee

Our compensation committee consists of Dr. Niedel, Ms. Hutton and Mr. Wollaeger. Mr. Wollaeger serves as the chair of our compensation committee. Our board of directors has determined that each of the members of our compensation committee is a non-employee director, as defined in Rule 16b-3 promulgated under the Securities Exchange Act of 1934, as amended (the Exchange Act), is an outside director, as defined pursuant to Section 162(m) of the Internal Revenue Code of 1986, as amended (the Code), and satisfies the Nasdaq Stock Market independence requirements. The functions of this committee include, among other things:

- reviewing, modifying and approving (or if it deems appropriate, making recommendations to the full board of directors regarding) our overall compensation strategy and policies;
- reviewing and approving the compensation and other terms of employment of our executive officers;
- reviewing and approving performance goals and objectives relevant to the compensation of our executive officers and assessing their performance against these goals and objectives;
- reviewing and approving (or if it deems it appropriate, making recommendations to the full board of directors regarding) the equity incentive plans, compensation plans and similar programs advisable for us, as well as modifying, amending or terminating existing plans and programs;
- evaluating risks associated with our compensation policies and practices and assessing whether risks arising from our compensation policies and practices for our employees are reasonably likely to have a material adverse effect on us;
- reviewing and approving (or if it deems it appropriate, making recommendations to the full board of directors regarding) the type and amount of compensation to be paid or awarded to our non-employee board members;
- establishing policies with respect to votes by our stockholders to approve executive compensation as required by Section 14A of the Exchange Act and determining our recommendations regarding the frequency of advisory votes on executive compensation;
- reviewing and assessing the independence of compensation consultants, legal counsel and other advisors as required by Section 10C of the Exchange Act;
- administering our equity incentive plans;
- establishing policies with respect to equity compensation arrangements;
- reviewing the competitiveness of our executive compensation programs and evaluating the effectiveness of our compensation policy and strategy in achieving expected benefits to us;
- reviewing and approving the terms of any employment agreements, severance arrangements, change in control protections and any other compensatory arrangements for our executive officers;
- reviewing the adequacy of its charter on a periodic basis;
- reviewing with management and approving our disclosures under the caption “Compensation Discussion and Analysis” in our periodic reports or proxy statements to be filed with the SEC;
- preparing the report that the SEC requires in our annual proxy statement; and
- reviewing and assessing on an annual basis the performance of the compensation committee.

We believe that the composition and functioning of our compensation committee complies with all applicable requirements of the Sarbanes-Oxley Act of 2002, and all applicable SEC and Nasdaq rules and regulations. We intend to comply with future requirements to the extent they become applicable to us.

Nominating and Corporate Governance Committee

Our nominating and corporate governance committee consists of Ms. Champsi, Dr. Niedel and Mr. Wollaeger. Our board of directors has determined that each of the members of this committee satisfies the Nasdaq Stock Market independence requirements. Ms. Champsi serves as the chair of our nominating and corporate governance committee. The functions of this committee include, among other things:

- identifying, reviewing and evaluating candidates to serve on our board of directors consistent with criteria approved by our board of directors;
- determining the minimum qualifications for service on our board of directors;
- evaluating director performance on the board and applicable committees of the board and determining whether continued service on our board is appropriate;

- evaluating, nominating and recommending individuals for membership on our board of directors;
- evaluating nominations by stockholders of candidates for election to our board of directors;
- considering and assessing the independence of members of our board of directors;
- developing a set of corporate governance policies and principles, including a code of business conduct and ethics, periodically reviewing and assessing these policies and principles and their application and recommending to our board of directors any changes to such policies and principles;
- considering questions of possible conflicts of interest of directors as such questions arise;
- reviewing the adequacy of its charter on an annual basis; and
- annually evaluating the performance of the nominating and corporate governance committee.

We believe that the composition and functioning of our nominating and corporate governance committee complies with all applicable requirements of the Sarbanes-Oxley Act of 2002, and all applicable SEC and Nasdaq rules and regulations. We intend to comply with future requirements to the extent they become applicable to us.

Compensation Committee Interlocks and Insider Participation

We have established a compensation committee which has and will make decisions relating to compensation of our executive officers. Our board of directors has appointed Dr. Niedel, Ms. Hutton and Mr. Wollaeger to serve on the compensation committee. None of these individuals has ever been an executive officer or employee of ours. None of our executive officers currently serves, or has served during the last completed fiscal year, on the compensation committee or board of directors of any other entity that has one or more executive officers serving as a member of our board of directors or compensation committee.

Limitation on Liability and Indemnification of Directors and Officers

Our amended and restated certificate of incorporation and bylaws, which will be effective immediately prior to consummation of this offering, limit our directors' and officers' liability to the fullest extent permitted under Delaware corporate law. Delaware corporate law provides that directors of a corporation will not be personally liable for monetary damages for breach of their fiduciary duties as directors, except for liability:

- for any transaction from which the director derives an improper personal benefit;
- for any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- under Section 174 of the Delaware General Corporation Law (unlawful payment of dividends or redemption of shares); or
- for any breach of a director's duty of loyalty to the corporation or its stockholders.

If the Delaware General Corporation Law is amended to authorize corporate action further eliminating or limiting the personal liability of directors or officers, then the liability of our directors or officers shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

Delaware law and our amended and restated bylaws provide that we will, in certain situations, indemnify any person made or threatened to be made a party to a proceeding by reason of that person's former or present official capacity with us against judgments, penalties, fines, settlements and reasonable expenses. Any person is also entitled, subject to certain limitations, to payment or reimbursement of reasonable expenses (including attorneys' fees and disbursements) in advance of the final disposition of the proceeding.

In addition, we have entered, and intend to continue to enter, into separate indemnification agreements with our directors and executive officers. These agreements, among other things, require us to indemnify our directors and executive officers for certain expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by a director or executive officer in any action or proceeding arising out of their services as one of our directors or executive officers or any other company or enterprise to which the person provides services at our request.

We maintain a directors' and officers' insurance policy pursuant to which our directors and officers are insured against liability for actions taken in their capacities as directors and officers. We believe that these provisions in our amended and restated certificate of incorporation and amended bylaws and these indemnification agreements are necessary to attract and retain qualified persons as directors and officers.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or control persons, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

EXECUTIVE AND DIRECTOR COMPENSATION

Our named executive officers for the year ended December 31, 2012, which consist of our principal executive officer, our two other most highly compensated executive officers and two former executive officers who would have been included among our highest compensated executive officers but for the fact that they were not serving as officers as of December 31, 2012, are:

- Kenneth I. Moch, our President and Chief Executive Officer;
- Timothy W. Trost, our Senior Vice President, Chief Financial Officer and Corporate Secretary;
- M. Michelle Berrey, M.D., M.P.H., our current Chief Medical Officer;
- Dorothy Margolskee, M.D., our former interim Chief Medical Officer; and
- J. Michael Grindel, Ph.D., our former Head of Development and Program Management.

Summary Compensation Table

Name and principal position	Year	Salary ($)	Option awards ($)[1]	Non-equity incentive plan compensation ($)[2]	All other compensation ($)[3]	Total ($)
Kenneth I. Moch *President and Chief Executive Officer*	2012	427,450	283,091[4]	85,490	1,318	797,349
Timothy W. Trost *Senior Vice President, Chief Financial Officer and Corporate Secretary*	2012	275,000	—	34,375	1,318	310,693
M. Michelle Berrey, M.D., M.P.H. *Chief Medical Officer*	2012	47,731[5]	499,129	—	110	546,970
Dorothy J. Margolskee, M.D. *Former Interim Chief Medical Officer*	2012	816,848[6]	37,176	—	—	854,024
J. Michael Grindel, Ph.D. *Former Head of Development and Program Management*	2012	384,375[7]	—	—	—	384,375

(1) In accordance with SEC rules, this column reflects the aggregate grant date fair value of the option awards granted during 2012 computed in accordance with Financial Accounting Standard Board Accounting Standards Codification Topic 718 for stock-based compensation transactions (ASC 718). Assumptions used in the calculation of these amounts are included in Note 8 to our financial statements appearing elsewhere in this prospectus. These amounts do not reflect the actual economic value that will be realized by the named executive officer upon the vesting of the stock options, the exercise of the stock options, or the sale of the common stock underlying such stock options.

(2) Amount represents annual performance-based bonuses earned for 2012. 50% of the amount of each performance-based bonus shown above will be paid in cash in March 2013 and 50% of the amount shown above will be paid in the form of restricted stock units. As of the date of this prospectus, the number of restricted stock units awarded have not yet been determined. The company expects that the restricted stock units will be determined and granted on or prior to March 31, 2013. Drs. Margolskee, Grindel and Berrey are not eligible to receive a performance-based bonus for 2012. For more information, see below under "— Annual Performance-Based Bonus Opportunity."

(3) Amounts shown represent term life insurance, long-term disability insurance, short-term disability insurance and accidental death and dismemberment insurance paid by us on behalf of the named executive officers. All of these benefits are provided to the named executive officers on the same terms as provided to all of our regular full-time employees in the United States. For more information regarding these benefits, see below under "— Perquisites, Health, Welfare and Retirement Benefits."

(4) On June 13, 2012, an outstanding and unvested option held by Mr. Moch to purchase 294,685 shares that was granted on April 14, 2010 and subject to vesting upon the occurrence of certain Company performance goals was cancelled.

(5) Dr. Berrey became our Chief Medical Officer on November 12, 2012 at an annual salary of $340,000. The amount above reflects the pro-rated portion earned from Dr. Berrey's hire date through December 31, 2012.

(6) Dr. Margolskee served as the Company's interim Chief Medical Officer from March 30, 2012 until a successor was hired on November 12, 2012. The amount above represents the total amount paid by the Company to Synergee LLC for Dr. Margolskee's consulting services to the Company during 2012, as described further below under "— Agreements with our Named Executive Officers."

(7) Dr. Grindel served as the Company's Head of Development and Program Management until December 31, 2012, however his service as an executive officer terminated on November 30, 2012. The amount above represents the total amount paid by the Company to EPD Pharma Solutions, LLC for Dr. Grindel's consulting services to the Company during 2012, as described further below under "— Agreements with our Named Executive Officers."

Annual Base Salary

The compensation of our named executive officers is generally determined and approved by our board of directors, based on the recommendation of the compensation committee of our board of directors (the Committee). Our board of directors approved the following 2012 base salaries for our named executive officers, which became effective on January 1, 2012, with the exception of Dr. Berrey. Our board of directors approved the following 2012 base salary for Dr. Berrey in connection with her commencement of employment, which became effective on November 12, 2012.

Name	2012 Base Salary ($)
Kenneth I. Moch	427,450
Timothy W. Trost	275,000
M. Michelle Berrey	340,000

Synergee LLC and EPD Pharma Solutions, LLC are paid consulting fees pursuant to the terms of consulting agreements with the Company for Drs. Margolskee's and Grindel's services, respectively, described below under "— Agreements with our Named Executive Officers". The company paid an hourly rate of $400 for Dr. Margolskee's services as interim Chief Medical Officer and a weekly rate ranging from $8,000 to $10,000 for Dr. Grindel's services relating to BARDA and non-BARDA activities, which was reduced to an hourly rate of $250 in December 2012 in connection with Dr. Grindel's cessation of services relating to BARDA.

Annual Performance-Based Bonus Opportunity

In addition to base salaries, our named executive officers are eligible to receive annual performance-based cash bonuses, which are designed to provide appropriate incentives to our executives to achieve defined annual corporate goals and to reward our executives for individual achievement towards these goals. The annual performance-based bonus each named executive officer is eligible to receive is based on the individual's target bonus, as a percentage of base salary, or target bonus percentage, and the extent to which we achieve the corporate goals that our board of directors establishes each year.

The actual performance-based bonus paid, if any, is calculated by multiplying the executive's annual base salary, target bonus percentage, and the percentage attainment of the corporate goals established by the board of directors for such year with respect to the executive. Our board of directors will generally consider each named executive officer's individual contributions towards reaching our annual corporate goals but does not typically establish specific individual goals for our named executive officers. There is no minimum bonus percentage or amount established for the named executive officers and, as a result, the bonus amounts vary from year to year based on corporate and individual performance.

At the end of the year, the board of directors reviews our performance against predetermined goal weightings assigned to each corporate goal and approves the extent to which we achieved each of our corporate goals. The board of directors may award a bonus in an amount above or below the amount resulting from the calculation described above, based on other factors that the board determines, in its sole discretion following recommendation by the Committee, are material to our corporate performance and provide appropriate incentives to our executives, for example based on events or circumstances that arise after the original corporate goals are set. The board of directors may also determine that the bonus will be paid in the form of cash, equity awards such as options or restricted stock unit awards, or a combination of cash and equity awards.

The board of directors sets the target bonus for each of the named executive officers at the beginning of each year for which the bonus will apply, or in connection with the hiring of a new named executive officer, as applicable. Each of the following named executive officers' 2012 target bonus percentage is set forth below:

Name	Target bonus
Kenneth I. Moch	40%
Timothy W. Trost	25%

Drs. Margolskee and Grindel were not eligible to receive performance-based bonuses for 2012. Because Dr. Berrey commenced employment with us in November 2012, she did not earn a performance-based bonus in 2012. However, her target bonus percentage beginning in 2013 is 25%. The corporate goals and relative overall weighting towards corporate goal achievement established by the board of directors, upon recommendation by the Committee, for 2012 were for progress with respect to: CMX001 business development (50%); CMX157 business development (20%); FDA interactions regarding CMX001 development (10%); the conduct of our Phase 2 AdV study (10%); and our contract with BARDA (10%).

No specific individual goals were established for any of our named executive officers for 2012. Rather, the board of directors assigned a specific weighting to each corporate goal on which the executive's performance bonus was based. Messrs. Moch's and Trost's performance bonuses were dependent on all of the corporate goals based on the overall weightings listed above. For 2012, there was no minimum percentage of corporate goals that must be achieved in order to earn a bonus.

In early 2013, the board of directors considered each corporate goal in detail and determined that we had achieved 50% of the 2012 corporate goals. Specifically, the Committee determined that we, as a company, had not achieved our goal with respect to CMX001 business development, which constituted 50% of the overall corporate goals. The remaining award of 50% was based, in part, upon progress with respect to: CMX157 business development, FDA interactions regarding CMX001, conduct of our CMX001 Study 202 (a Phase 2 clinical trial in patients with AdV), and our contract with BARDA. Accordingly, we paid Messrs. Moch and Trost a bonus calculated based on 50% of overall corporate goal achievement. Upon recommendation from the Committee, the board of directors determined that 50% of the performance bonus would be awarded to the executives in the form of a cash payment and 50% would be awarded in the form of restricted stock units under our 2012 plan, the terms of which are further described below under "— Equity Benefit Plans." We will pay the cash portion of the performance bonuses to our executives in March 2013. The amount of restricted stock units granted to our executives that is equivalent to 50% of the performance bonus will be determined based on our updated common stock valuation, which as of the date of this prospectus has not yet been determined. We expect that the number of restricted stock units will be determined and granted to our executives on or before March 31, 2013, upon receipt of a third-party valuation of our common stock.

Equity-Based Incentive Awards

Our equity-based incentive awards are designed to align our interests with those of our employees and consultants, including our named executive officers. The board of directors or the Committee is responsible for approving equity grants. As of December 31, 2012, the only form of equity award to our named executive officers has been stock option grants. As discussed above, in January 2013, our board of directors determined to pay 50% of the performance bonus for 2012 in the form of restricted stock units. Restricted stock units represent the right to be issued our common stock upon the occurrence of future dates or events. Vesting of the stock option and restricted stock units is tied to continuous service with us and serves as an additional retention measure. Although we may grant equity awards to our employees and consultants from time to time, we do not have a current practice of making annual equity grants to our executives. In addition, our executives generally are awarded an initial grant upon commencement of employment. Additional grants may occur periodically in order to specifically incentivize executives with respect to achieving certain corporate goals or to reward executives for exceptional performance.

Prior to this offering, we have granted all equity awards pursuant to the 2012 plan and the 2002 plan, the terms of which are described below under "— Equity Benefit Plans." All options are granted with a per share exercise price equal to no less than the fair market value of a share of our common stock on the date of grant of each award.

Generally our stock option awards vest over a four-year period and may be granted with an early exercise feature allowing the holder to exercise and receive unvested shares of our stock, so that the holder may have a greater opportunity for gains on the shares to be taxed at long-term capital gains rates rather than ordinary income rates. Our restricted stock units (including the units that will be granted to Messrs. Moch and Trost in 2013 in respect of their 2012 performance bonuses) vest upon the earlier of (i) the effective date of our registration statement filed under the Securities Act for the sale of our common stock or (ii) a change in control (as defined in the 2012 plan), provided that the holder continues to provide services to us through such date.

Effective June 13, 2012, the board of directors granted Mr. Moch an option to purchase 416,723 shares of common stock with an exercise price of $0.67 per share in connection with the cancellation of Mr. Moch's performance-based stock option granted in 2010 that never vested. On March 30, 2012, the board of directors granted an option to purchase 50,000 shares of common stock to Dr. Margolskee in connection with her appointment as interim Chief Medical Officer, with an exercise price of $0.66 per share. On November 18, 2012, the board of directors granted an option to purchase 625,000 shares of common stock to Dr. Berrey in connection with her commencement of employment with us on November 12, 2012, with an exercise price of $1.20 per share. We did not grant Mr. Trost or Dr. Grindel stock options or other equity awards in 2012. As discussed in the section above entitled "— Annual Performance-Based Bonus Opportunity", we will grant restricted stock units to Messrs. Moch and Trost in 2013 in an amount equivalent to 50% of the performance bonuses earned for 2012.

The vesting terms of the 2012 option grants are described in the footnotes to the "— Outstanding Equity Awards at Fiscal Year-End" table below.

Agreements with our Named Executive Officers

Below are written descriptions of our employment or consulting agreements or offer letters with our named executive officers.

Agreement with Mr. Moch. We entered into an employment agreement with Mr. Moch in October 2009 setting forth the terms of his employment, that was subsequently amended in April 2010 in connection with Mr. Moch's assuming the office of President and Chief Executive Officer and in December 2012 to make certain clarifications for purposes of Section 409A of the Code. Pursuant to the agreement, Mr. Moch is entitled to an initial annual base salary of $395,000, subject to increase by the board of directors, and is eligible to receive an annual cash performance bonus based on a target amount that would be between the 50th and 75th percentile for total cash compensation for chief executive officers of similarly situated companies. The performance bonus is subject to the Company's good faith assessment of Mr. Moch's achievement of individual goals and the achievement of the Company's goals. Pursuant to the agreement, Mr. Moch was granted several options to purchase shares of our common stock, including a 2010 option award covering 294,685 shares of stock that vested upon achievement of certain corporate performance goals that never occurred and was cancelled in June 2012 in connection with Mr. Moch's 2012 stock option grant described above under "— Equity-Based Incentive Awards. " Mr. Moch was eligible for a one-time cash bonus of $250,000 under his employment agreement in the event we executed a qualified definitive agreement for a collaboration transaction on or before September 30, 2010 that was never awarded. Mr. Moch is additionally entitled to certain severance and change of control benefits pursuant to his agreement, the terms of which are described below under "— Termination-Based Compensation." Mr. Moch's agreement had an initial term of one year and is subject to automatic renewal of successive one-year periods unless either Mr. Moch or the Company give 30 days' notice of their intent not to renew.

Agreement with Mr. Trost. In March 2011, we entered into an offer letter agreement with Mr. Trost setting forth the terms of his employment. Pursuant to the agreement, Mr. Trost is entitled to an initial annual base salary of $250,000, subject to adjustment by the board of directors, and was granted an option to purchase 600,000 shares of our common stock.

Agreement with Dr. Berrey. In November 2012, we entered into an offer letter agreement with Dr. Berrey setting forth the terms of her employment. Pursuant to the agreement, Dr. Berrey is entitled to an initial annual base annual salary of $340,000, subject to adjustment by the board of directors, and was granted an option to purchase 625,000 shares of our common stock.

Agreement with Dr. Margolskee. In February 2012, we entered into a consulting agreement with Synergee LLC relating to certain medical and strategic support services performed by Dr. Margolskee in connection with development of CMX001. In March of 2012, the agreement was amended to provide that Dr. Margolskee would serve as interim Chief Medical Officer (CMO), until such time as a replacement CMO was identified and hired. Under the terms of the agreement, Synergee LLC is paid an hourly rate for Dr. Margolskee's services, which was $400 per hour for services as CMO, as well as reimbursement of out-of-pocket expenses. In connection with serving as interim CMO, Dr. Margolskee was granted an option to purchase 50,000 shares of our common stock. Dr. Margolskee is not eligible for a performance-based bonus in connection with her services to the Company. The agreement has a term of one year and may be terminated by either party upon 30 days prior written notice. During the term and for a period of two years following termination, Dr. Margolskee is prohibited from recruiting Chimerix employees. Dr. Margolskee ceased serving as our interim CMO on November 12, 2012, but continues to provide consulting services to us as of the date of this prospectus pursuant to her consulting agreement.

Agreement with Dr. Grindel. In August 2011, we entered into a consulting agreement with EPD Pharma Solutions, LLC relating to certain consulting services performed by Dr. Grindel as the Company's Head of Development and Program Management. EPD Pharma Solutions, LLC was paid a weekly rate for Dr. Grindel's services of $6,000 for work performed under the BARDA contract and $2,000 for work performed on non-BARDA related activities, in addition to reimbursement of Dr. Grindel's out-of-pocket expenses related to these services. Dr. Grindel is not eligible for a performance-based bonus in connection with his services to the Company. The agreement had an initial term of six months and was amended in February 2012 to extend the term until December 31, 2012. On December 1, 2012, the agreement was amended to reflect Dr. Grindel's discontinuation of his duties with respect to the Company's performance under the BARDA contract. During the term and for a period of two years following termination, Dr. Grindel is prohibited from recruiting Chimerix employees. On January 1, 2013, we entered into a new consulting agreement with EPD Pharma Solutions, LLC for consulting services performed by Dr. Grindel relating to chemistry, manufacturing and control development, non-clinical development and program management for which we pay $300 per hour, as well as reimbursement of out-of-pocket expenses. The agreement has a term of one year and may be terminated by either party upon 30 days prior written notice.

Potential Payments Upon Termination or Change of Control

Regardless of the manner in which a named executive officer's service terminates, the named executive officer is entitled to receive amounts earned during his or her term of service, including salary and unused vacation pay.

Pursuant to his employment agreement, Mr. Moch is entitled to certain severance and change of control payments and benefits. In the event of termination due to disability, Mr. Moch will continue to receive payments at the rate of his then current salary for six months, contingent upon delivery to us of a satisfactory release of claims. In the event that Mr. Moch is terminated without cause, if we do not renew his employment agreement each year, or upon Mr. Moch's resignation for good reason, which is triggered by certain reductions in Mr. Moch's compensation, title, authority or duties or a requirement to relocate, Mr. Moch is eligible to receive payments at the rate of his then current salary for six months and reimbursement of COBRA health and dental premiums for up to six months contingent upon delivery to us of a satisfactory release of claims.

In the event of a change of control, Mr. Moch's employment agreement provides that his outstanding equity awards will accelerate vesting with respect to the number of shares that would have vested during the 12 months immediately following the change of control. In the event that Mr. Moch's employment is terminated without cause or Mr. Moch resigns for good reason following a change of control, Mr. Moch's outstanding equity awards will immediately vest in full.

Each of our named executive officers holds stock options under our equity incentive plans that were granted subject to our form of stock option agreements. A description of the termination and change of control provisions in such equity incentive plans and form of stock option agreements is provided below under "— Equity Benefit Plans." In addition, the restricted stock units that will be granted to Messrs. Moch and Trost that represent 50% of their 2012 performance bonuses will vest in full upon the earlier of (i) the

effective date of our registration statement filed under the Securities Act for the sale of our common stock or (ii) a change in control (as defined in the 2012 plan), provided that the holder continues to provide services to us through such date.

Pursuant to Dr. Grindel's stock option agreement, in the event that Dr. Grindel's continuous service terminates for reasons other than cause or upon his death or disability, Dr. Grindel will be entitled to exercise the vested portion of the option granted to him in 2011 for 50,000 shares for a period of 12 months following the termination of his continuous service.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth certain information regarding outstanding equity awards granted to our named executive officers that remain outstanding as of December 31, 2012.

		Option Awards[1]			
	Grant Date	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable	Option exercise price ($)[2]	Option expiration date
Kenneth I. Moch	6/20/2009	699,980	100,020[3]	0.44	6/19/2019
	8/12/2009	103,356	62,520[4]	0.89	8/11/2019
	8/12/2009	334,124[5][6][13]	—	0.89	8/11/2019
	4/14/2010	416,723[5][7][13]	—	0.89	4/13/2020
	4/7/2011	750,000[5][8][13]	—	0.66	4/6/2021
	6/13/2012	416,723[5][9][13]	—	0.67	6/12/2022
Timothy W. Trost	4/7/2011	600,000[5][8]	—	0.66	4/6/2021
M. Michelle Berrey	11/18/2012	—	625,000[10]	1.20	11/17/2022
Dorothy J. Margolskee	3/30/2012	50,000[11]	—	0.66	3/29/2022
J. Michael Grindel	11/17/2011	50,000[12]	—	0.66	11/16/2021

(1) All of the option awards granted in 2012 were granted under the 2012 plan and all of the options granted prior to 2012 were granted under the 2002 plan, the terms of which plans are described below under "— Equity Benefit Plans." Except as otherwise indicated, each option award becomes exercisable as it becomes vested and all vesting is subject to the executive's continuous service with the Company through the vesting dates.

(2) All of the option awards were granted with a per share exercise price equal to the fair market value of one share of our common stock on the date of grant, as determined in good faith by our board of directors with the assistance of a third-party valuation expert.

(3) 227,272 shares were vested on June 8, 2009 and 6,060 shares became vested on August 8, 2010. Thereafter the shares vest in equal monthly installments on the eighth day of each month over the following three years.

(4) 76,404 shares were vested on June 8, 2010; 1,123 shares vest on the eighth day of each month commencing on January 8, 2011 and ending on and including December 8, 2012; and 10,420 shares vest on the eighth day of each month commencing on January 8, 2013 and ending on and including June 8, 2013.

(5) The shares underlying the option award are 100% exercisable on the date of grant and prior to vesting.

(6) 48,596 shares vested on June 8, 2010; 10,416 shares vest and become exercisable on the eighth day of each month commencing on June 8, 2010 and ending on and including December 8, 2010; 9,293 shares vest and become exercisable on the eighth day of each month commencing on January 8, 2011 and ending on and including December 8, 2012.

(7) The shares vest in forty-eight equal monthly installments on the first day of the month beginning on May 1, 2010.

(8) 25% of the shares vest on July 26, 2011 and $1/36^{th}$ of the shares vest monthly thereafter.

(9) $1/48^{th}$ of the shares vest monthly after the grant date.

(10) 25% of the shares vest on November 12, 2013 and $1/36^{th}$ of the shares vest monthly thereafter.

(11) 10,000 shares vested immediately on the date of grant. The remainder of the shares vested at a rate of 5,000 per month during the time Dr. Margolskee served as our interim CMO, and at the rate of 2,500 per month during the time Dr. Margolskee provided continuous services to us but not as our interim CMO. The shares were 100% vested as of December 31, 2012.

(12) 50,000 shares vested on December 31, 2012. In the event that Dr. Grindel's continuous service terminates for reasons other than cause or upon his death or disability, Dr. Grindel will be entitled to exercise the vested portion of the option for a period of 12 months following the termination of his continuous service.

(13) Pursuant to an option transfer agreement dated May, 2012 and amended in November 2012, Mr. Moch transferred vested shares to the 2012 Kenneth Ian Moch Irrevocable GST Trust F/B/O Ellen Gray Stolzman and Descendants with respect to the following options as of December 31, 2012: 334,124 shares subject to the option covering 334,124 shares granted on August 12, 2009; 277,815 shares subject to the option covering 416,723 shares granted on April 14, 2010; 312,500 shares subject to the option covering 750,000 shares granted on April 7, 2011; and 52,090 shares subject to the option covering 416,723 shares granted on June 13, 2012.

Option Exercises and Stock Vested

Our named executive officers did not exercise any stock option awards during the fiscal year ended December 31, 2012.

Option Repricings

We did not engage in any repricings or other modifications or cancellations to any of our named executive officers' outstanding equity awards during the year ended December 31, 2012, except that in June 2012, we cancelled Mr. Moch's performance-based stock option granted in 2010, as described above under "— Agreements with our Named Executive Officers".

Perquisites, Health, Welfare and Retirement Benefits

Of our named executive officers, only Messrs. Moch and Trost and Dr. Berrey are eligible to participate in our employee benefit plans, including our medical, dental, vision, group life and accidental death and dismemberment insurance plans, in each case on the same basis as all of our other employees. We provide a 401(k) plan to our employees, including our employee named executive officers, as discussed in the section below entitled "— 401(k) Plan."

We do not provide perquisites or personal benefits to our named executive officers. We do, however, pay the premiums for term life insurance and long-term disability for all of our employees, including our employee named executive officers. None of our named executive officers participate in or have account balances in qualified or non-qualified defined benefit plans sponsored by us. Our board of directors may elect to adopt qualified or non-qualified benefit plans in the future if it determines that doing so is in our best interests.

401(k) Plan

We maintain a defined contribution employee retirement plan, or 401(k) plan, for our employees. Our executive officers are also eligible to participate in the 401(k) plan on the same basis as our other employees. The 401(k) plan is intended to qualify as a tax-qualified plan under Section 401(k) of the Code. The plan provides that each participant may contribute up to the lesser of 100% of his or her compensation or the statutory limit, which is $17,000 for calendar year 2012. Participants that are 50 years or older can also make "catch-up" contributions, which in calendar year 2012 may be up to an additional $5,500 above the statutory limit. We do not make contributions into the 401(k) plan on behalf of participants. Participant contributions are held and invested, pursuant to the participant's instructions, by the plan's trustee.

Nonqualified Deferred Compensation

None of our named executive officers participate in or have account balances in nonqualified defined contribution plans or other nonqualified deferred compensation plans maintained by us. Our board of directors may elect to provide our officers and other employees with non-qualified defined contribution or other nonqualified deferred compensation benefits in the future if it determines that doing so is in our best interests.

Equity Benefit Plans

2013 Equity Incentive Plan

Our board of directors adopted the 2013 plan in , and we expect our stockholders will approve the plan prior to this offering and that the 2013 plan will become effective upon the execution and delivery of the underwriting agreement for this offering. Once the 2013 plan is effective, no further grants will be made under the 2012 plan.

Stock Awards. The 2013 plan provides for the grant of incentive stock options (ISOs), nonstatutory stock options (NSOs), stock appreciation rights, restricted stock awards, restricted stock unit awards, performance-based stock awards, and other forms of equity compensation (collectively, stock awards), all of which may be granted to employees, including officers, non-employee directors and consultants of us and our affiliates. Additionally, the 2013 plan provides for the grant of performance cash awards. ISOs may be granted only to employees. All other awards may be granted to employees, including officers, and to non-employee directors and consultants.

Share Reserve. Initially, the aggregate number of shares of our common stock that may be issued pursuant to stock awards under the 2013 plan after the 2013 plan becomes effective is the sum of (i) shares, plus (ii) the number of shares reserved for issuance under our 2012 plan at the time our 2013 plan becomes effective, plus (iii) any shares subject to stock options or other stock awards granted under our 2012 plan that would have otherwise returned to our 2012 plan (such as upon the expiration or termination of a stock award prior to vesting). Additionally, the number of shares of our common stock reserved for issuance under our 2013 plan will automatically increase on January 1 of each year, beginning on January 1, (assuming the 2013 plan becomes effective before such date) and continuing through and including January 1, , by % of the total number of shares of our capital stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares determined by our board of directors. The maximum number of shares that may be issued upon the exercise of ISOs under our 2013 plan is shares.

No person may be granted stock awards covering more than shares of our common stock under our 2013 plan during any calendar year pursuant to stock options, stock appreciation rights and other stock awards whose value is determined by reference to an increase over an exercise or strike price of at least 100% of the fair market value on the date the stock award is granted. Additionally, no person may be granted in a calendar year a performance stock award covering more than shares or a performance cash award having a maximum value in excess of $. Such limitations are designed to help assure that any deductions to which we would otherwise be entitled with respect to such awards will not be subject to the $1,000,000 limitation on the income tax deductibility of compensation paid to any covered executive officer imposed by Section 162(m) of the Code.

If a stock award granted under the 2013 plan expires or otherwise terminates without being exercised in full, or is settled in cash, the shares of our common stock not acquired pursuant to the stock award again will become available for subsequent issuance under the 2013 plan. In addition, the following types of shares under the 2013 plan may become available for the grant of new stock awards under the 2013 plan: (1) shares that are forfeited to or repurchased by us prior to becoming fully vested; (2) shares withheld to satisfy income or employment withholding taxes; or (3) shares used to pay the exercise or purchase price of a stock award. Shares issued under the 2013 plan may be previously unissued shares or reacquired shares bought by us on the open market. As of the date hereof, no awards have been granted and no shares of our common stock have been issued under the 2013 plan.

Administration. Our board of directors, or a duly authorized committee thereof, has the authority to administer the 2013 plan. Our board of directors may also delegate to one or more of our officers the authority to (1) designate employees (other than other officers) to be recipients of certain stock awards, and (2) determine the number of shares of common stock to be subject to such stock awards. Subject to the terms of the 2013 plan, our board of directors or the authorized committee, referred to herein as the plan administrator, determines recipients, dates of grant, the numbers and types of stock awards to be granted and the terms and conditions of the stock awards, including the period of their exercisability and vesting schedule applicable to a stock award. Subject to the limitations set forth below, the plan administrator will also determine the exercise price, strike price or purchase price of awards granted and the types of consideration to be paid for the award.

The plan administrator has the authority to modify outstanding awards under our 2013 plan. Subject to the terms of our 2013 plan, the plan administrator has the authority to reduce the exercise, purchase or strike price of any outstanding stock award, cancel any outstanding stock award in exchange for new stock awards, cash or other consideration, or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any adversely affected participant.

Stock Options. Incentive and nonstatutory stock options are granted pursuant to stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for a stock option, within the terms and conditions of the 2013 plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Options granted under the 2013 plan vest at the rate specified by the plan administrator.

The plan administrator determines the term of stock options granted under the 2013 plan, up to a maximum of 10 years. Unless the terms of an option holder's stock option agreement provide otherwise, if an option holder's service relationship with us, or any of our affiliates, ceases for any reason other than disability, death or cause, the option holder may generally exercise any vested options for a period of three months following the cessation of service. The option term may be extended in the event that exercise of the option following such a termination of service is prohibited by applicable securities laws or our insider trading policy. If an optionholder's service relationship with us or any of our affiliates ceases due to disability or death, or an optionholder dies within a certain period following cessation of service, the optionholder or a beneficiary may generally exercise any vested options for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, options generally terminate immediately upon the termination of the individual for cause. In no event may an option be exercised beyond the expiration of its term.

Acceptable consideration for the purchase of common stock issued upon the exercise of a stock option will be determined by the plan administrator and may include (1) cash, check, bank draft or money order, (2) a broker-assisted cashless exercise, (3) the tender of shares of our common stock previously owned by the optionholder, (4) a net exercise of the option if it is an NSO, and (5) other legal consideration approved by the plan administrator.

Unless the plan administrator provides otherwise, options generally are not transferable except by will, the laws of descent and distribution, or pursuant to a domestic relations order. An optionholder may designate a beneficiary, however, who may exercise the option following the optionholder's death.

Tax Limitations On Incentive Stock Options. The aggregate fair market value, determined at the time of grant, of our common stock with respect to incentive stock options (ISOs) that are exercisable for the first time by an optionholder during any calendar year under all of our stock plans may not exceed $100,000. Options or portions thereof that exceed such limit will generally be treated as nonstatutory stock options (NSOs). No ISO may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our affiliates unless (1) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant, and (2) the term of the ISO does not exceed five years from the date of grant.

Restricted Stock Awards. Restricted stock awards are granted pursuant to restricted stock award agreements adopted by the plan administrator. Restricted stock awards may be granted in consideration for (1) cash, check, bank draft or money order, (2) services rendered to us or our affiliates, or (3) any other form of legal consideration. Common stock acquired under a restricted stock award may, but need not, be subject to a share repurchase option in our favor in accordance with a vesting schedule to be determined by the plan administrator. Rights to acquire shares under a restricted stock award may be transferred only upon such terms and conditions as set by the plan administrator. Except as otherwise provided in the applicable award agreement, restricted stock unit awards that have not vested will be forfeited upon the participant's cessation of continuous service for any reason.

Restricted Stock Unit Awards. Restricted stock unit awards are granted pursuant to restricted stock unit award agreements adopted by the plan administrator. Restricted stock unit awards may be granted in consideration for any form of legal consideration. A restricted stock unit award may be settled by cash, delivery of stock, a combination of cash and stock as deemed appropriate by the plan administrator, or in any other form of consideration set forth in the restricted stock unit award agreement. Additionally, dividend equivalents may be credited in respect of shares covered by a restricted stock unit award. Except as otherwise provided in the applicable award agreement, restricted stock units that have not vested will be forfeited upon the participant's cessation of continuous service for any reason.

Stock Appreciation Rights. Stock appreciation rights are granted pursuant to stock appreciation grant agreements adopted by the plan administrator. The plan administrator determines the strike price for a stock appreciation right, which generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Upon the exercise of a stock appreciation right, we will pay the participant an amount equal to the product of (1) the excess of the per share fair market value of our common stock on the date of exercise over the strike price, multiplied by (2) the number of shares of common stock with respect to which

the stock appreciation right is exercised. A stock appreciation right granted under the 2013 plan vests at the rate specified in the stock appreciation right agreement as determined by the plan administrator.

The plan administrator determines the term of stock appreciation rights granted under the 2013 plan, up to a maximum of ten years. Unless the terms of a participant's stock appreciation right agreement provides otherwise, if a participant's service relationship with us or any of our affiliates ceases for any reason other than cause, disability or death, the participant may generally exercise any vested stock appreciation right for a period of three months following the cessation of service. The stock appreciation right term may be further extended in the event that exercise of the stock appreciation right following such a termination of service is prohibited by applicable securities laws. If a participant's service relationship with us, or any of our affiliates, ceases due to disability or death, or a participant dies within a certain period following cessation of service, the participant or a beneficiary may generally exercise any vested stock appreciation right for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, stock appreciation rights generally terminate immediately upon the occurrence of the event giving rise to the termination of the individual for cause. In no event may a stock appreciation right be exercised beyond the expiration of its term.

Performance Awards. The 2013 plan permits the grant of performance-based stock and cash awards that may qualify as performance-based compensation that is not subject to the $1,000,000 limitation on the income tax deductibility of compensation paid to a covered executive officer imposed by Section 162(m) of the Code. To help assure that the compensation attributable to performance-based awards will so qualify, our compensation committee can structure such awards so that stock or cash will be issued or paid pursuant to such award only after the achievement of certain pre-established performance goals during a designated performance period.

The performance goals that may be selected include one or more of the following: (1) earnings (including earnings per share and net earnings); (2) earnings before interest, taxes and depreciation; (3) earnings before interest, taxes, depreciation and amortization; (4) total stockholder return; (5) return on equity or average stockholder's equity; (6) return on assets, investment, or capital employed; (7) stock price; (8) margin (including gross margin); (9) income (before or after taxes); (10) operating income; (11) operating income after taxes; (12) pre-tax profit; (13) operating cash flow; (14) sales or revenue targets; (15) increases in revenue or product revenue; (16) expenses and cost reduction goals; (17) improvement in or attainment of working capital levels; (18) economic value added (or an equivalent metric); (19) market share; (20) cash flow; (21) cash flow per share; (22) share price performance; (23) debt reduction; (24) implementation or completion of projects or processes; (25) customer satisfaction; (26) stockholders' equity; (27) capital expenditures; (28) debt levels; (29) operating profit or net operating profit; (30) workforce diversity; (31) growth of net income or operating income; (32) billings; and (33) to the extent that an award is not intended to comply with Section 162(m) of the Code, other measures of performance selected by our board of directors.

The performance goals may be based on a company-wide basis, with respect to one or more business units, divisions, affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise (i) in the award agreement at the time the award is granted or (ii) in such other document setting forth the performance goals at the time the goals are established, we will appropriately make adjustments in the method of calculating the attainment of performance goals as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects, as applicable, for non-U.S. dollar denominated goals; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of any "extraordinary items" as determined under generally accepted accounting principles. In addition, we retain the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of the goals. The performance goals may differ from participant to participant and from award to award.

Other Stock Awards. The plan administrator may grant other awards based in whole or in part by reference to our common stock. The plan administrator will set the number of shares under the stock award and all other terms and conditions of such awards.

Changes to Capital Structure. In the event that there is a specified type of change in our capital structure, such as a stock split or recapitalization, appropriate adjustments will be made to (a) the class and maximum number of shares reserved for issuance under the 2013 plan, (b) the class and maximum number of shares by which the share reserve may increase automatically each year, (c) the class and maximum number of shares that may be issued upon the exercise of ISOs, (d) the class and maximum number of shares subject to stock awards that can be granted in a calendar year (as established under the 2013 plan pursuant to Section 162(m) of the Code) and (e) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock awards.

Corporate Transactions. In the event of certain specified significant corporate transactions, the plan administrator has the discretion to take any of the following actions with respect to stock awards:

- arrange for the assumption, continuation or substitution of a stock award by a surviving or acquiring entity or parent company;
- arrange for the assignment of any reacquisition or repurchase rights held by us to the surviving or acquiring entity or parent company;
- accelerate the vesting of the stock award and provide for its termination prior to the effective time of the corporate transaction;
- arrange for the lapse of any reacquisition or repurchase right held by us;
- cancel or arrange for the cancellation of the stock award in exchange for such cash consideration, if any, as our board of directors may deem appropriate; or
- make a payment equal to the excess of (a) the value of the property the participant would have received upon exercise of the stock award over (b) the exercise price otherwise payable in connection with the stock award.

Our plan administrator is not obligated to treat all stock awards, even those that are of the same type, in the same manner.

Under the 2013 plan, a corporate transaction is generally the consummation of (i) a sale or other disposition of all or substantially all of our consolidated assets, (ii) a sale or other disposition of at least 90% of our outstanding securities, (iii) a merger, consolidation or similar transaction following which we are not the surviving corporation, or (iv) a merger, consolidation or similar transaction following which we are the surviving corporation but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction.

Change of Control. The plan administrator may provide, in an individual award agreement or in any other written agreement between a participant and us that the stock award will be subject to additional acceleration of vesting and exercisability in the event of a change of control. Under the 2013 plan, a change of control is generally (i) the acquisition by a person or entity of more than 50% of our combined voting power other than by merger, consolidation or similar transaction; (ii) a consummated merger, consolidation or similar transaction immediately after which our stockholders cease to own more than 50% of the combined voting power of the surviving entity; or (iii) a consummated sale, lease or exclusive license or other disposition of all or substantially of our consolidated assets.

Amendment and Termination. Our board of directors has the authority to amend, suspend, or terminate our 2013 plan, provided that such action does not materially impair the existing rights of any participant without such participant's written consent. No ISOs may be granted after the tenth anniversary of the date our board of directors adopted our 2013 plan.

2012 Equity Incentive Plan

Our board of directors and our stockholders approved our 2012 plan, which became effective in February 2012. Our 2012 plan was a continuation of and successor to our 2002 plan and after our 2012 plan became effective, no further stock awards were made under our 2002 plan. As of December 31, 2012, there were 1,518,795 shares remaining available for the grant of stock awards under our 2012 plan and there were outstanding stock awards covering a total of 1,510,136 shares that were granted under our 2012 plan.

The 2012 plan will terminate in February 2022, unless our board of directors terminates it earlier. After the effective date of the 2013 plan, no additional awards will be granted under the 2012 plan, and all awards granted under the 2012 plan that are repurchased, forfeited, expire or are cancelled will become available for grant under the 2013 plan in accordance with its terms.

Stock awards. The 2012 plan provides for the grant of ISO, NSOs, stock appreciation rights, restricted stock awards, restricted stock unit awards and other forms of stock awards (collectively, stock awards), all of which may be granted to employees, including officers, non-employee directors and consultants of us and our affiliates. ISOs may be granted only to employees. All other awards may be granted to employees, including officers, and to non-employee directors and consultants.

Share Reserve. The aggregate number of shares of our common stock originally reserved for issuance pursuant to stock awards under the 2012 plan was the sum of (i) 1,597,646 shares (which was the number of shares subject to the 2002 plan's available share reserve as of the effective date of the 2012 plan), plus (ii) any shares subject to stock options or other stock awards granted under our 2002 plan that expire or terminate for any reason, are forfeited or repurchased by us or are reacquired, withheld or not issued to satisfy a tax withholding obligation. The maximum number of shares that may be issued upon the exercise of ISOs under our 2012 plan was 22,000,000 shares.

If a stock award granted under the 2012 plan expires or otherwise terminates without being exercised in full, or is settled in cash, the shares of our common stock not acquired pursuant to the stock award again will become available for subsequent issuance under the 2012 plan. In addition, the following types of shares under the 2012 plan may become available for the grant of new stock awards under the 2012 plan: (1) shares that are forfeited to or repurchased by us prior to becoming fully vested; (2) shares withheld to satisfy income or employment withholding taxes; or (3) shares used to pay the exercise or purchase price of a stock award. Shares issued under the 2012 plan may be previously unissued shares or reacquired shares bought by us on the open market.

Administration. Our board of directors, or a duly authorized committee thereof, has the authority to administer the 2012 plan. Our board of directors may also delegate to one or more of our officers the authority to (1) designate employees (other than other officers) to be recipients of certain stock awards, and (2) determine the number of shares of common stock to be subject to such stock awards. Subject to the terms of the 2012 plan, our board of directors or the authorized committee, referred to herein as the plan administrator, determines recipients, dates of grant, the numbers and types of stock awards to be granted and the terms and conditions of the stock awards, including the period of their exercisability and vesting schedule applicable to a stock award. Subject to the limitations set forth below, the plan administrator will also determine the exercise price, strike price or purchase price of awards granted and the types of consideration to be paid for the award.

The plan administrator has the authority to modify outstanding awards under our 2012 plan. Subject to the terms of our 2012 plan, the plan administrator has the authority to reduce the exercise, purchase or strike price of any outstanding stock award, cancel any outstanding stock award in exchange for new stock awards, cash or other consideration, or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any adversely affected participant.

Stock Options. Incentive and nonstatutory stock options are granted pursuant to stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for a stock option, within the terms and conditions of the 2012 plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Options granted under the 2012 plan vest at the rate specified by the plan administrator.

The plan administrator determines the term of stock options granted under the 2012 plan, up to a maximum of 10 years. Unless the terms of an option holder's stock option agreement provide otherwise, if an option holder's service relationship with us, or any of our affiliates, ceases for any reason other than disability, death or cause, the option holder may generally exercise any vested options for a period of three months following the cessation of service. The option term may be extended in the event that exercise of the option following such a termination of service is prohibited by applicable securities laws or our insider trading

policy. If an optionholder's service relationship with us or any of our affiliates ceases due to disability or death, or an optionholder dies within a certain period following cessation of service, the optionholder or a beneficiary may generally exercise any vested options for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, options generally terminate immediately upon the termination of the individual for cause. In no event may an option be exercised beyond the expiration of its term.

Acceptable consideration for the purchase of common stock issued upon the exercise of a stock option will be determined by the plan administrator and may include (1) cash, check, bank draft or money order, (2) a broker-assisted cashless exercise, (3) the tender of shares of our common stock previously owned by the optionholder, (4) a net exercise of the option if it is an NSO, and (5) other legal consideration approved by the plan administrator.

Unless the plan administrator provides otherwise, options generally are not transferable except by will, the laws of descent and distribution, or pursuant to a domestic relations order. An optionholder may designate a beneficiary, however, who may exercise the option following the optionholder's death.

Tax Limitations On Incentive Stock Options. The aggregate fair market value, determined at the time of grant, of our common stock with respect to ISOs that are exercisable for the first time by an optionholder during any calendar year under all of our stock plans may not exceed $100,000. Options or portions thereof that exceed such limit will generally be treated as NSOs. No ISO may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our affiliates unless (1) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant, and (2) the option is not exercisable after the expiration of five years from the date of grant.

Restricted Stock Unit Awards. Restricted stock unit awards are granted pursuant to restricted stock unit award agreements adopted by the plan administrator. Restricted stock unit awards may be granted in consideration for any form of legal consideration. A restricted stock unit award may be settled by cash, delivery of stock, a combination of cash and stock as deemed appropriate by the plan administrator, or in any other form of consideration set forth in the restricted stock unit award agreement. Additionally, dividend equivalents may be credited in respect of shares covered by a restricted stock unit award. Except as otherwise provided in the applicable award agreement, restricted stock units that have not vested will be forfeited upon the participant's cessation of continuous service for any reason.

Changes to Capital Structure. In the event that there is a specified type of change in our capital structure, such as a stock split or recapitalization, appropriate adjustments will be made to (a) the class and maximum number of shares reserved for issuance under the 2012 plan, (b) the class and maximum number of shares that may be issued upon the exercise of ISOs, and (c) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock awards.

Corporate Transactions. In the event of certain specified significant corporate transactions, outstanding stock awards shall be assumed, continued or substituted for similar stock awards by the surviving or acquiring corporation. If any surviving or acquiring corporation fails to assume, continue or substitute such stock awards, stock awards held by participants whose continuous service has terminated will accelerate vesting in full prior to the corporate transaction. All stock awards will terminate at or prior to the corporate transaction.

Under the 2012 plan, a corporate transaction is generally the consummation of (i) a sale or other disposition of all or substantially all of our consolidated assets, (ii) a sale or other disposition of at least 90% of our outstanding securities, (iii) a merger, consolidation or similar transaction following which we are not the surviving corporation, or (iv) a merger, consolidation or similar transaction following which we are the surviving corporation but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction.

Change of Control. The plan administrator may provide, in an individual award agreement or in any other written agreement between a participant and us that the stock award will be subject to additional acceleration of vesting and exercisability in the event of a change of control. Our form of option agreement provides for acceleration in full of the stock option if a participant is terminated without cause or resigns for

good reason (which includes a resignation due to a material reduction in authority, duties or responsibilities, a material reduction in base salary or a relocation of employment by more than 50 miles) within thirteen months after a change of control. Under the 2012 plan, a change of control is generally (i) the acquisition by a person or entity of more than 50% of our combined voting power other than by merger, consolidation or similar transaction; (ii) a consummated merger, consolidation or similar transaction immediately after which our stockholders cease to own more than 50% of the combined voting power of the surviving entity; (iii) approval by the stockholders or our board of directors of a plan of complete dissolution or liquidation of us; or (iv) a consummated sale, lease or exclusive license or other disposition of all or substantially of our consolidated assets.

Amendment and Termination. The 2012 plan will terminate on February 15, 2022. However, our board of directors has the authority to amend, suspend, or terminate our 2012 plan, provided that such action does not materially impair the existing rights of any participant without such participant's written consent.

2002 Equity Incentive Plan

Our board of directors and our stockholders originally approved our 2002 plan, which became effective in September 2002, and was further amended by our board of directors and stockholders, most recently in February 2011. The 2002 plan terminated and no further awards were granted upon the effective date of the 2012 plan. As of December 31, 2012, there were outstanding stock awards covering a total of 7,850,206 shares that were granted under our 2002 plan.

Stock Awards. The 2002 plan provides for the grant of ISO, NSOs, stock bonuses and rights to acquire restricted stock , or collectively, "stock awards," all of which may be granted to employees, including officers, non-employee directors and consultants of us and our affiliates. ISOs may be granted only to employees. All other awards may be granted to employees, including officers, and to non-employee directors and consultants.

Share Reserve. Shares are no longer available for the grant of stock awards under our 2002 plan. However, if a stock award granted under the 2002 plan expires or otherwise terminates without being exercised in full, the shares of our common stock not acquired pursuant to the stock award again will become available for subsequent issuance under the 2012 plan.

Administration. Our board of directors, or a duly authorized committee thereof, has the authority to administer the 2002 plan. Our board of directors may also delegate to one or more of our officers the authority to (1) designate employees (other than other officers) to be recipients of certain stock awards, and (2) determine the number of shares of common stock to be subject to such stock awards. Subject to the terms of the 2002 plan, our board of directors or the authorized committee, referred to herein as the plan administrator, determines recipients, dates of grant, the numbers and types of stock awards to be granted and the terms and conditions of the stock awards, including the period of their exercisability and vesting schedule applicable to a stock award. Subject to the limitations set forth below, the plan administrator will also determine the exercise price, strike price or purchase price of awards granted and the types of consideration to be paid for the award. The plan administrator has the authority to modify outstanding awards under our 2002 plan.

Stock Options. Incentive and nonstatutory stock options are granted pursuant to stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for a stock option, within the terms and conditions of the 2002 plan, provided that the exercise price of an incentive stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant and the exercise price of a nonstatutory stock option generally cannot be less than 85% of the fair market value of our common stock on the date of grant. Options granted under the 2002 plan vest at the rate specified by the plan administrator.

The plan administrator determines the term of stock options granted under the 2002 plan, up to a maximum of 10 years. Unless the terms of an option holder's stock option agreement provide otherwise, if an option holder's service relationship with us, or any of our affiliates, ceases for any reason other than disability, death or cause, the option holder may generally exercise any vested options for a period of three months following the cessation of service. The option term may be extended in the event that exercise of the option following such a termination of service is prohibited by applicable securities laws or our insider trading

policy. If an optionholder's service relationship with us or any of our affiliates ceases due to disability or death, or an optionholder dies within a certain period following cessation of service, the optionholder or a beneficiary may generally exercise any vested options for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, options generally terminate immediately upon the termination of the individual for cause. In no event may an option be exercised beyond the expiration of its term.

Acceptable consideration for the purchase of common stock issued upon the exercise of a stock option will be determined by the plan administrator and may include cash or, at the discretion of the plan administrator, by (1) the tender of shares of our common stock previously owned by the optionholder, (2) deferred payment and (3) other legal consideration approved by the plan administrator.

Unless the plan administrator provides otherwise, options generally are not transferable except by will, the laws of descent and distribution. An optionholder may designate a beneficiary, however, who may exercise the option following the optionholder's death.

Tax Limitations On Incentive Stock Options. The aggregate fair market value, determined at the time of grant, of our common stock with respect to ISOs that are exercisable for the first time by an optionholder during any calendar year under all of our stock plans may not exceed $100,000. Options or portions thereof that exceed such limit will generally be treated as NSOs. No ISO may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our affiliates unless (1) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant, and (2) the term of the ISO does not exceed five years from the date of grant.

Changes to Capital Structure. In the event that there is a specified type of change in our capital structure, such as a stock split or recapitalization, appropriate adjustments will be made to (a) the class and maximum number of shares reserved for issuance under the 2002 plan, (b) the class and maximum number of shares that may be issued upon the exercise of ISOs, and (c) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock awards.

Corporate Transactions. In the event of certain specified significant corporate transactions, outstanding stock awards shall be assumed, continued or substituted for similar stock awards by the surviving or acquiring corporation. If any surviving or acquiring corporation fails to assume, continue or substitute such stock awards, stock awards held by participants whose continuous service has terminated will accelerate vesting in full prior to the corporate transaction. All stock awards will terminate at or prior to the corporate transaction.

Under the 2002 plan, a corporate transaction is generally (i) a sale or other disposition of all or substantially all of our consolidated assets, (ii) a merger, consolidation or similar transaction following which we are not the surviving corporation, or (iii) a reverse merger in which we are the surviving corporate but shares of our common stock outstanding immediately preceding the merger are converted into other property by virtue of the transaction.

Change of Control. In addition, the plan administrator may provide for special vesting acceleration in an individual award agreement or in any other written agreement between a participant and us. Our form of option agreement provides for acceleration in full of the stock option if a participant is terminated without cause or resigns for good reason (which includes a resignation due to a material reduction in authority, duties or responsibilities, a material reduction in base salary or a relocation of employment by more than 50 miles) within thirteen months after a change of control transaction. A change of control transaction is generally (i) a sale or disposition of all of our assets; (ii) a merger or consolidation following which we are not the surviving entity and our stockholders own less than 50% of the voting power of the surviving entity or its parent; (iii) a reverse merger where we are the surviving entity but our stockholders own less than 50% of the voting power; or (iv) an acquisition by a person, group or entity of 50% of our voting power.

Director Compensation

In 2012, we provided compensation to Ms. Demski in the form of a $25,000 annual cash retainer. Historically, we have not paid cash or equity compensation to directors who are also our employees for their service on our board of directors, nor have we paid cash or equity compensation to our non-employee

directors who are associated with our principal stockholders for service on our board of directors. We have reimbursed and will continue to reimburse all of our non-employee directors for their travel, lodging and other reasonable expenses incurred in attending meetings of our board of directors and committees of our board of directors.

The following table sets forth in summary form information concerning the compensation that we paid or awarded during the year ended December 31, 2012 to each of our non-employee directors:

Name[1]	Fees Earned or Paid in Cash ($)	Option Awards ($) [2]	Total ($)
Farah Champsi	—	—	—
Martha J. Demski	25,000	—	25,000
Wende Hutton	—	—	—
James Niedel, M.D., Ph.D	—	—	—
Arthur M. Pappas	—	—	—
Timothy J. Wollaeger	—	—	—

(1) Mr. Moch was an employee director during 2012 and his compensation is fully reflected in the "— Summary Compensation Table" above. George Painter, Ph.D. was an executive officer and director from January 1, 2012 until his resignation from our board of directors on July 20, 2012. Dr. Painter did not receive any compensation in 2012 for services provided as a member of our board of directors.

(2) We did not grant any stock options to our non-employee directors in 2012. The aggregate number of shares subject to each non-employee director's outstanding option awards as of December 31, 2012 was as follows: Martha J. Demski, 165,000 outstanding and unexercised.

Effective upon the closing of this offering, our board of directors adopted a new compensation policy that will be applicable to all of our non-employee directors. This compensation policy provides that each such non-employee director will receive the following compensation for service on our board of directors:

- an annual cash retainer of $ and payment of travel expenses to attend meetings of the board of directors and committees of the board of directors;
- an additional annual cash retainer of $ for service as chairman of the audit committee, $ for service as chairman of the compensation committee and $ for service as chairman of the nominating and corporate governance committee;
- upon first joining our board of directors, an automatic initial grant of an option having a Black-Scholes value of $ on the date of grant;
- for each non-employee director whose term continues on the date of our annual meeting each year, an automatic annual grant of an option having a Black-Scholes value of $ on the date of grant; and
- for the chairman of our board of directors, an additional automatic annual option grant having a Black-Scholes value of $ on the date of grant.

Each of the option grants described above will vest and become exercisable over a four year period following the date of grant, subject to the director continuing to provide services to us during such period. The term of each option will be 10 years. The options will be granted under our 2013 plan, the terms of which are described in more detail above under "— Equity Benefit Plans — 2013 Equity Incentive Plan."

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following includes a summary of transactions since January 1, 2009 to which we have been a party, in which the amount involved in the transaction exceeded $120,000, and in which any of our directors, executive officers or, to our knowledge, beneficial owners of more than 5% of our capital stock or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than equity and other compensation, termination, change in control and other arrangements, which are described under "Executive and Director Compensation."

Preferred Stock Financings

Series E Preferred Stock Financing

In July and August 2009, we issued and sold to investors an aggregate of 7,894,871 shares of Series E preferred stock, at a purchase price of $2.045 per share, for aggregate consideration of $16,145,011.

The participants in this preferred stock financing included the following holders of more than 5% of our capital stock or entities affiliated with them. The following table presents the number of shares issued to these related parties in this financing:

Participants[1]	Series E Preferred Stock
5% or Greater Stockholders	
Canaan VII L.P.[2]	2,992,666
Alta Biopharma Partners III, L.P. and its affiliated entities[3]	2,444,990
Sanderling Venture Partners V, L.P. and its affiliated entities[4]	2,200,490

(1) Additional details regarding these stockholders and their equity holdings is provided in "Principal Stockholders."

(2) Includes 2,933,986 shares of Series E preferred stock issued to Canaan VII L.P., 48,900 shares of Series E preferred stock issued to Dan T. Ciporin, 4,890 shares of Series E preferred stock issued to Stephen M. Bloch and 4,890 shares of Series E preferred stock issued to Warren Lee.

(3) Includes 2,239,404 shares of Series E preferred stock issued to Alta Biopharma Partners III, L.P., 150,397 shares of Series E preferred stock issued to Alta Biopharma Partners III GmbH & Co. Beteiligungs KG, and 55,189 shares of Series E preferred stock issued to Alta Embarcadero Biopharma Partners III, LLC.

(4) Includes 19,461 shares of Series E preferred stock issued to Sanderling Venture Partners V, L.P., 4,744 shares of Series E preferred stock issued to Sanderling V Biomedical, L.P., 16,015 shares of Series E preferred stock issued to Sanderling V Ventures Management, 404,708 shares of Series E preferred stock issued to Sanderling V Biomedical Co-Investment Fund, L.P., 667,542 shares of Series E preferred stock issued to Sanderling Venture Partners V Co-Investment Fund, L.P., 1,033,315 shares of Series E preferred stock issued to Sanderling Venture Partners VI Co-Investment Fund, L.P., 19,998 shares of Series E preferred stock issued to Sanderling CI Beteiligungs GmbH & Co. KG, 23,827 shares of Series E preferred stock issued to Sanderling VI Limited Partnership, and 10,880 shares of Series E preferred stock issued to Sanderling Ventures Management VI.

Series F Preferred Stock Financing

In February 2011, we issued and sold to investors an aggregate of 22,004,895 shares of Series F preferred stock, at a purchase price of $2.045 per share, for aggregate consideration of $45,000,010. At the closing, for no additional consideration, we issued each investor in this financing a warrant to purchase a number of shares of Series F preferred stock, at an exercise price of $2.045 per share, equal to 25% of the number of shares otherwise purchased by such participant in the financing.

The participants in this preferred stock financing included the following holders of more than 5% of our capital stock or entities affiliated with them. The following table presents the number of shares issued to these related parties in this financing:

Participants[1]	Series F Preferred Stock[2]
5% or Greater Stockholders	
New Leaf Ventures II, L.P	8,557,458
A.M. Pappas Life Science Ventures IV, L.P. and its affiliated entities[3]	3,168,706
Canaan VII L.P.[4]	3,014,670
Sanderling Venture Partners V, L.P. and its affiliated entities[5]	2,811,735
Alta Biopharma Partners III, L.P. and its affiliated entities[6]	1,955,991

(1) Additional details regarding these stockholders and their equity holdings is provided in "Principal Stockholders."

(2) Share amounts exclude shares of Series F preferred stock that may be acquired upon the exercise of warrants that were issued in connection with our Series F preferred stock financing.

(3) Includes 2,333,903 shares of Series F preferred stock issued to A.M. Pappas Life Science Ventures IV, L.P., 111,086 shares of Series F preferred stock issued to PV IV CEO Fund, L.P., 681,356 shares of Series F preferred stock issued to A.M. Pappas Life Science Ventures III, L.P., and 42,361 shares of Series F preferred stock issued to PV III CEO Fund L.P.

(4) Includes 3,007,335 shares of Series F preferred stock issued to Canaan VII L.P., 2,445 shares of Series F preferred stock issued to Stephen M. Bloch, and 4,890 shares of Series F preferred stock issued to Dan T. Ciporin.

(5) Includes 115,968 shares of Series F preferred stock issued to Sanderling Ventures Management V, and 2,695,767 shares of Series F preferred stock issued to Sanderling V Strategic Exit Fund, L.P.

(6) Includes 1,791,523 shares of Series F preferred stock issued to Alta Biopharma Partners III, L.P., 120,317 shares of Series F preferred stock issued to Alta Biopharma Partners III GmbH & Co. Beteiligungs KG, and 44,151 shares of Series F preferred stock issued to Alta Embarcadero Biopharma Partners III, LLC.

Some of our directors are associated with our principal stockholders as indicated in the table below:

Director	Principal Stockholder
Timothy J. Wollaeger	Sanderling Venture Partners V, L.P. and its affiliated entities
Wende Hutton	Canaan VII L.P.
James Niedel, M.D., Ph.D.	New Leaf Ventures II, L.P.
Farah Champsi	Alta Biopharma Partners III, L.P. and its affiliated entities
Arthur M. Pappas	A.M. Pappas Life Science Ventures IV, L.P. and its affiliated entities

Investor Rights, Voting and Co-Sale Agreements

In connection with our preferred stock financings, we entered into amended and restated investor rights, voting and right of first refusal and co-sale agreements containing voting rights, information rights, rights of first refusal and registration rights, among other things, with certain holders of our preferred stock and certain holders of our common stock. These stockholder agreements will terminate upon the closing of this offering, except for the registration rights granted under our amended and restated investor rights agreement, as more fully described below in "Description of Capital Stock — Registration Rights."

Employment Arrangements

For more information about our employment and consulting agreements and offer letters with our named executive officers, refer to "Executive and Director Compensation — Employment Agreements with Executive Officers."

We currently maintain a written employment agreement with our President and Chief Executive Officer, Kenneth I. Moch. Pursuant to the terms of his employment agreement, in November 2009 we issued a promissory note in the principal amount of $125,000 to Mr. Moch. The promissory note bore interest at the rate of 0.71% per annum. The entire outstanding principal balance and accured interest under the promissory note was repaid in full by Mr. Moch in April 2011.

Between January 2009 and July 2012, George Painter, Ph.D. was employed as our Chief Scientific Officer, and received an annual base salary ranging between $392,500 and $200,000, received annual cash bonuses ranging between $20,000 and $130,000 and was granted stock options to purchase an aggregate of 1,102,036 shares of our common stock. Concurrently during this period, Dr. George Painter also served as a member of our board of directors.

Between January 2009 and August 2009, Gwendolyn Painter, M.D. served as a consultant to us, earned consulting fees of approximately $225,000 and was granted a stock option to purchase 10,000 shares of our common stock. Thereafter, between August 2009 and February 2012, Dr. Gwendolyn Painter was employed as our Chief Medical Officer, and received an annual base salary ranging between $375,000 and $394,000, received annual cash bonuses ranging between $28,750 and $100,000 and was granted stock options to purchase an aggregate of 635,000 shares of our common stock. Starting in March 2012 Dr. Gwendolyn Painter reduced her efforts to a part-time employee working 20 hours a week at an annual salary rate of $210,993. Concurrently during each of these periods, Dr. George Painter, her husband, served as a member of our board of directors.

Stock Options Granted to Executive Officers and Directors

We have granted stock options to our executive officers and directors, as more fully described in "Executive and Director Compensation."

Indemnification Agreements

We have entered, and intend to continue to enter, into separate indemnification agreements with our directors and executive officers, in addition to the indemnification provided for in our amended and restated bylaws. These agreements, among other things, require us to indemnify our directors and executive officers for certain expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by a director or executive officer in any action or proceeding arising out of their services as one of our directors or executive officers or any other company or enterprise to which the person provides services at our request. For more information regarding these indemnification arrangements, see "Management — Limitation on Liability and Indemnification of Directors and Officers." We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might benefit us and our stockholders. A stockholder's investment may be harmed to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Policies and Procedures for Transactions with Related Persons

We have adopted a written related-person transactions policy that sets forth our policies and procedures regarding the identification, review, consideration and oversight of "related-person transactions." For purposes of our policy only, a "related-person transaction" is a transaction, arrangement or relationship (or any series of similar transactions, arrangements or relationships) in which we and any "related person" are participants involving an amount that exceeds $120,000.

Transactions involving compensation for services provided to us as an employee, consultant or director are not considered related-person transactions under this policy. A related person is any executive officer, director or a holder of more than five percent of our common stock, including any of their immediate family members and any entity owned or controlled by such persons.

Under the policy, where a transaction has been identified as a related-person transaction, management must present information regarding the proposed related-person transaction to our audit committee (or, where review by our audit committee would be inappropriate, to another independent body of our board of directors) for review. The presentation must include a description of, among other things, the material facts, the direct and indirect interests of the related persons, the benefits of the transaction to us and whether any alternative transactions are available. To identify related-person transactions in advance, we rely on information supplied

by our executive officers, directors and certain significant stockholders. In considering related-person transactions, our audit committee or another independent body of our board of directors takes into account the relevant available facts and circumstances including, but not limited to:

- the risks, costs and benefits to us;
- the impact on a director's independence in the event the related person is a director, immediate family member of a director or an entity with which a director is affiliated;
- the terms of the transaction;
- the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties or to or from our employees generally.

In the event a director has an interest in the proposed transaction, the director must recuse himself or herself from the deliberations and approval.

PRINCIPAL STOCKHOLDERS

The following table sets forth information regarding beneficial ownership of our capital stock by:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our common stock;
- each of our directors;
- each of our named executive officers; and
- all of our current executive officers and directors as a group.

The percentage ownership information under the column entitled "Before Offering" is based on 56,844,852 shares of common stock outstanding as of November 30, 2012, assuming conversion of all outstanding shares of our preferred stock into 51,404,514 shares of common stock, and excludes the issuance of shares of common stock to holders of our Series F preferred stock upon closing of this offering, at their election, in respect of the accumulated dividends on our Series F preferred stock. The percentage ownership information under the column entitled "After Offering" is based on the sale of shares of common stock in this offering.

Information with respect to beneficial ownership has been furnished by each director, officer or beneficial owner of more than 5% of our common stock. We have determined beneficial ownership in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities. In addition, the rules include shares of common stock issuable pursuant to the exercise of stock options or warrants that are either immediately exercisable or exercisable on or before January 29, 2013, which is 60 days after November 30, 2012. These shares are deemed to be outstanding and beneficially owned by the person holding those options or warrants for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, the persons or entities identified in this table have sole voting and investment power with respect to all shares shown as beneficially owned by them, subject to applicable community property laws.

Except as otherwise noted below, the address for each person or entity listed in the table is c/o Chimerix, Inc., 2505 Meridian Parkway, Suite 340, Durham, North Carolina 27713.

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned	
		Before Offering	After Offering
5% or greater stockholders			
Sanderling Venture Partners V, L.P. and its affiliated entities[1] 400 South El Camino Real, Suite 1200 San Mateo, CA 94402	15,323,124	26.6%	
Canaan VII L.P.[2] 285 Riverside Avenue, Suite 250 Westport, CT 06880	11,050,122	19.2%	
New Leaf Ventures II, L.P.[3] Time Square Tower 7 Times Square, Suite 3502 New York, NY 10036	10,696,822	18.1%	
Alta Biopharma Partners III, L.P. and its affiliated entities[4] One Embarcadero Center, 37th Floor San Francisco, CA 94111	7,823,963	13.6%	
A.M. Pappas Life Science Ventures IV, L.P. and its affiliated entities[5] P.O. Box 110287 Research Triangle Park, NC 27709	3,960,881	6.9%	

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned	
		Before Offering	After Offering
Directors and named executive officers			
Timothy J. Wollaeger[1]	15,323,124	26.6%	
Wende S. Hutton[6]	11,094,132	19.3%	
James Niedel, M.D., Ph.D.[3]	10,696,822	18.1%	
Farah Champsi[4]	7,823,963	13.6%	
Arthur M. Pappas[5]	3,960,881	6.9%	
Kenneth I. Moch[7]	2,747,992	4.6%	
Timothy W. Trost[8]	600,000	1.0%	
Martha J. Demski[9]	217,500	*	
Michael Grindel, Ph.D.[10]	50,000	*	
Dorothy J. Margolskee, M.D.[11]	50,000	*	
M. Michelle Berrey, M.D., M.P.H.	—	*	
All current executive officers and directors as a group (9 persons)[12]	52,464,414	80.4%	

* Represents beneficial ownership of less than one percent.

(1) Includes 3,963,929 shares of common stock held by Sanderling Venture Partners V, L.P., 970,704 shares of common stock held by Sanderling V Biomedical, L.P., 550,766 shares of common stock held by Sanderling V Limited Partnership, 490,075 shares of common stock held by Sanderling V Beteiligungs GmbH & Co. KG, 315,833 shares of common stock held by Sanderling V Ventures Management, 997,742 shares of common stock held by Sanderling V Biomedical Co-Investment Fund, L.P., 1,645,719 shares of common stock held by Sanderling Venture Partners V Co-Investment Fund, L.P., 2,695,767 shares of common stock and a warrant to purchase 673,941 shares of common stock held by Sanderling V Strategic Exit Fund, L.P. (collectively, the Sanderling V Shares), 2,830,585 shares of common stock held by Sanderling Venture Partners VI Co-Investment Fund, L.P., 54,781 shares of common stock held by Sanderling VI Beteiligungs GmbH & Co. KG, 65,269 shares of common stock held by Sanderling VI Limited Partnership, 29,805 shares of common stock and a warrant to purchase 28,992 shares of common stock held by Sanderling Ventures Management VI (collectively, the Sanderling VI Shares) and 9,216 shares of common stock held by Middleton-McNeil Retirement Trust. Timothy J. Wollaeger, one of our directors, Fred A. Middleton, Robert G. McNeil and Timothy C. Mills share voting and investment power with respect to the Sanderling V Shares. Robert G. McNeil, Fred A. Middleton, Timothy C. Mills and Timothy J. Wollaeger share voting and investment power with respect to the Sanderling VI Shares. Fred A. Middleton and Robert G. McNeil share voting and investment power with respect to the shares held by the Middleton-McNeil Retirement Trust. Each of these individuals disclaims beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein. The address for this stockholder is 400 S. El Camino Real, Suite 1200, San Mateo, CA 94402.

(2) Includes 10,298,289 shares of common stock and a warrant to purchase 751,833 shares of common stock held by Canaan VII L.P. (the Canaan VII Shares). Canaan Partners VII LLC (Canaan VII) is the sole General Partner of Canaan VII L.P. and may be deemed to share voting and investment power over the Canaan VII Shares. The managers of Canaan VII are Wende S. Hutton, one of our directors, Brenton K. Ahrens, John V. Balen, Stephen M. Bloch, Maha S. Ibrahim, Deepak Kamra, Gregory Kopchinsky, Seth A. Rudnick, Guy M. Russo and Eric A. Young. Each of these individuals disclaims beneficial ownership of the Canaan VII Shares. The address for Canaan VII L.P. is 2765 Sand Hill Road, Menlo Park, CA 94025.

(3) Includes 8,557,458 shares of common stock and a warrant to purchase 2,139,364 shares of common stock held by New Leaf Ventures II, L.P. James Niedel, one of our directors, Srinivas Akkaraju, Philippe O. Chambon, Jeani Delagardelle, Ronald M. Hunt and Vijay K. Lathi, the members of the investment committee of New Leaf Venture Associates II, L.P., which is the General Partner of New Leaf Ventures II, L.P., have the power to vote or dispose of these shares and therefore each of the foregoing members of the investment committee may be deemed to have voting and investment power with respect to such shares. Each of the foregoing members of the investment committee disclaims beneficial ownership of such shares except to the extent of his or her pecuniary interest therein. The address for this stockholder is Times Square Tower, 7 Times Square, Suite 3502, New York, NY 10036.

(4) Includes 6,718,212 shares of common stock and a warrant to purchase 447,880 shares of common stock held by Alta Biopharma Partners III, L.P., 451,189 shares of common stock and a warrant to purchase 30,079 shares of common stock held by Alta Biopharma Partners III GmbH & Co. Beteiligungs KG and 165,566 shares of common stock and a warrant to purchase 11,037 shares of common stock held by Alta Embarcadero Biopharma Partners III, LLC (collectively, the Alta Shares). Alta Partners III, Inc. provides investment advisory services to Alta Biopharma Partners III, L.P., Alta Biopharma Partners III GmbH & Co. Beteiligungs KG and Alta Embarcadero Biopharma Partners III, LLC (collectively, the Alta Funds). The directors of Alta Biopharma Management III, LLC, which is a general partner of Alta Biopharma Partners III, L.P., the managing limited partner of Alta Biopharma Partners III GmbH & Co. Beteiligungs KG, and the manager of Alta Embarcadero Biopharma Partners III, LLC, exercise sole dispositive and voting power over the shares owned by the Alta Funds. Farah Champsi, one of our directors, Edward Penhoet and Edward Hurwitz, are directors of Alta Biopharma Management III, LLC and managers of Alta Embarcadero Biopharma Partners III, LLC. These individuals may be deemed to share dispositive and voting power over the shares held by the Alta Funds. Each of these individuals disclaims beneficial ownership of such shares except to the extent of his or her pecuniary interest therein. The address for this stockholder is One Embarcadero Center, Suite 3700, San Francisco, CA 94111.

(5) Includes 2,333,903 shares of common stock and a warrant to purchase 583,475 shares of common stock held by A.M. Pappas Life Science Ventures IV, L.P., 111,086 shares of common stock and a warrant to purchase 27,771 shares of common stock held by PV IV CEO Fund, L.P., 681,356 shares of common stock and a warrant to purchase 170,339 shares of common stock held by A.M. Pappas Life Science Ventures III, L.P. and 42,361 shares of common stock and a warrant to purchase 10,590 shares of common stock held by PV III CEO Fund, L.P. AMP&A Management IV, LLC is the general partner of each of A. M. Pappas Life Science Ventures IV, L.P. and PV IV CEO Fund, L.P. (collectively, the IV Funds), and AMP&A Management III, LLC is the general partner of each of A. M. Pappas Life Science Ventures III, L.P. and PV III CEO Fund, L.P. (collectively with the IV Funds, the Funds), and each of AMP&A Management IV, LLC and AMP&A Management III, LLC has a management agreement with A. M. Pappas & Associates, LLC whereby A. M. Pappas & Associates, LLC provides management services for the Funds. As a result, A. M. Pappas & Associates, LLC's investment committee exercises sole dispositive and voting power over the shares owned by the Funds. By virtue of these relationships, AMP&A Management IV, LLC, AMPA& Management III, LLC and A. M. Pappas & Associates, LLC may be deemed to beneficially own the shares owned directly by the Funds. Each of the foregoing entities disclaims beneficial ownership of such shares except to the extent of each of its pecuniary interest therein. The address for this stockholder is 2520 Meridian Parkway, Suite 400, Durham, NC 27713.

(6) Includes 10,298,289 shares of common stock and a warrant to purchase 751,833 shares of common stock held by Canaan VII L.P. (the Canaan VII Shares), and 44,010 shares of common stock held by The Hutton Living Trust dated 12/10/96. Ms. Hutton is a trustee of The Hutton Living Trust dated 12/10/96 (The Hutton Trust) and has shared voting and investment power over the shares held by The Hutton Trust. Ms. Hutton is one of the managers of Canaan Partners VII LLC, which is the sole general partner of Canaan VII L.P. Ms. Hutton disclaims beneficial ownership of the Canaan VII Shares. Ms. Hutton's address is c/o Canaan VII L.P., 2765 Sand Hill Road, Menlo Park, CA 94025.

(7) Represents 2,747,992 shares which Mr. Moch has the right to acquire from us within 60 days of November 30, 2012 pursuant to the exercise of stock options, 908,052 of which will be unvested but exercisable as of January 29, 2013, and 925,565 of which are held by The 2012 Kenneth Moch Irrevocable GST Trust F/B/O Ellen Gray Stolzman and Descendants dated May 25, 2012, of which Ellen Gray Stolzman, Mr. Moch's wife, is trustee.

(8) Represents 600,000 shares which Mr. Trost has the right to acquire from us within 60 days of November 30, 2012 pursuant to the exercise of stock options, 225,000 of which will be unvested but exercisable as of January 29, 2013.

(9) Includes 52,500 shares held by Ms. Demski, 39,375 of which are held by the Martha J. Demski Trust u/a 10/01/94, and 165,000 shares which Ms. Demski has the right to acquire from us within 60 days of November 30, 2012 pursuant to the exercise of stock options, 35,105 of which will be unvested but exercisable as of January 29, 2013.

(10) Represents 50,000 shares which Dr. Grindel has the right to acquire from us within 60 days of November 30, 2012 pursuant to the exercise of stock options.

(11) Represents 50,000 shares which Dr. Margolskee has the right to acquire from us within 60 days of November 30, 2012 pursuant to the exercise of stock options.

(12) Includes 44,076,121 shares held by all current executive officers and directors as a group and 8,388,293 shares that all current executive officers and directors as a group have the right to acquire from us within 60 days of November 30, 2012 pursuant to the exercise of stock options and warrants, 1,168,157 of which will be unvested but exercisable as of January 29, 2013.

DESCRIPTION OF CAPITAL STOCK

Upon closing of this offering and the filing of our amended and restated certificate of incorporation, our authorized capital stock will consist of 200,000,000 shares of common stock, par value $0.001 per share and 10,000,000 shares of preferred stock, par value $0.001 per share. All of our authorized preferred stock upon the closing of this offering will be undesignated. The following is a summary of the rights of our common and preferred stock and some of the provisions of our amended and restated certificate of incorporation and amended and restated bylaws, which will become effective upon closing of this offering and of the Delaware General Corporation Law. This summary is not complete. For more detailed information, please see our amended and restated certificate of incorporation and amended and restated bylaws, which are filed as exhibits to the registration statement of which this prospectus is a part, as well as the relevant provisions of the Delaware General Corporation Law.

Common Stock

Outstanding Shares

On September 30, 2012, there were 5,438,065 shares of common stock outstanding, held of record by 43 stockholders. Based on shares of common stock outstanding as of September 30, 2012, which assumes (1) the conversion of all outstanding shares of our preferred stock which, at September 30, 2012, will convert into 51,404,514 shares of common stock upon the closing of this offering, (2) the issuance of shares of common stock to holders of our Series F preferred stock upon closing of this offering in respect of the accumulated dividends on our Series F preferred stock through to the closing date of this offering (based on an assumed closing date of , 2013), and (3) the issuance by us of shares of common stock in this offering, there will be shares of common stock outstanding upon closing of this offering.

As of September 30, 2012, there were 9,370,011 shares of common stock subject to outstanding options under our equity incentive plans, 155,288 shares of common stock issuable pursuant to outstanding restricted stock units under our equity incentive plans and 5,727,595 shares of our preferred stock issuable upon the exercise of outstanding warrants.

Voting

Our common stock is entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders, including the election of directors, and does not have cumulative voting rights. Accordingly, the holders of a majority of the shares of our common stock entitled to vote in any election of directors can elect all of the directors standing for election.

Dividends

Subject to preferences that may be applicable to any then outstanding preferred stock, the holders of common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds.

Liquidation

In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities, subject to the satisfaction of any liquidation preference granted to the holders of any outstanding shares of preferred stock.

Rights and Preferences

Holders of our common stock have no preemptive, conversion or subscription rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of our preferred stock that we may designate and issue in the future.

Fully Paid and Nonassessable

All of our outstanding shares of common stock are, and the shares of common stock to be issued in this offering will be, fully paid and nonassessable.

Preferred Stock

As of September 30, 2012, we had outstanding an aggregate of 51,404,514 shares of preferred stock held of record by 40 stockholders.

In addition, as of September 30, 2012, we had outstanding warrants to purchase an aggregate of 5,727,595 shares of preferred stock, as described under "— Warrants" below.

Upon closing of this offering, all outstanding shares of preferred stock at September 30, 2012, will convert into 51,404,514 shares of our common stock, and we will issue shares of common stock to holders of our Series F preferred stock upon closing of this offering in respect of the accumulated dividends on our Series F preferred stock through to the closing date of this offering (based on an assumed closing date of , 2013).

Immediately prior to closing of this offering, our certificate of incorporation will be amended and restated to delete all references to such shares of preferred stock. Under the amended and restated certificate of incorporation, our board of directors will have the authority, without further action by the stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the rights, preferences and privileges of the shares of each wholly unissued series and any qualifications, limitations or restrictions thereon and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of the common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in our control that may otherwise benefit holders of our common stock and may adversely affect the market price of the common stock and the voting and other rights of the holders of common stock. We have no current plans to issue any shares of preferred stock.

Stock Options and Restricted Stock Units

As of September 30, 2012, 9,370,011 shares of common stock were issuable upon the exercise of outstanding stock options, at a weighted-average exercise price of $0.64 per share, and 155,288 shares of common stock were issuable pursuant to outstanding restricted stock units.

Warrants

As of September 30, 2012, 21,000 shares of our Series B-1 preferred stock were issuable upon exercise of an outstanding warrant to purchase Series B-1 preferred stock with an exercise price of $1.50 per share. This warrant was issued to General Electric Capital Corporation and is exercisable until November 5, 2013. The warrant provides for cashless exercise at the option of the holder, and also contains provisions for the adjustment of the number of shares issuable upon the exercise of the warrant in the event of stock splits, recapitalizations, reclassifications and consolidations. Upon closing of this offering, this warrant will automatically become a warrant to purchase 21,000 shares of our common stock at an exercise price of $1.50 per share of common stock.

As of September 30, 2012, 58,680 shares of our Series D preferred stock were issuable upon exercise of an outstanding warrant to purchase Series D preferred stock with an exercise price of $2.045 per share. This warrant was issued in connection with a loan and security agreement entered into with SVB. The warrant issued to SVB is exercisable until November 24, 2018 or until an acquisition of the Company as set forth in the warrant. The warrant provides for cashless exercise at the option of the holder, and also contains provisions for the adjustment of the exercise price and the number of shares issuable upon the exercise of the warrant in the event of stock dividends, stock splits, reorganizations and reclassifications. Upon closing of this offering, this warrant will automatically become a warrant to purchase 58,680 shares of our common stock at an exercise price of $2.045 per share of common stock.

As of September 30, 2012, an aggregate of 5,647,915 shares of our Series F preferred stock were issuable upon exercise of outstanding warrants to purchase Series F preferred stock, with an exercise price of $2.045 per share. These warrants were issued in connection with (i) a loan and security agreement entered into with SVB and MidCap in January 2012, and (ii) an equity financing agreement with certain investors for the sale of Series F preferred stock. The warrants will become exercisable for shares of our common stock upon completion of this offering. The warrant issued to SVB is exercisable until January 22, 2022 or until an acquisition of the Company as set forth in the warrant and, upon closing of this offering, will automatically become a warrant to purchase 146,700 shares of our common stock at an exercise price of $2.045 per share of common stock. The warrants issued in connection with the Series F preferred stock financing are exercisable for seven years after the issuance date of each respective warrant (each of which was issued in February of 2011), unless terminated earlier as a result of certain reorganizations or changes in control as set forth in the warrant and, upon closing of this offering, will automatically become warrants to purchase an aggregate of 5,501,215 shares of our common stock at the same exercise price per share of common stock. These warrants provide for cashless exercise at the option of the holder, and also contain provisions for the adjustment of the exercise price and the number of shares issuable upon the exercise of the warrants in the event of stock dividends, stock splits, reorganizations and reclassifications and consolidations.

Registration Rights

Following the closing of this offering, certain holders of our common stock, or their transferees, will be entitled to the registration rights set forth below with respect to registration of the resale of such shares under the Securities Act pursuant to an amended and restated investors' rights agreement by and among us and certain of our stockholders.

Demand Registration Rights

At any time beginning on the earlier of (i) February 7, 2015 and (ii) six months after the public offering date set forth on the cover page of this prospectus, upon the written request of certain of the holders of the registrable securities then outstanding that we file a registration statement under the Securities Act with an anticipated aggregate price to the public of at least $5 million, we will be obligated to notify all holders of registrable securities of such request and to use our reasonable best efforts to register the sale of all registrable securities that holders may request to be registered. We are not required to effect more than two registration statements which are declared or ordered effective, subject to certain exceptions. We may postpone the filing of a registration statement for up to 60 days twice in a 12-month period if in the good faith judgment of our board of directors such registration would be detrimental to us, and we are not required to effect the filing of a registration statement during the period beginning 60 days prior to our good faith estimate of the date of the filing of, and ending on a date 180 days following the effective date of, a registration initiated by us.

Form S-3 Registration Rights

If we are eligible to file a registration statement on Form S-3, holders of registrable securities have the right to demand that we file a registration statement on Form S-3 so long as the aggregate amount of securities to be sold under the registration statement on Form S-3 is at least $2.5 million, subject to specified exceptions, conditions and limitations.

"Piggyback" Registration Rights

If we register any securities for public sale, holders of registration rights will have the right to include their shares in the registration statement. The underwriters of any underwritten offering will have the right to limit the number of shares having registration rights to be included in the registration statement, but not below 30% of the total number of shares included in the registration statement, except this offering in which the holders have waived any and all rights to have their shares included.

Expenses of Registration

Generally, we are required to bear all registration and selling expenses incurred in connection with the demand, piggyback and Form S-3 registrations described above, other than underwriting discounts and commissions.

Expiration of Registration Rights

The demand, piggyback and Form S-3 registration rights discussed above will terminate five years following the closing of this offering or, as to a given holder of registrable securities, when such holder is able to sell all of their registrable securities in a single 90-day period under Rule 144 of the Securities Act.

Anti-Takeover Effects of Provisions of Our Amended and Restated Certificate of Incorporation, Our Bylaws and Delaware Law

Delaware Anti-Takeover Law

We are subject to Section 203 of the Delaware General Corporation Law (Section 203). Section 203 generally prohibits a public Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- the interested stockholder owned at least 85% of the voting stock of the corporation outstanding upon consummation of the transaction, excluding for purposes of determining the number of shares outstanding (a) shares owned by persons who are directors and also officers and (b) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or subsequent to the consummation of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Provisions of our amended and restated certificate of incorporation and amended and restated bylaws, which will become effective upon the closing of this offering, may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our common stock. Among other things, our amended and restated certificate of incorporation and amended and restated bylaws:

- permit our board of directors to issue up to 10,000,000 shares of preferred stock, with any rights, preferences and privileges as they may designate (including the right to approve an acquisition or other change in our control);
- provide that the authorized number of directors may be changed only by resolution adopted by a majority of the board of directors;
- provide that the board of directors or any individual director may only be removed with cause and the affirmative vote of the holders of at least 66 2/3% of the voting power of all of our then outstanding common stock;
- provide that all vacancies, including newly created directorships, may, except as otherwise required by law or subject to the rights of holders of preferred stock as designated from time to time, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- divide our board of directors into three classes;
- require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not be taken by written consent;
- provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide notice in writing in a timely manner and also specify requirements as to the form and content of a stockholder's notice;
- do not provide for cumulative voting rights (therefore allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose);
- provide that special meetings of our stockholders may be called only by the chairman of the board, our Chief Executive Officer or by the board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors (whether or not there exists any vacancies); and
- provide that the Court of Chancery of the State of Delaware will be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors or officers to us or our stockholders, (iii) any action asserting a claim against the us arising pursuant to any provision of the DGCL or our certificate of incorporation or bylaws, or (iv) any action asserting a claim against us governed by the internal affairs doctrine.

The amendment of any of these provisions, with the exception of the ability of our board of directors to issue shares of preferred stock and designate any rights, preferences and privileges thereto, would require the affirmative vote of the holders of at least 66 2/3% of the voting power of all of our then outstanding common stock.

Nasdaq Global Market Listing

We have applied for listing of our common stock on the Nasdaq Global Market under the symbol CMRX.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is . The transfer agent and registrar's address is .

SHARES ELIGIBLE FOR FUTURE SALE

Immediately prior to this offering, there has been no public market for our common stock. Future sales of substantial amounts of common stock in the public market could adversely affect prevailing market prices. Furthermore, since only a limited number of shares will be available for sale shortly after this offering because of contractual and legal restrictions on resale described below, sales of substantial amounts of common stock in the public market after the restrictions lapse could adversely affect the prevailing market price for our common stock as well as our ability to raise equity capital in the future.

Based on the number of shares of common stock outstanding as of September 30, 2012, upon closing of this offering, shares of common stock will be outstanding, assuming no exercise of the underwriters' over-allotment option and no exercise of options or warrants. All of the shares sold in this offering will be freely tradable unless held by an affiliate of ours. Except as set forth below, the remaining shares of common stock outstanding after this offering will be restricted as a result of securities laws or lock-up agreements. These remaining shares will generally become available for sale in the public market as follows:

- No restricted shares will be eligible for immediate sale upon the closing of this offering;
- Up to restricted shares will be eligible for sale under Rule 144 or Rule 701 upon expiration of lock-up agreements at least 180 days after the date of this offering; and
- The remainder of the restricted shares will be eligible for sale from time to time thereafter upon expiration of their respective one-year holding periods under Rule 144, but could be sold earlier if the holders exercise any available registration rights.

Rule 144

In general, under Rule 144 as currently in effect, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, any person who is not an affiliate of ours and has held their shares for at least six months, including the holding period of any prior owner other than one of our affiliates, may sell shares without restriction, provided current public information about us is available. In addition, under Rule 144, any person who is not an affiliate of ours and has held their shares for at least one year, including the holding period of any prior owner other than one of our affiliates, would be entitled to sell an unlimited number of shares immediately upon the closing of this offering without regard to whether current public information about us is available.

Beginning 90 days after the effective date of the registration statement of which this prospectus is a part, a person who is an affiliate of ours and who has beneficially owned restricted securities for at least six months, including the holding period of any prior owner other than one of our affiliates, is entitled to sell a number of restricted shares within any three-month period that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately shares immediately after this offering; or
- the average weekly trading volume of our common stock on the Nasdaq Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Sales of restricted shares under Rule 144 held by our affiliates are also subject to requirements regarding the manner of sale, notice and the availability of current public information about us. Rule 144 also provides that affiliates relying on Rule 144 to sell shares of our common stock that are not restricted shares must nonetheless comply with the same restrictions applicable to restricted shares, other than the holding period requirement.

Notwithstanding the availability of Rule 144, the holders of substantially all of our restricted shares have entered into lock-up agreements as described below and their restricted shares will become eligible for sale at the expiration of the restrictions set forth in those agreements.

Rule 701

Under Rule 701, shares of our common stock acquired upon the exercise of currently outstanding options or pursuant to other rights granted under our stock plans may be resold by:

- persons other than affiliates, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, subject only to the manner-of-sale provisions of Rule 144; and
- our affiliates, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, subject to the manner-of-sale and volume limitations, current public information and filing requirements of Rule 144, in each case, without compliance with the six-month holding period requirement of Rule 144.

As of September 30, 2012, options to purchase a total of 9,370,011 shares of common stock were outstanding, of which 9,082,765 were vested, and 155,288 shares of common stock were issuable pursuant to outstanding restricted stock units. Of the total number of shares of our common stock issuable under these options and restricted stock units, substantially all are subject to contractual lock-up agreements with us or the underwriters described below under “Underwriters” and will become eligible for sale in accordance with Rule 701 at the expiration of those agreements.

Lock-Up Agreements

We, along with our directors, executive officers and substantially all of our other stockholders, optionholders and warrantholders, have agreed that for a period of 180 days (the restricted period), after the date of this prospectus, subject to specified exceptions, we or they will not offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of, directly or indirectly, any shares of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock, or enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock. Upon expiration of the “restricted” period, certain of our stockholders and warrantholders will have the right to require us to register their shares under the Securities Act. See “— Registration Rights” below and “Description of Capital Stock — Registration Rights.”

After this offering, certain of our employees, including our executive officers and/or directors, may enter into written trading plans that are intended to comply with Rule 10b5-1 under the Exchange Act. Sales under these trading plans would not be permitted until the expiration of the lock-up agreements relating to the offering described above.

Registration Rights

Upon closing of this offering, the holders of shares of our common stock will be entitled to rights with respect to the registration of their shares under the Securities Act, subject to the lock-up agreements described under “— Lock-Up Agreements” above. Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act, except for shares purchased by affiliates, immediately upon the effectiveness of the registration statement of which this prospectus is a part. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock. See “Description of Capital Stock — Registration Rights.”

Equity Incentive Plans

We intend to file with the SEC a registration statement on Form S-8 under the Securities Act covering the shares of common stock reserved for issuance under the 2013 plan. The registration statement is expected to be filed and become effective as soon as practicable after the closing of this offering. Accordingly, shares registered under the registration statement will be available for sale in the open market following its effective date, subject to Rule 144 volume limitations and the lock-up agreements described above, if applicable.

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS OF OUR COMMON STOCK

The following discussion describes the material U.S. federal income and estate tax consequences of the acquisition, ownership and disposition of our common stock acquired in this offering by Non-U.S. Holders (as defined below). This discussion does not address all aspects of U.S. federal income and estate taxes, does not discuss the potential application of the Medicare Contribution tax, and does not deal with state, local or non-U.S. tax consequences that may be relevant to Non-U.S. Holders in light of their particular circumstances, nor does it address U.S. federal tax consequences other than income and estate taxes. Rules different from those described below may apply to certain Non-U.S. Holders that are subject to special treatment under the Code such as financial institutions, insurance companies, tax-exempt organizations, broker-dealers and traders in securities, U.S. expatriates, "controlled foreign corporations," "passive foreign investment companies," corporations that accumulate earnings to avoid U.S. federal income tax, persons that hold our common stock as part of a "straddle," "conversion transaction," or other risk reduction strategy, partnerships and other pass-through entities, and investors in such pass-through entities or entities that are treated as disregarded entities for U.S. federal income tax purposes (regardless of their places of organization or formation). Such Non-U.S. Holders are urged to consult their own tax advisors to determine the U.S. federal, state, local and other tax consequences that may be relevant to them. Furthermore, the discussion below is based upon the provisions of the Code, and Treasury regulations, rulings and judicial decisions thereunder as of the date hereof, and such authorities may be repealed, revoked or modified, perhaps retroactively, so as to result in U.S. federal income or estate tax consequences different from those discussed below. We have not requested a ruling from the IRS with respect to the statements made and the conclusions reached in the following summary. This discussion assumes that the Non-U.S. Holder holds our common stock as a "capital asset" within the meaning of Section 1221 of the Code (generally, property held for investment).

The following discussion is for general information only and is not tax advice for any Non-U.S. Holders under their particular circumstances. Persons considering the purchase of our common stock pursuant to this offering should consult their own tax advisors concerning the U.S. federal income and estate tax consequences of acquiring, owning and disposing of our common stock in light of their particular situations as well as any consequences arising under the laws of any other taxing jurisdiction, including any state, local and non-U.S. tax consequences and any U.S. federal non-income tax consequences.

For the purposes of this discussion, a "Non-U.S. Holder" is, for U.S. federal income tax purposes, a beneficial owner of common stock that is not a U.S. Holder. A "U.S. Holder" means a beneficial owner of our common stock that is for U.S. federal income tax purposes (a) an individual who is a citizen or resident of the United States, (b) a corporation or other entity treated as a corporation created or organized in or under the laws of the United States, any state thereof or the District of Columbia, (c) an estate the income of which is subject to U.S. federal income taxation regardless of its source or (d) a trust if it (1) is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person. Also, partnerships, or other entities that are treated as partnerships for U.S. federal income tax purposes (regardless of their place of organization or formation) and entities that are treated as disregarded entities for U.S. federal income tax purposes (regardless of their place of organization or formation) are not addressed by this discussion and are, therefore, not considered to be Non-U.S. Holders for the purposes of this discussion.

Distributions

Subject to the discussion below, distributions, if any, made on our common stock to a Non-U.S. Holder of our common stock generally will constitute dividends for U.S. tax purposes to the extent made out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles) and will be subject to withholding tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. To obtain a reduced rate of withholding under a treaty, a Non-U.S. Holder generally will be required to provide us with a properly executed IRS Form W-8BEN, or other appropriate form, certifying the Non-U.S. Holder's entitlement to benefits under that treaty. In the case of a Non-U.S. Holder that is an entity, Treasury Regulations and the relevant tax treaty provide rules to determine whether, for purposes of determining the applicability of a tax treaty, dividends will be treated as paid to the entity or to those holding

an interest in that entity. If a Non-U.S. Holder holds stock through a financial institution or other agent acting on the holder's behalf, the holder will be required to provide appropriate documentation to such agent. The holder's agent will then be required to provide certification to us or our paying agent, either directly or through other intermediaries. If you are eligible for a reduced rate of U.S. federal withholding tax under an income tax treaty, you should consult with your own tax advisor to determine if you are able to obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for a refund with the IRS.

We generally are not required to withhold tax on dividends paid to a Non-U.S. Holder that are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, are attributable to a permanent establishment that such holder maintains in the United States) if a properly executed IRS Form W-8ECI, stating that the dividends are so connected, is furnished to us (or, if stock is held through a financial institution or other agent, to such agent). In general, such effectively connected dividends will be subject to U.S. federal income tax, on a net income basis at the regular graduated rates, unless a specific treaty exemption applies. A corporate Non-U.S. Holder receiving effectively connected dividends may also be subject to an additional "branch profits tax," which is imposed, under certain circumstances, at a rate of 30% (or such lower rate as may be specified by an applicable treaty) on the corporate Non-U.S. Holder's effectively connected earnings and profits, subject to certain adjustments.

To the extent distributions on our common stock, if any, exceed our current and accumulated earnings and profits, they will first reduce your adjusted basis in our common stock as a non-taxable return of capital, but not below zero, and then any excess will be treated as gain and taxed in the same manner as gain realized from a sale or other disposition of common stock as described in the next section.

Gain on Disposition of Our Common Stock

Subject to the discussion below regarding backup withholding and foreign accounts, a Non-U.S. Holder generally will not be subject to U.S. federal income tax with respect to gain realized on a sale or other disposition of our common stock unless (a) the gain is effectively connected with a trade or business of such holder in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment that such holder maintains in the United States), (b) the Non-U.S. Holder is a nonresident alien individual and is present in the United States for 183 or more days in the taxable year of the disposition and certain other conditions are met, or (c) we are or have been a "United States real property holding corporation" within the meaning of Code Section 897(c)(2) at any time within the shorter of the five-year period preceding such disposition or such holder's holding period.

If you are a Non-U.S. Holder described in (a) above, you will be required to pay tax on the net gain derived from the sale at regular graduated U.S. federal income tax rates, unless a specific treaty exemption applies, and corporate Non-U.S. Holders described in (a) above may be subject to the additional branch profits tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. If you are an individual Non-U.S. Holder described in (b) above, you will be required to pay a flat 30% tax on the gain derived from the sale, which gain may be offset by U.S. source capital losses (even though you are not considered a resident of the United States). With respect to (c) above, in general, we would be a United States real property holding corporation if interests in U.S. real estate constituted (by fair market value) at least half of our assets. We believe that we are not, and do not anticipate becoming, a United States real property holding corporation, however, there can be no assurance that we will not become a U.S. real property holding corporation in the future. Even if we are treated as a U.S. real property holding corporation, gain realized by a Non-U.S. Holder on a disposition of our common stock will not be subject to U.S. federal income tax so long as (1) the Non-U.S. Holder owned, directly, indirectly and constructively, no more than five percent of our common stock at all times within the shorter of (i) the five-year period preceding the disposition or (ii) the holder's holding period and (2) our common stock is regularly traded on an established securities market. There can be no assurance that our common stock will continue to qualify as regularly traded on an established securities market.

Information Reporting Requirements and Backup Withholding

Generally, we or certain financial middlemen must report information to the IRS with respect to any dividends we pay on our common stock including the amount of any such dividends, the name and address of

the recipient, and the amount, if any, of tax withheld. A similar report is sent to the holder to whom any such dividends are paid. Pursuant to tax treaties or certain other agreements, the IRS may make its reports available to tax authorities in the recipient's country of residence.

Dividends paid by us (or our paying agents) to a Non-U.S. Holder may also be subject to U.S. backup withholding. U.S. backup withholding generally will not apply to a Non-U.S. Holder who provides a properly executed IRS Form W-8BEN or otherwise establishes an exemption.

Under current U.S. federal income tax law, U.S. information reporting and backup withholding requirements generally will apply to the proceeds of a disposition of our common stock effected by or through a U.S. office of any broker, U.S. or non-U.S., unless the holder provides a properly executed IRS Form W-8BEN or otherwise establishes an exemption. Generally, U.S. information reporting and backup withholding requirements will not apply to a payment of disposition proceeds to a Non-U.S. Holder where the transaction is effected outside the United States through a non-U.S. office of a non-U.S. broker. Information reporting and backup withholding requirements may, however, apply to a payment of disposition proceeds if the broker has actual knowledge, or reason to know, that the holder is, in fact, a U.S. person. For information reporting purposes, certain brokers with substantial U.S. ownership or operations will generally be treated in a manner similar to U.S. brokers.

If backup withholding is applied to you, you should consult with your own tax advisor to determine if you are able to obtain a tax refund or credit with respect to the amount withheld.

Foreign Accounts

A U.S. federal withholding tax of 30% may apply to dividends and the gross proceeds of a disposition of our common stock paid to a foreign financial institution (as specifically defined by applicable rules), including when the foreign financial institution holds our common stock on behalf of a Non-U.S. Holder, unless such institution enters into an agreement with the U.S. government to withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which includes certain equity holders of such institution, as well as certain account holders that are foreign entities with U.S. owners). This U.S. federal withholding tax of 30% will also apply to dividends and the gross proceeds of a disposition of our common stock paid to a non-financial foreign entity unless such entity provides the withholding agent with either a certification that it does not have any substantial direct or indirect U.S. owners or provides information regarding direct and indirect U.S. owners of the entity. The withholding tax described above will not apply if the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from the rules. Under certain circumstances, a Non-U.S. Holder might be eligible for refunds or credits of such taxes. Holders are encouraged to consult with their own tax advisors regarding the possible implications of the legislation on their investment in our common stock.

The withholding provisions described above will generally apply to payments of dividends made on or after January 1, 2014 and to payments of gross proceeds from a sale or other disposition of common stock on or after January 1, 2017.

Federal Estate Tax

An individual who at the time of death is not a citizen or resident of the United States and who is treated as the owner of, or has made certain lifetime transfers of, an interest in our common stock will be required to include the value thereof in his or her taxable estate for U.S. federal estate tax purposes, and may be subject to U.S. federal estate tax unless an applicable estate tax treaty provides otherwise. The test for whether an individual is a resident of the United States for federal estate tax purposes differs from the test used for U.S. federal income tax purposes. Some individuals, therefore, may be "Non-U.S. Holders" for U.S. federal income tax purposes, but not for U.S. federal estate tax purposes, and vice versa.

EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAW, AS WELL AS TAX CONSEQUENCES ARISING UNDER ANY STATE, LOCAL, NON-U.S. OR U.S. FEDERAL NON-INCOME TAX LAWS.

UNDERWRITERS

Under the terms and subject to the conditions in an underwriting agreement dated the date of this prospectus, the underwriters named below, for whom Morgan Stanley & Co. LLC and Cowen and Company, LLC are acting as representatives, have severally agreed to purchase, and we have agreed to sell to them, severally, the number of shares indicated below:

Name	Number of Shares
Morgan Stanley & Co. LLC	
Cowen and Company, LLC	
William Blair & Company, L.L.C.	
Lazard Capital Markets LLC	
Total:	

The underwriters and the representatives are collectively referred to as the "underwriters" and the "representatives," respectively. The underwriters are offering the shares of common stock subject to their acceptance of the shares from us and subject to prior sale. The underwriting agreement provides that the obligations of the several underwriters to pay for and accept delivery of the shares of common stock offered by this prospectus are subject to the approval of certain legal matters by their counsel and to certain other conditions. The underwriters are obligated to take and pay for all of the shares of common stock offered by this prospectus if any such shares are taken. However, the underwriters are not required to take or pay for the shares covered by the underwriters' over-allotment option described below.

The underwriters initially propose to offer part of the shares of common stock directly to the public at the offering price listed on the cover page of this prospectus and part to certain dealers at a price that represents a concession not in excess of $ a share under the public offering price. After the initial offering of the shares of common stock, the offering price and other selling terms may from time to time be varied by the representatives.

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase up to additional shares of common stock at the public offering price listed on the cover page of this prospectus, less underwriting discounts and commissions. The underwriters may exercise this option solely for the purpose of covering over-allotments, if any, made in connection with the offering of the shares of common stock offered by this prospectus. To the extent the option is exercised, each underwriter will become obligated, subject to certain conditions, to purchase about the same percentage of the additional shares of common stock as the number listed next to the underwriter's name in the preceding table bears to the total number of shares of common stock listed next to the names of all underwriters in the preceding table.

The following table shows the per share and total public offering price, underwriting discounts and commissions, and proceeds before expenses to us. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase up to an additional shares of common stock.

		Total	
	Per Share	No Exercise	Full Exercise
Public offering price	$	$	$
Underwriting discounts and commissions to be paid by us	$	$	$
Proceeds, before expenses, to us	$	$	$

The estimated offering expenses payable by us, exclusive of the underwriting discounts and commissions, are approximately $.

The underwriters have informed us that they do not intend sales to discretionary accounts to exceed 5% of the total number of shares of common stock offered by them.

We have applied to have our common stock quoted on the Nasdaq Global Market under the trading symbol CMRX.

We, all of our directors and officers, and the holders of all of our outstanding stock and stock options have agreed that, without the prior written consent of the representatives on behalf of the underwriters, we and they will not, during the period ending 180 days after the date of this prospectus (the restricted period):

- offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of, directly or indirectly, any shares of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock; or
- enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock,

whether any such transaction described above is to be settled by delivery of common stock or such other securities, in cash or otherwise. In addition, we have agreed that, without the prior written consent of the representatives on behalf of the underwriters, we will not, during the restricted period, file any registration statement with the SEC relating to the offering of any shares of common stock or any security convertible into or exercisable or exchangeable for common stock (other than on Form S-8 with respect to our equity incentive plans described in this prospectus), and such other person have agreed that they will not, during the restricted period, make any demand for, or exercise any right with respect to, the registration of, any shares of common stock or any security convertible into or exercisable or exchangeable for common stock.

The restrictions described in the immediately preceding paragraph to do not apply to:

- the sale of shares to the underwriters;
- the issuance by us of shares of our common stock or other securities convertible into or exercisable for shares of our common stock upon (i) the exercise of an option or warrant or the conversion of a security outstanding on the date of this prospectus, or (ii) in satisfaction of the accrued but unpaid dividends, if any, payable to holders of our Series F preferred stock outstanding on the date of this prospectus in connection with completion of this offering; *provided* that, prior to the issuance of any such shares of common stock within the restricted period, we cause each recipient of such shares to sign and deliver a lock-up letter substantially to the effect of the restrictions described in this and the immediately preceding paragraph (unless such recipient has previously executed and delivered a lock-up letter in such form);
- the issuance by us of shares of our common stock or other securities convertible into or exercisable for shares of our common stock pursuant to our equity incentive plans described in this prospectus; *provided* that, prior to the issuance of any such shares of common stock or other securities where the shares of common stock or other securities vest within the restricted period, we cause each recipient of such shares or other securities to sign and deliver a lock-up letter substantially to the effect of the restrictions described in this and the immediately preceding paragraph;
- (i) the entry into an agreement providing for the issuance by us of shares of our common stock or any security convertible into or exercisable for shares of our common stock in connection with the acquisition by us or any of our subsidiaries of the securities, business, or other assets of another person or entity or pursuant to an employee benefit plan assumed by us in connection with such acquisition, and the issuance of any such securities pursuant to any such agreement, and (ii) the entry into an agreement providing for the issuance of shares of Common Stock or any security convertible into or exercisable for shares of our common stock in connection with joint ventures, commercial relationships or other strategic transactions, and the issuance of any such securities pursuant to any such agreement; *provided* that the aggregate number of shares of common stock that we may sell or issue or agree to sell or issue, or that may be issuable upon conversion or exercise of all other securities that we may sell or issue or agree to sell or issue, pursuant to this bullet point shall not exceed 5% of the total number of shares of our common stock issued and outstanding immediately following the completion of this offering; and *provided further*, that each recipient of shares or other securities issued pursuant to this bullet point shall sign and deliver a lock-up letter substantially to the effect of the restrictions described in this and the immediately preceding paragraph, and we shall enter stop transfer instructions with the our transfer agent and registrar on

such shares or other securities, which we agree we will not waive or amend without the prior written consent of the representatives;

- transfers by a director, officer or stockholder of shares of common stock or any security convertible into common stock as a bona fide gift, by will or intestate succession, or to any trust for the direct or indirect benefit of such director, officer or stockholder and/or their immediate family, or distributions by a stockholder of shares of common stock or any security convertible into common stock to partners, members, stockholders or holders of similar equity interests in such stockholder; *provided* that in the case of any such transfer or distribution, (i) each done, transferee or distributee shall sign and deliver a lock-up letter substantially to the effect of the restrictions described in this and the immediately preceding paragraph, and (ii) no filing under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of shares of common stock, shall be required or shall be voluntarily made during the restricted period;
- transactions by a director, officer or stockholder relating to shares of our common stock acquired in open market transactions after the completion of this offering; *provided* that no filing under Section 16(a) of the Exchange Act shall be required or shall be voluntarily made in connection with subsequent dispositions of our common stock acquired in such open market transactions during the restricted period;
- the establishment by a director, officer or stockholder of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of our common stock; *provided* that such plan does not provide for the transfer of shares of our common stock during the restricted period and no public announcement or filing under the Exchange Act regarding the establishment of such plan shall be required or shall be voluntarily made by or on behalf of such director, officer or stockholder or us during the restricted period; or
- transfers by a director, officer or stockholder to us of shares of our common stock or other securities convertible into or exercisable or exchangeable for our common stock (i) upon a vesting event of our securities or the exercise of options issued pursuant to the our equity incentive plans in full or partial payment of taxes or tax withholding obligations required to be paid or satisfied upon such vesting or exercise, or (ii) in exercise of our right to repurchase or reacquire the securities of such director, officer or stockholder pursuant to agreements that permit us to repurchase or reacquire such securities upon termination of the services of such director, officer or stockholder to us; *provided* that in the case of any transfer pursuant to this bullet point, no filing under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of shares of our common stock, shall be required or shall be voluntarily made during the restricted period.

The representatives, in their sole discretion, may release the common stock and other securities subject to the lock-up agreements described above in whole or in part at any time.

In order to facilitate the offering of the common stock, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock. Specifically, the underwriters may sell more shares than they are obligated to purchase under the underwriting agreement, creating a short position. A short sale is covered if the short position is no greater than the number of shares available for purchase by the underwriters under the over-allotment option. The underwriters can close out a covered short sale by exercising the over-allotment option or purchasing shares in the open market. In determining the source of shares to close out a covered short sale, the underwriters will consider, among other things, the open market price of shares compared to the price available under the over-allotment option. The underwriters may also sell shares in excess of the over-allotment option, creating a naked short position. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in this offering. As an additional means of facilitating this offering, the underwriters may bid for, and purchase, shares of common stock in the open market to stabilize the price of the common stock. These activities may raise or maintain the

market price of the common stock above independent market levels or prevent or retard a decline in the market price of the common stock. The underwriters are not required to engage in these activities and may end any of these activities at any time.

We and the underwriters have agreed to indemnify each other against certain liabilities, including liabilities under the Securities Act.

A prospectus in electronic format may be made available on websites maintained by one or more underwriters, or selling group members, if any, participating in this offering. The representatives may agree to allocate a number of shares of common stock to underwriters for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters that may make Internet distributions on the same basis as other allocations.

Other Relationships

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. Certain of the underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various financial advisory and investment banking services for us, for which they received or will receive customary fees and expenses.

Lazard Frères & Co. LLC referred this transaction to Lazard Capital Markets LLC and will receive a referral fee from Lazard Capital Markets LLC in connection therewith.

In addition, in the ordinary course of their various business activities, the underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve our securities and instruments. The underwriters and their respective affiliates may also make investment recommendations or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long or short positions in such securities and instruments.

Pricing of the Offering

Prior to this offering, there has been no public market for our common stock. The initial public offering price was determined by negotiations between us and the representatives. Among the factors considered in determining the initial public offering price were our future prospects and those of our industry in general, our sales, earnings and certain other financial and operating information in recent periods, and the price-earnings ratios, price-sales ratios, market prices of securities, and certain financial and operating information of companies engaged in activities similar to ours. Neither we nor the underwriters can assure investors that an active trading market for the shares will develop, or that after the offering the shares will trade in the public market at or above the initial public offering price.

Selling Restrictions

European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a Relevant Member State) an offer to the public of any shares of our common stock may not be made in that Relevant Member State, except that an offer to the public in that Relevant Member State of any shares of our common stock may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

(a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;

(b) to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the representatives for any such offer; or

(c) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of shares of our common stock shall result in a requirement for the publication by us or any underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares of our common stock in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares of our common stock to be offered so as to enable an investor to decide to purchase any shares of our common stock, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression "Prospectus Directive" means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State), and includes any relevant implementing measure in the Relevant Member State, and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

United Kingdom

Each underwriter has represented and agreed that:

(a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received by it in connection with the issue or sale of the shares of our common stock in circumstances in which Section 21(1) of the FSMA does not apply to us; and

(b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares of our common stock in, from or otherwise involving the United Kingdom.

LEGAL MATTERS

The validity of the shares of common stock being offered by this prospectus will be passed upon for us by Cooley LLP, San Diego, California. The underwriters are being represented by Davis Polk & Wardwell LLP, New York, New York.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our financial statements at December 31, 2011 and 2010, and for each of the three years in the period ended December 31, 2011, as set forth in their report. We have included our financial statements in the prospectus and elsewhere in the registration statement in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1, including exhibits and schedules, under the Securities Act, with respect to the shares of common stock being offered by this prospectus. This prospectus, which constitutes part of the registration statement, does not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the common stock offered by this prospectus, we refer you to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

You can read our SEC filings, including the registration statement, over the Internet at the SEC's website at *www.sec.gov*. You may also read and copy any document we file with the SEC at its public reference facilities at 100 F Street, NE, Washington, D.C. 20549. You may also obtain copies of these documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities. You may also request a copy of these filings, at no cost, by writing us at 2505 Meridian Parkway, Suite 340, Durham, North Carolina 27713 or telephoning us at (919) 806-1074.

Upon the closing of this offering, we will be subject to the information reporting requirements of the Exchange Act, and we will file reports, proxy statements and other information with the SEC. These reports, proxy statements and other information will be available for inspection and copying at the public reference room and web site of the SEC referred to above. We also maintain a website at *www.chimerix.com*, at which, following the closing of this offering, you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on or accessible through our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is an inactive textual reference only.

INDEX TO FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders
Chimerix, Inc.

We have audited the accompanying balance sheets of Chimerix, Inc. as of December 31, 2011 and 2010 and the related statements of operations and comprehensive loss, redeemable convertible preferred stock and stockholders' deficit and cash flows for the three years in the period ended December 31, 2011. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Chimerix, Inc. at December 31, 2011 and 2010 and the results of its operations and its cash flows for the three years in the period ended December 31, 2011, in conformity with U.S. generally accepted accounting principles.

/s/ Ernst & Young LLP

Raleigh, North Carolina
January 30, 2013

Chimerix, Inc.

Balance Sheets
(in thousands, except share and per share data)

	December 31,		September 30,	Pro Forma Stockholders' Equity at September 30, 2012
	2010	2011	2012	
			(unaudited)	
Assets				
Current assets:				
Cash and cash equivalents	$ 3,306	$ 13,607	$ 34,462	$
Short-term investments, available-for-sale	—	5,918	—	
Accounts receivable	—	4,187	1,032	
Prepaid and other current assets	612	1,048	877	
Note receivable from officer	125	—	—	
Deferred financing costs, current portion	51	64	32	
Total current assets	4,094	24,824	36,403	
Property and equipment, net of accumulated depreciation	510	561	471	
Deposits	16	22	22	
Deferred financing costs, less current portion	63	25	56	
Total assets	$ 4,683	$ 25,432	$ 36,952	$
Liabilities, redeemable convertible preferred stock and stockholders' deficit				
Current liabilities:				
Accounts payable	$ 2,017	$ 4,120	$ 2,865	$
Accrued liabilities	2,572	2,534	696	
Loan payable, current portion	1,965	160	3,281	
Total current liabilities	6,554	6,814	6,842	
Other long-term liabilities	4	—	337	
Loan payable, less current portion	2,601	2,441	11,284	
Redeemable convertible preferred stock warrant liability	—	6,491	7,738	
Total liabilities	9,159	15,746	26,201	
Redeemable convertible preferred stock	55,131	103,366	106,066	
Stockholders' deficit:				
Common stock, $0.001 par value; 45,000,000 shares authorized at December 31, 2010 and 89,700,000 shares authorized at December 31, 2011 and September 30, 2012 (unaudited); 5,212,065, 5,387,065 and 5,438,065 shares issued and outstanding at December 31, 2010, December 31, 2011 and September 30, 2012, respectively and shares issued and outstanding pro forma (unaudited)	5	5	5	
Additional paid-in capital	1,892	—	—	
Accumulated other comprehensive loss	—	(4)	—	
Accumulated deficit	(61,504)	(93,681)	(95,320)	
Total stockholders' deficit	(59,607)	(93,680)	(95,315)	
Total liabilities, redeemable convertible preferred stock and stockholders' deficit	$ 4,683	$ 25,432	$ 36,952	$

See accompanying notes.

Chimerix, Inc.

Statements of Operations and Comprehensive Loss
(in thousands, except per share data)

	Year Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
				(unaudited)	
Revenues:					
Collaboration and licensing revenue	$ —	$ —	$ 55	$ —	$ 17,445
Contract and grant revenue	7,810	1,715	12,046	6,746	12,694
Total revenues	7,810	1,715	12,101	6,746	30,139
Operating expenses:					
Research and development	14,617	19,413	27,369	20,016	21,713
General and administrative	6,694	7,606	9,724	7,488	7,066
	21,311	27,019	37,093	27,504	28,779
Income (loss) from operations	(13,501)	(25,304)	(24,992)	(20,758)	1,360
Other (expense) income:					
Interest expense, net	136	(154)	(212)	(133)	(367)
Fair value adjustments to warrant liability	—	—	(385)	(275)	(1,073)
Other income	25	1	—	—	—
Net loss	(13,340)	(25,457)	(25,589)	(21,166)	(80)
Other comprehensive loss:					
Unrealized gain (loss) on securities available-for-sale	(78)	—	(4)	(13)	4
Comprehensive loss	$ (13,418)	$ (25,457)	$ (25,593)	$ (21,179)	$ (76)
Net loss	$ (13,340)	$ (25,457)	$ (25,589)	$ (21,166)	$ (80)
Accretion of redeemable convertible preferred stock	—	—	(9,565)	(8,658)	(2,700)
Net loss attributable to common stockholders	$ (13,340)	$ (25,457)	$ (35,154)	$ (29,824)	$ (2,780)
Per share information:					
Net loss, basic and diluted	$ (2.71)	$ (4.94)	$ (6.62)	$ (5.61)	$ (0.51)
Weighted-average shares outstanding, basic and diluted	4,916	5,158	5,312	5,312	5,403
Pro forma net loss, basic and diluted (unaudited)			$		$
Weighted-average pro forma shares outstanding, basic and diluted (unaudited)					

See accompanying notes.

Chimerix, Inc.

Statements of Redeemable Convertible Preferred Stock and Stockholders' Deficit
(in thousands)

	Redeemable Convertible Preferred Stock	Common Stock	Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Deficit
Balance, December 31, 2008	$ 39,058	$ 5	$ 551	$ 78	$ (22,707)	$ (22,073)
Share-based compensation	—	—	431	—	—	431
Exercise of stock options	—	—	132	—	—	132
Issuance of redeemable convertible preferred stock	16,073	—	—	—	—	—
Comprehensive loss:						
Reversal of previously unrecognized gain on investments	—	—	—	(78)	—	(78)
Net loss	—	—	—	—	(13,340)	(13,340)
Total comprehensive loss						(13,418)
Balance, December 31, 2009	55,131	5	1,114	—	(36,047)	(34,928)
Share-based compensation	—	—	753	—	—	753
Exercise of stock options	—	—	25	—	—	25
Comprehensive loss:						
Net loss	—	—	—	—	(25,457)	(25,457)
Total comprehensive loss						(25,457)
Balance, December 31, 2010	55,131	5	1,892	—	(61,504)	(59,607)
Share-based compensation	—	—	966	—	—	966
Issuance of redeemable convertible preferred stock	38,670	—	—	—	—	—
Issuance of common stock	—	—	89	—	—	89
Exercise of stock options	—	—	30	—	—	30
Dividends on redeemable preferred stock	3,235	—	(2,977)	—	(258)	(3,235)
Adjustment of redeemable preferred stock to redemption value	6,330	—	—	—	(6,330)	(6,330)
Comprehensive loss:						
Unrealized loss on investments, net	—	—	—	(4)	—	(4)
Net loss	—	—	—	—	(25,589)	(25,589)
Total comprehensive loss						(25,593)
Balance, December 31, 2011	103,366	5	—	(4)	(93,681)	(93,680)
Share-based compensation	—	—	1,133	—	—	1,133
Exercise of stock options	—	—	8	—	—	8
Dividends on redeemable preferred stock	2,700	—	(1,141)	—	(1,559)	(2,700)
Comprehensive loss:						
Unrealized loss on investments, net	—	—	—	4	—	4
Net loss	—	—	—	—	(80)	(80)
Total comprehensive loss						(76)
Balance, September 30, 2012 (unaudited)	$ 106,066	$ 5	$ —	$ —	$ (95,320)	$ (95,315)

See accompanying notes.

Chimerix, Inc.

Statements of Cash Flows
(in thousands)

	Year Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
				(unaudited)	
Operating activities					
Net loss	$ (13,340)	$ (25,457)	$ (25,589)	$ (21,166)	$ (80)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:					
Depreciation	178	213	270	194	210
Non-cash interest expense	—	38	50	38	175
Amortization/accretion of premium/discount on investments	(2)	119	118	64	29
Share-based compensation costs	431	753	1,055	833	1,133
Deferred lease obligation	(5)	(19)	(4)	(4)	—
Fair value measurement of redeemable convertible preferred stock warrant liability	—	—	385	275	1,073
Net change in:					
Accounts receivable	1,249	937	(4,187)	(488)	3,155
Prepaid and other current assets and deposits	(648)	181	(442)	(136)	171
Accounts payable and accrued liabilities	(58)	1,554	2,065	783	(3,093)
Net cash (used in) provided by operating activities	(12,195)	(21,681)	(26,279)	(19,607)	2,773
Investing activities					
Purchase of property and equipment	(226)	(117)	(321)	(286)	(120)
Purchase of short-term investments	(3,916)	(12,094)	(13,640)	(12,852)	—
Sales of short-term investments	3,066	2,925	500	—	—
Maturities of short-term investments	11,650	9,050	7,100	—	5,893
(Issuance) repayment of loan to officer	(125)	—	125	125	—
Net cash (used in) provided by investing activities	10,449	(236)	(6,236)	(13,013)	5,773
Financing activities					
Proceeds from issuance of redeemable convertible preferred stock and warrants	16,145	—	45,000	45,000	—
Proceeds from exercise of stock options	132	25	30	—	8
Proceeds from loan payable	—	6,000	—	—	15,000
Debt discount	—	—	—	—	(75)
Repayment of loan payable	—	(1,434)	(1,965)	(1,465)	(2,600)
Stock offering and deferred financing costs	(90)	12	(249)	(224)	(24)
Net cash provided by financing activities	16,187	4,603	42,816	43,311	12,309
Increase (decrease) in cash and cash equivalents	14,441	(17,314)	10,301	10,691	20,855
Cash and cash equivalents:					
Beginning of period	6,179	20,620	3,306	3,306	13,607
End of period	$ 20,620	$ 3,306	$ 13,607	$ 13,997	$ 34,462
Supplemental schedule of cash flow information					
Interest payments	$ —	$ 180	$ 186	$ 149	$ 170

See accompanying notes.

Chimerix, Inc.

Notes to Financial Statements

1. Description of Business

Chimerix, Inc. (the Company) is a biopharmaceutical company committed to the discovery, development and commercialization of novel, oral antiviral therapeutics that are designed to transform patient care in areas of high unmet medical need. The Company's proprietary lipid technology has given rise to two clinical-stage compounds, CMX001 and CMX157, which have demonstrated the potential for enhanced antiviral activity and safety inconvenient, orally administered dosing regimens. The Company has worldwide rights to its lead product candidate, CMX001, and anticipates beginning the Phase 3 SUPPRESS study in 2013 for the prevention of cytomegalovirus infection in hematopoietic stem cell transplant recipients. The Company intends to develop CMX001 as the first broad-spectrum antiviral against double-stranded DNA viruses. The Company's second clinical-stage compound, CMX157, is a Phase 1 product candidate for the treatment of HIV and was licensed to Merck, Sharp & Dohme Corp. (Merck) in 2012.

To date, the Company has derived its revenue from the United States government, principally grants from the National Institute of Allergy and Infectious Diseases (NIAID) and a contract with the Biomedical Advanced Research and Development Authority (BARDA), and pursuant to the license agreement it entered with Merck in July 2012. See Note 11 for further discussion of these arrangements.

The accompanying financial statements for the nine months ended September 30, 2011 and 2012 (unaudited) and the years ended December 31, 2009, 2010 and 2011 have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business for the foreseeable future. Since inception in 2000, the Company has not been profitable and has incurred operating losses in each year. The Company has not generated revenue from any product sales to date and will continue to incur significant research and development and other expenses related to its ongoing operations. The Company has funded its operations primarily through the sale and issuance of preferred stock, loans with third parties, grant and contract awards from the United States government and amounts received pursuant to a license agreement with Merck. Net working capital at December 31, 2011 and September 30, 2012 (unaudited), was $18.0 million and $29.6 million, respectively. The Company expects to continue to incur losses for the foreseeable future. At September 30, 2012 (unaudited), the Company had capital resources consisting of cash and cash equivalents of $34.5 million.

2. Significant Accounting Policies

Basis of Presentation

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP).

Unaudited Interim Financial Data

The accompanying balance sheet as of September 30, 2012, statements of operations and comprehensive loss and of cash flows for the nine months ended September 30, 2011 and 2012, and the statements of redeemable convertible preferred stock and stockholders' deficit for the nine months ended September 30, 2012 are unaudited. The unaudited interim financial statements have been prepared on a basis consistent with the audited financial statements and, in the opinion of management, reflect all adjustments (consisting of normal recurring adjustments) considered necessary to state fairly the Company's financial position as of September 30, 2012 and the results of operations and cash flows for the nine months ended September 30, 2011 and 2012. The financial data and other information disclosed in these notes to the financial statements related to the nine-month periods ended September 30, 2011 and 2012 are unaudited. The results for the nine months ended September 30, 2012 are not necessarily indicative of the results to be expected for the year ending December 31, 2012 or for any other interim period.

Unaudited Pro Forma Stockholders' Equity (Deficit)

Immediately prior to the consummation of this offering, all of the Company's redeemable convertible preferred stock will automatically convert into common stock at the applicable conversion ratio then in effect. In addition, immediately prior to the consummation of this offering, the Company will issue shares of

Chimerix, Inc.

Notes to Financial Statements

2. Significant Accounting Policies – (continued)

common stock to its holders of Series F preferred stock in respect of the accumulated dividends on the Company's Series F preferred stock through to the closing date of this offering. Unaudited pro forma stockholders' equity assumes the conversion of all preferred stock into shares of common stock, the issuance of common stock in respect of the accumulated dividends on the Company's Series F preferred stock, and the conversion of all outstanding warrants exercisable for shares of preferred stock into warrants exercisable for a corresponding number of shares of common stock, resulting in the preferred stock warrant liability being reclassified to additional paid-in capital. The unaudited pro forma loss per share of common stock for the year ended December 31, 2011, and the nine months ended September 30, 2012, was computed using the weighted-average number of shares of common stock outstanding, including the pro forma effect of the conversion of all outstanding convertible preferred stock into shares of common stock and the issuance of shares of common stock in respect of the accumulated dividends on the Company's Series F preferred stock as if such conversion and issuance had occurred at the beginning of the respective period.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Segment Reporting

The Company operates in only one segment. The chief operating decision-maker and management use cash flows as the primary measure to manage the business and do not segment the business for internal reporting or decision making.

Cash and Cash Equivalents

The Company considers any highly liquid instrument with an original maturity of three months or less at acquisition to be a cash equivalent. Cash equivalents consist of money market accounts.

Investments

Investments consist primarily of corporate bonds and commercial paper. The Company invests in high-credit quality investments in accordance with its investment policy which minimizes the possibility of loss.

Available-for-sale securities are carried at fair value as determined by quoted market prices, with the unrealized gains and losses, net of tax, reported as a separate component of stockholders' deficit. Realized gains and losses are determined using the specific identification method and transactions are recorded on a settlement date basis in interest income or expense, net. Investments with original maturities beyond three months at date of purchase and which mature at, or less than twelve months from, the balance sheet date are classified as current. Investments with a maturity beyond twelve months from the balance sheet date are classified as long-term. The Company periodically reviews available-for-sale securities for other-than temporary declines in fair value below the cost basis, and whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Any such declines in value judged to be other-than-temporary on available-for-sale securities are reported in interest income or expense, net. There were no such declines in value for the nine months ended September 30, 2011 and 2012 (unaudited) and the years ended December 31, 2009, 2010 and 2011.

Chimerix, Inc.

Notes to Financial Statements

2. Significant Accounting Policies – (continued)

Accounts Receivable

Accounts receivable at December 31, 2011, and at September 30, 2012 (unaudited), consisted of amounts billed and unbilled under the Company's contract with BARDA. Receivables under the BARDA contract are recorded as qualifying research activities are conducted and invoices from the Company's vendors are received. The Company carries its accounts receivable at cost less an allowance for doubtful accounts. On a periodic basis, the Company evaluates its accounts receivable and establishes an allowance based on its history of collections and write-offs and the current status of all receivables. The Company does not accrue interest on trade receivables. If accounts become uncollectible, they will be written off through a charge to the allowance for doubtful accounts. The Company has not recorded an allowance for doubtful contract receivable as management believes all receivables are fully collectible.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist of cash, cash equivalents, short-term investments and accounts receivable. The Company is exposed to credit risk, subject to federal deposit insurance, in the event of default by the financial institutions holding its cash and cash equivalents to the extent of amounts recorded on the balance sheets. Accounts receivable represent amounts due from an agency of the federal government.

Fair Value of Financial Instruments

The carrying amounts of certain of the Company's financial instruments, including accounts receivable, notes receivable, accounts payable and accrued expenses approximate their fair values due to the short-term nature of such instruments. The carrying amount of borrowings under the Company's loan payable approximates its fair value based on the determination that the stated rate on such loan payable is consistent with current interest rates for similar borrowing arrangements available to the Company.

For assets and liabilities recorded at fair value, it is the Company's policy to maximize the use of observable inputs and minimize the use of unobservable inputs when developing fair value measurements, in accordance with the fair value hierarchy. Fair value measurements for assets and liabilities where there exists limited or no observable market data are based primarily upon estimates, are often calculated based on the economic and competitive environment, the characteristics of the asset or liability and other factors. Therefore, fair value measurements cannot be determined with precision and may not be realized in an actual sale or immediate settlement of the asset or liability. Additionally, there may be inherent weaknesses in any calculation technique, and changes in the underlying assumptions used, including discount rates and estimates of future cash flows, could significantly affect the calculated current or future fair values. The Company utilizes fair value measurements to record fair value adjustments to certain assets and liabilities and to determine fair value disclosures.

The Company groups assets and liabilities at fair value in three levels, based on the markets in which the assets and liabilities are traded and the reliability of the assumptions used to determine fair value. An adjustment to the pricing method used within either Level 1 or Level 2 inputs could generate a fair value measurement that effectively falls in a lower level in the hierarchy. These levels are:

- Level 1 — Valuations based on unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access.
- Level 2 — Valuations based on quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, and models for which all significant inputs are observable, either directly or indirectly.
- Level 3 — Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

Chimerix, Inc.

Notes to Financial Statements

2. Significant Accounting Policies – (continued)

The determination of where an asset or liability falls in the hierarchy requires significant judgment. The Company evaluates its hierarchy disclosures and, based on various factors, it is possible that an asset or liability may be classified differently from period to period. However, the Company expects changes in classification between levels will be rare.

The Company has cash equivalents consisting of money market accounts and commercial paper whose value is based on using quoted market prices. Accordingly, these securities are classified as Level 1. At September 30, 2012, and December 31, 2011, the Company had short-term investments, comprised of corporate bonds and commercial paper, for which quoted prices are not available that were valued using independent pricing models or other model-based valuation techniques such as the present value of future cash flows, adjusted for the security's credit rating, prepayment assumptions and other factors such as credit loss assumptions. Accordingly, these securities are classified as Level 2.

The warrants issued for Series F redeemable convertible preferred stock are categorized as Level 3 as there are significant unobservable inputs. The valuation of the warrants reflects a two stage process. Using a contingent claims model in combination with the Company's Series F financing which occurred in February 2011, the fair value of total equity and all components of the Company's capital structure, including the warrants, is determined as of the time of the financing event. Using this value as a starting point, a series of equity values and associated probabilities are calculated using simulation methodologies that incorporate both Monte Carlo and risk neutral frameworks. Based on assessments of expected returns and volatilities consistent with market practice, a distribution of equity values was produced which covered the range of values that an informed market participant might expect. These outcomes were organized into ranges and a probability calculated based on the percent of the total falling into each range. This process created a range of equity values. Using a contingent claims framework, each equity value is allocated to the various components of the capital structure including the warrants. Each warrant value is weighted by its respective probability to determine the final fair value of the warrants as of September 30, 2012, and December 31, 2011. The key unobservable inputs used in the determination of the September 30, 2012 fair value are (i) volatility – 78%, (ii) range of implied fair value of the Series F redeemable convertible preferred stock – $2.15 to $2.88, (iii) time to liquidity – 8 months to 5 years, and (iv) range of probabilities of liquidity event outcomes – 4% to 32%.

There was no material remeasurement to fair value of financial assets and liabilities that are not measured at fair value on a recurring basis.

Below is a table that presents information about certain assets and liabilities measured at fair value on a recurring basis:

		Fair Value Measurements at December 31, 2011		
	December 31, 2011	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
		(In thousands)		
Cash equivalents	$ 9,326	$ 9,326	$ —	$ —
Short-term investments	5,918	—	5,918	—
Redeemable convertible preferred stock warrant liability	6,491	—	—	6,491

Chimerix, Inc.

Notes to Financial Statements

2. Significant Accounting Policies – (continued)

	September 30, 2012	Fair Value Measurements at September 30, 2012 (unaudited)		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	(unaudited)	(in thousands)		
Cash equivalents	$ 27,650	$ 27,650	$ —	$ —
Redeemable convertible preferred stock warrant liability	7,738	—	—	7,738

At December 31, 2010, the Company's assets valued at fair value consisted of $0.1 million in cash equivalents that were considered Level 1.

Below is a table that presents a reconciliation of the beginning and ending balances of liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3):

	Fair Value Measurements (Level 3)
	(in thousands)
Redeemable Convertible Preferred Stock Warrant Liability	
Balance at January 1, 2011	$ —
Issuance	6,106
Fair value increase recorded in other income (expense)	385
Fair value at December 31, 2011	6,491
Issuance	174
Fair value increase recorded in other income (expense)	1,073
Fair value at September 30, 2012 (unaudited)	$ 7,738

Prepaid and Other Current Assets

Prepaid and other current assets consist of the following:

	December 31,		September 30,
	2010	2011	2012
		(in thousands)	(unaudited)
Prepaid development expenses	$ 443	$ 816	$ 751
Other prepaid and other current assets	169	232	126
	$ 612	$ 1,048	$ 877

Property and Equipment

Property and equipment are stated at cost, less accumulated depreciation. Depreciation is determined on a straight-line basis over the estimated useful lives of the assets, which generally range from three to five years. Leasehold improvements are amortized over the shorter of the useful life of the asset or the term of the related lease. Maintenance and repairs are charged against expense as incurred.

Chimerix, Inc.

Notes to Financial Statements

2. Significant Accounting Policies – (continued)

Impairment of Long-lived Assets

The Company evaluates long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. If the estimated future cash flows (undiscounted and without interest charges) from the use of an asset are less than the carrying value, a write-down would be recorded to reduce the related asset to its estimated fair value. To date, no such write-downs have occurred.

Deferred Rent

The Company recognizes rent expense on a straight-line basis over the non-cancelable term of its operating lease and records the difference between cash rent payments and the recognition of rent expense as a deferred rent liability. The Company also records landlord-funded lease incentives, such as reimbursable leasehold improvements, as a deferred rent liability, which is amortized as a reduction of rent expense over the non-cancelable term of its operating lease.

Accrued Liabilities

Accrued liabilities consist of the following:

	December 31,		September 30,
	2010	2011	2012
		(in thousands)	
			(unaudited)
Accrued compensation	$ 951	$ 693	$ 393
Accrued development expenses	1,307	1,459	—
Other accrued liabilities	314	382	303
	$ 2,572	$ 2,534	$ 696

Redeemable Convertible Preferred Stock Warrant Liability

Freestanding warrants for shares that are either putable or redeemable are classified as liabilities on the balance sheet at fair value. As further discussed in Note 7, the preferred stock underlying the warrants is redeemable in certain circumstances, and as such the freestanding warrants that are related to the purchase of the Company's Series F preferred stock are liabilities that should be recorded at the estimated fair value. At the end of each reporting period, changes in the estimated fair value during the period are recorded in other income.

Redeemable Convertible Preferred Stock

The Company classifies its redeemable convertible preferred stock, for which the Company does not control the redemption, outside of permanent equity. The Company records redeemable convertible preferred stock at fair value upon issuance, net of any offering costs, and the carrying value is adjusted to the redemption value at the end of each reporting period. These adjustments are effected through charges against additional paid-in capital and accumulated deficit.

Revenue Recognition

The Company's revenues consist of (i) contract and grant revenues – revenues generated under federal contracts and other awarded grants, and (ii) collaboration and licensing revenues – revenues related to up-front, non-refundable fees earned under license agreements. Revenue is recognized when all four of the following criteria are met: (1) persuasive evidence that an arrangement exists; (2) delivery of the products and/or services has occurred; (3) the selling price is fixed or determinable; and (4) collectability is reasonably assured.

Chimerix, Inc.

Notes to Financial Statements

2. Significant Accounting Policies – (continued)

For arrangements that involve the delivery of more than one element, each product, service and/or right to use assets is evaluated to determine whether it qualifies as a separate unit of accounting. This determination is based on whether the deliverable has "stand-alone value" to the customer. The consideration that is fixed or determinable is then allocated to each separate unit of accounting based on the relative selling prices of each deliverable. The consideration allocated to each unit of accounting is recognized as the related goods and services are delivered, limited to the consideration that is not contingent upon future deliverables. If the arrangement constitutes a single unit of accounting, the revenue recognition policy must be determined for the entire arrangement and the consideration received is recognized over the period of inception through the date the last deliverable within the single unit of accounting is expected to be delivered. Revisions to the estimated period of recognition are reflected in revenue prospectively.

Non-refundable upfront fees are recorded as deferred revenue and recognized into revenue as license fees from collaborations on a straight-line basis over the estimated period of the Company's substantive performance obligations. If the Company does not have substantive performance obligations, it recognizes non-refundable upfront fees into revenue through the date the deliverable is satisfied. Analyzing the arrangement to identify deliverables requires the use of judgment, and each deliverable may be an obligation to deliver services, a right or license to use an asset, or another performance obligation.

Milestone payments are recognized when earned, provided that (i) the milestone event is substantive; (ii) there is no ongoing performance obligation related to the achievement of the milestone earned; and (iii) it would result in additional payments. Milestone payments are considered substantive if all of the following conditions are met: the milestone payment is non-refundable; achievement of the milestone was not reasonably assured at the inception of the arrangement; substantive effort is involved to achieve the milestone; and the amount of the milestone appears reasonable in relation to the effort expended, the other milestones in the arrangement; and the related risk associated with the achievement of the milestone. Contingent based event payments the Company may receive under a license or collaboration agreement will be recognized when received.

For the years ended December 31, 2010 and 2009, grant revenue was derived from research grants with the NIAID. In the year ended December 31, 2011 and the nine months ended September 30, 2012 (unaudited), contract revenue consisted of revenue from the BARDA contract. The Company recognizes contract and grant revenue as qualifying research activities are conducted based on invoices received from the Company's vendors. Changes in fringe and indirect rates are recognized as a change in estimate in the period such rate changes are approved by BARDA.

Clinical Trial Accruals

As part of the process of preparing financial statements, the Company is required to estimate its expenses resulting from its obligation under contracts with vendors and consultants and clinical site agreements in connection with conducting clinical trials. The financial terms of these contracts are subject to negotiations which vary contract to contract and may result in payment flows that do not match the periods over which materials or services are provided to the Company under such contracts. The Company's objective is to reflect the appropriate clinical trial expenses in its financial statements by matching those expenses with the period in which services and efforts are expended. The Company accounts for these expenses according to the progress of the trial as measured by patient progression and the timing of various aspects of the trial. The Company determines accrual estimates through discussion with applicable personnel and outside service providers as to the progress or state of communication of trials, or the services completed. During the course of a clinical trial, the Company adjusts its rate of clinical trial expense recognition if actual results differ from its estimates. The Company makes estimates of its accrued expenses as of each balance sheet date in its financial statements based on facts and circumstances known at that time. Although the Company does not expect its estimates to be materially different from amounts actually incurred, its understanding of status and timing of services performed relative to the actual status and timing of services performed may vary and may result in

Chimerix, Inc.

Notes to Financial Statements

2. Significant Accounting Policies – (continued)

the Company reporting amounts that are too high or too low for any particular period. Through September 30, 2012, there had been no material adjustments to the Company's prior period estimates of accrued expenses for clinical trials. The Company's clinical trial accrual is dependent upon the timely and accurate reporting of contract research organizations and other third-party vendors.

Research and Development

Major components of research and development (R&D) costs include cash compensation, stock based compensation, pre-clinical studies, clinical trial and related clinical manufacturing, drug development, materials and supplies, and fees paid to consultants and other entities that conduct certain research and development activities of the Company's behalf. R&D costs, including upfront fees and milestones paid to contract research organizations, are expensed as goods as received or services rendered. Costs incurred in connection with clinical trial activities for which the underlying nature of the activities themselves do not directly relate to active research and development, such as costs incurred for market research and focus groups linked to clinical strategy as well as costs to build the Company's brand, are not included in R&D costs but are reflected as general and administrative costs.

Interest Expense, Net

Interest expense, net includes interest earned on short-term investments, interest incurred on loans payable, the amortization of deferred financing costs related to fees paid to attorneys and other non-lender entities in order to acquire debt, and the amortization of debt discount related to fees paid to the lender in order to acquire debt.

Income Taxes

Deferred tax assets and liabilities are determined based on differences between the financial and tax reporting bases of assets and liabilities and are measured using enacted tax rates and laws that are expected to be in effect when the differences are expected to reverse. Valuation allowances are established when the Company determines that it is more likely than not that some portion of a deferred tax asset will not be realized. The Company has incurred operating losses from April 7, 2000 (inception) through September 30, 2012 (unaudited), and therefore has not recorded any current provision for income taxes.

Additionally, the Company recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position. The tax benefit recognized in the financial statements for a particular tax position is based on the largest benefit that is more likely than not to be realized upon settlement. Accordingly, the Company establishes reserves for uncertain tax positions.

Share-Based Compensation

The Company measures and recognizes compensation expense for all share-based payment awards made to employees and directors, including employee stock options, based on estimated fair values. The fair value of share-based awards is estimated on the grant date using the Black-Scholes valuation model. The value of the portion of the award that is ultimately expected to vest is recorded as expense over the requisite service periods.

The Company also accounts for equity instruments issued to non-employees using a fair value approach. The Company values equity instruments, stock options and warrants granted to lenders and consultants using the Black-Scholes valuation model. The measurement of non-employee share-based compensation is subject to periodic adjustments as the underlying equity instruments vest and is recognized as an expense over the term of the related financing or the period over which services are received.

Basic and Dilutive Net Loss per Share of Common Stock

Basic net loss per share of common stock is computed by dividing net loss by the weighted-average number of shares of common stock outstanding during the period, excluding the dilutive effects converting

Chimerix, Inc.

Notes to Financial Statements

2. Significant Accounting Policies – (continued)

redeemable preferred stock, warrants to purchase redeemable convertible preferred stock, restricted stock and options. Diluted net loss per share of common stock is computed by dividing the net loss by the sum of the weighted-average number of shares of common stock outstanding during the period plus the potential dilutive effects of redeemable convertible preferred stock and warrants to purchase redeemable convertible preferred stock, and options outstanding during the period calculated in accordance with the treasury stock method, but are excluded if their effect is anti-dilutive. Because the impact of these items is anti-dilutive during the periods of net loss, there was no difference between basic and diluted loss per share of common stock at December 31, 2009, 2010, and 2011 and September 30, 2011 and 2012 (unaudited).

The calculation of weighted-average diluted shares outstanding excludes the dilutive effect of converting redeemable convertible preferred stock, warrants to purchase convertible preferred stock and options to purchase common stock, as the impact of such items are anti-dilutive during periods of net loss. Shares excluded from the calculations were 19,863,426, 24,074,522, 39,171,199, 38,546,716 and 44,712,133 for the years ended December 31, 2009, 2010 and 2011 and for the nine months ended September 30, 2011 and 2012 (unaudited), respectively.

Impact of Recently Issued Accounting Standards

In May 2011, the FASB issued Accounting Standards Update (ASU) 2011-04, *Fair Value Measurement (Topic 820): Amendments to Achieve Common Fair Value Measurements and Disclosure Requirement in U.S. GAAP and IFRS*. This guidance includes amendments that clarify the intent about the application of existing fair value measurements and disclosures, and change a principle or requirement for fair value measurements or disclosures. This guidance is effective for interim and annual periods beginning after December 15, 2011. The standard was adopted as of January 1, 2012 and the retrospective application of this standard did not have a material impact on the Company's financial statements.

In June 2011, the FASB issued ASU 2011-05, *Comprehensive Income (Topic 220): Presentation of Comprehensive Income*. This guidance requires that all nonowner changes in stockholders' equity be presented either in a single continuous statement of comprehensive income or in two separate but consecutive statements. This guidance is effective for interim and annual periods beginning after December 15, 2011. This standard was adopted as of January 1, 2012 and the retrospective application of this standard did not have a material impact on the Company's financial statements.

3. Investments

The following table summarizes available-for-sale securities:

	December 31, 2011,			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
	(in thousands)			
Corporate bonds	$ 4,173	$ —	$ (4)	$ 4,169
Commercial paper	1,749	—	—	1,749
Total	$ 5,922	$ —	$ (4)	$ 5,918

All of the Company's investments as of December 31, 2011 had maturities of one year or less. The Company had no investments at December 31, 2010 or September 30, 2012 (unaudited).

Chimerix, Inc.

Notes to Financial Statements

4. Property and Equipment

Property and equipment consist of the following:

	December 31,		September 30,
	2010	2011	2012
		(in thousands)	
			(unaudited)
Lab equipment	$ 814	$ 900	$ 958
Leasehold improvements	56	74	78
Computer equipment	227	340	387
Office furniture and equipment	97	201	212
	1,194	1,515	1,635
Less accumulated depreciation	(684)	(954)	(1,164)
	$ 510	$ 561	$ 471

5. Loans Payable

On November 24, 2008, the Company entered into a Loan and Security Agreement (the loan) with Silicon Valley Bank (SVB) under which the Company could borrow up to $6.0 million. On March 31, 2010, the Company drew the full amount of the loan with interest payable at 5%, the prime rate of interest plus 1% at the time of draw. The loan was secured by certain assets of the Company, excluding intellectual property. Borrowings under the loan were to be paid over a period of thirty-six months. The Company also granted the financial institution, concurrent with issuance of the loan, a warrant to purchase a total of 58,680 shares of the Company's Series D preferred stock at a price of $2.045 per share. The Company incurred deferred financing costs of approximately $0.2 million in connection with securing the loan and valuing the warrants which was amortized over the term of the loan through interest expense.

On January 27, 2012, the Company entered into a Loan and Security Agreement (the LSA) with SVB and MidCap Financial SBIC, LP (MidCap) allowing for borrowings up to $15.0 million, split between a first tranche of $3.0 million borrowed at the time of the agreement, and a second tranche of up to $12.0 million that would be available to be drawn by December 31, 2012 upon meeting one of three stated financial and/or operational goals.

The first tranche was used to repay the remaining principal balance outstanding under the 2008 loan noted above of $2.6 million. This repayment was deemed a modification of debt and therefore the remaining related deferred financing costs totaling $0.1 million remained in deferred financing costs and are being amortized over the term of the LSA through interest expense. The first tranche has an interest only period of twelve months followed by a thirty month principal and interest amortization period with interest being charged at 8.25% per year for the full period of the LSA.

The Company met one of the financial and/or operational goals mentioned above and, in September 2012, the remaining $12.0 million was borrowed in the second tranche. The second tranche has a six month interest only period followed by a thirty-two month principal and interest amortization period with interest being charged at the same rate as the first tranche. There are certain fees in accordance with the LSA which are being recorded as discounts or other long and short-term liabilities depending on the nature of the fees. The fees are being accreted through interest expense. $0.1 million was recorded in interest expense for the nine months ended September 30, 2012 (unaudited).

Concurrently with entering into the LSA, the Company also granted SVB a warrant to purchase shares of Series F preferred stock at a price of $2.045 per share equal to 2% of the aggregate amount of the advances made to the Company pursuant to the LSA, divided by the exercise price. In relation to the first tranche, 29,340 warrants became exercisable, and in relation to the second tranche, an additional 117,360 warrants became exercisable. As discussed in Note 2, the warrants are classified as a liability and are required to be

Chimerix, Inc.

Notes to Financial Statements

5. Loans Payable – (continued)

measured at fair value. Therefore, the warrants were recorded as a debt discount at their fair value at the time of grant and accreted over the life of the LSA using the effective interest method. The subsequent re-valuation of the warrants (at fair value) resulted in other expense of $28,000 for the nine months ended September 30, 2012 (unaudited).

The future payments under the LSA are as follows (in thousands):

Years ending December 31,	
2012	$ 427
2013	6,042
2014	6,323
2015	4,508
	17,300
Less: amount representing interest	(2,300)
Total payments under LSA	$ 15,000

6. Commitments and Contingencies

Leases

The Company leases its facilities and certain office equipment under long-term noncancelable operating leases that expire at various dates through 2013. As of December 31, 2011, future minimum payments under noncancelable operating leases are as follows (in thousands):

Years Ending December 31,	
2012	$ 81
2013	6
	$ 87

Rent expense under non-cancelable operating leases and other month-to-month equipment rental agreements, including common area maintenance fees, totaled approximately $0.4 million, $0.5 million, $0.3 million, and $0.4 million for the years ended December 31, 2010 and 2011 and nine months ended September 30, 2011 and 2012 (unaudited), respectively.

In 2012, the Company extended three facility leases for the period beginning March 2012 and ending February 2014. Future minimum payments under these extensions total $0.4 million, $0.2 million, and $18,000 in 2012, 2013, and 2014, respectively.

Significance of Revenue Source

The Company is the recipient of federal research grant funds from the U.S. Department of Health and Human Services through the NIAID and federal research contract funds from BARDA. Periodic audits are required under the grant and contract agreements and certain costs may be questioned as appropriate under the agreements; however, no questioned costs have historically been material. Management believes that such amounts in the current year, if any, are not significant. Accordingly, no provision for refundable amounts under the agreements has been made as of December 31, 2009, 2010, and 2011 and September 30, 2012 (unaudited).

7. Redeemable Convertible Preferred Stock

In February 2011, the Company issued 22,004,895 shares of $0.001 par value Series F redeemable convertible preferred stock at $2.045 per share and warrants to purchase an aggregate of 5,501,215 shares of

Chimerix, Inc.

Notes to Financial Statements

7. Redeemable Convertible Preferred Stock – (continued)

Series F redeemable convertible preferred stock at an exercise price of $2.045 per share for proceeds of $45.0 million, less issuance costs of $0.2 million. The warrants are exercisable at any time and expire on February 4, 2018.

In January 2012, the Company issued a warrant to SVB to purchase a number of shares of Series F redeemable convertible preferred stock at an exercise price of $2.045 per share equal to 2% of the aggregate amount of the advances made to the Company pursuant to the LSA, divided by the exercise price. Following the first and second tranches of the LSA, the warrant was exercisable to purchase an aggregate of 146,700 shares of Series F redeemable convertible preferred stock. The warrant issued to SVB is exercisable until January 22, 2022.

The following table summarizes the authorized, issued and outstanding shares of redeemable convertible preferred stock as of December 31, 2010 and 2011 and September 30, 2012:

	December 31, 2010		December 31, 2011		September 30, 2012	
	Authorized Shares	Issued and Outstanding Shares	Authorized Shares	Issued and Outstanding Shares	Authorized Shares	Issued and Outstanding Shares
					(unaudited)	
Series A	800,000	800,000	800,000	800,000	800,000	800,000
Series B	2,233,879	2,233,879	2,233,879	2,233,879	2,233,879	2,233,879
Series B-1	2,054,333	2,033,333	2,054,333	2,033,333	2,054,333	2,033,333
Series C	5,141,690	5,141,690	5,141,690	5,141,690	5,141,690	5,141,690
Series D	11,354,526	11,295,846	11,354,526	11,295,846	11,354,526	11,295,846
Series E	7,894,871	7,894,871	7,894,871	7,894,871	7,894,871	7,894,871
Series F	—	—	40,200,000	22,004,895	40,200,000	22,004,895
Total Shares	29,479,299	29,399,619	69,679,299	51,404,514	69,679,299	51,404,514

The Company's Series A preferred stock, Series B preferred stock, Series B-1 preferred stock, Series C preferred stock, Series D preferred stock, Series E preferred stock and Series F preferred stock (collectively, the Preferred Stock) have the following rights, preferences, and privileges:

Dividend Provisions

The Company's Series F preferred stock is entitled to receive dividends at the rate of 8% per annum of the original issuance price of $2.045 per share (subject to adjustment in the event of any stock dividends, stock splits, combination of shares, recapitalization or similar events), whenever funds are legally available. These dividends shall accrue on a daily basis, whether or not declared by the Company's Board of Directors, and shall be cumulative to the extent not declared and paid through the earlier of (i) February 7, 2014, or (ii) the date of drug application approval for CMX001 in specified indications by the United States Food and Drug Administration, and shall be payable in cash concurrently with any liquidation, dissolution or winding up of the Company, qualifying initial public offering of the Company's common stock, asset transfer or acquisition; *provided* that such dividends will be paid in shares of Series F preferred stock at the election of each holder of Series F preferred stock or in the case of an asset transfer or acquisition in which all or part of the consideration is not cash. After the earlier of the events described in (i) and (ii), any future dividends shall be payable only when, as and if declared by the Company's Board of Directors and shall be non-cumulative. Dividends on the Company's Series F preferred stock will be paid in preference to dividends on the Series A preferred Stock, the Series B preferred stock, the Series B-1 preferred stock, the Series C preferred stock, the Series D preferred stock and the Series E preferred stock. As of December 31, 2011 and September 30, 2012, dividends in the amount of $3.2 million and $5.9 million have been accrued and included in the balance of Series F preferred stock.

Chimerix, Inc.

Notes to Financial Statements

7. Redeemable Convertible Preferred Stock – (continued)

Each of the Company's Series A preferred stock, Series B preferred stock and Series B-1 preferred stock (collectively, the Junior Preferred Stock), the Company's Series C preferred stock and Series D preferred stock (collectively, the Mezzanine Preferred Stock), and the Company's Series E preferred stock is entitled to receive dividends at the rate 8% per annum of the applicable original issuance price per share. The original issuance price is $0.50, $1.00, $1.50, $2.045, $2.045, $2.045, and $2.045 per share, respectively, for the Series A preferred stock, Series B preferred stock, Series B-1 preferred stock, Series C preferred stock, Series D preferred stock and Series E preferred stock (subject to adjustment in the event of any stock dividends, stock splits, combination of shares, recapitalization or similar events). Such dividends will be paid when and as declared by the board, whenever funds are legally available, and subject to consent of a requisite number of Series F preferred stockholders. In addition, dividends on the Company's Series E preferred stock will be paid in preference to dividends on the Mezzanine Preferred Stock and the Junior Preferred Stock, and dividends on the Company's Mezzanine Preferred Stock will be paid in preference to dividends on the Junior Preferred Stock. Dividends on each series of the Junior Preferred Stock, the Mezzanine Preferred Stock and the Series E preferred stock will be noncumulative.

No dividends shall be paid on the Company's common stock without the prior written consent of the requisite holders of the Company's Series F preferred stock and all dividends on the preferred stock have been declared or set aside. In the event dividends are paid on Company's common stock, the preferred stock shall participate in any such dividend paid to the Company's common stock in an equal amount per share (on an as-if converted basis). Dividends on the preferred stock will be in preference to dividends paid on the common stock.

As of December 31, 2011 and September 30, 2012 (unaudited), no dividends for the Company's Series A preferred stock, Series B preferred stock, Series B-1 preferred stock, Series C preferred stock, Series D preferred stock or Series E preferred stock had been declared, and therefore none were accrued.

Liquidation Preference

In the event of any liquidation, dissolution or winding up of the Company, the holders of the preferred stock are entitled to be paid out of the assets of the Company at an amount per share equal to the original issue price plus any accrued or declared and unpaid dividends on the preferred stock. The original purchase prices are $2.045 for the Series F preferred stock, Series E preferred stock, Series D preferred stock and Series C preferred stock, and $1.50, $1.00 and $0.50 for the Series B-1 preferred stock, Series B preferred stock and Series A preferred stock, respectively (in each case, subject to adjustment in the event of any stock dividends, stock splits, combination of shares, recapitalization or similar events). Payments on the Series F preferred stock will be in preference to payments on any other series of preferred stock. Payments on the Series E preferred stock will be in preference to payments on the Mezzanine Preferred Stock and the Junior Preferred Stock. Payments on each series of Mezzanine Preferred Stock will be in preference to payments on the Junior Preferred Stock. If, upon liquidation, dissolution or winding up, the assets of the Company are insufficient to make payment in full to preferred stock holders, then such assets will be distributed in the order of priority described above, in each case in proportion to the full amounts to which the holders of the relevant series of preferred stock would be otherwise respectively entitled. After payment in full of all holders of preferred stock, all remaining assets, if any, available for distribution shall be distributed ratably to the holders of preferred stock and common stock in proportion to the number of shares of common stock held by each holder (in the case of the preferred stock, on an as-if converted basis); *provided* that holders of the Company's preferred stock will not receive more than two times the original issuance price for the applicable series of preferred stock. Any remaining assets will be distributed ratably to holders of common stock.

The acquisition of the Company by another entity in which the stockholders of the Company immediately prior to the acquisition do not retain at least 50% of the total voting power of the surviving entity or after which such other entity holds more than 50% of the voting power of the Company's outstanding capital stock, or a sale, exclusive license or other disposition of all or substantially all assets of the Company, is treated as a

Chimerix, Inc.

Notes to Financial Statements

7. Redeemable Convertible Preferred Stock – (continued)

liquidation event for purposes of triggering the liquidation preferences described above. The treatment of any particular transaction or series of transactions as a liquidation event may be waived by the vote or written consent of the requisite holders the Company's Series F preferred stock and the majority holders of the Series E preferred stock.

Voting Rights

The holder of each share of preferred stock shall be entitled to the number of votes equal to the number of shares of common stock into which each share of preferred stock could be converted. Each share of common stock carries equivalent voting rights. In addition, certain actions require approval by the requisite holders of the Company's Series F preferred stock and/or the majority holders of the Company's Series E preferred stock.

Automatic Conversion

Each share of preferred stock shall automatically be converted into shares of common stock at the then effective conversion rate (i) immediately prior to the closing of a qualifying IPO, which is a firmly underwritten public offering pursuant to an effective registration statement under the Securities Act covering the offer and sale of the Company's common stock for the account of the Company in which the aggregate gross proceeds raised by the corporation exceed $50.0 million (before underwriting discounts, commissions and fees), the per share price equals or exceeds $4.09 (subject to adjustment for stock splits, dividends, recapitalizations and the like) and immediately after which the Company's common stock is listed on a United States national securities exchange, or (ii) on the date upon which the Company obtains the consent of affirmative vote to such automatic conversion by the requisite holders of the Series F preferred stock and the majority holders of the Series E preferred stock.

Redemption

The Company's Series F preferred stock is redeemable at the option of the holder in three annual installments occurring beginning February 7, 2018. The redemption value of the Company's Series F preferred stock is the greater of (i) the then fair value or (ii) the original issue price plus accrued dividends. See Note 8 for a discussion of the fair value considerations related to the Company's capital stock.

The Company determined that the Company's Series A preferred stock, Series B preferred stock, Series B-1 preferred stock, Series C preferred stock, Series D preferred stock and Series E preferred stock are contingently redeemable based on deemed liquidation events described above which are outside the control of the Company. Preferred Stock is recorded at fair value at the date of issuance and adjusts the carrying value to its redemption value at each balance sheet date. The redemption values of the Company's Series A preferred stock, Series B preferred stock, Series B-1 preferred stock, Series C preferred stock, Series D preferred stock and Series E preferred stock as of December 31, 2011, and September 30, 2012 (unaudited) would be each series' initial carrying amount, which is equal to $0.4 million, $2.2 million, $3.1 million, $10.4 million, $22.9 million, and $16.1 million, respectively. The redemption value of the Company's Series F preferred stock is estimated to be $48.2 million and $50.9 million at December 31, 2011, and September 30, 2012 (unaudited), respectively.

Chimerix, Inc.

Notes to Financial Statements

7. Redeemable Convertible Preferred Stock – (continued)

Warrants

The following warrants for the purchase of preferred stock on a one to one basis were issued, outstanding and exercisable at September 30, 2012:

Class	Date	Shares	Price Per Share	Expiration
Series B-1	November 5, 2003	21,000	$ 1.500	November 2013
Series D	November 24, 2008	58,680	$ 2.045	November 2018
Series F	February 7, 2011	5,501,215	$ 2.045	February 2018
Series F	January 27, 2012	146,700	$ 2.045	January 2022

As discussed in Note 2, the warrants exercisable for the Company's Series F preferred stock are classified as a liability and are required to be measured at fair value. Therefore, such warrants were recorded at the full fair value with the Company's Series F preferred stock being recorded at the residual value at the time of issuance. At each reporting date, the warrants exercisable for the Company's Series F preferred stock are recorded to fair value which is charged to other income. The fair valuation of such warrants resulted in other expense of $0.4 million for the year ended December 31, 2011, and $0.3 million and $1.1 million for the nine months ended September 30, 2011 and 2012 (unaudited), respectively.

8. Stockholders' Deficit

Common Stock

The Company's common stock consists of 45.0 million, 89.7 million and 89.7 million authorized shares at December 31, 2010, 2011 and September 30, 2012, respectively, and 5.2 million, 5.4 million and 5.4 million shares issued and outstanding at December 31, 2010, 2011 and September 30, 2012, respectively.

Shares Reserved for Future Issuance

The following shares of common stock are reserved for future issuances are as follows:

	December 31, 2011	September 30, 2012
		(unaudited)
Conversion of preferred stock and preferred stock warrants	56,985,409	57,132,109
Stock options issued and outstanding	9,340,180	9,370,011
Restricted Stock units outstanding	—	155,288
Authorized for future grants under the 2012 Equity Incentive Plan	1,597,646	1,361,527
	67,923,235	68,018,935

Stock Options

The Company has stock option plans under which incentive or nonqualified stock options may be awarded to employees, directors and consultants. The Company's 2012 equity incentive plan (the 2012 Plan), which became effective in February 2012, is a continuation of and successor to the Company's 2002 equity incentive plan (the 2002 Plan). The Company's Board of Directors has authorized the grant of options for the purchase of up to 12,665,816 shares of the Company's common stock as of December 31, 2011 and September 30, 2012.

Under the 2012 Plan, the Company's Board of Directors determines the terms and conditions of options granted. The exercise price for stock options shall not be less than the fair market value at the date of grant, and the options expire no later than ten years from the date of grant. Options issued to employees generally vest one-fourth on the first anniversary date following the date of grant and ratably each month for the next three years. Any outstanding options that are cancelled are automatically returned to the option pool.

Chimerix, Inc.

Notes to Financial Statements

8. Stockholders' Deficit – (continued)

The 2012 Plan has an "early exercise" provision under which options to purchase common stock may be exercised prior to being fully vested; however, the shares issued for options exercised under the "early exercise" provision continue to vest under the same terms as the underlying exercised option. Upon termination of an employee prior to the vesting of such shares, the Company can either repurchase the unvested shares or let the repurchase right expire.

The Company estimates the fair value of its share-based awards to employees, directors and consultants using the Black-Scholes option-pricing model. The Black-Scholes model requires the input of highly complex and subjective assumptions, including (a) the expected stock price volatility, (b) the calculation of expected term of the award, (c) the risk-free interest rate and (d) expected dividends. Due to the Company's limited operating history and a lack of company specific historical and implied volatility data, the Company has based its estimates of expected volatility on a group of similar public traded companies. When selecting these public companies on which it has based its expected stock price volatility, the Company selected companies with comparable characteristics to it, including enterprise value, risk profiles, positions within the industry, and with historical share price information sufficient to meet the expected life of its stock options. For employee stock options the Company uses the "simplified" method for estimating expected life, whereby, the expected life equals the arithmetic average of the vesting term and the original contractual term of the option due to its lack of sufficient historical data. The expected term for share-based compensation granted to non-employees is the contractual life. The risk-free interest rates for the periods within the expected life of the option are based on the U.S. Treasury instrument with a life that is similar to the expected life of the option grant. The Company has never paid, and does not expect to pay, dividends in the foreseeable future. The following table illustrates the assumptions for the Black-Scholes model used in determining the fair value of the options granted.

	Employees				
	Year Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
				(unaudited)	
Dividend yield	0.00%	0.00%	0.00%	0.00%	0.00%
Weighted-average risk-free interest rate	2.73%	2.69%	2.85%	2.85%	0.90%
Volatility	95.00%	91.00%	82.00%	82.10%	80.00%
Expected term (in years)	7.0	7.0	7.0	7.0	6.0
Weighted-average fair value per option	$ 0.56	$ 0.71	$ 0.50	$ 0.49	$ 0.46

	Non-Employees				
	Year Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
				(unaudited)	
Dividend yield	—	—	0.00%	0.00%	0.00%
Weighted-average risk-free interest rate	—	—	0.40%	0.21%	0.78%
Volatility	—	—	77.80%	76.60%	81.80%
Expected term (in years)	—	—	2.7	1.5	5.8
Weighted-average fair value per option	—	—	$ 1.04	$ 0.75	$ 0.92

The Company is also required to estimate forfeitures at the time of grant, and revise those estimates in subsequent periods if actual forfeitures differ from its estimates. The Company uses historical data to estimate pre-vesting option forfeitures and record stock-based compensation expense only for those awards that are expected to vest. To the extent that actual forfeitures differ from the Company's estimates, the difference is recorded as a cumulative adjustment in the period the estimates were revised. For the years ended

Chimerix, Inc.

Notes to Financial Statements

8. Stockholders' Deficit – (continued)

December 31, 2009, 2010, and 2011 and for the nine months ended September 30, 2011 and 2012, the Company applied a forfeiture rate based on the Company's historical forfeitures.

A summary of activity related to the Company's stock options is as follows:

	Number of Options Outstanding	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (in Years)
Balance, January 1, 2011	7,242,242	$ 0.62	—
Granted	3,120,500	0.66	—
Exercised	(75,000)	0.40	—
Forfeited	(947,562)	0.67	—
Balance, December 31, 2011	9,340,180	0.63	7.69
Granted	700,723	0.67	—
Exercised	(51,000)	0.16	
Expired	(362,915)	0.74	—
Forfeited	(256,977)	0.52	—
Balance, September 30, 2012 (unaudited)	9,370,011	$ 0.64	7.23
Exercisable at September 30, 2012 (unaudited)	6,028,991	$ 0.61	6.57
Vested or expected to vest at September 30, 2012	9,082,765	$ 0.64	7.19

At September 30, 2012 (unaudited), the aggregate intrinsic value of options outstanding and exercisable was $3.6 million. The total intrinsic value of options exercised was $0.2 million, $0.1 million and $16,000 for the years ended December 31, 2009, 2010, and 2011, respectively. There were no options exercised in the nine months ended September 30, 2011 (unaudited). The total intrinsic value of options exercised was $14,000 for the nine months ended September 30, 2012 (unaudited).

In the nine months ended September 30, 2012, the Company modified option grants for four individuals. Three of the modifications extended the term to exercise the option resulting in $30,000 in additional compensation expense. One option was modified to continue vesting after the participant's termination and to extend the time to exercise such option resulting in additional compensation expense of $0.3 million.

For awards with only service conditions and graded-vesting features, the Company recognizes compensation expense on a straight-line basis over the requisite service period. The fair value of options vested and share-based compensation expense recognized are as follows:

	Year Ended December 31,			Nine Months Ended September 30,	
	2009	2010	2011	2011	2012
			(in thousands)		
				(unaudited)	
Research and development:					
Employee	$ 165	$ 299	$ 315	$ 252	$ 234
Non-employee	—	—	—	—	59
General and administrative:					
Employee	266	454	651	492	781
Non-employee	—	—	—	—	59
	$ 431	$ 753	$ 966	$ 744	$ 1,133

Chimerix, Inc.

Notes to Financial Statements

8. Stockholders' Deficit – (continued)

Cash received from option exercises under all share-based payment arrangements for 2011 and the nine months ended September 30, 2012 (unaudited), was $30,000 and $8,000, respectively. There was no actual tax benefit realized for the tax deductions from option exercises of the share-based payment arrangements during 2011 or 2012.

As of September 30, 2012 (unaudited), there was approximately $1.3 million of total unrecognized compensation cost related to non-vested share-based compensation arrangements granted under the Company's 2012 Plan. That compensation cost is expected to be recognized over a weighted-average period of approximately 2.11 years.

The Company continues to account for stock options issued to non-employees using a fair value approach. The compensation costs of these arrangements are subject to re-measurement over the vesting terms as earned. Compensation cost for performance-based awards is recognized when it is probable that the performance criteria will be met.

Restricted Stock Units

In 2012, the Company issued restricted stock units (RSUs) to certain employees which vest based on specific performance criteria. The RSUs become immediately vested upon the earlier of (i) a change of control and (ii) the effective date of a registration statement for the Company's common stock, subject to the continuous service with the Company at the applicable vesting event. When vested, the RSU represents the right to be issued the number of shares of the Company's common stock that is equal to the number of RSUs granted.

A summary of activity related to the Company's RSUs is as follows:

	Number of Restricted Stock Units Outstanding
Balance, December 31, 2011	—
Granted	171,263
Forfeited	(15,975)
Balance, September 30, 2012 (unaudited)	155,288

The grant date fair value of the RSUs was $0.70 per unit. As of September 30, 2012, no compensation had been recorded as it was not considered probable that the performance criteria will be met.

Fair Value Estimate

The Company is required to estimate the fair value of the common stock underlying stock-based awards when performing the fair value calculations with the Black-Scholes option-pricing model. The fair value of the common stock underlying stock-based awards was determined on each grant date by the Company's board of directors, with input from management. All options to purchase shares of common stock are intended to be granted with an exercise price per share no less than the fair value per share of common stock underlying those options on the date of grant, based on the information known on the date of grant.

The Company is privately held with no active public market for its common stock. Therefore, management has for financial reporting purposes periodically determined the estimated per share fair value of the Company's common stock and redeemable convertible preferred stock at various dates using contemporaneous valuations consistent with the American Institute of Certified Public Accountants Practice Aid, "Valuation of Privately-Held Company Equity Securities Issued as Compensation," also known as the Practice Aid. These valuations were performed with the assistance of a third-party valuation specialist. The Company performed these contemporaneous valuations as of February 15, 2011, December 31, 2011, and September 30, 2012. In conducting these contemporaneous valuations, management considered all objective and subjective factors that it believed to be relevant in each valuation conducted, including management's best

Chimerix, Inc.

Notes to Financial Statements

8. Stockholders' Deficit – (continued)

estimate of the Company's business condition, prospects and operating performance at each valuation date. Within the contemporaneous valuations performed, a range of factors, assumptions and methodologies were used. The significant factors included external market conditions affecting the biotechnology industry, trends within the biotechnology industry, the prices at which the Company sold shares of preferred stock, the superior rights and preferences of the preferred stock relative to common stock at the time of each grant, the results of operations, financial position, status of research and development efforts, stage of development and business strategy, the lack of an active public market for the common and preferred stock, and the likelihood of achieving a liquidity event such as an initial public offering (IPO) or sale of the Company in light of prevailing market conditions.

The dates of the Company's contemporaneous valuations have not always coincided with the dates of its stock-based compensation grants. In such instances, management's estimates have been based on the most recent contemporaneous valuation of the Company's shares of common stock and its assessment of additional objective and subjective factors management believed were relevant and which may have changed from the date of the most recent contemporaneous valuation through the date of the grant. In addition, the Company performed retrospective valuations as of certain key option grant dates using similar methodologies as were used in the contemporaneous valuations. As a result, the Company concluded certain options granted in 2012 had reassessed values different from the grant date. The reassessed values were used to determine stock compensation expense for the nine months ended September 30, 2012.

9. Related-Party Transactions

The Company paid consulting fees related to research and development activities in the amount of $0.3 million, $0.1 million, and $6,250 to the relatives of officers of the Company during the years ended December 31, 2009, 2010, and 2011, respectively; and $6,250 during the nine months ended September 30, 2011 (unaudited). No related party fees were paid during the nine months ended September 30, 2012 (unaudited).

On November 19, 2009, the Company issued a promissory note in the amount of $0.1 million to an officer of the Company. The outstanding principal balance plus accrued interest, calculated at an annual rate of 0.71%, was repaid during 2011.

10. Income Taxes

There is no provision for income taxes because the Company has incurred operating losses since inception. At September 30, 2012, the Company has concluded that it is more likely than not that the Company may not realize the benefit of its deferred tax assets due to its history of losses. Accordingly, the net deferred tax assets have been fully reserved.

In general, if the Company experiences a greater than 50% aggregate change in ownership of certain significant stockholders over a three-year period (a Section 382 ownership change), utilization of its pre-change net operating loss carryforwards is subject to an annual limitation under Section 382 of the Internal Revenue Code (and similar state laws). The annual limitation generally is determined by multiplying the value of the Company's stock at the time of such ownership change (subject to certain adjustments) by the applicable long-term tax-exempt rate. Such limitations may result in expiration of a portion of the net operating loss carryforwards before utilization and may be substantial. The ability of the Company to use its net operating loss carryforwards may be limited or lost if the Company experiences a Section 382 ownership change in connection with this offering or as a result of future changes in its stock ownership. Losses from a specific period may be subject to multiple limitations, and would generally be limited by the lowest of those limitations.

The Company has determined that a Section 382 ownership change occurred in 2002, and as such, losses incurred prior to that date are subject to an annual limitation of at least $64,000. Additionally, the Company

Chimerix, Inc.

Notes to Financial Statements

10. Income Taxes – (continued)

has determined that a Section 382 ownership change occurred in 2007, and as such, losses incurred prior to that date are subject to an annual limitation of at least $762,000. The Company is currrently evaluating Section 382 ownership changes subsequent to 2007. As a result, losses could be further limited.

The components of deferred tax assets and liabilities at December 31, 2010 and 2011 are as follows:

	December 31,	
	2010	2011
	(in thousands)	
Deferred tax assets:		
Net operating loss carryforwards	$ 22,526	$ 30,723
Research and development expenses	491	562
Capitalized Section 174 expenses	110	97
Research and development credits	85	941
Accrued bonuses	258	133
Other	206	411
Total gross deferred tax assets	23,676	32,867
Valuation allowance	(23,606)	(32,721)
	70	146
Deferred tax liabilities:		
Other	(70)	(146)
Total deferred tax liabilities	(70)	(146)
Net deferred tax assets	$ —	$ —

At December 31, 2010, the Company has net operating loss carryforwards for federal and state tax purposes of approximately $57.4 million and $52.2 million, respectively. At December 31, 2011, the Company has net operating loss carryforwards for federal and state tax purposes of approximately and $80.2 million and $75.9 million, respectively. The federal losses begin to expire in 2020 and the state losses begin to expire in 2018.In addition, the Company has tax credit carryforwards for federal tax purposes of approximately $0.9 million as of December 31, 2011, which begin to expire in 2022. The future utilization of net operating loss and tax credit carryforwards may be limited due to changes in ownership. Management has recorded a valuation allowance for all of the deferred tax assets due to the uncertainty of future taxable income.

The components of the net income tax benefit for the years ended December 31, 2009, 2010, and 2011 are as follows:

	December 31,		
	2009	2010	2011
		(in thousands)	
Deferred	$ 5,174	$ 9,559	$ 9,115
Valuation allowance	(5,174)	(9,559)	(9,115)
Net income tax benefit	$ —	$ —	$ —

Chimerix, Inc.

Notes to Financial Statements

10. Income Taxes – (continued)

A reconciliation of the difference between the benefit for income taxes and income taxes at the statutory U.S. federal income tax rate is as follows for the years ended December 31, 2009, 2010, and 2011:

	2009		2010		2011	
	Amount	% of Pretax Earnings	Amount	% of Pretax Earnings	Amount	% of Pretax Earnings
	(in thousands)					
Income tax benefit at statutory rate	$ (4,536)	34.0%	$ (8,655)	34.0%	$ (8,700)	34.0%
State income taxes	(767)	5.8%	(1,464)	5.8%	(1,164)	4.6%
Research and development credits	—	0.0%	(14)	0.1%	(1,169)	4.6%
Permanent items	156	(1.2%)	246	(1.0%)	964	(3.8%)
Provision to return adjustments	(27)	0.2%	328	(1.3%)	12	0.0%
Effect of change in state tax rate	—	0.0%	—	0.0%	630	(2.5%)
Increase in unrecognized tax benefits	—	0.0%	—	0.0%	314	(1.2%)
Valuation allowance	5,174	(38.8%)	9,559	(37.6%)	9,115	(35.7%)
Net benefit	$ —	0.0%	$ —	0.0%	$ —	0.0%

The Company has determined that there may be a future limitation on the Company's ability to utilize its entire federal R&D credit carryover. Therefore, the Company recognized an uncertain tax benefit associated with the federal R&D credit carryover during the year ended December 31, 2011, as follows (in thousands):

Balance at December 31, 2010	$ —
Increase related to 2011	314
Balance at December 31, 2011	$ 314

The Company has determined that it had no other material uncertain tax benefits for the year ended December 31, 2011. As of January 1, 2012, due to the carry forward of unutilized net operating losses and research and development credits, the Company is subject to U.S. Federal and state income tax examinations for the tax years 2000 through 2011. The Company recognizes accrued interest related to unrecognized tax benefits in interest expense and penalties in operating expense. No amounts were accrued for the payment of interest and penalties at January 1, 2012.

11. Significant Agreements

The Regents of the University of California

In May 2002, the Company entered into a license agreement with The Regents of the University of California (UC) under which the Company obtained an exclusive, worldwide license to UC's patent rights in certain inventions (the UC Patent Rights) related to lipid-conjugated antiviral compounds and their use, including certain patents relating to CMX001 and CMX157. The license agreement was amended in September 2002 in order to expand the scope of the license and again in December 2010 in order to modify certain financial terms. The agreement was amended a third time in September 2011 to add additional patents related to certain metabolically stable lipid-conjugate compounds. A fourth amendment was executed in July 2012 to alter the rights and obligations of the parties in light of the Company's current business plans.

Chimerix, Inc.

Notes to Financial Statements

11. Significant Agreements – (continued)

Under the license agreement, the Company is permitted to research, develop, manufacture and commercialize products utilizing the UC Patent Rights for all human and veterinary uses, and to sublicense such rights. UC retained the right, on behalf of itself and other non-profit institutions, to use the UC Patent Rights for educational and research purposes and to publish information about the UC Patent Rights.

In consideration for the rights granted to the Company under the license agreement, the Company has issued UC an aggregate of 230,000 shares of the Company's common stock. As additional consideration, the Company is required to pay certain cash milestone payments in connection with the development and commercialization of compounds that are covered by the UC Patent Rights, plus certain annual fees to maintain such patents until the Company commercializes a product utilizing UC Patent Rights. In addition, upon commercialization of any product utilizing the UC Patent Rights (which would include the commercialization of CMX001 or CMX157), the Company will be required to pay low single digit royalties on net sales of such product.

In the event the Company sublicenses a UC Patent Right (including UC Patent Rights relating to CMX001 or CMX157), the Company is obligated to pay to UC a fee, which amount will vary depending upon the size of any upfront payment the Company receives and the clinical development stage of the compound being sublicensed, but which could be up to approximately 50% of the sublicense fee in certain circumstances. In addition, the Company will also be required to pay to UC a low single digit sublicense royalty on net sales of products that use the sublicensed UC Patent Rights, but in no event will the Company be required to pay more than 50% of the royalties it receives in connection with the relevant sublicense. Any such royalty payment will be reduced by other payments the Company is required to make to third parties until a minimum royalty has been reached.

As a result of the Company meeting certain milestones and sublicense fees related to the license agreement, the Company incurred liabilities of $0.1 million, $0.2 million, and $0.9 million, for the years ended December 31, 2010, 2011 and nine months ended September 30, 2012 (unaudited), respectively.

Biomedical Advanced Research and Development Authority

In February 2011, the Company entered into a contract with BARDA for the advanced development of CMX001 as a medical countermeasure in the event of a smallpox release. The contract has been amended several times, most recently on November 26, 2012, to expand the scope of work, update key personnel and change the periods of performance, benefits and the amount of base costs.

Under the contract, BARDA will reimburse the Company's costs, plus pay the Company a fixed fee, for the research and development of CMX001 as a broad-spectrum therapeutic antiviral for the treatment of smallpox infections and double-stranded DNA viruses. The contract consists of an initial performance period, referred to as the base performance segment, plus up to four extension periods of around one year each, referred to as option segments, each of which may be exercised at BARDA's sole discretion. The Company must complete the agreed upon milestones and deliverables in each discrete work segment before the next option segment is eligible to be exercised. Under the contract as currently in effect, if each follow-on option segment is exercised by BARDA, the Company may receive up to an aggregate of $81.1 million in expense reimbursement and fees.

The Company is currently completing the base performance segment of the contract under which the Company may receive up to a total of $31.0 million. The term of the base segment ends on March 31, 2013. BARDA must notify the Company at least 30 days before the end of the current base performance segment if it intends to exercise the first option segment of the contract. If all option segments are exercised by BARDA, the term of the contract would be extended to February 15, 2016.

Chimerix, Inc.

Notes to Financial Statements

11. Significant Agreements – (continued)

Merck, Sharp & Dohme Corp.

In July 2012, the Company entered into a collaboration and license agreement granting Merck exclusive worldwide rights to CMX157, the Company's lipid acyclic nucleoside phosphonate currently being evaluated to treat HIV infection. Under the terms of the agreement, Merck received an exclusive worldwide license for any human use of CMX157 and has agreed to use commercially reasonable efforts to develop and commercialize CMX157 in the United States and at least three major European markets. Following execution of the agreement, the Company received a $17.5 million upfront payment from Merck.

As additional consideration, the Company is eligible to receive up to a total of $151.0 million in milestone payments if certain development and regulatory milestones are achieved by Merck for products utilizing CMX157, as well as tiered royalties on net sales ranging from high single digits to low double digits, depending upon the volume of sales of each applicable product, if CMX157 is successfully commercialized. Milestone payments are triggered upon the completion of various stages of the regulatory approval process for each of the first two indications for CMX157, with the final milestones reached upon approval in the United States and three major European markets. Royalties for any given product will continue on a country-by-country basis through the later of the expiration of the Company's patent rights applicable to such product or ten years from the first commercial sale of such product.

The Company's participation in the collaboration with Merck, including its involvement in the joint steering committee to monitor the development of CMX157, represents a right and an observation role only, rather than a substantive performance obligation. As such, the Company's performance in this collaboration relates to the specific transfers in connection with the license which was completed during the same quarter the agreement was entered into. Therefore, the Company recognized the upfront payment during the nine months ended September 30, 2012 (unaudited).

The contingent event-based payments the Company may receive pursuant to the agreement do not meet the definition of a milestone as achievement of the triggering event for such payments is based on the performance of Merck and not the Company. Therefore the milestone method will not be applied to those payments.

National Institute of Allergy and Infectious Diseases

In September 2003, the Company was awarded a $36.3 million grant from the NIAID to support the Company's development of an oral drug for the treatment of smallpox. The work performed under this grant resulted in the Company's selection of CMX001 as a lead product candidate for commercial development. The grant, and the Company's activities conducted in connection therewith, were substantially complete in early 2010. However, the grant was not formally terminated until February 2011.

12. Employee Benefit Plan

The Company has an employee retirement plan under which eligible employees may defer a portion of their annual compensation, pursuant to Section 401(k) of the Internal Revenue Code. The Company can make discretionary contributions to the plan. For the year ended December 31, 2009, the Company contributed approximately $14,000 to the plan. For the years ended December 31, 2010 and 2011 and the nine months ended September 30, 2012, the Company made no contributions to the plan.

13. Subsequent Events

The Company has evaluated subsequent events through date of this Registration Statement on Form S-1 with the SEC to ensure that this filing includes appropriate disclosure of events both recognized in the financial statements as of September 30, 2012, and events which occurred subsequently but were not recognized in the financial statements. The Company has concluded that no subsequent event has occurred that requires disclosure.


CHIMERIX, INC.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth all costs and expenses, other than underwriting discounts and commissions, payable by Chimerix, Inc. (the Registrant) in connection with the sale of the common stock being registered. All amounts shown are estimates except for the Securities and Exchange Commission (SEC) registration fee, the Financial Industry Regulatory Authority, Inc. (FINRA) filing fee and the Nasdaq Global Market listing fee.

	Amount to be paid
SEC registration fee	$ *
FINRA filing fee	*
Nasdaq Global Market listing fee	25,000
Blue sky qualification fees and expenses	*
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer agent and registrar fees and expenses	*
Premium paid on directors' and officers' insurance policy	*
Miscellaneous expenses	*
Total	$ *

* To be provided by amendment.

Item 14. Indemnification of Directors and Officers.

The Registrant incorporated under the laws of the State of Delaware. Section 145 of the Delaware General Corporation Law provides that a Delaware corporation may indemnify any persons who were, are, or are threatened to be made, parties to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person is or was an officer, director, employee or agent of such corporation, or is or was serving at the request of such corporation as an officer, director, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided that such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the corporation's best interests and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his or her conduct was illegal. A Delaware corporation may indemnify any persons who were, are, or are threatened to be made, a party to any threatened, pending or completed action or suit by or in the right of the corporation by reason of the fact that such person is or was a director, officer, employee or agent of such corporation, or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit provided such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the corporation's best interests except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him or her against the expenses (including attorneys' fees) actually and reasonably incurred.

The Registrant's amended and restated certificate of incorporation and amended and restated bylaws, each of which will become effective upon the closing of this offering, provide for the indemnification of its directors and officers to the fullest extent permitted under the Delaware General Corporation Law.

Section 102(b)(7) of the Delaware General Corporation Law permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duties as a director, except for liability for any:

- transaction from which the director derives an improper personal benefit;
- act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payment of dividends or redemption of shares; or
- breach of a director's duty of loyalty to the corporation or its stockholders.

The Registrant's amended and restated certificate of incorporation includes such a provision. Expenses incurred by any officer or director in defending any such action, suit or proceeding in advance of its final disposition shall be paid by the Registrant upon delivery to it of an undertaking, by or on behalf of such director or officer, to repay all amounts so advanced if it shall ultimately be determined that such director or officer is not entitled to be indemnified by the Registrant.

Section 174 of the Delaware General Corporation Law provides, among other things, that a director who willfully or negligently approves of an unlawful payment of dividends or an unlawful stock purchase or redemption, may be held liable for such actions. A director who was either absent when the unlawful actions were approved or dissented at the time may avoid liability by causing his or her dissent to such actions to be entered in the books containing minutes of the meetings of the board of directors at the time such action occurred or immediately after such absent director receives notice of the unlawful acts.

As permitted by the Delaware General Corporation Law, the Registrant has entered into indemnity agreements with each of its directors and executive officers, that require the Registrant to indemnify such persons against any and all costs and expenses (including attorneys', witness or other professional fees) actually and reasonably incurred by such persons in connection with any action, suit or proceeding (including derivative actions), whether actual or threatened, to which any such person may be made a party by reason of the fact that such person is or was a director or officer or is or was acting or serving as an officer, director, employee or agent of the Registrant or any of its affiliated enterprises. Under these agreements, the Registrant is not required to provided indemnification for certain matters, including:

- indemnification beyond that permitted by the Delaware General Corporation Law;
- indemnification for any proceeding with respect to the unlawful payment of remuneration to the director or officer;
- indemnification for certain proceedings involving a final judgment that the director or officer is required to disgorge profits from the purchase or sale of the Registrant's stock
- indemnification for proceedings involving a final judgment that the director's or officer's conduct was in bad faith, knowingly fraudulent or deliberately dishonest or constituted willful misconduct or a breach of his or her duty of loyalty, but only to the extent of such specific determination;
- indemnification for proceedings or claims brought by an officer or director against us or any of the Registrant's directors, officers, employees or agents, except for (i) claims to establish a right of indemnification or proceedings, (ii) claims approved by the Registrant's board of directors, (iii) claims required by law, (iv) when there has been a change of control as defined in the indemnification agreement with each director or officer, or (v) by the Registrant in its sole discretion pursuant to the powers vested to the Registrant under Delaware law;
- indemnification for settlements the director or officer enters into without the Registrant's consent; or
- indemnification in violation of any undertaking required by the Securities Act or in any registration statement filed by the Registrant.

The indemnification agreements also set forth certain procedures that will apply in the event of a claim for indemnification thereunder.

Except as otherwise disclosed under the heading “Legal Proceedings” in the “Business” section of the prospectus included in this registration statement, there is at present no pending litigation or proceeding involving any of the Registrant’s directors or executive officers as to which indemnification is required or permitted, and the Registrant is not aware of any threatened litigation or proceeding that may result in a claim for indemnification.

The Registrant has an insurance policy in place that covers its officers and directors with respect to certain liabilities, including liabilities arising under the Securities Act of 1933, as amended (the Securities Act) or otherwise.

The Registrant plans to enter into an underwriting agreement which provides that the underwriters are obligated, under some circumstances, to indemnify the Registrant’s directors, officers and controlling persons against specified liabilities, including liabilities under the Securities Act.

Item 15. Recent Sales of Unregistered Securities.

The following sets forth information regarding all unregistered securities sold by the Registrant since January 1, 2009:

(1) The Registrant issued and sold to investors an aggregate of 7,894,871 shares of Series E preferred stock in two closings in July 2009 and August 2009, at a purchase price of $2.045 per share, for aggregate consideration of $16,145,011. Upon the closing of this offering, these shares will convert into 7,894,871 shares of common stock.

(2) In February 2011, the Registrant issued and sold to investors an aggregate of 22,004,895 shares of Series F preferred stock, at a purchase price of $2.045 per share, for aggregate consideration of $45,000,010. Upon the closing of this offering, these shares will convert into 22,004,895 shares of common stock.

(3) In February 2011, in connection with the Registrant’s Series F preferred stock financing, the Registrant issued warrants to purchase up to an aggregate of 5,501,215 shares of the Registrant’s Series F preferred stock, with an exercise price of $2.045 per share. Upon the closing of this offering, these warrants will be exercisable for 5,501,215 shares of common stock at an exercise price of $2.045 per share.

(4) In January 2012, in connection with the Registrant’s loan and security agreement with Silicon Valley Bank and MidCap Financial SBIC, LP, the Registrant issued Silicon Valley Bank a warrant to purchase a number of shares of the Registrant’s Series F preferred stock, with an exercise price of $2.045 per share, equal to (x) 2% of the aggregate amount of the advances made to the Registrant pursuant to such loan and security agreement, *divided by* (y) the exercise price. As of December 31, 2012, this warrant is exercisable for up to an aggregate of 146,700 shares of the Registrant’s Series F preferred stock, and upon the closing of this offering, this warrant will be exercisable for 146,700 shares of common stock at an exercise price of $2.045 per share.

(5) From January 1, 2009 to January 1, 2012, the Registrant granted stock options under its 2002 Equity Incentive Plan (the 2002 Plan) to purchase 8,177,044 shares of common stock (net of expirations and cancellations) to its employees, directors and consultants, having exercise prices ranging from $0.44 to $0.89 per share. Of these, options to purchase 62,500 shares of common stock have been exercised through December 31, 2012, for aggregate consideration of $27,500.

(6) On February 16, 2012, the Registrant issued restricted stock units under its 2012 Equity Incentive Plan (the 2012 Plan) pursuant to which 171,263 shares of common stock are issuable (net of expirations and cancellations) to its employees, directors and consultants.

(7) From February 22, 2012 to November 18, 2012, the Registrant granted stock options under the 2012 Plan to purchase 1,356,723 shares of common stock (net of expirations and cancellations) to its employees, directors and consultants, having exercise prices ranging from $0.66 to $1.20 per share. None of these options to purchase shares of common stock have been exercised through December 31, 2012.

The offers, sales and issuances of the securities described in paragraphs (1), (2), (3) and (4) were deemed to be exempt from registration under the Securities Act in reliance on Section 4(2) of the Securities Act and Rule 506 promulgated under Regulation D promulgated thereunder as transactions by an issuer not involving a public offering. The recipients of securities in each of these transactions acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions was an accredited investor within the meaning of Rule 501 of Regulation D under the Securities Act and had adequate access, through employment, business or other relationships, to information about the Registrant. No underwriters were involved in these transactions.

The offers, sales and issuances of the securities described in paragraphs (5), (6) and (7) were deemed to be exempt from registration under the Securities Act in reliance on Rule 701 in that the transactions were under compensatory benefit plans and contracts relating to compensation as provided under Rule 701. The recipients of such securities were the Registrant's employees, directors or bona fide consultants and received the securities under the 2002 Plan and the 2012 Plan. Appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions had adequate access, through employment, business or other relationships, to information about the Registrant.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits.

Exhibit Number	Description of Document
1.1†	Form of Underwriting Agreement.
3.1	Amended and Restated Certificate of Incorporation, as amended and as currently in effect.
3.2	Form of Amended and Restated Certificate of Incorporation to become effective upon closing of this offering.
3.3	Amended and Restated Bylaws, as currently in effect.
3.4	Form of Amended and Restated Bylaws to become effective upon closing of this offering.
4.1†	Form of Common Stock Certificate of the Registrant.
4.2	Form of Warrant to Purchase Stock issued to participants in the Registrant's Series F Preferred Stock financing dated February 7, 2011.
4.3	Warrant to Purchase Series F Preferred Stock issued to Silicon Valley Bank on January 27, 2012.
4.4	Warrant to Purchase Series D Preferred Stock issued to Silicon Valley Bank on November 24, 2008.
4.5	Warrant to Purchase Series B-1 Preferred Stock issued to General Electric Capital Corporation on November 5, 2003.
4.6	Amended and Restated Investor Rights Agreement dated February 7, 2011 by and among the Registrant and certain of its stockholders.
5.1†	Opinion of Cooley LLP.
10.1+	Form of Indemnity Agreement by and between the Registrant and its directors and officers.
10.2+	Chimerix, Inc. 2002 Equity Incentive Plan and Form of Stock Option Agreement, Notice of Exercise and Form of Stock Option Grant Notice thereunder.
10.3+	Chimerix, Inc. 2012 Equity Incentive Plan and Form of Stock Option Agreement, Notice of Exercise and Form of Stock Option Grant Notice and Form of Restricted Stock Unit Award Agreement and Form of Restricted Stock Unit Award Grant Notice thereunder.

Exhibit Number	Description of Document
10.4+†	Chimerix, Inc. 2013 Equity Incentive Plan and Form of Stock Option Agreement, Notice of Exercise and Form of Stock Option Grant Notice thereunder.
10.5+†	Chimerix, Inc. Non-Employee Director Compensation Policy.
10.6+	Employment Agreement by and between the Registrant and Kenneth I. Moch dated October 20, 2009, as amended and clarified.
10.7+	Employment Offer Letter to Timothy W. Trost dated March 16, 2011.
10.8+	Employment Offer Letter to M. Michelle Berrey, M.D., M.P.H. dated November 7, 2012.
10.9+	Consulting Agreement by and between the Registrant and EPD Pharma Solutions, LLC dated August 12, 2011, as amended.
10.10+	Consulting Agreement by and between the Registrant and EPD Pharma Solutions, LLC dated January 1, 2013.
10.11+	Consulting Agreement by and between the Registrant and Synergee, LLC dated February 7, 2012, as amended.
10.12	Office Lease by and between the Registrant and ACP 2505 Meridian LLC dated September 1, 2007, as amended.
10.13	Lease Agreement by and between the Registrant and Biopharm Properties, LLC dated September 1, 2008, as amended.
10.14†	Deed of Sublease Agreement by and between the Registrant and MDxHealth, Inc. dated March 7, 2011, as amended.
10.15*	Collaboration and Exclusive License Agreement by and between the Registrant and Merck Sharp & Dohme Corp. dated July 23, 2012.
10.16*	Contract by and between the Registrant and the Biomedical Advanced Research and Development Authority of the United States Department of Health and Human Services dated February 16, 2011, as amended.
10.17*	License Agreement by and between the Registrant and The Regents of the University of California dated May 13, 2002, as amended.
10.18	Loan and Security Agreement by and among the Registrant, Midcap Financial SBIC, LP and Silicon Valley Bank dated January 27, 2012.
23.1†	Consent of Ernst & Young LLP, an Independent Registered Public Accounting Firm.
23.2†	Consent of Cooley LLP. Reference is made to Exhibit 5.1.
24.1	Power of Attorney. Reference is made to the signature page hereto.

† To be filed by amendment.

+ Indicates management contract or compensatory plan.

* The Registrant intends to seek confidential treatment with respect to certain portions of this exhibit.

(b) Financial Statement Schedules.

No financial statement schedules are provided because the information called for is not required or is shown either in the financial statements or the notes thereto.

Item 17. Undertakings.

The undersigned Registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification

against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer, or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

(a) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(b) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Durham, State of North Carolina, on the day of , 2013.

CHIMERIX, INC.

By: _____

Kenneth I. Moch
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Kenneth I. Moch and Timothy W. Trost, and each of them, as his true and lawful attorneys-in-fact and agents, each with the full power of substitution, for him and in his name, place or stead, in any and all capacities, to sign any and all amendments to this registration statement (including post-effective amendments), and to sign any registration statement for the same offering covered by this registration statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act, and all post-effective amendments thereto, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their, his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
Kenneth I. Moch	President, Chief Executive Officer and Member of the Board of Directors *(Principal Executive Officer)*	, 2013
Timothy W. Trost	Senior Vice President, Chief Financial Officer and Corporate Secretary *(Principal Financial and Accounting Officer)*	, 2013
James Niedel, M.D., Ph.D.	Chairman of the Board of Directors	, 2013
Farah Champsi	Member of the Board of Directors	, 2013
Martha J. Demski	Member of the Board of Directors	, 2013
Wende Hutton	Member of the Board of Directors	, 2013
Arthur M. Pappas	Member of the Board of Directors	, 2013
Timothy J. Wollaeger		

EXHIBIT INDEX

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23.1†	Consent of Ernst & Young LLP, an Independent Registered Public Accounting Firm.
23.2†	Consent of Cooley LLP. Reference is made to Exhibit 5.1.
24.1	Power of Attorney. Reference is made to the signature page hereto.

† To be filed by amendment.

+ Indicates management contract or compensatory plan.

* The Registrant intends to seek confidential treatment with respect to certain portions of this exhibit.

Exhibit 3.1

AMENDED AND RESTATED

CERTIFICATE OF INCORPORATION

OF

CHIMERIX, INC.

Kenneth I. Moch hereby certifies that:

1. The name of the corporation is Chimerix, Inc. (the ***"Corporation"***). The original Certificate of Incorporation of the Corporation was filed with the Delaware Secretary of State on April 7, 2000.

2. He is the duly elected and acting Chief Executive Officer of the Corporation.

3. Pursuant to Sections 228, 242 and 245 of the Delaware General Corporation Law, this Amended and Restated Certificate of Incorporation of the Corporation was adopted by the Corporation's Board of Directors (the ***"Board"***) and stockholders.

4. The text of the Corporation's Certificate of Incorporation as heretofore amended or supplemented is hereby restated and further amended to read in its entirety as follows:

I.

The name of the corporation is Chimerix, Inc. (the ***"Corporation"***).

II.

The address of the Corporation's registered office in the State of Delaware is 1209 Orange Street, City of Wilmington, County of New Castle, Delaware 19801, and the name of the registered agent is The Corporation Trust Company.

III.

The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the Delaware General Corporation Law.

IV.

A. This Corporation is authorized to issue two classes of shares to be designated, respectively, Preferred Stock ("***Preferred Stock***") and Common Stock ("***Common Stock***"). The total number of shares of capital stock that the Corporation is authorized to issue is One Hundred Fifty-Nine Million Three Hundred Seventy-Nine Thousand Two Hundred Ninety-Nine (159,379,299). The Preferred Stock shall have a par value of $0.001 per share and the Common Stock shall have a par value of $0.001 per share. The total number of shares of Common Stock this Corporation shall have authority to issue is Eighty-Nine Million Seven Hundred Thousand (89,700,000). The total number of shares of Preferred Stock this Corporation shall have authority to issue is Sixty-Nine Million Six Hundred Seventy-Nine Thousand Two Hundred Ninety-Nine (69,679,299), of which Eight Hundred Thousand (800,000) shall be designated ***"Series A Preferred Stock"***, Two Million Two Hundred Thirty-Three Thousand Eight Hundred Seventy-Nine (2,233,879) shall be designated ***"Series B Preferred Stock"***, Two Million Fifty-Four Thousand Three Hundred Thirty-Three (2,054,333) shall be designated ***"Series B-1 Preferred Stock"***, Five Million One Hundred Forty-One Thousand Six Hundred Ninety (5,141,690) shall be designated ***"Series C Preferred Stock"***, Eleven Million Three Hundred Fifty-Four Thousand Five Hundred Twenty-Six (11,354,526) shall be designated ***"Series D Preferred Stock"***, Seven Million Eight Hundred Ninety-Four Thousand Eight Hundred Seventy-One (7,894,871) shall be designated ***"Series E Preferred Stock"*** and Forty Million Two Hundred Thousand (40,200,000) shall be designated ***"Series F Preferred Stock."*** The Series A Preferred Stock, Series B Preferred Stock and Series B-1 Preferred Stock are referred to herein collectively as the ***"Junior Series Preferred."*** The Series C Preferred Stock and Series D Preferred Stock are referred to herein collectively as the ***"Mezzanine Preferred."*** The Junior Series Preferred, the Mezzanine Preferred, the Series E Preferred Stock and the Series F Preferred Stock are referred to herein collectively as the ***"Series Preferred."***

B. The powers, preferences, rights, restrictions, and other matters relating to the Series Preferred are as follows:

1. DIVIDENDS.

a. Holders of Series F Preferred Stock, in preference to the holders of the Series E Preferred Stock, Mezzanine Preferred, Junior Series Preferred and Common Stock, shall be entitled to receive, but only out of funds that are legally available therefor, cash dividends at the rate of eight percent (8%) of the Original Issue Price (as defined below) per annum on each outstanding share of Series F Preferred Stock. The ***"Original Issue Price"*** of the Series F Preferred Stock shall be Two Dollars and Four and One-Half Cents ($2.045) per share (as adjusted for any stock dividends, combinations, splits, recapitalizations and the like with respect to such applicable series of shares). Such dividends shall accrue on a daily basis, whether or not declared by the Board, and shall be cumulative to the extent not declared and paid for a period ending on the earlier of (i) February 7, 2014 or (ii) the date of approval by the United States Food and Drug Administration of the Corporation's new drug application for CMX001 as a therapeutic drug for an adenovirus or cytomegalovirus indication, and shall be payable in cash to the holders of Series F Preferred Stock concurrently with any liquidation, dissolution or winding up of the Corporation, Qualifying IPO, Asset Transfer or Acquisition (as such terms are defined below); provided, however, that (i) at the election of each holder of Series F Preferred Stock or (ii) in the case of an Asset Transfer or Acquisition in which all or part of the consideration paid is other than cash, such dividends shall instead be paid to each such holder of Series F Preferred Stock in a number of shares of Series F Preferred Stock equal to the amount of such dividends divided by the Original Issue Price of the Series F Preferred Stock, rounded down to the nearest whole share. After the earlier of the events described in (i) and (ii) in the immediately prior sentence, any future dividends shall be payable only when, as and if declared by the Board and shall be non-cumulative notwithstanding anything to the contrary set forth above.

b. So long as any shares of Series F Preferred Stock shall be outstanding, no dividend, whether in cash or property, shall be paid or declared, nor shall any other distribution be made, on any Series E Preferred Stock, nor shall any shares of any Series E Preferred Stock be purchased, redeemed, or otherwise acquired for value by the Corporation until (i) the Corporation has received the prior written consent of the Series F Requisite Investors (as defined in that certain Series F Preferred Stock and Warrant Purchase Agreement (the ***"Purchase Agreement"***), dated on or about the date hereof, by and among the Corporation and the investors listed therein) in accordance with Section B.5(a) and (ii) all dividends (set forth in Section B.1(a) above) on the Series F Preferred Stock shall have been paid or declared and set apart. Prior to the payment of any dividend on any share of Series E Preferred Stock, an additional dividend shall be paid with respect to all outstanding shares of Series F Preferred Stock in an amount equal per share (on an as-if-converted to Common Stock basis) to the amount paid or set aside for each share of Series E Preferred Stock (on an as-if-converted to Common Stock basis).

c. After (i) the Corporation has received the prior written consent of the Series F Requisite Investors in accordance with Section B.5(a) and (ii) the payment, declaration or setting apart of dividends on the Series F Preferred Stock as set forth in Sections B.1(a) and B.1(b) above, holders of Series E Preferred Stock, in preference to the holders of the Mezzanine Preferred, Junior Series Preferred and Common Stock, shall be entitled to receive, when and as declared by the Board, but only out of funds that are legally available therefor, cash dividends at the rate of eight percent (8%) of the applicable Original Issue Price per annum on each outstanding share of Series E Preferred Stock. The ***"Original Issue Price"*** of the Series E Preferred Stock shall be Two Dollars and Four and One-Half Cents ($2.045) per share (as adjusted for any stock dividends, combinations, splits, recapitalizations and the like with respect to such applicable series of shares). Such dividends shall be payable only when, as and if declared by the Board and shall be non-cumulative.

d. So long as any shares of Series F Preferred Stock or Series E Preferred Stock shall be outstanding, no dividend, whether in cash or property, shall be paid or declared, nor shall any other distribution be made, on any Mezzanine Preferred, nor shall any shares of any Mezzanine Preferred be purchased, redeemed, or otherwise acquired for value by the Corporation until (i) the Corporation has received the prior written consent of the Series F Requisite Investors in accordance with Section B.5(a) and (ii) all dividends (set forth in Sections B.1(a), B.1(b) and B.1(c) above) on the Series F Preferred Stock and Series E Preferred Stock shall have been paid or declared and set apart. Prior to the payment of any dividend on any share of Mezzanine Preferred, an additional dividend shall be paid with respect to all outstanding shares of Series F Preferred Stock and Series E Preferred Stock in an amount equal per share (on an as-if-converted to Common Stock basis) to the amount paid or set aside for each share of Mezzanine Preferred (on an as-if-converted to Common Stock basis).

e. After (i) the Corporation has received the prior written consent of the Series F Requisite Investors in accordance with Section B.5(a) and (ii) the payment, declaration or setting apart of dividends on the Series F Preferred Stock and the Series E Preferred Stock as set forth in Sections B.1(a), B.1(b), B.1(c) and B.1(d) above, holders of Mezzanine Preferred, in preference to the holders of the Junior Series Preferred and Common Stock, shall be entitled to receive, when and as declared by the Board, but only out of funds that are legally available therefor, cash dividends at the rate of eight percent (8%) of the applicable Original Issue Price per annum on each outstanding share of Mezzanine Preferred. The ***"Original Issue Price"*** of the Mezzanine Preferred shall be Two Dollars and Four and One-Half Cents ($2.045) per share (as adjusted for any stock dividends, combinations, splits, recapitalizations and the like with respect to such applicable series of shares). Such dividends shall be payable only when, as and if declared by the Board and shall be non-cumulative.

f. So long as any shares of Series F Preferred Stock, Series E Preferred Stock or Mezzanine Preferred shall be outstanding, no dividend, whether in cash or property, shall be paid or declared, nor shall any other distribution be made, on any Junior Series Preferred, nor shall any shares of any Junior Series Preferred be purchased, redeemed, or otherwise acquired for value by the Corporation until (i) the Corporation has received the prior written consent of the Series F Requisite Investors in accordance with Section B.5(a) and (ii) all dividends (set forth in Sections B.1(a), B.1(b), B.1(c), B.1(d) and B.1(e) above) on the Series F Preferred Stock, Series E Preferred Stock and Mezzanine Preferred shall have been paid or declared and set apart. Prior to the payment of any dividend on any share of Junior Series Preferred, an additional dividend shall be paid with respect to all outstanding shares of Series F Preferred Stock, Series E Preferred Stock and Mezzanine Preferred in an amount equal per share (on an as-if-converted to Common Stock basis) to the amount paid or set aside for each share of Junior Series Preferred (on an as-if-converted to Common Stock basis).

g. After (i) the Corporation has received the prior written consent of the Series F Requisite Investors in accordance with Section B.5(a) and (ii) the payment, declaration or setting apart of dividends on the Series F Preferred Stock, the Series E Preferred Stock and the Mezzanine Preferred as set forth in Sections B.1(a), B.1(b), B.1(c), B.1(d), B.1(e) and B.1(f) above, holders of Junior Series Preferred, in preference to the holders of the Common Stock, shall be entitled to receive, when and as declared by the Board, but only out of funds that are legally available therefor, cash dividends at the rate of eight percent (8%) of the applicable Original Issue Price per annum on each outstanding share of Junior Series Preferred. The ***"Original Issue Price"*** of (x) the Series A Preferred Stock shall be Fifty Cents ($0.50) per share (as adjusted for any stock dividends, combinations, splits, recapitalizations and the like with respect to such applicable series of shares), (y) the Series B Preferred Stock shall be One Dollar ($1.00) per share (as adjusted for any stock dividends, combinations, splits, recapitalizations and the like with respect to such applicable series of shares) and (z) the Series B-1 Preferred Stock shall be One Dollar and Fifty Cents ($1.50) per share (as adjusted for any stock dividends, combinations, splits, recapitalizations and the like with respect to such applicable series of shares). Such dividends shall be payable only when, as and if declared by the Board and shall be non-cumulative.

h. So long as any shares of Series Preferred shall be outstanding, no dividend, whether in cash or property, shall be paid or declared, nor shall any other distribution be made, on any Common Stock, nor shall any shares of Common Stock be purchased, redeemed, or otherwise acquired for value by the Corporation (except for acquisitions of Common Stock by the Corporation pursuant to agreements which permit the Corporation to repurchase such shares upon termination of services to the Corporation or in exercise of the Corporation's right of first refusal upon a proposed transfer) until (i) the Corporation has received the prior written consent of the Series F Requisite Investors in accordance with Section B.5(a) and (ii) all dividends (set forth in Sections B.1(a), B.1(b), B.1(c), B.1(d), B.1(e), B.1(f) and B.1(g) above) on the Series Preferred shall have been paid or declared and set apart. In the event dividends are paid on any share of Common Stock, an additional dividend shall be paid with respect to all outstanding shares of Series Preferred in an amount equal per share (on an as-if-converted to Common Stock basis) to the amount paid or set aside for each share of Common Stock.

i. The provisions of Section B.1(h) shall not, however, apply to (i) a dividend payable in Common Stock, or (ii) any repurchase of any outstanding securities of the Corporation that is unanimously approved by the Board. The holders of the Series Preferred expressly waive their rights, if any, as described in California Code Sections 502, 503 and 506 as they relate to repurchases of shares upon termination of employment or service as a consultant or director.

2. LIQUIDATION PREFERENCE.

a. In the event of any liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, before any distribution or payment shall be made to the holders of any Series E Preferred Stock, Mezzanine Preferred, Junior Series Preferred or Common Stock, the holders of Series F Preferred Stock shall be entitled to be paid out of the assets of the Corporation an amount per share of Series F Preferred Stock equal to the applicable Original Issue Price plus all accrued or declared and unpaid dividends in respect of such share of Series F Preferred Stock held by them. If, upon any such liquidation, distribution or winding up, the assets of the Corporation shall be insufficient to make payment in full to all holders of Series F Preferred Stock of the liquidation preference set forth in this Section B.2(a), then all such assets shall be distributed among the holders of Series F Preferred Stock at the time outstanding, ratably in proportion to the full amounts to which they would otherwise be respectively entitled.

b. After full payment to the holders of the Series F Preferred Stock of the amounts set forth in Section B.2(a) above, but before any distribution or payment shall be made to the holders of any Mezzanine Preferred, Junior Series Preferred or Common Stock, the holders of Series E Preferred Stock shall be entitled to be paid out of the assets of the Corporation an amount per share of Series E Preferred Stock equal to the applicable Original Issue Price plus all declared and unpaid dividends in respect of such share of Series E Preferred Stock held by them. If, upon any such liquidation, distribution or winding up, the assets of the Corporation shall be insufficient to make payment in full to all holders of Series E Preferred Stock of the liquidation preference set forth in this Section B.2(b) (following payment of the amounts set forth in Section B.2(a)), then such assets shall be distributed among the holders of Series E Preferred Stock at the time outstanding, ratably in proportion to the full amounts to which they would otherwise be respectively entitled.

c. After full payment to the holders of the Series F Preferred Stock and Series E Preferred Stock of the amounts set forth in Sections B.2(a) and B.2(b) above, but before any distribution or payment shall be made to the holders of any Junior Series Preferred or Common Stock, the holders of Mezzanine Preferred shall be entitled to be paid out of the assets of the Corporation an amount per share of Mezzanine Preferred equal to the applicable Original Issue Price plus all declared and unpaid dividends in respect of such share of Mezzanine Preferred held by them. If, upon any such liquidation, distribution or winding up, the assets of the Corporation shall be insufficient to make payment in full to all holders of Mezzanine Preferred of the liquidation preference set forth in this Section B.2(c) (following payment of the amounts set forth in Sections B.2(a) and B.2(b)), then such assets shall be distributed among the holders of Mezzanine Preferred at the time outstanding, ratably in proportion to the full amounts to which they would otherwise be respectively entitled.

d. After full payment to the holders of the Series F Preferred Stock, Series E Preferred Stock and Mezzanine Preferred of the amounts set forth in Sections B.2(a), B.2(b) and B.2(c) above, but before any distribution or payment shall be made to the holders of any Common Stock, the holders of Junior Series Preferred shall be entitled to be paid out of the assets of the Corporation an amount per share of Junior Series Preferred equal to the applicable Original Issue Price plus all declared and unpaid dividends in respect of such share of Junior Series Preferred held by them. If, upon any such liquidation, distribution or winding up, the assets of the Corporation shall be insufficient to make payment in full to all holders of Junior Series Preferred of the liquidation preference set forth in this Section B.2(d) (following payment of the amounts set forth in Sections B.2(a), B.2(b) and B.2(c)), then such assets shall be distributed among the holders of Junior Series Preferred at the time outstanding, ratably in proportion to the full amounts to which they would otherwise be respectively entitled.

e. After full payment to the holders of the Series Preferred of the amounts set forth in Sections B.2(a), B.2(b), B.2(c) and B.2(d) above, the entire remaining assets and funds of the Corporation legally available for distribution, if any, shall be distributed among the holders of the Series Preferred and Common Stock in proportion to the shares of Common Stock then held by such holders, with each share of Series Preferred treated as the number of shares of Common Stock into which such share of Series Preferred is then convertible; *provided, however*, that the holders of Series Preferred will participate in the distribution pursuant to this Section B.2(e) only until such time as such holders have received pursuant to Sections B.2(a), B.2(b), B.2(c) and B.2(d) above and this Section B.2(e) an aggregate amount per share of the applicable Series Preferred equal to two (2) times the applicable Original Issue Price; thereafter, the remaining assets of the Corporation legally available for distribution (or consideration received in such transaction), if any, shall be distributed ratably to the holders of the Common Stock. Notwithstanding the foregoing, for purposes of determining the amount each holder of shares of Series Preferred is entitled to receive with respect to any liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, each such holder of shares of a series of Series Preferred shall be deemed to have converted (regardless of whether such holder actually converted) such holder's shares of such series into shares of Common Stock immediately prior to such liquidation, dissolution or winding up of the Corporation if, as a result of an actual conversion, such holder would receive, in the aggregate, an amount greater than the amount that would be distributed to such holder in respect of such shares of such series of Series Preferred if such holder did not convert such shares of such series of Series Preferred into shares of Common Stock.

f. Unless the Series F Requisite Investors and the holders of a majority of the outstanding Series E Preferred Stock, voting as a separate class (the ***"Majority Series E Holders"***) elect otherwise, the following events shall be treated as a liquidation, dissolution or winding up of the Corporation and shall entitle the holders of Series Preferred and Common Stock to receive at the closing of such event in cash, securities or other property (valued as provided in Section B.2(g) below) amounts as specified in Sections B.2(a), B.2(b), B.2(c), B.2(d) and B.2(e) above:

(i) a sale, exclusive license, or other disposition of all or substantially all of the assets of the Corporation (an ***"Asset Transfer"***); or

(ii) any acquisition of the Corporation by another person or entity (or group of persons or entities) by means of any transaction or series of transactions (including, without limitation, any reorganization, consolidation or merger of the Corporation with or into any other entity) (x) in which the holders of the Corporation's outstanding capital stock immediately before the first such transaction do not, immediately after any other such transaction, retain stock or other equity interests representing at least fifty percent (50%) of the voting power of the surviving entity of such transaction or (y) after which any such person or entity (or group of persons or entities) hold more than fifty percent (50%) of the voting power of the Corporation's outstanding capital stock excluding any transaction or series of related transactions effected for bona fide fund raising purposes (an ***"Acquisition"***). Unless otherwise agreed upon by the Series F Requisite Investors and the Majority Series E Holders, no stockholder of the Corporation shall enter into any transaction or series of related transactions resulting in a liquidation, dissolution or winding up of the Corporation pursuant to the terms hereof unless the terms of such transaction or transactions provide that the consideration to be paid to the stockholders of the Corporation is to be allocated in accordance with the preferences and priorities set forth in this Section B.2.

g. Whenever the distribution provided for in this Section B.2 shall be payable in securities or property other than cash, the value of such distribution shall be the fair market value of such securities or other property as determined in good faith by the Board.

h. Notwithstanding any other provision set forth in this Section B.2, unless otherwise agreed upon by the Series F Requisite Investors and the Majority Series E Holders, in the event that any consideration payable to the Corporation or its stockholders in connection with any Asset Transfer or Acquisition is contingent upon the occurrence of any event or the passage of time pursuant to deferred purchase price payments, installment payments, payments made in respect of any promissory note issued in such transaction, payments from escrow, purchase price adjustment payments or payments in respect of "earnouts" or holdbacks, such consideration shall not be deemed received by the Corporation or its stockholders or available for distribution to such stockholders unless and until such consideration is indefeasibly received by the Corporation or its stockholders in accordance with the terms of such Asset Transfer or Acquisition.

i. In applying distributions upon a liquidation, dissolution or winding up of the Corporation (including an Asset Transfer or Acquisition) pursuant to this Section B.2 that involves installment or contingent payments, the holders of the Series Preferred will be entitled to an amount, re-calculated at the time of each installment or contingent payment and applied on a cumulative basis, that is the greater of (i) the amounts specified in Section B.2(a)-(e), as applicable, and (ii) the amount to which such holder of Series Preferred would have been entitled to on an as-if-converted to Common Stock basis, taking into account cumulative installment or contingent payments.

3. VOTING RIGHTS; DIRECTORS.

a. Each holder of shares of the Series Preferred shall be entitled to that number of votes equal to the number of shares of Common Stock issuable upon conversion of such shares of Series Preferred and shall have voting rights and powers equal to the voting rights and powers of the Common Stock (except as otherwise expressly provided herein or as required by law), voting together with the Common Stock as a single class on an as-if-converted to Common Stock basis and shall be entitled to notice of any stockholders' meeting in accordance with the Bylaws of the Corporation. Fractional votes shall not, however, be permitted and any fractional voting rights resulting from the above formula (after aggregating all shares into which shares of Series Preferred held by each holder could be converted) shall be rounded to the nearest whole number (with one-half being rounded upward). Each holder of Common Stock shall be entitled to one (l) vote for each share of Common Stock held.

b. Notwithstanding Section B.3(a) above, (i) the holders of Series A Preferred Stock, by a majority vote, voting together as a single class, shall be entitled to elect one (1) member of the Board (the ***"Series A Director"***), (ii) the holders of Series E Preferred Stock, by a majority vote, voting together as a single class, shall be entitled to elect two (2) members of the Board (the ***"Series E Directors"***), (iii) the holders of Series F Preferred Stock, by a vote of the holders of a majority of the outstanding Series F Preferred Stock, voting as a separate class, shall be entitled to elect two (2) members of the Board (the ***"Series F Directors"***, and together with the Series A Director and the Series E Directors, the ***"Preferred Directors"***), (iv) the holders of Common Stock, by a majority vote, voting together as a single class, shall be entitled to elect one (1) member of the Board (the ***"Common Director"***) and (v) all remaining members of the Board shall be elected by all classes of the Corporation's capital stock, by a majority vote, voting together as a single class on an as-if-converted to Common Stock basis as provided in Section B.3(a) above.

c. Subject to Section B.3(b) above, at any meeting held for the purpose of electing or nominating directors, the presence in person or by proxy of the holders of (i) a majority of the Series A Preferred Stock then outstanding shall constitute a quorum of the Series A Preferred Stock for the election or nomination of the Series A Director, (ii) a majority of the Series E Preferred Stock then outstanding shall constitute a quorum of the Series E Preferred Stock for the election or nomination of the Series E Directors, (iii) a majority of the Series F Preferred Stock then outstanding shall constitute a quorum of the Series F Preferred Stock for the election or nomination of the Series F Directors, (iv) a majority of the Common Stock then outstanding shall constitute a quorum of the Common Stock for the election or nomination of the Common Director and (v) a majority of all classes of the Corporation's capital stock, on an as-if-converted to Common Stock basis, then outstanding shall constitute a quorum of all such classes for the election or nomination of all remaining directors; a vacancy in any directorship elected solely by (i) the holders of Series A Preferred Stock shall be filled only by the vote of the holders of Series A Preferred Stock as provided in Section B.3(b)(i) above, (ii) the holders of Series E Preferred Stock shall be filled only by the vote of the holders of Series E Preferred Stock as provided in Section B.3(b)(ii) above, (iii) the holders of Series F Preferred Stock shall be filled only by the vote of the holders of Series F Preferred Stock as provided in Section B.3(b)(iii) above and (iv) the holders of Common Stock shall be filled only by the vote of the holders of Common Stock as provided in Section B.3(b)(iv) above; and a vacancy in all remaining directorships shall be filled by the vote of the holders of the Corporation's capital stock as provided in Section B.3(b)(v) above.

4. **Conversion.** The holders of the Series Preferred shall have conversion rights as follows:

a. **Optional Conversion.** Subject to and in compliance with the provisions of this Section B.4, any shares of Series Preferred may, at the option of the holder, be converted at any time into fully-paid and nonassessable shares of Common Stock. The number of shares of Common Stock to which a holder of Series Preferred shall be entitled upon conversion shall be the product obtained by multiplying the applicable Series Preferred Conversion Rate then in effect (determined as provided in Section B.4(b)) by the number of shares of Series Preferred, as applicable, being converted.

b. **Series Preferred Conversion Rate.** The conversion rate in effect at any time for conversion of the Series Preferred (the ***"Series Preferred Conversion Rate"***) shall be the quotient obtained by dividing the applicable Original Issue Price of the Series Preferred by the applicable ***"Junior Series Preferred Conversion Price," "Mezzanine Preferred Conversion Price," "Series E Preferred Conversion Price"*** or ***"Series F Preferred Conversion Price"*** calculated as provided in Section B.4(c).

c. **Series Preferred Conversion Price.** The conversion price for the Series A Preferred Stock, Series B Preferred Stock, Series B-1 Preferred Stock, Series C Preferred Stock, Series D Preferred Stock, Series E Preferred Stock and Series F Preferred Stock shall initially be the applicable Original Issue Price of the Series A Preferred Stock, Series B Preferred Stock and Series B-1 Preferred Stock (collectively, the ***"Junior Series Preferred Conversion Price"***), the Series C Preferred Stock and Series D Preferred Stock (collectively, the ***"Mezzanine Preferred Conversion Price"***), the Series E Preferred Stock (the ***"Series E Preferred Conversion Price"***), and the Series F Preferred Stock (the ***"Series F Preferred Conversion Price"***) respectively. Such initial Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price and Series F Preferred Conversion Price shall be adjusted from time to time in accordance with this Section B.4. All references to the Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price herein shall mean the respective Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price as so adjusted.

d. Mechanics of Conversion. Each holder of Series Preferred who converts the same into shares of Common Stock pursuant to this Section B.4 shall surrender the certificate or certificates therefor, duly endorsed, at the office of the Corporation or any transfer agent for the Series Preferred, and shall give written notice to the Corporation at such office that such holder elects to convert the same. Such notice shall state the number of shares of Series Preferred being converted. Thereupon, the Corporation shall promptly issue and deliver at such office to such holder a certificate or certificates for the number of shares of Common Stock to which such holder is entitled and shall promptly pay (i) in cash or, to the extent sufficient funds are not then legally available therefor, in Common Stock (at the Common Stock's fair market value determined by the Board as of the date of such conversion), any declared and unpaid dividends on the shares of Series Preferred being converted and (ii) in cash (at the Common Stock's fair market value determined by the Board as of the date of conversion) the value of any fractional share of Common Stock otherwise issuable to any holder of Series Preferred. Such conversion shall be deemed to have been made at the close of business on the date of such surrender of the certificates representing the shares of Series Preferred to be converted (or the holder thereof notifies the Corporation that such certificates have been lost, stolen or destroyed and such holder executes an agreement to indemnify the Corporation from any loss incurred by it in connection with such certificates), and the person entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock on such date. If the conversion is in connection with an underwritten offering of securities registered pursuant to the Securities Act of 1933, as amended, or any Asset Transfer or Acquisition, the conversion may, at the option of any holder tendering Series Preferred for conversion, be conditioned upon the closing with the underwriters of the sale of securities pursuant to such offering or the closing of such Asset Transfer or Acquisition, in which event the person(s) entitled to receive the Common Stock upon conversion of the Series Preferred shall not be deemed to have converted such Series Preferred until immediately prior to the closing of such sale of securities or the closing of such Asset Transfer or Acquisition.

e. Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after, with respect to the Junior Series Preferred, Mezzanine Preferred and Series E Preferred Stock, the date and time of filing of this Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware (the ***"Effective Time"***) or, with respect to the Series F Preferred Stock, the date that the first share of Series F Preferred Stock is issued (the ***"Issue Date"***), effect a subdivision or split of the outstanding Common Stock, the applicable Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price in effect immediately before that subdivision or split shall be proportionately decreased. Conversely, if the Corporation shall at any time or from time to time after, with respect to the Junior Series Preferred, Mezzanine Preferred and Series E Preferred Stock, the Effective Time or, with respect to the Series F Preferred Stock, the Issue Date, combine the outstanding shares of Common Stock into a smaller number of shares, the applicable Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price in effect immediately before the combination shall be proportionately increased. Any adjustment under this Section B.4(e) shall become effective at the close of business on the date the subdivision, split or combination becomes effective.

f. Adjustment for Common Stock Dividends and Distributions. If the Corporation at any time or from time to time after, with respect to the Junior Series Preferred, Mezzanine Preferred and Series E Preferred Stock, the Effective Time or, with respect to the Series F Preferred Stock, the Issue Date, makes, or fixes a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in additional shares of Common Stock or other securities or rights convertible into, or entitling the holder thereof to receive directly or indirectly, additional shares of Common Stock ("***Common Stock Equivalents***"), in each such event the applicable Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price that is then in effect shall be decreased as of the time of such issuance or, in the event such record date is fixed, as of the close of business on such record date, by multiplying the applicable Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price then in effect by a fraction (i) the numerator of which is the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and (ii) the denominator of which is the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock (or in the case of Common Stock Equivalents, shares of Common Stock underlying such Common Stock Equivalents) issuable in payment of such dividend or distribution; *provided, however*, that if such record date is fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the applicable Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter the applicable Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price shall be adjusted pursuant to this Section B.4(f) to reflect the actual payment of such dividend or distribution.

g. Adjustment for Reclassification, Exchange and Substitution. If at any time or from time to time after, with respect to the Junior Series Preferred, Mezzanine Preferred and Series E Preferred Stock, the Effective Time or, with respect to the Series F Preferred Stock, the Issue Date, the Common Stock issuable upon the conversion of the Series Preferred is changed into the same or a different number of shares of any class or classes of stock, whether by recapitalization, reclassification or otherwise (other than an Acquisition or Asset Transfer treated as a liquidation, dissolution or winding up of the Corporation as described in Section B.2(f) or a subdivision or combination of shares or stock dividend or a reorganization, merger, consolidation or sale of assets provided for elsewhere in this Section B.4), in any such event each holder of Series Preferred shall have the right thereafter to convert such stock into the kind and amount of stock and other securities and property receivable upon such recapitalization, reclassification or other change by holders of the maximum number of shares of Common Stock into which such shares of Series Preferred could have been converted immediately prior to such recapitalization, reclassification or change, all subject to further adjustment as provided herein or with respect to such other securities or property by the terms thereof.

h. Reorganizations, Mergers or Consolidations. If at any time or from time to time after, with respect to the Junior Series Preferred, Mezzanine Preferred and Series E Preferred Stock, the Effective Time or, with respect to the Series F Preferred Stock, the Issue Date, there is a capital reorganization of the Common Stock or the merger or consolidation of the Corporation with or into another corporation or another entity or person (other than an Acquisition or Asset Transfer as defined in Section B.2(f) or a recapitalization, subdivision, combination, reclassification, exchange or substitution of shares provided for elsewhere in this Section B.4), as a part of such capital reorganization, provision shall be made so that the holders of the Series Preferred shall thereafter be entitled to receive upon conversion of the Series Preferred the number of shares of stock or other securities or property of the Corporation to which a holder of the number of shares of Common Stock deliverable upon conversion would have been entitled on such capital reorganization, merger or consolidation subject to adjustment in respect of such stock or securities by the terms thereof. In any such case, appropriate adjustment shall be made in the application of the provisions of this Section B.4 with respect to the rights of the holders of Series Preferred after the capital reorganization, merger or consolidation to the end that the provisions of this Section B.4 (including adjustment of the applicable Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price then in effect and the number of shares issuable upon conversion of the Series Preferred) shall be applicable after that event and be as nearly equivalent as practicable.

i. Sale of Shares Below Series Preferred Conversion Price.

(i) If at any time or from time to time after the Effective Time, the Corporation issues or sells, or is deemed by the express provisions of this subsection (i) to have issued or sold, Additional Shares of Common Stock (as defined in subsection (i)(iv) below), other than as a dividend or other distribution on any class of stock as provided in Section B.4(f) above, and other than a subdivision or combination of shares of Common Stock as provided in Section B.4(e) above, for an Effective Price (as defined in subsection (i)(iv) below) less than the then effective applicable Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price, then and in each such case the then effective applicable Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price shall be reduced, as of the opening of business on the date of such issue or sale, to a price determined by multiplying such applicable Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price by a fraction (i) the numerator of which shall be (A) the number of shares of Common Stock deemed outstanding (as defined below) immediately prior to such issue or sale, plus (B) the number of shares of Common Stock which the aggregate consideration received (as computed in subsection (i)(ii) below) by the Corporation for the total number of Additional Shares of Common Stock so issued would purchase at such applicable Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price, and (ii) the denominator of which shall be the number of shares of Common Stock deemed outstanding (as defined below) immediately prior to such issue or sale plus the total number of Additional Shares of Common Stock so issued. For the purposes of the preceding sentence, the number of shares of Common Stock deemed outstanding as of a given date shall be the sum of (A) the number of shares of Common Stock actually outstanding, (B) the number of shares of Common Stock into which the then outstanding shares of Series Preferred could be converted if fully converted on the day immediately preceding the given date, and (C) the number of shares of Common Stock which could be obtained through the exercise or conversion of all other rights, options and convertible securities outstanding on the day immediately preceding the given date.

(ii) For the purpose of making any adjustment required under this Section B.4(i), the consideration received by the Corporation for any issue or sale of securities shall (A) to the extent it consists of cash, be computed at the net amount of cash received by the Corporation after deduction of any underwriting or similar commissions, compensation or concessions paid or allowed by the Corporation in connection with such issue or sale but without deduction of any expenses payable by the Corporation, (B) to the extent it consists of property other than cash, be computed at the fair value of that property as determined in good faith by the Board, and (C) if Additional Shares of Common Stock, Convertible Securities (as defined in subsection (i)(iii)) or rights or options to purchase either Additional Shares of Common Stock or Convertible Securities are issued or sold together with other stock or securities or other assets of the Corporation for a consideration which covers both, be computed as the portion of the consideration so received that may be reasonably determined in good faith by the Board to be allocable to such Additional Shares of Common Stock, Convertible Securities or rights or options.

(iii) For the purpose of the adjustment required under this Section B.4(i), if the Corporation issues or sells (i) stock or other securities convertible into, Additional Shares of Common Stock (such convertible stock or securities being herein referred to as ***"Convertible Securities"***) or (ii) rights or options for the purchase of Additional Shares of Common Stock or Convertible Securities and if the Effective Price of such Additional Shares of Common Stock is less than the applicable Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price, in each case the Corporation shall be deemed to have issued at the time of the issuance of such rights or options or Convertible Securities the maximum number of Additional Shares of Common Stock issuable upon exercise or conversion thereof (assuming the satisfaction of any conditions to convertibility, exercisability or exchangeability (including, without limitation, the passage of time)) and to have received as consideration for the issuance of such shares an amount equal to the total amount of the consideration, if any, received by the Corporation for the issuance of such rights or options or Convertible Securities, plus, in the case of such rights or options, the minimum amounts of consideration, if any, payable to the Corporation upon the exercise of such rights or options, plus, in the case of Convertible Securities, the minimum amounts of consideration, if any, payable to the Corporation (other than by cancellation of liabilities or obligations evidenced by such Convertible Securities) upon the conversion thereof; provided that if in the case of Convertible Securities the minimum amounts of such consideration cannot be ascertained, but are a function of antidilution or similar protective clauses, the Corporation shall be deemed to have received the minimum amounts of consideration without reference to such clauses; provided further that if the minimum amount of consideration payable to the Corporation upon the exercise or conversion of rights, options or Convertible Securities is reduced over time or on the occurrence or non-occurrence of specified events other than by reason of antidilution adjustments, the Effective Price shall be recalculated using the figure to which such minimum amount of consideration is reduced; provided further that if the minimum amount of consideration payable to the Corporation upon the exercise or conversion of such rights, options or Convertible Securities is subsequently increased, the Effective Price shall be again recalculated using the increased minimum amount of consideration payable to the Corporation upon the exercise or conversion of such rights, options or Convertible Securities; provided further that in the event of any increase in the number of shares of Common Stock deliverable upon the exercise or conversion of such rights, options or Convertible Securities, the applicable Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price, to the extent in any way affected by or initially determined using such rights, options or Convertible Securities, shall be adjusted to reflect such increase. No further adjustment of the applicable Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price, as adjusted upon the issuance of such rights, options or Convertible Securities, shall be made as a result of the actual issuance of Additional Shares of Common Stock on the exercise of any such rights or options or the conversion of any such Convertible Securities. If any such rights or options or the conversion privilege represented by any such Convertible Securities shall expire without having been exercised, the applicable Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price as adjusted upon the issuance of such rights, options or Convertible Securities shall be readjusted to the applicable Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price which would have been in effect had an adjustment been made on the basis that the only Additional Shares of Common Stock so issued were the Additional Shares of Common Stock, if any, actually issued or sold on the exercise of such rights or options or rights of conversion of such Convertible Securities, and such Additional Shares of Common Stock, if any, were issued or sold for the consideration actually received by the Corporation upon such exercise, plus the consideration, if any, actually received by the Corporation for the granting of all such rights or options, whether or not exercised, plus the consideration received for issuing or selling the Convertible Securities actually converted, plus the consideration, if any, actually received by the Corporation (other than by cancellation of liabilities or obligations evidenced by such Convertible Securities) on the conversion of such Convertible Securities, provided that such readjustment shall not apply to prior conversions of Series Preferred.

(iv) ***"Additional Shares of Common Stock"*** shall mean all shares of Common Stock issued by the Corporation or deemed to be issued pursuant to this Section B.4(i), other than

(A) shares of Common Stock issued upon conversion of the Series Preferred;

(B) (1) up to Seven Million Two Hundred Forty-Two Thousand Two Hundred Forty-Two (7,242,242) shares of Common Stock (as adjusted for any stock dividends, combinations and splits with respect to such shares of Common Stock) issued pursuant to the exercise of the stock options granted pursuant to the Corporation's 2002 Equity Incentive Plan (as amended, the "***Option Plan***") and outstanding on the date hereof, (2) up to Three Million Seven Hundred Seventy Thousand Five Hundred Eighty-Four (3,770,584) shares of Common Stock (as adjusted for any stock dividends, combinations and splits with respect to such shares of Common Stock) issued as restricted stock awards, or issuable upon exercise of stock options issued or granted after the date hereof pursuant to the Option Plan or (3) shares of Common Stock issued as restricted stock awards, or issuable upon exercise of stock options issued or granted after the date hereof pursuant to the Option Plan to the extent that any stock options or restricted stock awards previously granted pursuant to clause (1) or clause (2) of this clause (B) are canceled or expire unexercised or are repurchased upon termination of service to the Corporation, in each such case, issued to employees, officers, directors or consultants for the primary purpose of soliciting or retaining their employment or services for the benefit of the Corporation;

(C) shares of Common Stock issued pursuant to the exercise of warrants outstanding as of the Effective Time;

(D) shares of Common Stock and/or options, warrants or other purchase rights for Common Stock, and the Common Stock issued pursuant to such options, warrants or other rights issued for consideration other than cash pursuant to a merger, consolidation, acquisition or similar business combination approved by a majority of the directors then serving on the Board;

(E) up to Five Hundred Thousand (500,000) shares of Common Stock (including any shares subject to options, warrants or other purchase rights for Common Stock, and the Common Stock issued pursuant to such options, warrants or other rights) (as adjusted for any stock dividends, combinations, splits, recapitalizations and the like with respect to such shares) issued after the Effective Time pursuant to any leasing arrangement or debt financing from a bank or similar financial institution, or pursuant to any research and development or other strategic partnership, licensing or collaborative arrangements and other similar transactions, approved by a majority of the directors then serving on the Board including the affirmative vote or written consent of at least one of the Series F Directors;

(F) shares of Common Stock issued in connection with a firmly underwritten public offering in connection with which all shares of Series Preferred convert into Common Stock as provided in Section B.4(l) below;

(G) One Hundred Thousand (100,000) shares of Common Stock (as adjusted for any stock splits, dividends and recapitalizations and the like with respect to such shares of Common Stock) issued in connection with the Second Amendment to the License Agreement effective May 13, 2002 by and between the Corporation and The Regents of the University of California, as amended; and

(H) shares of Common Stock issued on conversion of shares of Series F Preferred Stock that are issued pursuant to the exercise of warrants that are issued pursuant to the Purchase Agreement.

The ***"Effective Price"*** of Additional Shares of Common Stock shall mean the quotient determined by dividing the total number of Additional Shares of Common Stock issued or sold, or deemed to have been issued or sold by the Corporation under this Section B.4(i), into the aggregate consideration received, or deemed to have been received by the Corporation for such issue under this Section B.4(i), for such Additional Shares of Common Stock.

j. Certificate of Adjustment. In each case of an adjustment or readjustment of the applicable Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price for the number of shares of Common Stock or other securities issuable upon conversion of the Series Preferred, if the Series Preferred is then convertible pursuant to this Section B.4, the Corporation, at its expense, shall compute such adjustment or readjustment in accordance with the provisions hereof and prepare a certificate showing such adjustment or readjustment, and shall mail such certificate, by first class mail, postage prepaid, to each registered holder of Series Preferred at the holder's address as shown in the Corporation's books. The certificate shall set forth such adjustment or readjustment, showing in detail the facts upon which such adjustment or readjustment is based, including a statement, as applicable, of (i) the consideration received or deemed to be received by the Corporation for any Additional Shares of Common Stock issued or sold or deemed to have been issued or sold, (ii) the applicable Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price at the time in effect, (iii) the number of Additional Shares of Common Stock and (iv) the type and amount, if any, of other property which at the time would be received upon conversion of the Series Preferred.

k. Notices of Record Date. Upon (i) any taking by the Corporation of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or (ii) any Acquisition or other capital reorganization of the Corporation, any reclassification or recapitalization of the capital stock of the Corporation, any merger or consolidation of the Corporation with or into any other corporation, or any Asset Transfer, or any voluntary or involuntary dissolution, liquidation or winding up of the Corporation, the Corporation shall mail to each holder of Series Preferred at least ten (10) days prior to the record date specified therein (or such shorter period approved by the Series F Requisite Investors) a notice specifying (A) the date on which any such record is to be taken for the purpose of such dividend or distribution and a description of such dividend or distribution, (B) the date on which any such Acquisition, reorganization, reclassification, transfer, consolidation, merger, Asset Transfer, dissolution, liquidation or winding up is expected to become effective, and (C) the date, if any, that is to be fixed as to when the holders of record of Common Stock (or other securities) shall be entitled to exchange their shares of Common Stock (or other securities) for securities or other property deliverable upon such Acquisition, reorganization, reclassification, transfer, consolidation, merger, Asset Transfer, dissolution, liquidation or winding up.

l. Automatic Conversion.

(i) Each share of Series Preferred shall automatically be converted into shares of Common Stock, based on the then effective applicable Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price, at any time upon the affirmative election of the Series F Requisite Investors and the Majority Series E Holders.

(ii) Each share of Series Preferred shall automatically be converted into shares of Common Stock, based on the then effective applicable Junior Series Preferred Conversion Price, Mezzanine Preferred Conversion Price, Series E Preferred Conversion Price or Series F Preferred Conversion Price, immediately prior to the closing of a firmly underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, covering the offer and sale of Common Stock for the account of the Corporation in which (i) the per share price is at least $4.09 per share (as adjusted for stock splits, dividends, recapitalizations and the like with respect to such shares), (ii) the gross cash proceeds to the Corporation (before underwriting discounts, commissions and fees) are at least $50,000,000 and (iii) immediately after which the Common Stock is listed on a United States national securities exchange (a ***"Qualifying IPO"***).

(iii) Upon the occurrence of any of the events specified in Sections B.4(l)(i) or B.4(l)(ii) above, any declared and unpaid dividends shall be paid in accordance with the provisions of Section B.4(d) (and, upon a Qualifying IPO, any accrued but unpaid dividends payable to the holders of Series F Preferred Stock shall be paid in the manner provided in Section B.1(a)), and the outstanding shares of applicable Series Preferred shall be converted automatically without any further action by the holders of such shares and whether or not the certificates representing such shares are surrendered to the Corporation or its transfer agent; *provided*, *however*, that the Corporation shall not be obligated to issue certificates evidencing the shares of Common Stock issuable upon such conversion unless the certificates evidencing such shares of Series Preferred are either delivered to the Corporation or its transfer agent as provided below, or the holder notifies the Corporation or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificates. Upon the occurrence of such automatic conversion of the Series Preferred, the holders of Series Preferred shall surrender the certificates representing such shares at the office of the Corporation or any transfer agent for the Series Preferred. Thereupon, there shall be issued and delivered to such holder promptly at such office and in its name as shown on such surrendered certificate or certificates, a certificate or certificates for the number of shares of Common Stock into which the shares of Series Preferred surrendered were convertible on the date on which such automatic conversion occurred, and any declared and unpaid dividends shall be paid in accordance with the provisions of Section B.4(d) (and, upon a Qualifying IPO, any accrued but unpaid dividends payable to the holders of Series F Preferred Stock shall be paid in the manner provided in Section B.1(a)).

m. Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of Series Preferred. All shares of Common Stock (including fractions thereof) issuable upon conversion of more than one share of Series Preferred by a holder thereof shall be aggregated for purposes of determining whether the conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the conversion would result in the issuance of any fractional share, the Corporation shall, in lieu of issuing any fractional share, pay cash equal to the product of such fraction multiplied by the Common Stock's fair market value (as determined by the Board) on the date of conversion.

n. Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series Preferred, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of the Series Preferred. If at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series Preferred, the Corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose.

o. **Notices.** Any notice required by the provisions of this Section B.4 shall be in writing and shall be deemed effectively given: (i) upon personal delivery to the party to be notified, (ii) when sent by confirmed electronic mail or facsimile if sent during normal business hours of the recipient; if not, then on the next business day, (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (iv) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with verification of receipt. All notices shall be addressed to each holder of record at the address of such holder appearing on the books of the Corporation.

p. **Payment of Taxes.** The Corporation will pay all taxes (other than taxes based upon income) and other governmental charges that may be imposed with respect to the issue or delivery of shares of Common Stock upon conversion of shares of Series Preferred, excluding any tax or other charge imposed in connection with any transfer involved in the issue and delivery of shares of Common Stock in a name other than that in which the shares of Series Preferred so converted were registered.

q. **No Dilution or Impairment.** Without the consent of the Series F Requisite Investors and the Majority Series E Holders, the Corporation shall not amend its Certificate of Incorporation or participate in any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or take any other voluntary action, for the purpose of avoiding or seeking to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Corporation, but shall at all times in good faith assist in carrying out all such action as may be reasonably necessary or appropriate in order to protect the conversion rights of the holders of the Series Preferred against dilution or other impairment.

5. **Restrictions and Limitations.**

a. **Separate Vote of Series F Preferred Stock.** The Corporation shall not take any of the following actions, whether by means of amendment to the Certificate of Incorporation or by merger, consolidation or otherwise, without the prior written consent of the Series F Requisite Investors:

(i) Any amendment, alteration, or repeal of any provision of the Certificate of Incorporation or the Bylaws of the Corporation (including any filing of a Certificate of Designation);

(ii) Any increase or decrease in the authorized number of shares of Series F Preferred Stock, Common Stock or Preferred Stock;

(iii) Any authorization or any designation, whether by reclassification or otherwise, of any new class or series of stock or any other securities convertible into or exercisable or exchangeable for equity securities of the Corporation having any right, preference or privilege ranking on a parity with, or senior to, the rights, preferences or privileges of the Series F Preferred Stock;

(iv) Any redemption, repurchase, payment of dividends (other than Common Stock dividends) or other distributions with respect to its capital stock or other equity securities (except for acquisitions of Common Stock by the Corporation pursuant to agreements which permit the Corporation to repurchase such shares upon termination of services to the Corporation or in exercise of the Corporation's right of first refusal upon a proposed transfer);

(v) Any Asset Transfer or Acquisition;

(vi) Any other disposition, sale or license of assets of the Corporation then having a fair market value of greater than ten percent (10%) of the total fair market value of the Corporation's assets, as determined in good faith by the Board, unless approved by a majority of the directors then serving on the Board including the affirmative vote or written consent of at least one of the Series F Directors;

(vii) Any increase or decrease in the authorized number of members of the Corporation's Board;

(viii) Any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or its business;

(ix) Any material change in the Corporation's fundamental business, unless approved by a majority of the directors then serving on the Board including the affirmative vote or written consent of at least one of the Series F Directors;

(x) Any acquisition of any other business entity (or such entity's business, operations or assets), or any entry into strategic alliances, material technology licensing arrangements or other corporate partnering relationships, unless approved by a majority of the directors then serving on the Board including the affirmative vote or written consent of at least one of the Series F Directors;

(xi) The undertaking of any of the foregoing by any subsidiary of the Corporation; or

(xii) The issuance of any shares of the Series F Preferred Stock other than (i) pursuant to the Initial Closing or a Subsequent Closing (each as defined in the Purchase Agreement), (ii) pursuant to the exercise of warrants that are issued pursuant to the Purchase Agreement, (iii) pursuant to the payment of dividends pursuant to Section B.1(a) of Article IV or (iv) up to an aggregate of One Hundred Twenty-Six Thousand Six Hundred Fifty-Three (126,653) shares as approved by the Board.

b. Separate Vote of Series E Preferred Stock. The Corporation shall not, and shall not permit any of its subsidiaries to, take any of the following actions, whether by means of amendment to the Certificate of Incorporation or by merger, consolidation or otherwise, without the prior written consent of the Majority Series E Holders:

(i) Any amendment, alteration, or repeal of any provision of the Certificate of Incorporation or the Bylaws of the Corporation that would adversely affect the rights, preferences or privileges of the Series E Preferred Stock;

(ii) Any increase or decrease in the authorized number of shares of Series E Preferred Stock;

(iii) Any authorization or any designation, whether by reclassification or otherwise, of any new class or series of stock or any other securities convertible into or exercisable or exchangeable for equity securities of the Corporation having any right, preference or privilege ranking on a parity with, or senior to, the rights, preferences or privileges of the Series E Preferred Stock, unless such stock or securities also ranks on a parity with, or senior to, the rights, preferences or privileges of the Series F Preferred Stock;

(iv) Any Asset Transfer or Acquisition; or

(v) Any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or its business.

6. REDEMPTION.

a. The Corporation shall be obligated to redeem the Series F Preferred Stock as follows:

(i) The Series F Requisite Investors may require the Corporation, to the extent it may lawfully do so, to redeem all of the then outstanding Series F Preferred Stock in three (3) annual installments beginning not prior to the seventh (7^{th}) anniversary of the Issue Date, and ending on the date two (2) years from such first redemption date (each a ***"Redemption Date"***); provided that the Corporation shall receive at least sixty (60) days prior to such the first such Redemption Date written notice of such election of the Series F Preferred Stock. The Corporation shall effect such redemptions on each Redemption Date by paying in cash in exchange for the shares of Series F Preferred Stock to be redeemed on such Redemption Date at a price equal to the greater of (A) the fair market value of Series F Preferred Stock on such date as determined in good faith by the Board (provided that if the Series F Requisite Investors in good faith disagree with such fair market value, the Corporation shall engage a mutually acceptable investment bank or valuation firm to provide its opinion as to such fair market value, which shall be final and binding as to all parties) or (B) the Original Issue Price of the Series F Preferred Stock, plus any dividend accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon. The total amount to be paid for the Series F Preferred Stock is hereinafter referred to as the ***"Redemption Price."*** The number of shares of Series F Preferred Stock that the Corporation shall be required to redeem on any one Redemption Date shall be equal to the amount determined by dividing (A) the aggregate number of shares of Series F Preferred Stock outstanding immediately prior to the Redemption Date by (B) the number of remaining Redemption Dates (including the Redemption Date to which such calculation applies). Shares subject to redemption pursuant to this Section B.6(a) shall be redeemed from each holder of Series F Preferred Stock on a pro rata basis, based on the number of shares of Series F Preferred Stock then held.

(ii) At least thirty (30) days but no more than ninety (90) days prior to the first Redemption Date, the Corporation shall send a notice (a ***"Redemption Notice"***) to all holders of Series F Preferred Stock to be redeemed setting forth (A) the Redemption Price for the shares to be redeemed; and (B) the place at which such holders may obtain payment of the Redemption Price upon surrender of their share certificates. If the Corporation does not have sufficient funds legally available to redeem all shares to be redeemed at the Redemption Date (including, if applicable, those to be redeemed at the option of the Corporation), then it shall so notify such holders and shall redeem such shares pro rata (based on the portion of the aggregate Redemption Price payable to them) to the extent possible and shall redeem the remaining shares to be redeemed as soon as sufficient funds are legally available.

b. On or prior to the applicable Redemption Date, the Corporation shall deposit the Redemption Price of all shares to be redeemed on such Redemption Date with a bank or trust company having aggregate capital and surplus in excess of $100,000,000, as a trust fund, with irrevocable instructions and authority to the bank or trust company to pay, on and after such Redemption Date, the Redemption Price of the shares to their respective holders upon the surrender of their share certificates. Any moneys deposited by the Corporation pursuant to this Section B.6(b) for the redemption of shares thereafter converted into shares of Common Stock pursuant to Section B.4 hereof no later than the fifth (5^{th}) day preceding the applicable Redemption Date shall be returned to the Corporation forthwith upon such conversion. The balance of any funds deposited by the Corporation pursuant to this Section B.6(b) remaining unclaimed at the expiration of one (1) year following such Redemption Date shall be returned to the Corporation promptly upon its written request.

c. On or after each such Redemption Date, each holder of shares of Series F Preferred Stock to be redeemed shall surrender such holder's certificates representing such shares to the Corporation in the manner and at the place designated in the Redemption Notice, and thereupon the Redemption Price of such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof and each surrendered certificate shall be canceled. In the event that less than all the shares represented by such certificates are redeemed, a new certificate shall be issued representing the unredeemed shares. From and after such Redemption Date, unless there shall have been a default in payment of the Redemption Price or the Corporation is unable to pay the Redemption Price due to not having sufficient legally available funds, all rights of the holder of such shares as holder of Series F Preferred Stock (except the right to receive the Redemption Price without interest upon surrender of their certificates), shall cease and terminate with respect to such shares; provided that in the event that shares of Series F Preferred Stock are not redeemed due to a default in payment by the Corporation or because the Corporation does not have sufficient legally available funds, such shares of Series F Preferred Stock shall remain outstanding and shall be entitled to all of the rights and preferences provided herein until redeemed.

d. In the event of a call for redemption of any shares of Series F Preferred Stock, the conversion rights for such Series F Preferred Stock (as set forth in Section B.4 above) shall terminate as to the shares designated for redemption at the close of business on the last business day preceding the applicable Redemption Date, unless default is made in payment of the Redemption Price.

7. **No Reissuance of Preferred Stock**. No share or shares of Preferred Stock acquired by the Corporation by reason of redemption, purchase, conversion or otherwise shall be reissued, and all such shares shall be cancelled, retired and eliminated from the shares which the Corporation shall be authorized to issue.

V.

In furtherance and not in limitation of the powers conferred by statute, the Board shall have the power, subject to the provisions of Section B.5 of Article IV, both before and after receipt of any payment for any of the Corporation's capital stock, to adopt, amend, repeal or otherwise alter the Bylaws of the Corporation without any action on the part of the stockholders; *provided, however*, that the grant of such power to the Board shall not divest the stockholders of nor limit their power, subject to the provisions of Section B.5 of Article IV, to adopt, amend, repeal or otherwise alter the Bylaws.

VI.

Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

VII.

A director of the Corporation shall, to the full extent permitted by the Delaware General Corporation Law as it now exists or as it may hereafter be amended, not be liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. Neither any amendment nor repeal of this Article VII, nor the adoption of any provision of this Amended and Restated Certificate of Incorporation inconsistent with this Article VII, shall eliminate or reduce the effect of this Article VII in respect of any matter occurring, or any cause of action, suit or claim that, but for this Article VII, would accrue or arise, prior to such amendment, repeal or adoption of an inconsistent provision.

VIII.

The Corporation shall indemnify its directors and shall provide for advancement of the expenses of such persons, to the fullest extent provided by Section 145 of the Delaware General Corporation Law. To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) agents of the Corporation (and any other persons to which State law permits the Corporation to provide indemnification) through Bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the Delaware General Corporation Law, subject only to limits created by applicable law (statutory or non-statutory), with respect to actions for breach of duty to the Corporation, its stockholders and others.

Any amendment, repeal or modification of the foregoing provision of this Article VIII shall not adversely affect any right or protection of a director, officer, agent, or other person existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director, officer or agent occurring prior to, such amendment, repeal, modification or adoption.

IX.

Subject to the rights of the Series F Requisite Investors and the Majority Series E Holders pursuant to Section B.5 of Article IV above, the number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares of Common Stock then outstanding or necessary for the conversion of all shares of Series Preferred then outstanding or issuable upon exercise of warrants or other purchase rights) by the affirmative vote of the holders of a majority of the stock of the Corporation (voting together on an as-if-converted to Common Stock basis) irrespective of Section 242(b)(2) of the Delaware General Corporation Law.

X.

Pursuant to Section 122(17) of the Delaware General Corporation Law, the Corporation hereby renounces any interest or expectancy of the Corporation or any subsidiary of the Corporation in, or in being offered an opportunity to participate in, any and all business opportunities that are presented to the holders of Preferred Stock or their affiliates (including, without limitation, any representative or affiliate of such holders of Preferred Stock serving on the Board or the board of directors or other governing body of any subsidiary of the Corporation) (collectively, the "***Investor Parties***"). Without limiting the foregoing renunciation, the Corporation on behalf of itself and its subsidiaries (a) acknowledges that the Investor Parties are in the business of making investments in, and have or may have investments in, other businesses similar to and that may compete with the businesses of the Corporation and its subsidiaries ("***Competing Businesses***") and (b) agrees that the Investor Parties shall have the unfettered right to make investments in or have relationships with other Competing Businesses independent of their investments in the Corporation. Without limitation of the foregoing, each Investor Party may engage in or possess any interest in other business ventures of any nature or description, independently or with others, similar or dissimilar to the business of the Corporation or any of its subsidiaries, and none of the Corporation, any of its subsidiaries or any other holder of capital stock or securities of the Corporation shall have any rights or expectancy by virtue of such Investor Parties' relationships with the Corporation, or otherwise in and to such independent ventures or the income or profits derived therefrom.

5. This Amended and Restated Certificate of Incorporation has been duly adopted in accordance with the provisions of Sections 228, 242 and 245 of the Delaware General Corporation Law by the Board and the stockholders of the Corporation. The total number of outstanding shares entitled to vote or act by written consent was Five Million Three Hundred Twelve Thousand Sixty-Five (5,312,065) shares of Common Stock, Eight Hundred Thousand (800,000) shares of Series A Preferred Stock, Two Million Two Hundred Thirty-Three Thousand Eight Hundred Seventy-Nine (2,233,879) shares of Series B Preferred Stock, Two Million Thirty-Three Thousand Three Hundred Thirty-Three (2,033,333) shares of Series B-1 Preferred Stock, Five Million One Hundred Forty-One Thousand Six Hundred Ninety (5,141,690) shares of Series C Preferred Stock, Eleven Million Two Hundred Ninety-Five Thousand Eight Hundred Forty-Six (11,295,846) shares of Series D Preferred Stock and Seven Million Eight Hundred Ninety-Four Thousand Eight Hundred Seventy-One (7,894,871) shares of Series E Preferred Stock. A majority of the outstanding shares of Common Stock, Series A Preferred Stock, Series B Preferred Stock, Series B-1 Preferred Stock, Series C Preferred Stock, Series D Preferred Stock and Series E Preferred Stock, voting together as a single class on an as-if-converted to Common Stock basis, a majority of the outstanding shares of Series A Preferred Stock, Series B Preferred Stock, Series B-1 Preferred Stock, Series C Preferred Stock, Series D Preferred Stock and Series E Preferred Stock, voting together as a single class on an as-if-converted to Common Stock basis, and a majority of the outstanding shares of Series A Preferred Stock, Series B Preferred Stock, Series B-1 Preferred Stock, Series C Preferred Stock, Series D Preferred Stock and Series E Preferred Stock, voting as separate classes approved this Amended and Restated Certificate of Incorporation by written consent in accordance with Section 228 of the Delaware General Corporation Law and written notice of such was given by the Corporation in accordance with said Section 228.

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IN WITNESS WHEREOF, this Amended and Restated Certificate of Incorporation has been signed under the seal of this corporation as of this 7th day of February, 2011.

CHIMERIX, INC.

By: /s/ Kenneth I. Moch
Kenneth I. Moch
Chief Executive Officer

[Signature Page to Amended and Restated Certificate of Incorporation]

AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION OF
CHIMERIX, INC.

Chimerix, Inc., a corporation organized and existing under the laws of the State of Delaware, hereby certifies as follows:

FIRST: The name of this corporation is Chimerix, Inc.

SECOND: The date on which the corporation's Certificate of Incorporation was originally filed with the Secretary of State of the State of Delaware is April 7, 2000.

THIRD: The Certificate of Incorporation of said corporation shall be amended and restated to read in full as follows:

I.

The name of this corporation is Chimerix, Inc. (the "***Company***").

II.

The address of the registered office of the Company in the State of Delaware is 1209 Orange Street, City of Wilmington, County of New Castle, Delaware, 19801 and the name of the registered agent of the Company in the State of Delaware at such address is The Corporation Trust Company.

III.

The purpose of the Company is to engage in any lawful act or activity for which a corporation may be organized under the Delaware General Corporation Law (the "***DGCL***").

IV.

A. The Company is authorized to issue two classes of stock to be designated, respectively, "***Common Stock***" and "***Preferred Stock***." The total number of shares which the Company is authorized to issue is 210,000,000 shares. 200,000,000 shares shall be Common Stock, each having a par value of $0.001. 10,000,000 shares shall be Preferred Stock, each having a par value of $0.001.

B. The Preferred Stock may be issued from time to time in one or more series. The Board of Directors of the Company (the "***Board of Directors***") is hereby expressly authorized to provide for the issue of any or all of the unissued and undesignated shares of the Preferred Stock in one or more series, and to fix the number of shares and to determine or alter for each such series, such voting powers, full or limited, or no voting powers, and such designation, preferences, and relative, participating, optional, or other rights and such qualifications, limitations, or restrictions thereof, as shall be stated and expressed in the resolution or resolutions adopted by the Board of Directors providing for the issuance of such shares and as may be permitted by the DGCL. The Board of Directors is also expressly authorized to increase or decrease the number of shares of any series subsequent to the issuance of shares of that series, but not below the number of shares of such series then outstanding. In case the number of shares of any series shall be decreased in accordance with the foregoing sentence, the shares constituting such decrease shall resume the status that they had prior to the adoption of the resolution originally fixing the number of shares of such series. The number of authorized shares of Preferred Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the voting power of the stock of the Company entitled to vote thereon, without a separate vote of the holders of the Preferred Stock, or of any series thereof, unless a vote of any such holders is required pursuant to the terms of any certificate of designation filed with respect to any series of Preferred Stock.

C. Each outstanding share of Common Stock shall entitle the holder thereof to one vote on each matter properly submitted to the stockholders of the Company for their vote; *provided, however*, that, except as otherwise required by law, holders of Common Stock shall not be entitled to vote on any amendment to this Amended and Restated Certificate of Incorporation (this "***Certificate of Incorporation***") (including any certificate of designation filed with respect to any series of Preferred Stock) that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series of Preferred Stock are entitled, either separately or together as a class with the holders of one or more other series of Preferred Stock, to vote thereon by law or pursuant to this Certificate of Incorporation (including any certificate of designation filed with respect to any series of Preferred Stock).

V.

For the management of the business and for the conduct of the affairs of the Company, and in further definition, limitation and regulation of the powers of the Company, of its directors and of its stockholders or any class thereof, as the case may be, it is further provided that:

A. The management of the business and the conduct of the affairs of the Company shall be vested in its Board of Directors. The number of directors that shall constitute the Board of Directors shall be fixed exclusively by resolutions adopted by a majority of the authorized number of directors constituting the Board of Directors.

B. Subject to the rights of the holders of any series of Preferred Stock to elect additional directors under specified circumstances, the directors shall be divided into three classes designated as Class I, Class II and Class III, respectively. The Board of Directors is authorized to assign members of the Board of Directors already in office to such classes at the time the classification becomes effective. At the first annual meeting of stockholders following the initial classification of the Board of Directors, the term of office of the Class I directors shall expire and Class I directors shall be elected for a full term of three years. At the second annual meeting of stockholders following such initial classification, the term of office of the Class II directors shall expire and Class II directors shall be elected for a full term of three years. At the third annual meeting of stockholders following such initial classification, the term of office of the Class III directors shall expire and Class III directors shall be elected for a full term of three years. At each succeeding annual meeting of stockholders, directors shall be elected for a full term of three years to succeed the directors of the class whose terms expire at such annual meeting.

Notwithstanding the foregoing provisions of this section, each director shall serve until his or her successor is duly elected and qualified or until his or her death, resignation or removal. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

C. Subject to the rights of any series of Preferred Stock that may be designated from time to time to elect additional directors under specified circumstances, neither the Board of Directors nor any individual director may be removed without cause. Subject to any limitation imposed by law, any individual director or directors may be removed with cause by the affirmative vote of the holders of at least 66 2/3% of the voting power of all then-outstanding shares of capital stock of the Company entitled to vote generally at an election of directors, voting together as a single class.

D. Subject to the rights of the holders of any series of Preferred Stock that may be designated from time to time, any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal or other causes and any newly created directorships resulting from any increase in the number of directors, shall, unless the Board of Directors determines by resolution that any such vacancies or newly created directorships shall be filled by the stockholders, except as otherwise provided by law, be filled only by the affirmative vote of a majority of the directors then in office, even though less than a quorum of the Board of Directors, and not by the stockholders. Any director elected in accordance with the preceding sentence shall hold office for the remainder of the full term of the director for which the vacancy was created or occurred and until such director’s successor shall have been elected and qualified.

E. Subject to the rights of the holders of any series of Preferred Stock that may be designated from time to time, the Board of Directors is expressly empowered to adopt, amend or repeal the Amended and Restated Bylaws of the Company (the "***Bylaws***"). Any adoption, amendment or repeal of the Bylaws by the Board of Directors shall require the approval of a majority of the authorized number of directors. The stockholders shall also have power to adopt, amend or repeal the Bylaws, subject to any restrictions which may be set forth in this Certificate of Incorporation (including any certificate of designation that may be filed from time to time); *provided, however,* that, in addition to any vote of the holders of any class or series of stock of the Company required by law or by this Certificate of Incorporation, such action by stockholders shall require the affirmative vote of the holders of at least 66 2/3% of the voting power of all of the then-outstanding shares of the capital stock of the Company entitled to vote generally at an election of directors, voting together as a single class.

F. The directors of the Company need not be elected by written ballot unless the Bylaws so provide.

G. No action shall be taken by the stockholders of the Company except at an annual or special meeting of stockholders called in accordance with the Bylaws. No action shall be taken by the stockholders of the Company by written consent or electronic transmission.

H. Advance notice of stockholder nominations for the election of directors and of business to be brought by stockholders before any meeting of the stockholders of the Company shall be given in the manner provided in the Bylaws.

VI.

A. The liability of a director of the Company for monetary damages shall be eliminated to the fullest extent under applicable law. If the DGCL is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Company shall be eliminated to the fullest extent permitted by the DGCL, as so amended.

B. Any repeal or modification of this Article VI shall be prospective and shall not affect the rights under this Article VI in effect at the time of the alleged occurrence of any act or omission to act giving rise to liability or indemnification.

VII.

A. The Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Company, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director or officer of the Company to the Company or the Company's stockholders, (iii) any action asserting a claim against the Company arising pursuant to any provision of the DGCL or the Company's Certificate of Incorporation or Bylaws, or (iv) any action asserting a claim against the Company governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the Company shall be deemed to have notice of and to have consented to the provisions of this Article VII.

VIII.

A. The Company reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, except as provided in Section B of this Article VII, and all rights conferred upon the stockholders herein are granted subject to this reservation.

B. Notwithstanding any other provisions of this Certificate of Incorporation or any provision of law which might otherwise permit a lesser vote or no vote, but in addition to any affirmative vote of the holders of any particular class or series of the Company required by law or by this Certificate of Incorporation or any certificate of designation filed with respect to a series of Preferred Stock that may be designated from time to time, subject to the rights of the holders of any series of Preferred Stock, the affirmative vote of the holders of at least 66 2/3% of the voting power of all of the then-outstanding shares of capital stock of the Company entitled to vote generally at an election of directors, voting together as a single class, shall be required to alter, amend or repeal Articles V, VI, VII or VIII of this Certificate of Incorporation.

* * * *

FOURTH: This Certificate of Incorporation has been duly adopted and approved by the Board of Directors.

FIFTH: This Certificate of Incorporation has been duly adopted and approved by written consent of the stockholders in accordance with sections 228, 242 and 245 of the DGCL and written notice of such action has been given as provided in section 228 of the DGCL.

IN WITNESS WHEREOF, Chimerix, Inc. has caused this Amended and Restated Certificate of Incorporation to be signed by its President and Chief Executive Officer this ___ day of _____, 2013.

CHIMERIX, INC.

KENNETH I. MOCH
President and Chief Executive Officer

Exhibit 3.3

Adopted by the Board of Directors on July 18, 2003
Approved by the stockholders on July 18, 2003

AMENDED AND RESTATED BYLAWS

OF

CHIMERIX, INC.

(a Delaware corporation)

AMENDED AND RESTATED BYLAWS
OF
CHIMERIX, INC.

(a Delaware corporation)

ARTICLE I

MEETINGS OF STOCKHOLDERS

Section 1. Place of Meetings. All meetings of the stockholders shall be held at such place within or without the State of Delaware as may be fixed from time to time by the Board of Directors or the chief executive officer, or if not so designated, at the registered office of the corporation.

Section 2. Annual Meeting. Annual meetings of stockholders shall be held each year at such date and time as shall be designated from time to time by the Board and stated in the notice of the meeting. At such annual meeting, the stockholders shall elect a Board and transact such other business as may properly be brought before the meetings.

Section 3. Special Meetings. Special meetings of the stockholders, for any purpose or purposes, may, unless otherwise prescribed by statute or by the certificate of incorporation, be called by the Board of Directors or the chief executive officer and shall be called by the chief executive officer or secretary at the request in writing of a majority of the Board of Directors, or at the request in writing of stockholders owning 10 percent of the entire capital stock of the corporation issued and outstanding and entitled to vote. Such request shall state the purpose or purposes of the proposed meeting. Business transacted at any special meeting shall be limited to matters relating to the purpose or purposes stated in the notice of meeting.

Section 4. Notice of Meetings. Except as otherwise provided by law, written notice of each meeting of stockholders, annual or special, stating the place, date and hour of the meeting and, in the case of a special meeting, the purpose or purposes for which the meeting is called, shall be given not less than 10 nor more than 60 days before the date of the meeting, to each stockholder entitled to vote at such meeting.

Section 5. Voting List. The officer who has charge of the stock ledger of the corporation shall prepare and make, at least 10 days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least 10 days prior to the meeting, either at a place within the city or town where the meeting is to be held, which place shall be specified in the notice of the meeting, or, if not so specified, at the place where the meeting is to be held. The list shall also be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present.

Section 6. Quorum. The holders of a majority of the stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business, except as otherwise provided by statute, the certificate of incorporation or these bylaws.

Section 7. Adjournments. Any meeting of stockholders may be adjourned from time to time to any other time and to any other place at which a meeting of stockholders may be held under these bylaws, which time and place shall be announced at the meeting, by a majority of the stockholders present in person or represented by proxy at the meeting and entitled to vote, though less than a quorum, or, if no stockholder is present or represented by proxy, by any officer entitled to preside at or to act as secretary of such meeting, without notice other than announcement at the meeting, until a quorum shall be present or represented. At such adjourned meeting at which a quorum shall be present or represented, any business may be transacted which might have been transacted at the original meeting. If the adjournment is for more than 30 days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

Section 8. Action at Meetings. When a quorum is present at any meeting, the vote of the holders of a majority of the stock present in person or represented by proxy and entitled to vote on the question shall decide any question brought before such meeting, unless the question is one upon which by express provision of law, the certificate of incorporation or these bylaws, a different vote is required, in which case such express provision shall govern and control the decision of such question.

Section 9. Voting and Proxies. Unless otherwise provided in the certificate of incorporation, each stockholder shall at every meeting of the stockholders be entitled to one vote for each share of capital stock having voting power held of record by such stockholder. Each stockholder entitled to vote at a meeting of stockholders, or to express consent or dissent to corporate action in writing without a meeting, may authorize another person or persons to act for him by proxy, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period.

Section 10. Action Without Meeting. Any action required to be taken at any annual or special meeting of stockholders, or any action which may be taken at any annual or special meeting of such stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent in writing, setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing.

ARTICLE II

DIRECTORS

Section 1. Number, Election, Tenure and Qualification. The number of directors which shall constitute the whole board shall be determined from time to time by resolution of the Board of Directors or by the stockholders at the annual meeting or at any special meeting of stockholders. The directors shall be elected at the annual meeting or at any special meeting of the stockholders, except as provided in Section 3 of this Article, and each director elected shall hold office until his successor is elected and qualified, unless sooner displaced. Directors need not be stockholders.

Section 2. Enlargement. The number of the Board of Directors may be increased at any time by vote of a majority of the directors then in office.

Section 3. Vacancies. Vacancies and newly created directorships resulting from any increase in the authorized number of directors may be filled by a majority of the directors then in office, though less than a quorum, or by a sole remaining director, and the directors so chosen shall hold office until the next annual election and until their successors are duly elected and shall qualify, unless sooner displaced. If there are no directors in office, then an election of directors may be held in the manner provided by statute. In the event of a vacancy in the Board of Directors, the remaining directors, except as otherwise provided by law or these bylaws, may exercise the powers of the full board until the vacancy is filled.

Section 4. Resignation and Removal. Any director may resign at any time upon written notice to the corporation at its principal place of business or to the chief executive officer or the secretary. Such resignation shall be effective upon receipt unless it is specified to be effective at some other time or upon the happening of some other event. Any director or the entire Board of Directors may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors, unless otherwise specified by law or the certificate of incorporation.

Section 5. General Powers. The business and affairs of the corporation shall be managed by or under the direction of its Board of Directors, which may exercise all powers of the corporation and do all such lawful acts and things as are not by statute or by the certificate of incorporation or by these bylaws directed or required to be exercised or done by the stockholders.

Section 6. Chairman of the Board. If the Board of Directors appoints a chairman of the board, such chairman shall, when present, preside at all meetings of the stockholders and the Board of Directors. The chairman shall perform such duties and possess such powers as are customarily vested in the office of the chairman of the board or as may be vested in the chairman by the Board of Directors.

Section 7. Place of Meetings. The Board of Directors may hold meetings, both regular and special, either within or without the State of Delaware.

Section 8. Regular Meetings. Regular meetings of the Board of Directors may be held without notice at such time and at such place as may be determined from time to time by the board; provided that any director who is absent when such a determination is made shall be given prompt notice of such determination. A regular meeting of the Board of Directors may be held without notice immediately after and at the same place as the annual meeting of stockholders.

Section 9. Special Meetings. Special meetings of the board may be called by the chief executive officer, secretary, or on the written request of two or more directors, or by one director in the event that there is only one director in office. Four hours' notice to each director, either personally or by telegram, cable, telecopy, commercial delivery service, facsimile or similar means sent to such director's business or home address, or two days' notice by written notice deposited in the mail or delivered by a nationally recognized courier service, shall be given to each director by the secretary or by the officer or one of the directors calling the meeting. A notice or waiver of notice of a meeting of the Board of Directors need not specify the purposes of the meeting.

Section 10. Quorum, Action at Meeting, Adjournments. At all meetings of the board, a majority of directors then in office, but in no event less than one third of the entire board, shall constitute a quorum for the transaction of business, and the act of a majority of the directors present at any meeting at which there is a quorum shall be the act of the Board of Directors, except as may be otherwise specifically provided by law or by the certificate of incorporation. For purposes of this section, the term "entire board" shall mean the number of directors last fixed by the stockholders or directors, as the case may be, in accordance with law and these bylaws; provided, however, that if less than all the number so fixed of directors were elected, the "entire board" shall mean the greatest number of directors so elected to hold office at any one time pursuant to such authorization. If a quorum shall not be present at any meeting of the Board of Directors, a majority of the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present.

Section 11. Action by Consent. Unless otherwise restricted by the certificate of incorporation or these bylaws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all members of the board or committee, as the case may be, consent thereto in writing, and the writing or writings are filed with the minutes of proceedings of the board or committee.

Section 12. Telephonic Meetings. Unless otherwise restricted by the certificate of incorporation or these bylaws, members of the Board of Directors or of any committee thereof may participate in a meeting of the Board of Directors or of any committee, as the case may be, by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

Section 13. Committees. The Board of Directors may, by resolution passed by a majority of the whole board, designate one or more committees, each committee to consist of one or more of the directors of the corporation. The board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. Any such committee, to the extent provided in the resolution of the Board of Directors, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to amending the certificate of incorporation, adopting an agreement of merger or consolidation, recommending to the stockholders the sale, lease or exchange of all or substantially all of the corporation's property and assets, recommending to the stockholders a dissolution of the corporation or a revocation of a dissolution, or amending the bylaws of the corporation; and, unless the resolution designating such committee or the certificate of incorporation expressly so provide, no such committee shall have the power or authority to declare a dividend or to authorize the issuance of stock. Such committee or committees shall have such name or names as may be determined from time to time by resolution adopted by the Board of Directors. Each committee shall keep regular minutes of its meetings and make such reports to the Board of Directors as the Board of Directors may request. Except as the Board of Directors may otherwise determine, any committee may make rules for the conduct of its business, but unless otherwise provided by the directors or in such rules, its business shall be conducted as nearly as possible in the same manner as is provided in these bylaws for the conduct of its business by the Board of Directors.

Section 14. Compensation. Unless otherwise restricted by the certificate of incorporation or these bylaws, the Board of Directors shall have the authority to fix from time to time the compensation of directors. The directors may be paid their expenses, if any, of attendance at each meeting of the Board of Directors and the performance of their responsibilities as directors and may be paid a fixed sum for attendance at each meeting of the Board of Directors and/or a stated salary as director. No such payment shall preclude any director from serving the corporation or its parent or subsidiary corporations in any other capacity and receiving compensation therefor. The Board of Directors may also allow compensation for members of special or standing committees for service on such committees.

ARTICLE III

OFFICERS

Section 1. Enumeration. The officers of the corporation shall be chosen by the Board of Directors and shall be a president, a secretary and a treasurer and such other officers with such titles, terms of office and duties as the Board of Directors may from time to time determine, including a chairman of the board, one or more vice presidents, and one or more assistant secretaries and assistant treasurers. If authorized by resolution of the Board of Directors, the chief executive officer may be empowered to appoint from time to time assistant secretaries and assistant treasurers. Any number of offices may be held by the same person, unless the certificate of incorporation or these bylaws otherwise provide.

Section 2. Election. The Board of Directors at its first meeting after each annual meeting of stockholders shall choose a president, a secretary and a treasurer. Other officers may be appointed by the Board of Directors at such meeting, at any other meeting, or by written consent.

Section 3. Tenure. The officers of the corporation shall hold office until their successors are chosen and qualify, unless a different term is specified in the vote choosing or appointing such officer, or until such officer's earlier death, resignation or removal. Any officer elected or appointed by the Board of Directors or by the chief executive officer may be removed at any time by the affirmative vote of a majority of the Board of Directors or a committee duly authorized to do so, except that any officer appointed by the chief executive officer may also be removed at any time by the chief executive officer. Any vacancy occurring in any office of the corporation may be filled by the Board of Directors, at its discretion. Any officer may resign by delivering such officer's written resignation to the corporation at its principal place of business or to the chief executive officer or the secretary. Such resignation shall be effective upon receipt unless it is specified to be effective at some other time or upon the happening of some other event.

Section 4. President. The president shall be the chief operating officer of the corporation. The president shall also be the chief executive officer unless the Board of Directors otherwise provides. The president shall, unless the Board of Directors provides otherwise in a specific instance or generally, preside at all meetings of the stockholders and the Board of Directors, have general and active management of the business of the corporation and see that all orders and resolutions of the Board of Directors are carried into effect. The president shall execute bonds, mortgages, and other contracts requiring a seal, under the seal of the corporation, except where required or permitted by law to be otherwise signed and executed and except where the signing and execution thereof shall be expressly delegated by the Board of Directors to some other officer or agent of the corporation.

Section 5. Vice Presidents. In the absence of the president or in the event of his or her inability or refusal to act, the vice president, or if there be more than one vice president, the vice presidents in the order designated by the Board of Directors or the chief executive officer (or in the absence of any designation, then in the order determined by their tenure in office) shall perform the duties of the president, and when so acting, shall have all the powers of and be subject to all the restrictions upon the president. The vice presidents shall perform such other duties and have such other powers as the Board of Directors or the chief executive officer may from time to time prescribe.

Section 6. Secretary. The secretary shall have such powers and perform such duties as are incident to the office of secretary. The secretary shall maintain a stock ledger and prepare lists of stockholders and their addresses as required and shall be the custodian of corporate records. The secretary shall attend all meetings of the Board of Directors and all meetings of the stockholders and record all the proceedings of the meetings of the corporation and of the Board of Directors in a book to be kept for that purpose and shall perform like duties for the standing committees when required. The secretary shall give, or cause to be given, notice of all meetings of the stockholders and special meetings of the Board of Directors, and shall perform such other duties as may be from time to time prescribed by the Board of Directors or chief executive officer, under whose supervision he shall be. The Secretary shall have custody of the corporate seal of the corporation and he, or an assistant secretary, shall have authority to affix the same to any instrument requiring it and when so affixed, it may be attested by his or her signature or by the signature of such assistant secretary. The Board of Directors may give general authority to any other officer to affix the seal of the corporation and to attest the affixing by his or her signature.

Section 7. Assistant Secretaries. The assistant secretary, or if there be more than one, the assistant secretaries in the order determined by the Board of Directors, the chief executive officer or the secretary (or if there be no such determination, then in the order determined by their tenure in office), shall, in the absence of the secretary or in the event of his or her inability or refusal to act, perform the duties and exercise the powers of the secretary and shall perform such other duties and have such other powers as the Board of Directors, the chief executive officer or the secretary may from time to time prescribe. In the absence of the secretary or any assistant secretary at any meeting of stockholders or directors, the person presiding at the meeting shall designate a temporary or acting secretary to keep a record of the meeting.

Section 8. Treasurer. The treasurer shall perform such duties and shall have such powers as may be assigned to him or her by the Board of Directors or the chief executive officer. In addition, the treasurer shall perform such duties and have such powers as are incident to the office of treasurer. The treasurer shall have the custody of the corporate funds and securities and shall keep full and accurate accounts of receipts and disbursements in books belonging to the corporation and shall deposit all moneys and other valuable effects in the name and to the credit of the corporation in such depositories as may be designated by the Board of Directors. The treasurer shall disburse the funds of the corporation as may be ordered by the Board of Directors, taking proper vouchers for such disbursements, and shall render to the chief executive officer and the Board of Directors, when the chief executive officer or Board of Directors so requires, an account of all his or her transactions as treasurer and of the financial condition of the corporation.

Section 9. Assistant Treasurers. The assistant treasurer, or if there shall be more than one, the assistant treasurers in the order determined by the Board of Directors, the chief executive officer or the treasurer (or if there be no such determination, then in the order determined by their tenure in office), shall, in the absence of the treasurer or in the event of his or her inability or refusal to act, perform the duties and exercise the powers of the treasurer and shall perform such other duties and have such other powers as the Board of Directors, the chief executive officer or the treasurer may from time to time prescribe.

Section 10. Bond. If required by the Board of Directors, any officer shall give the corporation a bond in such sum and with such surety or sureties and upon such terms and conditions as shall be satisfactory to the Board of Directors, including without limitation a bond for the faithful performance of the duties of such officer's office and for the restoration to the corporation of all books, papers, vouchers, money and other property of whatever kind in his or her possession or under his or her control and belonging to the corporation.

ARTICLE IV

NOTICES

Section 1. Delivery. Whenever, under the provisions of law, or of the certificate of incorporation or these bylaws, written notice is required to be given to any director or stockholder, such notice may be given by mail, addressed to such director or stockholder, at such person's address as it appears on the records of the corporation, with postage thereon prepaid, and such notice shall be deemed to be given at the time when the same shall be deposited in the United States mail. Unless written notice by mail is required by law, written notice may also be given by telegram, cable, telecopy, commercial delivery service, facsimile or similar means, addressed to such director or stockholder at such person's address as it appears on the records of the corporation, in which case such notice shall be deemed to be given when delivered into the control of the persons charged with effecting such transmission, the transmission charge to be paid by the corporation or the person sending such notice and not by the addressee. Oral notice or other in-hand delivery (in person or by telephone) shall be deemed given at the time it is actually given.

Section 2. Waiver of Notice. Whenever any notice is required to be given under the provisions of law or of the certificate of incorporation or of these bylaws, a waiver thereof in writing, signed by the person or persons entitled to said notice, whether before or after the time stated therein, shall be deemed equivalent thereto. In addition to the foregoing, notice of a meeting need not be given to any director who signs a waiver of notice or a consent to holding the meeting or an approval of the minutes thereof, whether before or after the meeting, or who attends the meeting without protesting, prior thereto or at its commencement, the lack of notice to such director.

ARTICLE V

INDEMNIFICATION

Section 1. Actions Other Than by or in the Right of the Corporation. The corporation may, to the maximum extent and in the manner permitted by General Corporation Law of Delaware, indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit or proceeding if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceedings, had no reasonable cause to believe his conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his conduct was unlawful.

Section 2. Actions by or in the Right of the Corporation. The corporation may, to the maximum extent and in the manner permitted by General Corporation Law of Delaware, indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by him in connection with the defense or settlement of such action or suit if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable for negligence or misconduct in the performance of his duty to the corporation unless and only to the extent that the Court of Chancery of the State of Delaware or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery of the State of Delaware or such other court shall deem proper.

Section 3. Success on the Merits. To the extent that any person described in Section 1 or 2 of this Article V has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in said Sections, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by him in connection therewith.

Section 4. Specific Authorization. Any indemnification under Section 1 or 2 of this Article V (unless ordered by a court) shall be made by the corporation only as authorized in the specific case upon a determination that indemnification of any person described in said Sections is proper in the circumstances because such person has met the applicable standard of conduct set forth in said Sections. Such determination shall be made (1) by the Board of Directors by a majority vote of a quorum consisting of directors who were not parties to such action, suit or proceeding, or (2) if such a quorum is not obtainable, or even if obtainable a quorum of disinterested directors so directs, by independent legal counsel in a written opinion, or (3) by the stockholders of the corporation.

Section 5. Advance Payment. Expenses incurred in defending a civil or criminal action, suit or proceeding may be paid by the corporation in advance of the final disposition of such action, suit or proceeding as authorized by the Board of Directors in the manner provided for in Section 4 of this Article V upon receipt of an undertaking by or on behalf of any person described in said Section to repay such amount unless it shall ultimately be determined that such person is entitled to indemnification by the corporation as authorized in this Article V.

Section 6. Non-Exclusivity. The indemnification provided by this Article V shall not be deemed exclusive of any other rights to which those indemnified may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office, and shall continue as to a person who has ceased to be director, officer, employee or agent of the corporation and shall inure to the benefit of the heirs, executors and administrators of such a person.

Section 7. Insurance. The Board of Directors may authorize, by a vote of the majority of the full board, the corporation to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the corporation would have the power to indemnify such person against such liability under the provisions of this Article V.

Section 8. Severability. If any word, clause or provision of this Article V or any award made hereunder shall for any reason be determined to be invalid, the provisions hereof shall not otherwise be affected thereby but shall remain in full force and effect.

Section 9. Intent of Article. The intent of this Article V is to provide for indemnification to the fullest extent permitted by section 145 of the General Corporation Law of Delaware. To the extent that such Section or any successor section may be amended or supplemented from time to time, this Article V shall be amended automatically and construed so as to permit indemnification to the fullest extent from time to time permitted by law.

ARTICLE VI

CAPITAL STOCK

Section 1. Certificates of Stock. Every holder of stock in the corporation shall be entitled to have a certificate, signed by, or in the name of the corporation by, the chairman or vice chairman of the Board of Directors, or the president or a vice president and the treasurer or an assistant treasurer, or the secretary or an assistant secretary of the corporation, certifying the number of shares owned by him in the corporation. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if he were such officer, transfer agent or registrar at the date of issue. Certificates may be issued for partly paid shares and in such case upon the face or back of the certificates issued to represent any such partly paid shares, the total amount of the consideration to be paid therefor, and the amount paid thereon shall be specified.

Section 2. Lost Certificates. The Board of Directors may direct a new certificate or certificates to be issued in place of any certificate or certificates theretofore issued by the corporation alleged to have been lost, stolen or destroyed. When authorizing such issue of a new certificate or certificates, the Board of Directors may, in its discretion and as a condition precedent to the issuance thereof, require the owner of such lost, stolen or destroyed certificate or certificates, or his legal representative, to give reasonable evidence of such loss, theft or destruction, to advertise the same in such manner as it shall require and/or to give the corporation a bond in such sum as it may direct as indemnity against any claim that may be made against the corporation with respect to the certificate alleged to have been lost, stolen or destroyed or the issuance of such new certificate.

Section 3. Transfer of Stock. Upon surrender to the corporation or the transfer agent of the corporation of a certificate for shares, duly endorsed or accompanied by proper evidence of succession, assignment or authority to transfer, and proper evidence of compliance with other conditions to rightful transfer, it shall be the duty of the corporation to issue a new certificate to the person entitled thereto, cancel the old certificate and record the transaction upon its books.

Section 4. Record Date. In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or to express consent to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board of Directors may fix, in advance, a record date, which shall not be more than 60 days nor less then 10 days before the date of such meeting, nor more than 60 days prior to any other action to which such record date relates. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting. If no record date is fixed, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day before the day on which notice is given, or, if notice is waived, at the close of business on the day before the day on which the meeting is held. The record date for determining stockholders entitled to express consent to corporate action in writing without a meeting, when no prior action by the Board of Directors is necessary, shall be the day on which the first written consent is expressed. The record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating to such purpose.

Section 5. Registered Stockholders. The corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and to hold liable for calls and assessments a person registered on its books as the owner of shares, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

ARTICLE VII

CERTAIN TRANSACTIONS

Section 1. Transactions with Interested Parties. No contract or transaction between the corporation and one or more of its directors or officers, or between the corporation and any other corporation, partnership, association or other organization in which one or more of its directors or officers are directors or have a financial interest, shall be void or voidable solely for this reason, or solely because the director or officer is present at or participates in the meeting of the board or committee thereof which authorizes the contract or transaction or solely because the vote or votes of such director or officer are counted for such purpose, if:

(a) the material facts as to such person’s relationship or interest and as to the contract or transaction are disclosed or are known to the Board of Directors or the committee, and the board or committee in good faith authorizes the contract or transaction by the affirmative votes of a majority of the disinterested directors, even though the disinterested directors be less than a quorum; or

(b) The material facts as to such person's relationship or interest and as to the contract or transaction are disclosed or are known to the stockholders entitled to vote thereon, and the contract or transaction is specifically approved in good faith by vote of the stockholders; or

(c) The contract or transaction is fair as to the corporation as of the time it is authorized, approved or ratified, by the Board of Directors, a committee thereof, or the stockholders.

Section 2. Quorum. Common or interested directors may be counted in determining the presence of a quorum at a meeting of the Board of Directors or of a committee which authorizes the contract or transaction.

ARTICLE VIII

GENERAL PROVISIONS

Section 1. Dividends. Dividends upon the capital stock of the corporation, if any, may be declared by the Board of Directors at any regular or special meeting or by written consent, pursuant to law. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the certificate of incorporation.

Section 2. Reserves. The directors may set apart out of any funds of the corporation available for dividends a reserve or reserves for any proper purpose and may abolish any such reserve.

Section 3. Checks. All checks or demands for money and notes of the corporation shall be signed by such officer or officers or such other person or persons as the Board of Directors may from time to time designate.

Section 4. Fiscal Year. The fiscal year of the corporation shall be fixed by resolution of the Board of Directors.

Section 5. Seal. The Board of Directors may, by resolution, adopt a corporate seal. The corporate seal shall have inscribed thereon the name of the corporation, the year of its organization and the word "Delaware." The seal may be used by causing it or a facsimile thereof to be impressed or affixed or otherwise reproduced. The seal may be altered from time to time by the Board of Directors.

ARTICLE IX

AMENDMENTS

These bylaws may be altered, amended or repealed or new bylaws may be adopted by the stockholders or by the Board of Directors, when such power is conferred upon the Board of Directors by the certificate of incorporation, at any regular meeting of the stockholders or of the Board of Directors or at any special meeting of the stockholders or of the Board of Directors; provided, however, that in the case of a regular or special meeting of stockholders, notice of such alteration, amendment, repeal or adoption of new bylaws be contained in the notice of such meeting.

ARTICLE X

RIGHT OF FIRST REFUSAL

Section 1. Restrictions on Transfer. Except as permitted by this Article X, a stockholder of the corporation may not make any sale, exchange, transfer, assignment, gift, pledge, encumbrance, hypothecation or alienation of any shares of Common Stock of the corporation, or any interest in such shares, whether voluntarily, involuntarily or by operation of law (collectively, a "***Transfer***").

Section 2. Right of First Refusal.

(a) Notice to the corporation.

(i) If any stockholder (the "***Transferring Stockholder***") desires to Transfer any shares of Common Stock other than as specifically provided in Section 3 below, such Transferring Stockholder must deliver notice ("***Notice***") to the corporation stating (A) the Transferring Stockholder's bona fide intent to Transfer such shares of Common Stock, (B) the number of such shares to be Transferred, (C) the price, if any, for which such Transferring Stockholder proposes to Transfer such shares and (D) the name of the proposed purchaser or transferee (the "***Buyer***").

(ii) If the proposed Transfer is partially or completely in exchange for consideration other than cash, then such consideration shall be deemed to have a cash value in the amount determined by the corporation's Board of Directors (the "***Board***") in its sole good faith discretion, in which case such cash value ascertained by the Board, when added to any cash to be exchanged and then divided by the number of shares of Common Stock to be Transferred, shall be deemed the price per share set forth in the Notice. In the event of a gift, property settlement or other Transfer in which the Buyer is not paying the full price for the shares of Common Stock, which Transfer is not otherwise permitted by the terms of Section 2, the price per share set forth in the Notice shall be deemed to be the fair market value of such shares of Common Stock as determined by the Board in its sole good faith discretion.

(b) Right of First Refusal. The corporation shall have an exclusive, irrevocable option (the ***"Option"***), at any time within thirty (30) days after the corporation receives the Notice, to purchase some or all of the shares of Common Stock to which the Notice refers at the price per share specified in the Notice. The corporation shall exercise the Option by delivering notice to the Transferring Stockholder (the ***"Settlement Notice"***), which notice shall specify the number of shares of Common Stock the corporation will purchase (the ***"Noticed Shares"***), and the time, place and date for settlement of such purchase.

(c) Settlement. Within ten (10) days after the corporation sends the Settlement Notice, the Transferring Stockholder must deliver all certificates for the Noticed Shares, which are not already in the corporation's custody, together with the Transferring Stockholder's written representation that such shares are free and clear of any lien, encumbrance or other restrictions and with proper assignments in blank of such shares with signatures properly guaranteed and with such other documents as may be required by the corporation to provide assurance that each necessary endorsement is genuine and effective (the ***"Noticed Share Certificates"***). Upon the corporation's receipt of the Noticed Share Certificates, the corporation must deliver full cash payment for the Noticed Shares to the Transferring Stockholder, provided that, if the payment terms set forth in the Notice were other than cash against delivery, the corporation shall pay for said shares in accordance with Section 2(a)(ii).

Section 3. Permitted Transfers. Notwithstanding the foregoing, the rights of first refusal set forth in this Article X shall not apply to (a) any pledge of Common Stock made pursuant to a bona fide loan transaction that creates a mere security interest, (b) any Transfer to the ancestors, descendants or spouse of a stockholder or to trusts for the benefit of such persons or such stockholder, or to any or all of the members, stockholders, affiliates and partners, including without limitation general or limited partners, of such stockholder, (c) any bona fide gift or (d) any Transfer which is subject to a right of first refusal set forth in an agreement to which both the corporation and the Transferring Stockholder are parties, or any Transfer pursuant to such an agreement; provided that the shares so transferred shall remain bound by and subject to the provisions of this Article X.

Section 4. Termination. The rights of first refusal set forth in this Article X and the correlative obligations of each stockholder with respect to its shares of Common Stock shall terminate at such time as such stockholder shall no longer be the owner of any shares of Common Stock. Unless sooner terminated in accordance with the preceding sentence, the rights of first refusal set forth in this Article X shall terminate immediately prior to the closing of (a) a firm commitment underwritten public offering of the corporation's Common Stock registered under the Securities Act of 1933, as amended or (b) any acquisition of the corporation by means of merger or other form of corporate reorganization in which outstanding shares of the corporation are exchanged for securities or other consideration issued, or caused to be issued, by the acquiring corporation or its subsidiary (other than a mere reincorporation transaction).

Section 5. Miscellaneous Provisions.

(a) Notice. Unless otherwise provided, any notice required or permitted under this Article X shall be given in writing and shall be deemed effectively given: (i) upon personal delivery to the party to be notified, (ii) when sent by confirmed telex or facsimile if sent during normal business hours of the recipient, if not, then on the next business day, (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt.

(b) Legend. Each certificate representing shares of Common Stock shall be endorsed with a legend in substantially the following form:

THE SALE, PLEDGE, HYPOTHECATION OR TRANSFER OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE IS SUBJECT TO THE TERMS AND CONDITIONS OF A RIGHT OF FIRST REFUSAL SET FORTH IN THE CORPORATION'S BYLAWS. COPIES OF SUCH BYLAWS MAY BE OBTAINED UPON WRITTEN REQUEST TO THE SECRETARY OF THE CORPORATION

(c) **Assignment.** The corporation may assign its rights under this Article X.

AMENDMENT TO
AMENDED AND RESTATED BYLAWS
OF CHIMERIX, INC.

Upon approval of the Board of Directors and stockholders of Chimerix, Inc., a Delaware corporation (the ***"Corporation"***), the Corporation's Amended and Restated Bylaws (the ***"Bylaws"***) are amended to add the following sentence to the end of Article X, Section 1 of the Bylaws:

> Notwithstanding anything to the contrary set forth herein, the term "Common Stock" as used in this Article X shall exclude any Common Stock issued or issuable upon conversion of, or as a dividend or distribution on, the Preferred Stock of the Corporation.

I, the undersigned, certify that I am the duly elected and acting Secretary of the Corporation, and that the above amendment of the Bylaws was duly adopted by resolutions of the Board of Directors and stockholders of the Corporation dated October 19, 2004.

/s/ Thomas A. Coll
Thomas A. Coll, Secretary

AMENDMENT TO
AMENDED AND RESTATED BYLAWS
OF CHIMERIX, INC.

Upon approval of the Board of Directors and stockholders of Chimerix, Inc., a Delaware corporation (the ***"Corporation"***), the Corporation's Amended and Restated Bylaws, as amended on October 19, 2004 (the ***"Bylaws"***), are amended as follows:

1. **Article III, Section 4.** The following shall be added to the end of the first sentence of Article III, Section 4:

"unless the Board of Directors otherwise provides"

2. **Article IV, Section 1.** The second sentence of Article IV, Section 1 shall be deleted in its entirety and replaced with the following:

"Unless written notice by mail is required by law, written notice may also be given by telegram, cable, telecopy, commercial delivery service, facsimile, electronic mail or similar means, addressed to such director or stockholder at such person's address as it appears on the records of the corporation, in which case such notice shall be deemed to be given when delivered into the control of the persons charged with effecting such transmission, the transmission charge (as applicable) to be paid by the corporation or the person sending such notice and not by the addressee."

I, the undersigned, certify that I am the duly elected and acting Secretary of the Corporation, and that the above amendment of the Bylaws was duly adopted by resolutions of the Board of Directors and stockholders of the Corporation dated August 12, 2009 and May 10, 2010, respectively.

/s/ Thomas A. Coll
Thomas A. Coll, Secretary

Exhibit 3.4

AMENDED AND RESTATED BYLAWS OF CHIMERIX, INC.

ARTICLE I

OFFICES

Section 1. Registered Office. The registered office of the corporation in the State of Delaware shall be in the City of Wilmington, County of New Castle.

Section 2. Other Offices. The corporation shall also have and maintain an office or principal place of business at such place as may be fixed by the corporation's Board of Directors (the "***Board of Directors***"), and may also have offices at such other places, both within and without the State of Delaware as the Board of Directors may from time to time determine or the business of the corporation may require.

ARTICLE II

CORPORATE SEAL

Section 3. Corporate Seal. The Board of Directors may adopt a corporate seal. The corporate seal shall consist of a die bearing the name of the corporation and the inscription, "Corporate Seal-Delaware." Said seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

ARTICLE III

STOCKHOLDERS' MEETINGS

Section 4. Place of Meetings. Meetings of the stockholders of the corporation may be held at such place, either within or without the State of Delaware, as may be determined from time to time by the Board of Directors. The Board of Directors may, in its sole discretion, determine that the meeting shall not be held at any place, but may instead be held solely by means of remote communication as provided under the Delaware General Corporation Law (the "***DGCL***").

Section 5. Annual Meetings.

(a) The annual meeting of the stockholders of the corporation, for the purpose of election of directors and for such other business as may properly come before it, shall be held on such date and at such time as may be designated from time to time by the Board of Directors. Nominations of persons for election to the Board of Directors of the corporation and the proposal of business to be considered by the stockholders may be made at an annual meeting of stockholders: (i) pursuant to the corporation's notice of meeting of stockholders (with respect to business other than nominations); (ii) brought specifically by or at the direction of the Board of Directors; or (iii) by any stockholder of the corporation who was a stockholder of record at the time of giving the stockholder's notice provided for in Section 5(b) of these Amended and Restated Bylaws (the "***Bylaws***"), who is entitled to vote at the meeting and who complied with the notice procedures set forth in this Section 5. For the avoidance of doubt, clause (iii) above shall be the exclusive means for a stockholder to make nominations and submit other business (other than matters properly included in the corporation's notice of meeting of stockholders and proxy statement under Rule 14a-8 under the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (the "***1934 Act***")) before an annual meeting of stockholders.

(b) At an annual meeting of the stockholders, only such business shall be conducted as is a proper matter for stockholder action under Delaware law and as shall have been properly brought before the meeting.

i. For nominations for the election to the Board of Directors to be properly brought before an annual meeting by a stockholder pursuant to clause (iii) of Section 5(a) of these Bylaws, the stockholder must deliver written notice to the Secretary at the principal executive offices of the corporation on a timely basis as set forth in Section 5(b)(iii) of these Bylaws and must update and supplement such written notice on a timely basis as set forth in Section 5(c) of these Bylaws. Such stockholder's notice shall set forth: (A) as to each nominee such stockholder proposes to nominate at the meeting: (1) the name, age, business address and residence address of such nominee; (2) the principal occupation or employment of such nominee; (3) the class and number of shares of each class of capital stock of the corporation which are owned of record and beneficially by such nominee; (4) the date or dates on which such shares were acquired and the investment intent of such acquisition; (5) with respect to each nominee for election or re-election to the Board of Directors, include a completed and signed questionnaire, representation and agreement required by Section 5(e) of these Bylaws; and (6) such other information concerning such nominee as would be required to be disclosed in a proxy statement soliciting proxies for the election of such nominee as a director in an election contest (even if an election contest is not involved), or that is otherwise required to be disclosed pursuant to Section 14 of the 1934 Act and the rules and regulations promulgated thereunder (including such person's written consent to being named as a nominee and to serving as a director if elected); and (B) the information required by Section 5(b)(iv) of these Bylaws. The corporation may require any proposed nominee to furnish such other information as it may reasonably require to determine the eligibility of such proposed nominee to serve as an independent director of the corporation or that could be material to a reasonable stockholder's understanding of the independence, or lack thereof, of such proposed nominee.

ii. Other than proposals sought to be included in the corporation's proxy materials pursuant to Rule 14(a)-8 under the 1934 Act, for business other than nominations for the election to the Board of Directors to be properly brought before an annual meeting by a stockholder pursuant to clause (iii) of Section 5(a) of these Bylaws, the stockholder must deliver written notice to the Secretary at the principal executive offices of the corporation on a timely basis as set forth in Section 5(b)(iii) of these Bylaws, and must update and supplement such written notice on a timely basis as set forth in Section 5(c) of these Bylaws. Such stockholder's notice shall set forth: (A) as to each matter such stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the reasons for conducting such business at the meeting, and any material interest (including any anticipated benefit of such business to any Proponent (as defined below) other than solely as a result of its ownership of the corporation's capital stock, that is material to any Proponent individually, or to the Proponents in the aggregate) in such business of any Proponent; and (B) the information required by Section 5(b)(iv) of these Bylaws.

iii. To be timely, the written notice required by Section 5(b)(i) or 5(b)(ii) of these Bylaws must be received by the Secretary at the principal executive offices of the corporation not later than the close of business on the 90th day nor earlier than the close of business on the 120th day prior to the first anniversary of the preceding year's annual meeting; *provided, however,* that, subject to the last sentence of this Section 5(b)(iii), in the event that the date of the annual meeting is advanced more than 30 days prior to or delayed by more than 30 days after the anniversary of the preceding year's annual meeting, notice by the stockholder to be timely must be so received not earlier than the close of business on the 120th day prior to such annual meeting and not later than the close of business on the later of the 90th day prior to such annual meeting or the 10th day following the day on which public announcement of the date of such meeting is first made. In no event shall an adjournment or a postponement of an annual meeting for which notice has been given, or the public announcement thereof has been made, commence a new time period for the giving of a stockholder's notice as described above.

iv. The written notice required by Section 5(b)(i) or 5(b)(ii) of these Bylaws shall also set forth, as of the date of the notice and as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination or proposal is made (each, a "***Proponent***" and collectively, the "***Proponents***"): (A) the name and address of each Proponent, as they appear on the corporation's books; (B) the class, series and number of shares of the corporation that are owned beneficially and of record by each Proponent; (C) a description of any agreement, arrangement or understanding (whether oral or in writing) with respect to such nomination or proposal between or among any Proponent and any of its affiliates or associates, and any others (including their names) acting in concert, or otherwise under the agreement, arrangement or understanding, with any of the foregoing; (D) a representation that the Proponents are holders of record or beneficial owners, as the case may be, of shares of the corporation entitled to vote at the meeting and intend to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice (with respect to a notice under Section 5(b)(i) of these Bylaws) or to propose the business that is specified in the notice (with respect to a notice under Section 5(b)(ii) of these Bylaws); (E) a representation as to whether the Proponents intend to deliver a proxy statement and form of proxy to holders of a sufficient number of holders of the corporation's voting shares to elect such nominee or nominees (with respect to a notice under Section 5(b)(i) of these Bylaws) or to carry such proposal (with respect to a notice under Section 5(b)(ii) of these Bylaws); (F) to the extent known by any Proponent, the name and address of any other stockholder supporting the proposal on the date of such stockholder's notice; and (G) a description of all Derivative Transactions (as defined below) by each Proponent during the previous 12-month period, including the date of the transactions and the class, series and number of securities involved in, and the material economic terms of, such Derivative Transactions.

For purposes of Sections 5 and 6 of these Bylaws, a "***Derivative Transaction***" means any agreement, arrangement, interest or understanding entered into by, or on behalf or for the benefit of, any Proponent or any of its affiliates or associates, whether record or beneficial:

(w) the value of which is derived in whole or in part from the value of any class or series of shares or other securities of the corporation;

(x) which otherwise provides any direct or indirect opportunity to gain or share in any gain derived from a change in the value of securities of the corporation;

(y) the effect or intent of which is to mitigate loss, manage risk or benefit of security value or price changes; or

(z) which provides the right to vote or increase or decrease the voting power of, such Proponent, or any of its affiliates or associates, with respect to any securities of the corporation,

which agreement, arrangement, interest or understanding may include, without limitation, any option, warrant, debt position, note, bond, convertible security, swap, stock appreciation right, short position, profit interest, hedge, right to dividends, voting agreement, performance-related fee or arrangement to borrow or lend shares (whether or not subject to payment, settlement, exercise or conversion in any such class or series), and any proportionate interest of such Proponent in the securities of the corporation held by any general or limited partnership, or any limited liability company, of which such Proponent is, directly or indirectly, a general partner or managing member.

(c) A stockholder providing written notice required by Section 5(b)(i) or (ii) of these Bylaws shall update and supplement such notice in writing, if necessary, so that the information provided or required to be provided in such notice is true and correct in all material respects as of (i) the record date for the meeting and (ii) the date that is five business days prior to the meeting and, in the event of any adjournment or postponement thereof, five business days prior to such adjourned or postponed meeting. In the case of an update and supplement pursuant to clause (i) of this Section 5(c), such update and supplement shall be received by the Secretary at the principal executive offices of the corporation not later than five business days after the record date for the meeting. In the case of an update and supplement pursuant to clause (ii) of this Section 5(c), such update and supplement shall be received by the Secretary at the principal executive offices of the corporation not later than two business days prior to the date for the meeting, and, in the event of any adjournment or postponement thereof, two business days prior to such adjourned or postponed meeting.

(d) Notwithstanding anything in Section 5(b)(iii) of these Bylaws to the contrary, in the event that the number of directors in an Expiring Class (as defined below) is increased and there is no public announcement of the appointment of a director to such class, or, if no appointment was made, of the vacancy in such class, made by the corporation at least 10 days before the last day a stockholder may deliver a notice of nomination in accordance with Section 5(b)(iii) of these Bylaws, a stockholder's notice required by this Section 5 and which complies with the requirements in Section 5(b)(i) of these Bylaws, other than the timing requirements in Section 5(b)(iii) of these Bylaws, shall also be considered timely, but only with respect to nominees for any new positions in such Expiring Class created by such increase, if it shall be received by the Secretary at the principal executive offices of the corporation not later than the close of business on the 10th day following the day on which such public announcement is first made by the corporation. For purposes of this Section 5, an "***Expiring Class***" shall mean a class of directors whose term shall expire at the next annual meeting of stockholders.

(e) To be eligible to be a nominee for election or re-election as a director of the corporation pursuant to a nomination under clause (iii) of Section 5(a) of these Bylaws, such proposed nominee or a person on such proposed nominee's behalf must deliver (in accordance with the time periods prescribed for delivery of notice under Section 5(b)(iii) or 5(d) of these Bylaws, as applicable) to the Secretary at the principal executive offices of the corporation a written questionnaire with respect to the background and qualification of such proposed nominee and the background of any other person or entity on whose behalf the nomination is being made (which questionnaire shall be provided by the Secretary upon written request) and a written representation and agreement (in the form provided by the Secretary upon written request) that such person: (i) is not and will not become a party to (A) any agreement, arrangement or understanding with, and has not given any commitment or assurance to, any person or entity as to how such person, if elected as a director of the corporation, will act or vote on any issue or question (a "***Voting Commitment***") that has not been disclosed to the corporation in the questionnaire or (B) any Voting Commitment that could limit or interfere with such person's ability to comply, if elected as a director of the corporation, with such person's fiduciary duties under applicable law; (ii) is not and will not become a party to any agreement, arrangement or understanding with any person or entity other than the corporation with respect to any direct or indirect compensation, reimbursement or indemnification in connection with service or action as a director of the corporation that has not been disclosed therein; and (iii) in such person's individual capacity and on behalf of any person or entity on whose behalf the nomination is being made, would be in compliance, if elected as a director of the corporation, and will comply with, all applicable publicly disclosed corporate governance, conflict of interest, confidentiality and stock ownership and trading policies and guidelines of the corporation.

(f) A person shall not be eligible for election or re-election as a director unless the person is nominated either in accordance with clause (ii) of Section 5(a) of these Bylaws, or in accordance with clause (iii) of Section 5(a) of these Bylaws. Except as otherwise required by law, the chairman of the meeting shall have the power and duty to determine whether a nomination or any business proposed to be brought before the meeting was made, or proposed, as the case may be, in accordance with the procedures set forth in these Bylaws and, if any proposed nomination or business is not in compliance with these Bylaws, or the Proponent does not act in accordance with the representations in Sections 5(b)(iv)(D) and 5(b)(iv)(E) of these Bylaws, to declare that such proposal or nomination shall not be presented for stockholder action at the meeting and shall be disregarded, notwithstanding that proxies in respect of such nominations or such business may have been solicited or received.

(g) Notwithstanding the foregoing provisions of this Section 5, in order to include information with respect to a stockholder proposal in the proxy statement and form of proxy for a stockholders' meeting, a stockholder must also comply with all applicable requirements of the 1934 Act and the rules and regulations thereunder. Nothing in these Bylaws shall be deemed to affect any rights of stockholders to request inclusion of proposals in the corporation's proxy statement pursuant to Rule 14a-8 under the 1934 Act; *provided, however,* that any references in these Bylaws to the 1934 Act or the rules and regulations thereunder are not intended to and shall not limit the requirements applicable to proposals and/or nominations to be considered pursuant to Section 5(a)(iii) of these Bylaws.

(h) For purposes of Sections 5 and 6 of these Bylaws,

i. "***public announcement***" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the 1934 Act; and

ii. "***affiliates***" and "***associates***" shall have the meanings set forth in Rule 405 under the Securities Act of 1933, as amended.

Section 6. Special Meetings.

(a) Special meetings of the stockholders of the corporation may be called, for any purpose as is a proper matter for stockholder action under Delaware law, by (i) the Chairman of the Board of Directors, (ii) the Chief Executive Officer, or (iii) the Board of Directors pursuant to a resolution adopted by a majority of the total number of authorized directors (whether or not there exist any vacancies in previously authorized directorships at the time any such resolution is presented to the Board of Directors for adoption).

(b) The Board of Directors shall determine the time and place, if any, of such special meeting. Upon determination of the time and place, if any, of the meeting, the Secretary shall cause a notice of meeting to be given to the stockholders entitled to vote, in accordance with the provisions of Section 7 of these Bylaws. No business may be transacted at such special meeting otherwise than specified in the notice of meeting.

(c) Nominations of persons for election to the Board of Directors may be made at a special meeting of stockholders at which directors are to be elected (i) by or at the direction of the Board of Directors or (ii) by any stockholder of the corporation who is a stockholder of record at the time of giving notice provided for in this paragraph, who shall be entitled to vote at the meeting and who delivers written notice to the Secretary of the corporation setting forth the information required by Section 5(b)(i) of these Bylaws. In the event the corporation calls a special meeting of stockholders for the purpose of electing one or more directors to the Board of Directors, any such stockholder of record may nominate a person or persons (as the case may be), for election to such position(s) as specified in the corporation's notice of meeting, if written notice setting forth the information required by Section 5(b)(i) of these Bylaws shall be received by the Secretary at the principal executive offices of the corporation not later than the close of business on the later of the 90th day prior to such meeting or the 10th day following the day on which public announcement is first made of the date of the special meeting and of the nominees proposed by the Board of Directors to be elected at such meeting. The stockholder shall also update and supplement such information as required under Section 5(c) of these Bylaws. In no event shall an adjournment or a postponement of a special meeting for which notice has been given, or the public announcement thereof has been made, commence a new time period for the giving of a stockholder's notice as described above.

(d) Notwithstanding the foregoing provisions of this Section 6, a stockholder must also comply with all applicable requirements of the 1934 Act and the rules and regulations thereunder with respect to matters set forth in this Section 6. Nothing in these Bylaws shall be deemed to affect any rights of stockholders to request inclusion of proposals in the corporation's proxy statement pursuant to Rule 14a-8 under the 1934 Act; *provided, however,* that any references in these Bylaws to the 1934 Act or the rules and regulations thereunder are not intended to and shall not limit the requirements applicable to nominations for the election to the Board of Directors to be considered pursuant to Section 6(c) of these Bylaws.

Section 7. Notice Of Meetings. Except as otherwise provided by law, notice, given in writing or by electronic transmission, of each meeting of stockholders shall be given not less than 10 nor more than 60 days before the date of the meeting to each stockholder entitled to vote at such meeting, such notice to specify the place, if any, date and hour, in the case of special meetings, the purpose or purposes of the meeting, and the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at any such meeting. If mailed, notice is deemed given when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the corporation. If sent via electronic transmission, notice is deemed given as of the sending time recorded at the time of transmission. Notice of the time, place, if any, and purpose of any meeting of stockholders may be waived in writing, signed by the person entitled to notice thereof, or by electronic transmission by such person, either before or after such meeting, and will be waived by any stockholder by his attendance thereat in person, by remote communication, if applicable, or by proxy, except when the stockholder attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Any stockholder so waiving notice of such meeting shall be bound by the proceedings of any such meeting in all respects as if due notice thereof had been given.

Section 8. Quorum. At all meetings of stockholders, except where otherwise provided by statute or by the corporation's Amended and Restated Certificate of Incorporation ("***Certificate of Incorporation***"), or by these Bylaws, the presence, in person, by remote communication, if applicable, or by proxy duly authorized, of the holders of a majority of the outstanding shares of stock entitled to vote shall constitute a quorum for the transaction of business. In the absence of a quorum, any meeting of stockholders may be adjourned, from time to time, either by the chairman of the meeting or by vote of the holders of a majority of the shares represented thereat, but no other business shall be transacted at such meeting. The stockholders present at a duly called or convened meeting, at which a quorum is present, may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum. Except as otherwise provided by statute or by applicable stock exchange rules, or by the Certificate of Incorporation or these Bylaws, in all matters other than the election of directors, the affirmative vote of the majority of shares present in person, by remote communication, if applicable, or represented by proxy at the meeting and entitled to vote generally on the subject matter shall be the act of the stockholders. Except as otherwise provided by statute, the Certificate of Incorporation or these Bylaws, directors shall be elected by a plurality of the votes of the shares present in person, by remote communication, if applicable, or represented by proxy at the meeting and entitled to vote generally on the election of directors. Where a separate vote by a class or classes or series is required, except where otherwise provided by the statute or by the Certificate of Incorporation or these Bylaws, a majority of the outstanding shares of such class or classes or series, present in person, by remote communication, if applicable, or represented by proxy duly authorized, shall constitute a quorum entitled to take action with respect to that vote on that matter. Except where otherwise provided by statute or by the Certificate of Incorporation or these Bylaws, the affirmative vote of the majority (plurality, in the case of the election of directors) of shares of such class or classes or series present in person, by remote communication, if applicable, or represented by proxy at the meeting shall be the act of such class or classes or series.

Section 9. Adjournment and Notice of Adjourned Meetings. Any meeting of stockholders, whether annual or special, may be adjourned from time to time either by the chairman of the meeting or by the vote of a majority of the shares present in person, by remote communication, if applicable, or represented by proxy at the meeting. When a meeting is adjourned to another time or place, if any, notice need not be given of the adjourned meeting if the time and place, if any, thereof are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the corporation may transact any business which might have been transacted at the original meeting. If the adjournment is for more than 30 days or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

Section 10. Voting Rights. For the purpose of determining those stockholders entitled to vote at any meeting of the stockholders, except as otherwise provided by law, only persons in whose names shares stand on the stock records of the corporation on the record date, as provided in Section 12 of these Bylaws, shall be entitled to vote at any meeting of stockholders. Every person entitled to vote shall have the right to do so either in person, by remote communication, if applicable, or by an agent or agents authorized by a proxy granted in accordance with Delaware law. An agent so appointed need not be a stockholder. No proxy shall be voted after three years from its date of creation unless the proxy provides for a longer period.

Section 11. Joint Owners of Stock. If shares or other securities having voting power stand of record in the names of two or more persons, whether fiduciaries, members of a partnership, joint tenants, tenants in common, tenants by the entirety, or otherwise, or if two or more persons have the same fiduciary relationship respecting the same shares, unless the Secretary is given written notice to the contrary and is furnished with a copy of the instrument or order appointing them or creating the relationship wherein it is so provided, their acts with respect to voting shall have the following effect: (a) if only one votes, his act binds all; (b) if more than one votes, the act of the majority so voting binds all; or (c) if more than one votes, but the vote is evenly split on any particular matter, each faction may vote the securities in question proportionally, or may apply to the Delaware Court of Chancery for relief as provided in the DGCL, Section 217(b). If the instrument filed with the Secretary shows that any such tenancy is held in unequal interests, a majority or even-split for the purpose of clause (c) of this Section 11 shall be a majority or even-split in interest.

Section 12. List of Stockholders. The Secretary shall prepare and make, at least 10 days before every meeting of stockholders, a complete list of the stockholders entitled to vote at said meeting, arranged in alphabetical order, showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, (a) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (b) during ordinary business hours, at the principal place of business of the corporation. In the event that the corporation determines to make the list available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to stockholders of the corporation. The list shall be open to examination of any stockholder during the time of the meeting as provided by law.

Section 13. Action Without Meeting. No action shall be taken by the stockholders except at an annual or special meeting of stockholders called in accordance with these Bylaws, and no action shall be taken by the stockholders by written consent or electronic transmission.

Section 14. Organization.

(a) At every meeting of stockholders, the Chairman of the Board of Directors, or, if a Chairman has not been appointed or is absent, the President, or, if the President is absent, a chairman of the meeting chosen by a majority in interest of the stockholders entitled to vote, present in person or by proxy, shall act as chairman. The Secretary, or, in his or her absence, an Assistant Secretary directed to do so by the President, shall act as secretary of the meeting.

(b) The Board of Directors of the corporation shall be entitled to make such rules or regulations for the conduct of meetings of stockholders as it shall deem necessary, appropriate or convenient. Subject to such rules and regulations of the Board of Directors, if any, the chairman of the meeting shall have the right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairman, are necessary, appropriate or convenient for the proper conduct of the meeting, including, without limitation, establishing an agenda or order of business for the meeting, rules and procedures for maintaining order at the meeting and the safety of those present, limitations on participation in such meeting to stockholders of record of the corporation and their duly authorized and constituted proxies and such other persons as the chairman shall permit, restrictions on entry to the meeting after the time fixed for the commencement thereof, limitations on the time allotted to questions or comments by participants and regulation of the opening and closing of the polls for balloting on matters which are to be voted on by ballot. The date and time of the opening and closing of the polls for each matter upon which the stockholders will vote at the meeting shall be announced at the meeting. Unless and to the extent determined by the Board of Directors or the chairman of the meeting, meetings of stockholders shall not be required to be held in accordance with rules of parliamentary procedure.

ARTICLE IV

DIRECTORS

Section 15. Number and Term of Office. The authorized number of directors of the corporation shall be fixed in accordance with the Certificate of Incorporation. Directors need not be stockholders unless so required by the Certificate of Incorporation. If for any cause, the directors shall not have been elected at an annual meeting, they may be elected as soon thereafter as convenient at a special meeting of the stockholders called for that purpose in the manner provided in these Bylaws.

Section 16. Powers. The powers of the corporation shall be exercised, its business conducted and its property controlled by the Board of Directors, except as may be otherwise provided by statute or by the Certificate of Incorporation.

Section 17. Classes of Directors

Subject to the rights of the holders of any series of Preferred Stock to elect additional directors under specified circumstances, the directors shall be divided into three classes designated as Class I, Class II and Class III, respectively. Initially, directors shall be assigned to each class in accordance with a resolution or resolutions adopted by the Board of Directors. At the first annual meeting of stockholders following the initial classification of the Board of Directors, the term of office of the Class I directors shall expire and Class I directors shall be elected for a full term of three years. At the second annual meeting of stockholders following such initial classification, the term of office of the Class II directors shall expire and Class II directors shall be elected for a full term of three years. At the third annual meeting of stockholders following such initial classification, the term of office of the Class III directors shall expire and Class III directors shall be elected for a full term of three years. At each succeeding annual meeting of stockholders, directors shall be elected for a full term of three years to succeed the directors of the class whose terms expire at such annual meeting.

Notwithstanding the foregoing provisions of this Section 17, each director shall serve until his successor is duly elected and qualified or until his earlier death, resignation or removal. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

Section 18. Vacancies.

(a) Unless otherwise provided in the Certificate of Incorporation, and subject to the rights of the holders of any series of Preferred Stock, any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal or other causes and any newly created directorships resulting from any increase in the number of directors shall, unless the Board of Directors determines by resolution that any such vacancies or newly created directorships shall be filled by stockholders, be filled only by the affirmative vote of a majority of the directors then in office, even though less than a quorum of the Board of Directors, or by a sole remaining director, and not by the stockholders, *provided, however*, that whenever the holders of any class or classes of stock or series thereof are entitled to elect one or more directors by the provisions of the Certificate of Incorporation, vacancies and newly created directorships of such class or classes or series shall, unless the Board of Directors determines by resolution that any such vacancies or newly created directorships shall be filled by stockholders, be filled by a majority of the directors elected by such class or classes or series thereof then in office, or by a sole remaining director so elected, and not by the stockholders. Any director elected in accordance with the preceding sentence shall hold office for the remainder of the full term of the director for which the vacancy was created or occurred and until such director’s successor shall have been elected and qualified. A vacancy in the Board of Directors shall be deemed to exist under this Bylaw in the case of the death, removal or resignation of any director.

Section 19. Resignation. Any director may resign at any time by delivering his or her notice in writing or by electronic transmission to the Secretary, such resignation to specify whether it will be effective at a particular time. If no such specification is made, it shall be deemed effective at the time of delivery to the Secretary. When one or more directors shall resign from the Board of Directors, effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective, and each director so chosen shall hold office for the unexpired portion of the term of the director whose place shall be vacated and until his successor shall have been duly elected and qualified.

Section 20. Removal.

(a) Subject to the rights of any series of Preferred Stock to elect additional directors under specified circumstances, neither the Board of Directors nor any individual director may be removed without cause.

(b) Subject to any limitation imposed by law, any individual director or directors may be removed with cause by the affirmative vote of the holders of at least 66 2/3% of the voting power of all then outstanding shares of capital stock of the corporation entitled to vote generally at an election of directors.

Section 21. Duties of Chairman of the Board of Directors. The Chairman of the Board of Directors, when present, shall preside at all meetings of the stockholders and the Board of Directors. The Chairman of the Board of Directors shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers, as the Board of Directors shall designate from time to time.

Section 22. Meetings.

(a) Regular Meetings. Unless otherwise restricted by the Certificate of Incorporation, regular meetings of the Board of Directors may be held at any time or date and at any place within or without the State of Delaware which has been designated by the Board of Directors and publicized among all directors, either orally or in writing, by telephone, including a voice-messaging system or other system designed to record and communicate messages, facsimile, telegraph or telex, or by electronic mail or other electronic means. No further notice shall be required for regular meetings of the Board of Directors.

(b) Special Meetings. Unless otherwise restricted by the Certificate of Incorporation, special meetings of the Board of Directors may be held at any time and place within or without the State of Delaware whenever called by the Chairman of the Board, the Chief Executive Officer or a majority of the authorized number of directors.

(c) Meetings by Electronic Communications Equipment. Any member of the Board of Directors, or of any committee thereof, may participate in a meeting by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting by such means shall constitute presence in person at such meeting.

(d) Notice of Special Meetings. Notice of the time and place of all special meetings of the Board of Directors shall be orally or in writing, by telephone, including a voice messaging system or other system or technology designed to record and communicate messages, facsimile, telegraph or telex, or by electronic mail or other electronic means, during normal business hours, at least 24 hours before the date and time of the meeting. If notice is sent by U.S. mail, it shall be sent by first class mail, charges prepaid, at least three days before the date of the meeting. Notice of any meeting may be waived in writing, or by electronic transmission, at any time before or after the meeting and will be waived by any director by attendance thereat, except when the director attends the meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

(e) Waiver of Notice. The transaction of all business at any meeting of the Board of Directors, or any committee thereof, however called or noticed, or wherever held, shall be as valid as though it had been transacted at a meeting duly held after regular call and notice, if a quorum be present and if, either before or after the meeting, each of the directors not present who did not receive notice shall sign a written waiver of notice or shall waive notice by electronic transmission. All such waivers shall be filed with the corporate records or made a part of the minutes of the meeting.

Section 23. Quorum And Voting.

(a) Unless the Certificate of Incorporation requires a greater number, and except with respect to questions related to indemnification arising under Section 45 of these Bylaws for which a quorum shall be one-third of the exact number of directors fixed from time to time, a quorum of the Board of Directors shall consist of a majority of the exact number of directors fixed from time to time by the Board of Directors in accordance with the Certificate of Incorporation; *provided, however,* at any meeting whether a quorum be present or otherwise, a majority of the directors present may adjourn from time to time until the time fixed for the next regular meeting of the Board of Directors, without notice other than by announcement at the meeting.

(b) At each meeting of the Board of Directors at which a quorum is present, all questions and business shall be determined by the affirmative vote of a majority of the directors present, unless a different vote be required by law, the Certificate of Incorporation or these Bylaws.

Section 24. Action Without Meeting. Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all members of the Board of Directors or committee, as the case may be, consent thereto in writing or by electronic transmission, and such writing or writings or transmission or transmissions are filed with the minutes of proceedings of the Board of Directors or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Section 25. Fees and Compensation. Directors shall be entitled to such compensation for their services as may be approved by the Board of Directors, including, if so approved, by resolution of the Board of Directors, a fixed sum and expenses of attendance, if any, for attendance at each regular or special meeting of the Board of Directors and at any meeting of a committee of the Board of Directors. Nothing herein contained shall be construed to preclude any director from serving the corporation in any other capacity as an officer, agent, employee, or otherwise and receiving compensation therefor.

Section 26. Committees.

(a) Executive Committee. The Board of Directors may appoint an Executive Committee to consist of one or more members of the Board of Directors. The Executive Committee, to the extent permitted by law and provided in the resolution of the Board of Directors shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to (i) approving or adopting, or recommending to the stockholders, any action or matter (other than the election or removal of directors) expressly required by the DGCL to be submitted to stockholders for approval, or (ii) adopting, amending or repealing any Bylaw of the corporation.

(b) Other Committees. The Board of Directors may, from time to time, appoint such other committees as may be permitted by law. Such other committees appointed by the Board of Directors shall consist of one or more members of the Board of Directors and shall have such powers and perform such duties as may be prescribed by the resolution or resolutions creating such committees, but in no event shall any such committee have the powers denied to the Executive Committee in these Bylaws.

(c) Term. The Board of Directors, subject to any requirements of any outstanding series of Preferred Stock and the provisions of subsections (a) or (b) of this Section 26, may at any time increase or decrease the number of members of a committee or terminate the existence of a committee. The membership of a committee member shall terminate on the date of his death or voluntary resignation from the committee or from the Board of Directors. The Board of Directors may at any time for any reason remove any individual committee member and the Board of Directors may fill any committee vacancy created by death, resignation, removal or increase in the number of members of the committee. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee, and, in addition, in the absence or disqualification of any member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member.

(d) Meetings. Unless the Board of Directors shall otherwise provide, regular meetings of the Executive Committee or any other committee appointed pursuant to this Section 26 shall be held at such times and places as are determined by the Board of Directors, or by any such committee, and when notice thereof has been given to each member of such committee, no further notice of such regular meetings need be given thereafter. Special meetings of any such committee may be held at any place which has been determined from time to time by such committee, and may be called by any director who is a member of such committee, upon notice to the members of such committee of the time and place of such special meeting given in the manner provided for the giving of notice to members of the Board of Directors of the time and place of special meetings of the Board of Directors. Notice of any special meeting of any committee may be waived in writing or by electronic transmission at any time before or after the meeting and will be waived by any director by attendance thereat, except when the director attends such special meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Unless otherwise provided by the Board of Directors in the resolutions authorizing the creation of the committee, a majority of the authorized number of members of any such committee shall constitute a quorum for the transaction of business, and the act of a majority of those present at any meeting at which a quorum is present shall be the act of such committee.

Section 27. Lead Independent Director. The Chairman of the Board of Directors, or if the Chairman is not an independent director, one of the independent directors, may be designated by the Board of Directors as lead independent director ("***Lead Independent Director***") to serve until replaced by the Board of Directors. The Lead Independent Director will: with the Chairman of the Board of Directors, establish the agenda for regular Board meetings and serve as chairman of Board of Directors meetings in the absence of the Chairman of the Board of Directors; establish the agenda for meetings of the independent directors; coordinate with the committee chairs regarding meeting agendas and informational requirements; preside over meetings of the independent directors; preside over any portions of meetings of the Board of Directors at which the evaluation or compensation of the Chief Executive Officer is presented or discussed; preside over any portions of meetings of the Board of Directors at which the performance of the Board of Directors is presented or discussed; and perform such other duties as may be established or delegated by the Chairman of the Board of Directors**.**

Section 28. Organization. At every meeting of the directors, the Chairman of the Board of Directors, or, if a Chairman has not been appointed or is absent, the Lead Independent Director, or if the Lead Independent Director is absent, the Chief Executive Officer (if a director), or, if a Chief Executive Officer is absent, the President (if a director), or if the President is absent, the most senior Vice President (if a director), or, in the absence of any such person, a chairman of the meeting chosen by a majority of the directors present, shall preside over the meeting. The Secretary, or in his absence, any Assistant Secretary or other officer or director directed to do so by the Chairman, shall act as secretary of the meeting.

ARTICLE V

OFFICERS

Section 29. Officers Designated. The officers of the corporation shall include, if and when designated by the Board of Directors, the Chairman of the Board of Directors, the Chief Executive Officer, the President, one or more Vice Presidents, the Secretary, the Chief Financial Officer and the Treasurer. The Board of Directors may also appoint one or more Assistant Secretaries and Assistant Treasurers and such other officers and agents with such powers and duties as it shall deem necessary. The Board of Directors may assign such additional titles to one or more of the officers as it shall deem appropriate. Any one person may hold any number of offices of the corporation at any one time unless specifically prohibited therefrom by law. The salaries and other compensation of the officers of the corporation shall be fixed by or in the manner designated by the Board of Directors.

Section 30. Tenure and Duties of Officers.

(a) General. All officers shall hold office at the pleasure of the Board of Directors and until their successors shall have been duly elected and qualified, unless sooner removed. Any officer elected or appointed by the Board of Directors may be removed at any time by the Board of Directors. If the office of any officer becomes vacant for any reason, the vacancy may be filled by the Board of Directors.

(b) Duties of Chief Executive Officer. The Chief Executive Officer shall preside at all meetings of the stockholders and at all meetings of the Board of Directors, unless the Chairman of the Board of Directors or the Lead Independent Director has been appointed and is present. Unless an officer has been appointed Chief Executive Officer of the corporation, the President shall be the chief executive officer of the corporation and shall, subject to the control of the Board of Directors, have general supervision, direction and control of the business and officers of the corporation. To the extent that a Chief Executive Officer has been appointed and no President has been appointed, all references in these Bylaws to the President shall be deemed references to the Chief Executive Officer. The Chief Executive Officer shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers, as the Board of Directors shall designate from time to time.

(c) Duties of President. The President shall preside at all meetings of the stockholders and at all meetings of the Board of Directors, unless the Chairman of the Board of Directors, the Lead Independent Director, or the Chief Executive Officer has been appointed and is present. Unless another officer has been appointed Chief Executive Officer of the corporation, the President shall be the chief executive officer of the corporation and shall, subject to the control of the Board of Directors, have general supervision, direction and control of the business and officers of the corporation. The President shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers, as the Board of Directors shall designate from time to time.

(d) Duties of Vice Presidents. The Vice Presidents may assume and perform the duties of the President in the absence or disability of the President or whenever the office of President is vacant. The Vice Presidents shall perform other duties commonly incident to their office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer, or, if the Chief Executive Officer has not been appointed or is absent, the President shall designate from time to time.

(e) Duties of Secretary. The Secretary shall attend all meetings of the stockholders and of the Board of Directors and shall record all acts and proceedings thereof in the minute book of the corporation. The Secretary shall give notice in conformity with these Bylaws of all meetings of the stockholders and of all meetings of the Board of Directors and any committee thereof requiring notice. The Secretary shall perform all other duties provided for in these Bylaws and other duties commonly incident to the office and shall also perform such other duties and have such other powers, as the Board of Directors shall designate from time to time. The President may direct any Assistant Secretary or other officer to assume and perform the duties of the Secretary in the absence or disability of the Secretary, and each Assistant Secretary shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the President shall designate from time to time.

(f) Duties of Chief Financial Officer. The Chief Financial Officer shall keep or cause to be kept the books of account of the corporation in a thorough and proper manner and shall render statements of the financial affairs of the corporation in such form and as often as required by the Board of Directors or the President. The Chief Financial Officer, subject to the order of the Board of Directors, shall have the custody of all funds and securities of the corporation. The Chief Financial Officer shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the President shall designate from time to time. To the extent that a Chief Financial Officer has been appointed and no Treasurer has been appointed, all references in these Bylaws to the Treasurer shall be deemed references to the Chief Financial Officer. The President may direct the Treasurer, if any, or any Assistant Treasurer, or the Controller or any Assistant Controller to assume and perform the duties of the Chief Financial Officer in the absence or disability of the Chief Financial Officer, and each Treasurer and Assistant Treasurer and each Controller and Assistant Controller shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the President shall designate from time to time.

(g) Duties of Treasurer. Unless another officer has been appointed Chief Financial Officer of the corporation, the Treasurer shall be the chief financial officer of the corporation and shall keep or cause to be kept the books of account of the corporation in a thorough and proper manner and shall render statements of the financial affairs of the corporation in such form and as often as required by the Board of Directors or the President, and, subject to the order of the Board of Directors, shall have the custody of all funds and securities of the corporation. The Treasurer shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the President shall designate from time to time.

Section 31. Delegation of Authority. The Board of Directors may from time to time delegate the powers or duties of any officer to any other officer or agent, notwithstanding any provision hereof.

Section 32. Resignations. Any officer may resign at any time by giving notice in writing or by electronic transmission to the Board of Directors or to the President or to the Secretary. Any such resignation shall be effective when received by the person or persons to whom such notice is given, unless a later time is specified therein, in which event the resignation shall become effective at such later time. Unless otherwise specified in such notice, the acceptance of any such resignation shall not be necessary to make it effective. Any resignation shall be without prejudice to the rights, if any, of the corporation under any contract with the resigning officer.

Section 33. Removal. Any officer may be removed from office at any time, either with or without cause, by the affirmative vote of a majority of the directors in office at the time, or by the unanimous written consent of the directors in office at the time, or by any committee or by the Chief Executive Officer or by other superior officers upon whom such power of removal may have been conferred by the Board of Directors.

ARTICLE VI

EXECUTION OF CORPORATE INSTRUMENTS AND VOTING OF SECURITIES OWNED BY THE CORPORATION

Section 34. Execution of Corporate Instruments. The Board of Directors may, in its discretion, determine the method and designate the signatory officer or officers, or other person or persons, to execute on behalf of the corporation any corporate instrument or document, or to sign on behalf of the corporation the corporate name without limitation, or to enter into contracts on behalf of the corporation, except where otherwise provided by law or these Bylaws, and such execution or signature shall be binding upon the corporation.

All checks and drafts drawn on banks or other depositaries on funds to the credit of the corporation or in special accounts of the corporation shall be signed by such person or persons as the Board of Directors shall authorize so to do.

Unless authorized or ratified by the Board of Directors or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

Section 35. Voting of Securities Owned by the Corporation. All stock and other securities of other corporations owned or held by the corporation for itself, or for other parties in any capacity, shall be voted, and all proxies with respect thereto shall be executed, by the person authorized so to do by resolution of the Board of Directors, or, in the absence of such authorization, by the Chairman of the Board of Directors, the Chief Executive Officer, the President, or any Vice President.

ARTICLE VII

SHARES OF STOCK

Section 36. Form and Execution of Certificates. The shares of the corporation shall be represented by certificates, or shall be uncertificated if so provided by resolution or resolutions of the Board of Directors. Certificates for the shares of stock of the corporation, if any, shall be in such form as is consistent with the Certificate of Incorporation and applicable law. Every holder of stock represented by certificate in the corporation shall be entitled to have a certificate signed by or in the name of the corporation by the Chairman of the Board of Directors, the Chief Executive Officer, or the President or any Vice President and by the Chief Financial Officer, Treasurer or Assistant Treasurer or the Secretary or Assistant Secretary, certifying the number of shares owned by him in the corporation. Any or all of the signatures on the certificate may be facsimiles. In case any officer, transfer agent, or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent, or registrar before such certificate is issued, it may be issued with the same effect as if he were such officer, transfer agent, or registrar at the date of issue.

Section 37. Lost Certificates. A new certificate or certificates shall be issued in place of any certificate or certificates theretofore issued by the corporation alleged to have been lost, stolen, or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen, or destroyed. The corporation may require, as a condition precedent to the issuance of a new certificate or certificates, the owner of such lost, stolen, or destroyed certificate or certificates, or the owner's legal representative, to agree to indemnify the corporation in such manner as it shall require or to give the corporation a surety bond in such form and amount as it may direct as indemnity against any claim that may be made against the corporation with respect to the certificate alleged to have been lost, stolen, or destroyed.

Section 38. Transfers.

(a) Transfers of record of shares of stock of the corporation shall be made only upon its books by the holders thereof, in person or by attorney duly authorized, and, in the case of stock represented by certificate, upon the surrender of a properly endorsed certificate or certificates for a like number of shares.

(b) The corporation shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes of stock of the corporation to restrict the transfer of shares of stock of the corporation of any one or more classes owned by such stockholders in any manner not prohibited by the DGCL.

Section 39. Fixing Record Dates.

(a) In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall, subject to applicable law, not be more than 60 nor less than 10 days before the date of such meeting. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; *provided, however,* that the Board of Directors may fix a new record date for the adjourned meeting.

(b) In order that the corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix, in advance, a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than 60 days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

Section 40. Registered Stockholders. The corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

ARTICLE VIII

OTHER SECURITIES OF THE CORPORATION

Section 41. Execution of Other Securities. All bonds, debentures and other corporate securities of the corporation, other than stock certificates (covered in Section 36 of these Bylaws), may be signed by the Chairman of the Board of Directors, the Chief Executive Officer, President or any Vice President, or such other person as may be authorized by the Board of Directors, and the corporate seal impressed thereon or a facsimile of such seal imprinted thereon and attested by the signature of the Secretary or an Assistant Secretary, or the Chief Financial Officer or Treasurer or an Assistant Treasurer; *provided, however,* that where any such bond, debenture or other corporate security shall be authenticated by the manual signature, or where permissible facsimile signature, of a trustee under an indenture pursuant to which such bond, debenture or other corporate security shall be issued, the signatures of the persons signing and attesting the corporate seal on such bond, debenture or other corporate security may be the imprinted facsimile of the signatures of such persons. Interest coupons appertaining to any such bond, debenture or other corporate security, authenticated by a trustee as aforesaid, shall be signed by the Treasurer or an Assistant Treasurer of the corporation or such other person as may be authorized by the Board of Directors, or bear imprinted thereon the facsimile signature of such person. In case any officer who shall have signed or attested any bond, debenture or other corporate security, or whose facsimile signature shall appear thereon or on any such interest coupon, shall have ceased to be such officer before the bond, debenture or other corporate security so signed or attested shall have been delivered, such bond, debenture or other corporate security nevertheless may be adopted by the corporation and issued and delivered as though the person who signed the same or whose facsimile signature shall have been used thereon had not ceased to be such officer of the corporation.

ARTICLE IX

DIVIDENDS

Section 42. Declaration of Dividends. Dividends upon the capital stock of the corporation, subject to the provisions of the Certificate of Incorporation and applicable law, if any, may be declared by the Board of Directors pursuant to law at any regular or special meeting. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the Certificate of Incorporation and applicable law.

Section 43. Dividend Reserve. Before payment of any dividend, there may be set aside out of any funds of the corporation available for dividends such sum or sums as the Board of Directors from time to time, in their absolute discretion, think proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the corporation, or for such other purpose as the Board of Directors shall think conducive to the interests of the corporation, and the Board of Directors may modify or abolish any such reserve in the manner in which it was created.

ARTICLE X

FISCAL YEAR

Section 44. Fiscal Year. The fiscal year of the corporation shall be fixed by resolution of the Board of Directors.

ARTICLE XI

INDEMNIFICATION

Section 45. Indemnification of Directors, Officers, Employees and Other Agents.

(a) Directors and Officers. The corporation shall indemnify its directors and officers to the extent not prohibited by the DGCL or any other applicable law; *provided*, *however*, that the corporation may modify the extent of such indemnification by individual contracts with its directors and officers; and, *provided*, *further*, that the corporation shall not be required to indemnify any director or officer in connection with any proceeding (or part thereof) initiated by such person unless (i) such indemnification is expressly required to be made by law, (ii) the proceeding was authorized by the Board of Directors of the corporation, (iii) such indemnification is provided by the corporation, in its sole discretion, pursuant to the powers vested in the corporation under the DGCL or any other applicable law or (iv) such indemnification is required to be made under subsection (d).

(b) Employees and Other Agents. The corporation shall have power to indemnify its employees and other agents as set forth in the DGCL or any other applicable law. The Board of Directors shall have the power to delegate the determination of whether to indemnify any such employee or other agent to such officers or other persons as the Board of Directors so determines.

(c) Expenses. The corporation shall advance to any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he is or was a director or officer, of the corporation, or is or was serving at the request of the corporation as a director or officer of another corporation, partnership, joint venture, trust or other enterprise, prior to the final disposition of the proceeding, promptly following request therefor, all expenses incurred by any director or officer in connection with such proceeding provided, however, that if the DGCL requires, an advancement of expenses incurred by a director or officer in his or her capacity as a director or officer (and not in any other capacity in which service was or is rendered by such indemnitee, including, without limitation, service to an employee benefit plan) shall be made only upon delivery to the corporation of an undertaking, by or on behalf of such indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal that such indemnitee is not entitled to be indemnified for such expenses under this Section 45 or otherwise.

Notwithstanding the foregoing, unless otherwise determined pursuant to paragraph (e) of this Section 45, no advance shall be made by the corporation to an officer of the corporation (except by reason of the fact that such officer is or was a director of the corporation in which event this paragraph shall not apply) in any action, suit or proceeding, whether civil, criminal, administrative or investigative, if a determination is reasonably and promptly made (i) by a majority vote of directors who were not parties to the proceeding, even if not a quorum, or (ii) by a committee of such directors designated by a majority vote of such directors, even though less than a quorum, or (iii) if there are no such directors, or such directors so direct, by independent legal counsel in a written opinion, that the facts known to the decision-making party at the time such determination is made demonstrate clearly and convincingly that such person acted in bad faith or in a manner that such person did not believe to be in or not opposed to the best interests of the corporation.

(d) Enforcement. Without the necessity of entering into an express contract, all rights to indemnification and advances to directors and officers under this Section 45 shall be deemed to be contractual rights and be effective to the same extent and as if provided for in a contract between the corporation and the director or officer. Any right to indemnification or advances granted by this Section 45 to a director or officer shall be enforceable by or on behalf of the person holding such right in any court of competent jurisdiction if (i) the claim for indemnification or advances is denied, in whole or in part, or (ii) no disposition of such claim is made within 90 days of request therefor. To the extent permitted by law, the claimant in such enforcement action, if successful in whole or in part, shall be entitled to be paid also the expense of prosecuting the claim. In connection with any claim for indemnification, the corporation shall be entitled to raise as a defense to any such action that the claimant has not met the standards of conduct that make it permissible under the DGCL or any other applicable law for the corporation to indemnify the claimant for the amount claimed. In connection with any claim by an officer of the corporation (except in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such officer is or was a director of the corporation) for advances, the corporation shall be entitled to raise a defense as to any such action clear and convincing evidence that such person acted in bad faith or in a manner that such person did not believe to be in or not opposed to the best interests of the corporation, or with respect to any criminal action or proceeding that such person acted without reasonable cause to believe that his conduct was lawful. Neither the failure of the corporation (including its Board of Directors, independent legal counsel or its stockholders) to have made a determination prior to the commencement of such action that indemnification of the claimant is proper in the circumstances because he has met the applicable standard of conduct set forth in the DGCL or any other applicable law, nor an actual determination by the corporation (including its Board of Directors, independent legal counsel or its stockholders) that the claimant has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that claimant has not met the applicable standard of conduct. In any suit brought by a director or officer to enforce a right to indemnification or to an advancement of expenses hereunder, the burden of proving that the director or officer is not entitled to be indemnified, or to such advancement of expenses, under this Section 45 or otherwise shall be on the corporation.

(e) Non-Exclusivity of Rights. The rights conferred on any person by this Bylaw shall not be exclusive of any other right which such person may have or hereafter acquire under any applicable statute, provision of the Certificate of Incorporation, Bylaws, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding office. The corporation is specifically authorized to enter into individual contracts with any or all of its directors, officers, employees or agents respecting indemnification and advances, to the fullest extent not prohibited by the DGCL, or by any other applicable law.

(f) Survival of Rights. The rights conferred on any person by this Bylaw shall continue as to a person who has ceased to be a director or officer, or, if applicable, employee or other agent, and shall inure to the benefit of the heirs, executors and administrators of such a person.

(g) Insurance. To the fullest extent permitted by the DGCL or any other applicable law, the corporation, upon approval by the Board of Directors, may purchase insurance on behalf of any person required or permitted to be indemnified pursuant to this Section 45.

(h) Amendments. Any repeal or modification of this Section 45 shall only be prospective and shall not affect the rights under this Bylaw in effect at the time of the alleged occurrence of any action or omission to act that is the cause of any proceeding against any agent of the corporation.

(i) Saving Clause. If this Bylaw or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the corporation shall nevertheless indemnify each director and officer to the full extent not prohibited by any applicable portion of this Section 45 that shall not have been invalidated, or by any other applicable law. If this Section 45 shall be invalid due to the application of the indemnification provisions of another jurisdiction, then the corporation shall indemnify each director and officer to the full extent under any other applicable law.

(j) Certain Definitions. For the purposes of this Bylaw, the following definitions shall apply:

i. The term "***proceeding***" shall be broadly construed and shall include, without limitation, the investigation, preparation, prosecution, defense, settlement, arbitration and appeal of, and the giving of testimony in, any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative.

ii. The term "***expenses***" shall be broadly construed and shall include, without limitation, court costs, attorneys' fees, witness fees, fines, amounts paid in settlement or judgment and any other costs and expenses of any nature or kind incurred in connection with any proceeding.

iii. The term the "***corporation***" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under the provisions of this Section 45 with respect to the resulting or surviving corporation as he would have with respect to such constituent corporation if its separate existence had continued.

iv. References to a "***director***," "***officer***," "***employee***," or "***agent***" of the corporation shall include, without limitation, situations where such person is serving at the request of the corporation as, respectively, a director, officer, employee, trustee or agent of another corporation, partnership, joint venture, trust or other enterprise.

v. References to "***other enterprise***" shall include employee benefit plans; references to "***fines***" shall include any excise taxes assessed on a person with respect to an employee benefit plan; and references to "***serving at the request of the corporation***" shall include any service as a director, officer, employee or agent of the corporation which imposes duties on, or involves services by, such director, officer, employee, or agent with respect to an employee benefit plan, its participants, or beneficiaries; and a person who acted in good faith and in a manner such person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "***not opposed to the best interests of the corporation***" as referred to in this Section 45.

ARTICLE XII

NOTICES

Section 46. Notices.

(a) Notice to Stockholders. Written notice to stockholders of stockholder meetings shall be given as provided in Section 7 of these Bylaws. Without limiting the manner by which notice may otherwise be given effectively to stockholders under any agreement or contract with such stockholder, and except as otherwise required by law, written notice to stockholders for purposes other than stockholder meetings may be sent by U.S. mail or nationally recognized overnight courier, or by facsimile, telegraph or telex or by electronic mail or other electronic means.

(b) Notice to Directors. Any notice required to be given to any director may be given by the method stated in subsection (a), as otherwise provided in these Bylaws, or by overnight delivery service, facsimile, telex or telegram, except that such notice other than one which is delivered personally shall be sent to such address as such director shall have filed in writing with the Secretary, or, in the absence of such filing, to the last known post office address of such director.

(c) Affidavit of Mailing. An affidavit of mailing, executed by a duly authorized and competent employee of the corporation or its transfer agent appointed with respect to the class of stock affected, or other agent, specifying the name and address or the names and addresses of the stockholder or stockholders, or director or directors, to whom any such notice or notices was or were given, and the time and method of giving the same, shall in the absence of fraud, be prima facie evidence of the facts therein contained.

(d) Methods of Notice. It shall not be necessary that the same method of giving notice be employed in respect of all recipients of notice, but one permissible method may be employed in respect of any one or more, and any other permissible method or methods may be employed in respect of any other or others.

(e) Notice to Person With Whom Communication is Unlawful. Whenever notice is required to be given, under any provision of law or of the Certificate of Incorporation or Bylaws of the corporation, to any person with whom communication is unlawful, the giving of such notice to such person shall not be required and there shall be no duty to apply to any governmental authority or agency for a license or permit to give such notice to such person. Any action or meeting which shall be taken or held without notice to any such person with whom communication is unlawful shall have the same force and effect as if such notice had been duly given. In the event that the action taken by the corporation is such as to require the filing of a certificate under any provision of the DGCL, the certificate shall state, if such is the fact and if notice is required, that notice was given to all persons entitled to receive notice except such persons with whom communication is unlawful.

(f) Notice to Stockholders Sharing an Address. Except as otherwise prohibited under the DGCL, any notice given under the provisions of the DGCL, the Certificate of Incorporation or the Bylaws shall be effective if given by a single written notice to stockholders who share an address if consented to by the stockholders at that address to whom such notice is given. Such consent shall have been deemed to have been given if such stockholder fails to object in writing to the corporation within 60 days of having been given notice by the corporation of its intention to send the single notice. Any consent shall be revocable by the stockholder by written notice to the corporation.

ARTICLE XIII

AMENDMENTS

Section 47. Amendments. Subject to the limitations set forth in Section 45(h) of these Bylaws or the provisions of the Certificate of Incorporation, the Board of Directors is expressly empowered to adopt, amend or repeal the Bylaws of the corporation. Any adoption, amendment or repeal of the Bylaws of the corporation by the Board of Directors shall require the approval of a majority of the authorized number of directors. The stockholders also shall have power to adopt, amend or repeal the Bylaws of the corporation; provided, ho*wever,* that, in addition to any vote of the holders of any class or series of stock of the corporation required by law or by the Certificate of Incorporation, such action by stockholders shall require the affirmative vote of the holders of at least 66 2/3% of the voting power of all of the then-outstanding shares of the capital stock of the corporation entitled to vote generally in the election of directors, voting together as a single class.

ARTICLE XIV

LOANS TO OFFICERS OR EMPLOYEES

Section 48. Loans to Officers or Employees. Except as otherwise prohibited by applicable law, the corporation may lend money to, or guarantee any obligation of, or otherwise assist any officer or other employee of the corporation or of its subsidiaries, including any officer or employee who is a director of the corporation or its subsidiaries, whenever, in the judgment of the Board of Directors, such loan, guarantee or assistance may reasonably be expected to benefit the corporation. The loan, guarantee or other assistance may be with or without interest and may be unsecured, or secured in such manner as the Board of Directors shall approve, including, without limitation, a pledge of shares of stock of the corporation. Nothing in these Bylaws shall be deemed to deny, limit or restrict the powers of guaranty or warranty of the corporation at common law or under any statute.

Exhibit 4.2

THIS WARRANT AND THE UNDERLYING SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "*ACT*") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, ASSIGNED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR UNLESS THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY AND ITS COUNSEL THAT SUCH REGISTRATION IS NOT REQUIRED.

CHIMERIX, INC.

WARRANT TO PURCHASE STOCK

No. PFW-[___] **February 7, 2011**

This Certifies That, for value received, [_____] (the ***"Holder"***), is entitled to subscribe for and purchase at the Warrant Price (defined below) from Chimerix, Inc., a Delaware corporation (the ***"Company"***), all or any portion of the Shares (as defined below) during the Exercise Period (as defined below).

This Warrant is issued as one of a series of warrants (the ***"Series F Warrants"***) pursuant to the Series F Preferred Stock and Warrant Purchase Agreement dated as of the date hereof among the Company and the Investors listed on Schedule A thereto (the ***"Purchase Agreement"***). Capitalized terms used and not otherwise defined herein shall have the meanings given them in the Purchase Agreement.

1. Exercise of Warrant. The terms and conditions upon which this Warrant may be exercised, and the Shares covered hereby may be purchased, are as follows:

(a) Term. Subject to the terms and conditions hereof, this Warrant may be exercised at any time, or from time to time, in whole or in part, on or after the date hereof; *provided*, *however*, that in no event may this Warrant be exercised after February 7, 2018 (the ***"Exercise Period"***).

(b) Shares. For purposes of this Warrant, the ***"Shares"*** shall mean [_____] fully paid and nonassessable shares of the Series F Preferred Stock of the Company (***"Series F Preferred"***) (or such other number, class and kind of shares as may be issuable hereunder pursuant to Section 4 below).

(c) Warrant Price. For purposes of this Warrant, the ***"Warrant Price"*** shall mean $2.045 per Share, subject to adjustment pursuant to Section 4 below.

2. METHOD OF EXERCISE.

(a) The rights represented by this Warrant may be exercised in whole or in part at any time during the Exercise Period, by delivery of the following to the Company at its address set forth in the Purchase Agreement (or at such other address as it may designate by notice in writing to the Holder):

(i) An executed Notice of Exercise in the form attached hereto as **Exhibit A**;

(ii) Payment of the Warrant Price either (i) in cash or by check or (ii) by cancellation of indebtedness or (iii) by any combination thereof; and

(iii) This Warrant.

Upon the exercise of the rights represented by this Warrant, a certificate or certificates for the Shares so purchased, registered in the name of the Holder or persons affiliated with the Holder, if the Holder so designates, shall be issued and delivered to the Holder promptly after the rights represented by this Warrant shall have been so exercised.

The person in whose name any certificate or certificates for Shares are to be issued upon exercise of this Warrant shall be deemed to have become the holder of record of such Shares on the date on which this Warrant was surrendered and payment of the Warrant Price was made, irrespective of the date of delivery of such certificate or certificates, except that, if the date of such surrender and payment is a date when the stock transfer books of the Company are closed, such person shall be deemed to have become the holder of such Shares at the close of business on the next succeeding date on which the stock transfer books are open.

(b) **Net Exercise**. Notwithstanding any provisions herein to the contrary, if the Fair Market Value (as defined below) of one Share is greater than the Warrant Price (at the date of calculation as set forth below), in lieu of exercising this Warrant by payment of cash, the Holder may elect to receive Shares equal to the value (as determined below) of this Warrant (or the portion thereof being canceled) by surrender of this Warrant at the principal office of the Company together with the properly endorsed Notice of Exercise, in which event the Company shall issue to the Holder a number of Shares computed using the following formula:

$$X = \frac{Y\,(A-B)}{A}$$

Where:

X = the number of Shares to be issued to the Holder

Y = the number of Shares purchasable under the Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being exercised (at the date of such calculation)

A = the Fair Market Value of one Share (at the date of such calculation)

B = the Warrant Price (as adjusted to the date of such calculation)

For purposes of this Warrant, the fair market value of one Share (the ***"Fair Market Value"***) shall mean, with respect to each such Share, the value as determined by the Company's Board of Directors in good faith; *provided, however*, that in the event that this Warrant is exercised pursuant to this Section 2(b) in connection with the Company's initial public offering of its Common Stock, the Fair Market Value of one Share shall be the product of (i) the per share offering price to the public of the Company's initial public offering, and (ii) the number of shares of Common Stock into which each Share is convertible at the time of such exercise.

3. Covenants of the Company. The Company covenants and agrees that all Shares that may be issued upon the exercise of the rights represented by this Warrant will, upon issuance, be validly issued and outstanding, fully paid and nonassessable, and free from all taxes, liens and charges with respect to the issuance thereof (other than taxes, liens or charges created by or imposed upon the Holder through no action of the Company). The Company further covenants and agrees that the Company will at all times during the Exercise Period have authorized and reserved a sufficient number of shares of Preferred Stock to provide for the exercise of the rights represented by this Warrant. If at any time during the Exercise Period the number of authorized but unissued shares of Preferred Stock shall not be sufficient to permit exercise of this Warrant, the Company will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Preferred Stock to such number of shares as shall be sufficient for such purposes.

4. Adjustment. In the event of changes in the outstanding shares of the Series F Preferred by reason of stock dividends, split-ups, recapitalizations, reclassifications, conversions, mergers, combinations or exchanges of shares, separations, reorganizations, liquidations, or the like, the number and class of shares available under this Warrant in the aggregate and the Warrant Price and Shares shall be correspondingly adjusted to give the Holder of the Warrant, on exercise for the same aggregate Warrant Price, the total number, class, and kind of shares as the Holder would have owned had the Warrant been exercised prior to the event and had the Holder continued to hold such shares until after the event requiring adjustment.

5. Adjustment Certificate. When any adjustment is required to be made in the Shares or the Warrant Price pursuant to Section 4 or otherwise, the Company shall promptly mail to the Holder a certificate setting forth (i) a brief statement of the facts requiring such adjustment, (ii) the Warrant Price after such adjustment and (iii) the kind and amount of stock or other securities or property into which this Warrant shall be exercisable after such adjustment.

6. Fractional Shares. No fractional shares shall be issued upon the exercise of this Warrant as a consequence of any adjustment pursuant hereto. All Shares (including fractions) issuable upon exercise of this Warrant may be aggregated for purposes of determining whether the exercise would result in the issuance of any fractional share. If, after aggregation, the exercise would result in the issuance of a fractional share, the Company shall, in lieu of issuance of any fractional share, pay the Holder otherwise entitled to such fraction a sum in cash equal to the product resulting from multiplying the then current Fair Market Value of a Share by such fraction.

7. **Early Termination.** Notwithstanding Section 1(a), in the event of an Acquisition or Asset Transfer (each as defined in the Company's Amended and Restated Certificate of Incorporation) at any time during the Exercise Period, the Company shall provide to the Holder at least 10 days advance written notice of the closing of such Acquisition or Asset Transfer and, if not exercised prior the closing of such Acquisition or Asset Transfer, this Warrant shall terminate immediately prior to the closing of such Acquisition or Asset Transfer; provided, however, that if at the closing of such Acquisition or Asset Transfer the Fair Market Value of one Share exceeds the Warrant Price, then as of such closing this Warrant shall be deemed to have been exercised in full on a "net exercise" basis pursuant to Section 2(b).

8. **No Stockholder Rights**. This Warrant in and of itself shall not entitle the Holder to any voting rights or other rights as a stockholder of the Company.

9. **Lost, Stolen, Mutilated or Destroyed Warrant**. If this Warrant is lost, stolen, mutilated or destroyed, the Company shall, on such terms as to indemnity or otherwise as it may reasonably impose (which shall, in the case of a mutilated Warrant, include the surrender thereof), issue a new Warrant of like denomination and tenor as the Warrant so lost, stolen, mutilated or destroyed. Any such new Warrant shall constitute an original contractual obligation of the Company, whether or not the allegedly lost, stolen, mutilated or destroyed Warrant shall be at any time enforceable by anyone.

10. **Governing Law**. This Warrant and all rights, obligations and liabilities hereunder shall be governed by the laws of the State of Delaware.

11. **Amendment; Waiver**. Any term of this Warrant may be amended or waived with the written consent of the Company and the Series F Requisite Investors (as defined in the Purchase Agreement); *provided*, *however*, if any amendment of this Warrant by its terms materially and adversely affects the rights or obligations under this Warrant of any Holder then holding securities purchased under the Purchase Agreement, in a manner different than such amendment affects such rights or obligations of other Investors, then such amendment shall not be effective with respect to such adversely affected Holder without the written consent of such adversely affected Holder. Notwithstanding the foregoing, nothing provided in this Section 11 shall limit an individual Holder's right to waive or amend any provision of this Warrant on its own behalf.

12. **Severability**. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

13. **Counterparts**. This Warrant may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

In Witness Whereof, the Company has caused this **Warrant** to be executed by its duly authorized officer as of the date first written above.

Chimerix, Inc.

By: _____
Kenneth I. Moch
Chief Executive Officer

Acknowledged and Accepted:

Holder

_____

By: _____

Name: _____

Title: _____

[Warrant Signature page]

EXHIBIT A

NOTICE OF EXERCISE

TO: CHIMERIX, INC.

(1) ☐ The undersigned hereby elects to purchase _____ Shares (the "***Exercise Shares***") of **Chimerix, Inc.** (the "***Company***") pursuant to the terms of the attached Warrant, and tenders herewith payment of the exercise price in full, together with all applicable transfer taxes, if any.

☐ The undersigned hereby elects to purchase _____ Shares (the "***Exercise Shares***") of **Chimerix, Inc.** (the "***Company***") pursuant to the terms of the net exercise provisions set forth in Section 2(b) of the attached Warrant, and shall tender payment of all applicable transfer taxes, if any.

(2) Please issue a certificate or certificates representing said Exercise Shares in the name of the undersigned or in such other name as is specified below:

_____
(Name)

_____

_____
(Address)

(3) The undersigned represents that (i) the aforesaid Exercise Shares are being acquired for the account of the undersigned for investment and not with a view to, or for resale in connection with, the distribution thereof and that the undersigned has no present intention of distributing or reselling such shares; (ii) the undersigned is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision regarding its investment in the Company; (iii) the undersigned is experienced in making investments of this type and has such knowledge and background in financial and business matters that the undersigned is capable of evaluating the merits and risks of this investment and protecting the undersigned's own interests; (iv) the undersigned understands that Exercise Shares issuable upon exercise of this Warrant have not been registered under the Securities Act of 1933, as amended (the "***Securities Act***"), by reason of a specific exemption from the registration provisions of the Securities Act, which exemption depends upon, among other things, the bona fide nature of the investment intent as expressed herein, and, because such securities have not been registered under the Securities Act, they must be held indefinitely unless subsequently registered under the Securities Act or an exemption from such registration is available; (v) the undersigned is aware that the aforesaid Exercise Shares may not be sold pursuant to Rule 144 adopted under the Securities Act unless certain conditions are met and until the undersigned has held the shares for the period of time prescribed by Rule 144, that among the conditions for use of the Rule is the availability of current information to the public about the Company and the Company has not made such information available and has no present plans to do so; and (vi) the undersigned agrees not to make any disposition of all or any part of the aforesaid shares of Exercise Shares unless and until there is then in effect a registration statement under the Securities Act covering such proposed disposition and such disposition is made in accordance with said registration statement, or, if reasonably requested by the Company, the undersigned has provided the Company with an opinion of counsel satisfactory to the Company, stating that such registration is not required.

(Date)

(Signature)

(Print name)

2.

EXHIBIT B

ASSIGNMENT FORM

(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name: _____
(Please Print)

Address: _____
(Please Print)

Dated: _____, 20__

Holder's Signature: _____

Holder's Address: _____

NOTE: The signature to this Assignment Form must correspond with the name as it appears on the face of the Warrant, without alteration or enlargement or any change whatever. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant.

Exhibit 4.3

Execution Version

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AND PURSUANT TO THE PROVISIONS OF ARTICLE 5 BELOW, MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND APPLICABLE STATE SECURITIES LAW OR, IN THE OPINION OF LEGAL COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS EXEMPT FROM REGISTRATION.

WARRANT TO PURCHASE STOCK

Company: Chimerix, Inc., a Delaware corporation
Number of Shares: As set forth in Paragraph A below
Class of Stock: Series F Preferred Stock, $0.001 par value per share
Warrant Price: $2.045, subject to adjustment
Issue Date: January 27, 2012
Expiration Date: January 27, 2022
Credit Facility: This Warrant is issued in connection with that certain Loan and Security Agreement of even date herewith among Silicon Valley Bank, MidCap Financial SBIC, LP and the Company (as amended and/or modified and in effect from time to time, the "Loan Agreement").

THIS WARRANT CERTIFIES THAT, for good and valuable consideration, SILICON VALLEY BANK (Silicon Valley Bank, together with any successor or permitted assignee or transferee of this Warrant or of any shares issued upon exercise hereof, is referred to hereinafter as "Holder") is entitled to purchase the number of fully paid and non-assessable shares of the above-stated Class of Stock (the "Class") of the above-named company (the "Company") as determined pursuant to Paragraph A below, at the above-stated Warrant Price per Share, all as set forth above and as adjusted pursuant to Article 2 of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant.

A. Number of Shares. Upon the making of each Term Loan Advance (as defined in the Loan Agreement) by the Lenders (as defined in the Loan Agreement) to the Company, this Warrant automatically shall become exercisable for such number of shares of the Class (cumulatively, and as may be adjusted from time to time in accordance with the provisions of this Warrant, the "Shares") as shall equal (i)(a) 0.02, multiplied by (b) the aggregate amount of such Term Loan Advance, divided by (ii) the Warrant Price in effect on and as of the date of such Term Loan Advance, rounded to the nearest whole share, subject to adjustment thereafter from time to time in accordance with the provisions of this Warrant.

ARTICLE 1. EXERCISE.

1.1 Method of Exercise. Holder may exercise this Warrant by delivering the original of this Warrant together with a duly executed Notice of Exercise in substantially the form attached as Appendix 1 to the principal office of the Company.

Unless Holder is exercising the conversion right set forth in Article 1.2, Holder shall also deliver to the Company a check, wire transfer (to an account designated by the Company), or other form of payment acceptable to the Company for the aggregate Warrant Price for the Shares being purchased.

1.2 Conversion Right. In lieu of exercising this Warrant as specified in Article 1.1, Holder may from time to time convert this Warrant, in whole or in part, into a number of Shares determined by dividing (a) the aggregate fair market value of the Shares or other securities otherwise issuable upon exercise of this Warrant minus the aggregate Warrant Price of such Shares by (b) the fair market value of one Share. The fair market value of the Shares shall be determined pursuant to Article 1.3.

1.3 Fair Market Value. If the Company's common stock is traded in a public market and the Shares are common stock, the fair market value of a Share shall be the closing price of a share of common stock reported for the business day immediately before Holder delivers this Warrant together with its Notice of Exercise to the Company (or in the instance where the Warrant is exercised immediately prior to the effectiveness of the Company's initial public offering ("IPO"), the "price to public" per share price specified in the final prospectus relating to such offering). If the Company's common stock is traded in a public market and the Shares are preferred stock, the fair market value of a Share shall be the closing price of a share of the Company's common stock reported for the business day immediately before Holder delivers this Warrant together with its Notice of Exercise to the Company (or, in the instance where the Warrant is exercised immediately prior to the effectiveness of the IPO, the initial "price to public" per share price specified in the final prospectus relating to such offering), in both cases, multiplied by the number of shares of the Company's common stock into which a Share is convertible. If the Company's common stock is not traded in a public market, the Board of Directors of the Company shall determine fair market value in its reasonable good faith judgment.

1.4 Delivery of Certificate and New Warrant. Promptly after Holder exercises or converts this Warrant and, if applicable, the Company receives payment of the aggregate Warrant Price, the Company shall deliver to Holder certificates for the Shares acquired and, if this Warrant has not been fully exercised or converted and has not expired, a new Warrant representing the Shares not so acquired.

1.5 Replacement of Warrants. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company or, in the case of mutilation, on surrender and cancellation of this Warrant, the Company shall execute and deliver, in lieu of this Warrant, a new warrant of like tenor.

1.6 Treatment of Warrant Upon Acquisition of Company.

1.6.1 "Acquisition". For the purpose of this Warrant, "Acquisition" means any sale, exclusive license, or other disposition of all or substantially all of the assets of the Company, or any reorganization, consolidation, merger or sale of outstanding capital stock of the Company where the holders of the Company's securities before the transaction beneficially own less than a majority of the outstanding voting securities of the surviving entity after the transaction.

1.6.2 Treatment of Warrant at Acquisition.

A) Upon the written request of the Company, Holder agrees that, in the event of an Acquisition in which the sole consideration is cash and/or Marketable Securities, either (a) Holder shall exercise its conversion or purchase right under this Warrant and such exercise will be deemed effective immediately prior to the consummation of such Acquisition or (b) if Holder elects not to exercise the Warrant, this Warrant will expire upon the consummation of such Acquisition. The Company shall provide the Holder with written notice of its request relating to the foregoing (together with such reasonable information as the Holder may request in connection with such contemplated Acquisition giving rise to such notice), which is to be delivered to Holder not less than ten (10) days prior to the closing of the proposed Acquisition.

B) Upon the written request of the Company, Holder agrees that, in the event of an Acquisition that is an "arms length" sale of all or substantially all of the Company's assets (and only its assets) to a third party that is not an Affiliate (as defined below) of the Company (a "True Asset Sale"), either (a) Holder shall exercise its conversion or purchase right under this Warrant and such exercise will be deemed effective immediately prior to the consummation of such Acquisition or (b) if Holder elects not to exercise the Warrant, this Warrant will continue until the Expiration Date if the Company continues as a going concern following the closing of any such True Asset Sale. The Company shall provide the Holder with written notice of its request relating to the foregoing (together with such reasonable information as the Holder may request in connection with such contemplated Acquisition giving rise to such notice), which is to be delivered to Holder not less than ten (10) days prior to the closing of the proposed Acquisition.

C) Upon the closing of any Acquisition other than those particularly described in subsections (A) and (B) above, the successor entity shall assume the obligations of this Warrant, and this Warrant shall be exercisable for the same securities, cash, and property as would be payable for the Shares issuable upon exercise of the unexercised portion of this Warrant as if such Shares were outstanding on the record date for the Acquisition and subsequent closing. The Warrant Price and/or number of Shares shall be adjusted accordingly.

D) As used in this Article 1.6, (a) "Marketable Securities" means securities meeting all of the following requirements: (i) the issuer thereof is then subject to the reporting requirements of Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and is then current in its filing of all required reports and other information under the Act and the Exchange Act; (ii) the class and series of shares or other security of the issuer that would be received by Holder in connection with the Acquisition were Holder to exercise or convert this Warrant on or prior to the closing thereof is then listed or quoted for trading on a national securities exchange or a national inter-dealer quotation system, and (iii) Holder would not be not be restricted by contract or by applicable federal and state securities laws from publicly re-selling, within six (6) months and one day following the closing of such Acquisition, all of the issuer's shares and/or other securities that would be received by Holder in such Acquisition were Holder to exercise or convert this Warrant in full on or prior to the closing of such Acquisition; and (b) "Affiliate" shall mean any person or entity that owns or controls directly or indirectly ten percent (10%) or more of the stock of Company, any person or entity that controls or is controlled by or is under common control with such persons or entities, and each of such person's or entity's officers, directors, joint venturers or partners, as applicable.

ARTICLE 2. ADJUSTMENTS TO THE SHARES.

2.1 Stock Dividends, Splits, Etc. If the Company declares or pays a dividend on the outstanding shares of the Class payable in common stock or other securities, then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without cost to Holder, the total number and kind of securities to which Holder would have been entitled had Holder owned the Shares of record as of the date the dividend occurred. If the Company subdivides the outstanding shares of the Class by reclassification or otherwise into a greater number of shares, the number of Shares purchasable hereunder shall be proportionately increased and the Warrant Price shall be proportionately decreased. If the outstanding shares of the Class are combined or consolidated, by reclassification or otherwise, into a lesser number of shares, the Warrant Price shall be proportionately increased and the number of Shares shall be proportionately decreased.

2.2 Reclassification, Exchange, Combinations or Substitution. Upon any reclassification, exchange, substitution, or other event that results in a change of the number and/or class of the securities issuable upon exercise or conversion of this Warrant, Holder shall be entitled to receive, upon exercise or conversion of this Warrant, the number and kind of securities and property that Holder would have received for the Shares if this Warrant had been exercised immediately before such reclassification, exchange, substitution, or other event. Such an event shall include, without limitation, any automatic conversion of the outstanding or issuable securities of the Company of the same class or series as the Shares to common stock pursuant to the terms of the Company's Amended and Restated Certificate of Incorporation, as amended and in effect from time to time (the "Certificate"). The Company or its successor shall promptly issue to Holder an amendment to this Warrant setting forth the number and kind of such new securities or other property issuable upon exercise or conversion of this Warrant as a result of such reclassification, exchange, substitution or other event that results in a change of the number and/or class of securities issuable upon exercise or conversion of this Warrant. The amendment to this Warrant shall provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Article 2 including, without limitation, adjustments to the Warrant Price and to the number of securities or property issuable upon exercise of the new Warrant. The provisions of this Article 2.2 shall similarly apply to successive reclassifications, exchanges, substitutions, or other events.

2.3 Adjustments for Diluting Issuances. The number of shares of common stock issuable upon conversion of the Shares shall be subject to adjustment, from time to time in the manner set forth in the Certificate as if the Shares were issued and outstanding on and as of the date of any such required adjustment. The provisions set forth for the Class in the Certificate relating to the above in effect as of the Issue Date may not be amended, modified or waived, without the prior written consent of Holder unless such amendment, modification or waiver affects the rights associated with the Shares in the same manner as such amendment, modification or waiver affects the rights associated with all other shares of the Class.

2.4 No Impairment. The Company shall not, by amendment of the Certificate or through a reorganization, transfer of assets, consolidation, merger, dissolution, issue, or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed under this Warrant by the Company, but shall at all times in good faith assist in carrying out of all the provisions of this Article 2 and in taking all such action as may be necessary or appropriate to protect Holder's rights under this Article against impairment. Notwithstanding the foregoing in this Article 2.4, and without limiting any other provision of this Warrant, the Company shall not have been deemed to have impaired Holder's rights hereunder if: (a) it amends its Certificate, and/or the holders of the Company's preferred stock waive rights thereunder, in a manner that does not affect the Shares differently from the effect that such amendment and/or waiver has on the rights, preferences, privileges or restrictions of all other shares of the Class, or (b) the Shares are not differently affected than all other shares of the Class in connection with any reorganization, transfer of assets, consolidation, merger, dissolution, issue, or sale of securities or any other voluntary action.

2.5 Fractional Shares. No fractional Shares shall be issuable upon exercise or conversion of the Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional share interest arises upon any exercise or conversion of the Warrant, the Company shall eliminate such fractional share interest by paying Holder the amount computed by multiplying the fractional interest by the fair market value of a full Share.

2.6 Certificate as to Adjustments. Upon each adjustment of the Warrant Price, Class and/or number of Shares, the Company shall promptly notify Holder in writing, and, at the Company's expense, promptly compute such adjustment, and furnish Holder with a certificate of its Chief Financial Officer (or other authorized officer) setting forth such adjustment and the facts upon which such adjustment is based. The Company shall, upon written request, furnish Holder a certificate setting forth the Warrant Price, Class and number of Shares in effect upon the date thereof and the series of adjustments leading to such Warrant Price, Class and number of Shares.

ARTICLE 3. REPRESENTATIONS AND COVENANTS OF THE COMPANY.

3.1 Representations and Warranties. The Company represents and warrants to, and agrees with, the Holder as follows:

(a) The initial Warrant Price referenced on the first page of this Warrant is not greater than the price per share at which shares of the same class and series as the Shares were last issued in an arms-length transaction in which at least $500,000 of such shares were sold.

(b) All Shares which may be issued upon the exercise of the purchase right represented by this Warrant, and all securities, if any, issuable upon conversion of the Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and non-assessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein, under the Company's Bylaws or the Rights Agreement (as defined below), or under applicable federal and state securities laws.

(c) The Company's capitalization table attached hereto as Schedule 1 is true and complete as of the Issue Date.

3.2 Notice of Certain Events. If the Company proposes at any time (a) to declare any dividend or distribution upon the outstanding shares of the Class, whether in cash, property, stock, or other securities and whether or not a regular cash dividend; (b) to offer for subscription or sale pro rata to the holders of the outstanding shares of the Class any additional shares of any class or series of the Company's stock (other than pursuant to contractual pre-emptive rights); (c) to effect any reclassification, reorganization or recapitalization of the shares of the Class; or (d) to effect an Acquisition or to liquidate, dissolve or wind up; then, in connection with each such event, the Company shall give Holder: (1) at least 10 days prior written notice of the date on which a record will be taken for such dividend, distribution, or subscription rights (and specifying the date on which the holders of shares of the same class and series as the Shares will be entitled thereto) or for determining rights to vote, if any, in respect of the matters referred to in (c) and (d) above; and (2) in the case of the matters referred to in (c) and (d) above at least 10 days prior written notice of the date when the same will take place (and specifying the date on which the holders of shares of the same class and series as the Shares will be entitled to exchange their shares for the securities or other property deliverable upon the occurrence of such event).

3.3 [Intentionally Omitted]

3.4 No Shareholder Rights. Except as provided in this Warrant, Holder will not have any rights as a shareholder of the Company until the exercise of this Warrant.

3.5 Certain Information. The Company agrees to provide Holder at any time and from time to time with such information as Holder may reasonably request for purposes of Holder's compliance with regulatory, accounting and reporting requirements applicable to Holder.

ARTICLE 4. REPRESENTATIONS, WARRANTIES OF THE HOLDER. The Holder represents and warrants to the Company as follows:

4.1 Purchase for Own Account. This Warrant and the securities to be acquired upon exercise of this Warrant by Holder will be acquired for investment for Holder's account, not as a nominee or agent, and not with a view to the public resale or distribution within the meaning of the Act. Holder also represents that it has not been formed for the specific purpose of acquiring this Warrant or the Shares.

4.2 Disclosure of Information. Holder has received or has had full access to all the information it considers necessary or appropriate to make an informed investment decision with respect to the acquisition of this Warrant and its underlying securities. Holder further has had an opportunity to ask questions and receive answers from the Company regarding the terms and conditions of the offering of this Warrant and its underlying securities and to obtain additional information (to the extent the Company possessed such information or could acquire it without unreasonable effort or expense) necessary to verify any information furnished to Holder or to which Holder has access.

4.3 Investment Experience. Holder understands that the purchase of this Warrant and its underlying securities involves substantial risk. Holder has experience as an investor in securities of companies in the development stage and acknowledges that Holder can bear the economic risk of such Holder's investment in this Warrant and its underlying securities and has such knowledge and experience in financial or business matters that Holder is capable of evaluating the merits and risks of its investment in this Warrant and its underlying securities and/or has a preexisting personal or business relationship with the Company and certain of its officers, directors or controlling persons of a nature and duration that enables Holder to be aware of the character, business acumen and financial circumstances of such persons.

4.4 Accredited Investor Status. Holder is an "accredited investor" within the meaning of Regulation D promulgated under the Act.

4.5 The Act. Holder understands that this Warrant and the Shares issuable upon exercise or conversion hereof have not been registered under the Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of the Holder's investment intent as expressed herein. Holder understands that this Warrant and the Shares issued upon any exercise or conversion hereof must be held indefinitely unless subsequently registered under the Act and qualified under applicable state securities laws, or unless exemption from such registration and qualification are otherwise available.

ARTICLE 5. MISCELLANEOUS.

5.1 Term: This Warrant is exercisable in whole or in part at any time and from time to time on or before the Expiration Date.

5.2 Legends. This Warrant and the Shares (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) shall be imprinted with a legend in substantially the following form:

> THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE ACT, OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AND PURSUANT TO THE PROVISIONS OF ARTICLE 5 OF THAT CERTAIN WARRANT TO PURCHASE STOCK ISSUED BY THE COMPANY TO SILICON VALLEY BANK DATED AS OF JANUARY 27, 2012 MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND APPLICABLE STATE SECURITIES LAW OR, IN THE OPINION OF LEGAL COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS EXEMPT FROM REGISTRATION.

5.3 Compliance with Securities Laws on Transfer. This Warrant and the Shares issuable upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) may not be transferred or assigned in whole or in part without compliance with applicable federal and state securities laws by the transferor and the transferee (including, without limitation, the delivery of investment representation letters and legal opinions reasonably satisfactory to the Company, as reasonably requested by the Company). The Company shall not require Holder to provide an opinion of counsel if the transfer is to SVB Financial Group (Silicon Valley Bank's parent company) or any other affiliate of Holder, provided that any such transferee is an "accredited investor" as defined in Regulation D promulgated under the Act.

5.4 Transfer Procedure. After receipt by Silicon Valley Bank ("Bank") of the executed Warrant, Bank will transfer all of this Warrant to SVB Financial Group, Holder's parent company. Subject to the provisions of Article 5.3 and upon providing the Company with written notice, SVB Financial Group and any subsequent Holder may transfer all or part of this Warrant or the Shares issuable upon exercise of this Warrant (or the securities issuable directly or indirectly, upon conversion of the Shares, if any) to any transferee, provided, however, in connection with any such transfer, SVB Financial Group or any subsequent Holder will give the Company written notice of the portion of the Warrant being transferred with the name, address and taxpayer identification number of the transferee and Holder will surrender this Warrant to the Company for reissuance to the transferee(s) (and Holder if applicable). The Company may refuse to transfer this Warrant or the Shares to any person who directly competes with the Company, unless, in either case, the stock of the Company is publicly traded.

5.5 Notices. All notices and other communications from the Company to the Holder, or vice versa, shall be in writing and deemed delivered and effective when given personally or mailed by first-class registered or certified mail, postage prepaid (or on the first business day after transmission by facsimile), at such address as may have been furnished to the Company or Holder, as the case may be, in writing by the Company or such Holder from time to time. All notices to Holder shall be addressed as follows until the Company receives written notice of a change of address in connection with a transfer or otherwise:

SVB Financial Group
Attn: Treasury Department
3003 Tasman Drive, HA 200
Santa Clara, CA 95054
Telephone: 408-654-7400
Facsimile: 408-496-2405

Notice to the Company shall be addressed as follows until Holder receives notice of a change in address:

Chimerix, Inc.
Attn: Chief Executive Officer
2505 Meridian Parkway, Suite 340
Durham, NC 27713
Telephone: 919-806-1074
Facsimile: 919-806-1146

5.6 Waiver. This Warrant and any term hereof may be changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought.

5.7 Attorney's Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

5.8 Automatic Conversion upon Expiration. In the event that, upon the Expiration Date, the fair market value of one Share (or other security issuable upon the exercise hereof) as determined in accordance with Article 1.3 above is greater than the Warrant Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be converted pursuant to Article 1.2 above as to all Shares (or such other securities) for which it shall not previously have been exercised or converted, and the Company shall promptly deliver a certificate representing the Shares (or such other securities) issued upon such conversion to Holder.

5.9 Counterparts. This Warrant may be executed in counterparts, all of which together shall constitute one and the same agreement.

5.10 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of California, without giving effect to its principles regarding conflicts of law.

[Remainder of page left blank intentionally; signature page follows]

5.11 Market Stand-Off Provision. The Holder hereby agrees to be bound by the "Market Stand-Off" provision in Section 1.14 of the Company's Amended and Restated Investor Rights Agreement dated February 7, 2011, as amended and in effect from time to time.

"COMPANY"

CHIMERIX, INC.

By: /s/ Timothy W. Trost

Name: Timothy W. Trost
(Print)
Title: SVP + CFO

"HOLDER"

SILICON VALLEY BANK

By: /s/ Chris J. Stoecker

Name: Chris J. Stoecker
(Print)
Title: VP

APPENDIX 1

NOTICE OF EXERCISE

1. Holder elects to purchase_____shares of the Common/Series _____Preferred [strike one] Stock of_____ pursuant to the terms of the attached Warrant, and tenders payment of the purchase price of the shares in full.

[or]

1. Holder elects to convert the attached Warrant into Shares/cash [strike one] in the manner specified in the Warrant. This conversion is exercised for_____ of the Shares covered by the Warrant.

[Strike paragraph that does not apply.]

2. Please issue a certificate or certificates representing the Shares in the name specified below:

_____
Holders Name

_____

_____
(Address)

3. By its execution below and for the benefit of the Company, Holder hereby restates each of the representations and warranties in Article 4 of the Warrant as of the date hereof.

HOLDER:

_____

By: _____

Name: _____

Title: _____

(Date): _____

Exhibit 4.4

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AND PURSUANT TO THE PROVISIONS OF ARTICLE 5 BELOW, MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND APPLICABLE STATE SECURITIES LAW OR, IN THE OPINION OF LEGAL COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS EXEMPT FROM REGISTRATION.

WARRANT TO PURCHASE STOCK

Company: Chimerix, Inc., a Delaware corporation
Number of Shares: 58,680, subject to adjustment
Class of Stock: Series D Preferred Stock, $0.001 par value per share
Warrant Price: $2.045, subject to adjustment
Issue Date: November 24, 2008
Expiration Date: November 24, 2018
Credit Facility: This Warrant is issued in connection with that certain Loan and Security Agreement of even date herewith between Silicon Valley Bank and the Company.

THIS WARRANT CERTIFIES THAT, for good and valuable consideration, SILICON VALLEY BANK (Silicon Valley Bank, together with any successor or permitted assignee or transferee of this Warrant or of any shares issued upon exercise hereof, is referred to hereinafter as "Holder") is entitled to purchase the number of fully paid and non-assessable shares (the "Shares") of the above-stated Class of Stock (the "Class") of the above-named company (the "Company") at the above-stated Warrant Price, all as set forth above and as adjusted pursuant to Article 2 of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant.

ARTICLE 1. EXERCISE.

1.1 Method of Exercise. Holder may exercise this Warrant by delivering the original of this Warrant together with a duly executed Notice of Exercise in substantially the form attached as Appendix 1 to the principal office of the Company. Unless Holder is exercising the conversion right set forth in Article 1.2, Holder shall also deliver to the Company a check, wire transfer (to an account designated by the Company), or other form of payment acceptable to the Company for the aggregate Warrant Price for the Shares being purchased.

1.2 Conversion Right. In lieu of exercising this Warrant as specified in Article 1.1, Holder may from time to time convert this Warrant, in whole or in part, into a number of Shares determined by dividing (a) the aggregate fair market value of the Shares or other securities otherwise issuable upon exercise of this Warrant minus the aggregate Warrant Price of such Shares by (b) the fair market value of one Share. The fair market value of the Shares shall be determined pursuant to Article 1.3.

1.3 Fair Market Value. If the Company's common stock is traded in a public market and the Shares are common stock, the fair market value of a Share shall be the closing price of a share of common stock reported for the business day immediately before Holder delivers this Warrant together with its Notice of Exercise to the Company (or in the instance where the Warrant is exercised immediately prior to the effectiveness of the Company's initial public offering ("IPO"), the "price to public" per share price specified in the final prospectus relating to such offering). If the Company's common stock is traded in a public market and the Shares are preferred stock, the fair market value of a Share shall be the closing price of a share of the Company's common stock reported for the business day immediately before Holder delivers this Warrant together with its Notice of Exercise to the Company (or, in the instance where the Warrant is exercised immediately prior to the effectiveness of the IPO, the initial "price to public" per share price specified in the final prospectus relating to such offering), in both cases, multiplied by the number of shares of the Company's common stock into which a Share is convertible. If the Company's common stock is not traded in a public market, the Board of Directors of the Company shall determine fair market value in its reasonable good faith judgment.

1.4 Delivery of Certificate and New Warrant. Promptly after Holder exercises or converts this Warrant and, if applicable, the Company receives payment of the aggregate Warrant Price, the Company shall deliver to Holder certificates for the Shares acquired and, if this Warrant has not been fully exercised or converted and has not expired, a new Warrant representing the Shares not so acquired.

1.5 Replacement of Warrants. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company or, in the case of mutilation, on surrender and cancellation of this Warrant, the Company shall execute and deliver, in lieu of this Warrant, a new warrant of like tenor.

1.6 Treatment of Warrant Upon Acquisition of Company.

1.6.1 "Acquisition". For the purpose of this Warrant, "Acquisition" means any sale, exclusive license, or other disposition of all or substantially all of the assets of the Company, or any reorganization, consolidation, merger or sale of outstanding capital stock of the Company where the holders of the Company's securities before the transaction beneficially own less than a majority of the outstanding voting securities of the surviving entity after the transaction.

1.6.2 Treatment of Warrant at Acquisition.

A) Upon the written request of the Company, Holder agrees that, in the event of an Acquisition in which the sole consideration is cash and/or Marketable Securities, either (a) Holder shall exercise its conversion or purchase right under this Warrant and such exercise will be deemed effective immediately prior to the consummation of such Acquisition or (b) if Holder elects not to exercise the Warrant, this Warrant will expire upon the consummation of such Acquisition. The Company shall provide the Holder with written notice of its request relating to the foregoing (together with such reasonable information as the Holder may request in connection with such contemplated Acquisition giving rise to such notice), which is to be delivered to Holder not less than ten (10) days prior to the closing of the proposed Acquisition.

B) Upon the written request of the Company, Holder agrees that, in the event of an Acquisition that is an "arms length" sale of all or substantially all of the Company's assets (and only its assets) to a third party that is not an Affiliate (as defined below) of the Company (a "True Asset Sale"), either (a) Holder shall exercise its conversion or purchase right under this Warrant and such exercise will be deemed effective immediately prior to the consummation of such Acquisition or (b) if Holder elects not to exercise the Warrant, this Warrant will continue until the Expiration Date if the Company continues as a going concern following the closing of any such True Asset Sale. The Company shall provide the Holder with written notice of its request relating to the foregoing (together with such reasonable information as the Holder may request in connection with such contemplated Acquisition giving rise to such notice), which is to be delivered to Holder not less than ten (10) days prior to the closing of the proposed Acquisition.

C) Upon the closing of any Acquisition other than those particularly described in subsections (A) and (B) above, the successor entity shall assume the obligations of this Warrant, and this Warrant shall be exercisable for the same securities, cash, and property as would be payable for the Shares issuable upon exercise of the unexercised portion of this Warrant as if such Shares were outstanding on the record date for the Acquisition and subsequent closing. The Warrant Price and/or number of Shares shall be adjusted accordingly.

D) As used in this Article 1.6, (a) "Marketable Securities" means securities meeting all of the following requirements: (i) the issuer thereof is then subject to the reporting requirements of Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and is then current in its filing of all required reports and other information under the Act and the Exchange Act; (ii) the class and series of shares or other security of the issuer that would be received by Holder in connection with the Acquisition were Holder to exercise or convert this Warrant on or prior to the closing thereof is then listed or quoted for trading on a national securities exchange or a national inter-dealer quotation system, and (iii) Holder would not be not be restricted by contract or by applicable federal and state securities laws from publicly re-selling, within six (6) months and one day following the closing of such Acquisition, all of the issuer's shares and/or other securities that would be received by Holder in such Acquisition were Holder to exercise or convert this Warrant in full on or prior to the closing of such Acquisition; and (b) "Affiliate" shall mean any person or entity that owns or controls directly or indirectly ten percent (10%) or more of the stock of Company, any person or entity that controls or is controlled by or is under common control with such persons or entities, and each of such person's or entity's officers, directors, joint venturers or partners, as applicable.

ARTICLE 2. ADJUSTMENTS TO THE SHARES.

2.1 Stock Dividends, Splits, Etc. If the Company declares or pays a dividend on the outstanding shares of the Class payable in common stock or other securities, then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without cost to Holder, the total number and kind of securities to which Holder would have been entitled had Holder owned the Shares of record as of the date the dividend occurred. If the Company subdivides the outstanding shares of the Class by reclassification or otherwise into a greater number of shares, the number of Shares purchasable hereunder shall be proportionately increased and the Warrant Price shall be proportionately decreased. If the outstanding shares of the Class are combined or consolidated, by reclassification or otherwise, into a lesser number of shares, the Warrant Price shall be proportionately increased and the number of Shares shall be proportionately decreased.

2.2 Reclassification, Exchange, Combinations or Substitution. Upon any reclassification, exchange, substitution, or other event that results in a change of the number and/or class of the securities issuable upon exercise or conversion of this Warrant, Holder shall be entitled to receive, upon exercise or conversion of this Warrant, the number and kind of securities and property that Holder would have received for the Shares if this Warrant had been exercised immediately before such reclassification, exchange, substitution, or other event. Such an event shall include, without limitation, any automatic conversion of the outstanding or issuable securities of the Company of the same class or series as the Shares to common stock pursuant to the terms of the Company's Amended and Restated Certificate of Incorporation, as amended and in effect from time to time (the "Certificate"). The Company or its successor shall promptly issue to Holder an amendment to this Warrant setting forth the number and kind of such new securities or other property issuable upon exercise or conversion of this Warrant as a result of such reclassification, exchange, substitution or other event that results in a change of the number and/or class of securities issuable upon exercise or conversion of this Warrant. The amendment to this Warrant shall provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Article 2 including, without limitation, adjustments to the Warrant Price and to the number of securities or property issuable upon exercise of the new Warrant. The provisions of this Article 2.2 shall similarly apply to successive reclassifications, exchanges, substitutions, or other events.

2.3 Adjustments for Diluting Issuances. The number of shares of common stock issuable upon conversion of the Shares shall be subject to adjustment, from time to time in the manner set forth in the Certificate as if the Shares were issued and outstanding on and as of the date of any such required adjustment. The provisions set forth for the Class in the Certificate relating to the above in effect as of the Issue Date may not be amended, modified or waived, without the prior written consent of Holder unless such amendment, modification or waiver affects the rights associated with the Shares in the same manner as such amendment, modification or waiver affects the rights associated with all other shares of the Class.

2.4 No Impairment. The Company shall not, by amendment of the Certificate or through a reorganization, transfer of assets, consolidation, merger, dissolution, issue, or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed under this Warrant by the Company, but shall at all times in good faith assist in carrying out of all the provisions of this Article 2 and in taking all such action as may be necessary or appropriate to protect Holder's rights under this Article against impairment. Notwithstanding the foregoing in this Article 2.4, and without limiting any other provision of this Warrant, the Company shall not have been deemed to have impaired Holder's rights hereunder if: (a) it amends its Certificate, and/or the holders of the Company's preferred stock waive rights thereunder, in a manner that does not affect the Shares differently from the effect that such amendment and/or waiver has on the rights, preferences, privileges or restrictions of all other shares of the Class, or (b) the Shares are not differently affected than all other shares of the Class in connection with any reorganization, transfer of assets, consolidation, merger, dissolution, issue, or sale of securities or any other voluntary action.

2.5 Fractional Shares. No fractional Shares shall be issuable upon exercise or conversion of the Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional share interest arises upon any exercise or conversion of the Warrant, the Company shall eliminate such fractional share interest by paying Holder the amount computed by multiplying the fractional interest by the fair market value of a full Share.

2.6 Certificate as to Adjustments. Upon each adjustment of the Warrant Price, Class and/or number of Shares, the Company shall promptly notify Holder in writing, and, at the Company's expense, promptly compute such adjustment, and furnish Holder with a certificate of its Chief Financial Officer (or other authorized officer) setting forth such adjustment and the facts upon which such adjustment is based. The Company shall, upon written request, furnish Holder a certificate setting forth the Warrant Price, Class and number of Shares in effect upon the date thereof and the series of adjustments leading to such Warrant Price, Class and number of Shares.

ARTICLE 3. REPRESENTATIONS AND COVENANTS OF THE COMPANY.

3.1 Representations and Warranties. The Company represents and warrants to, and agrees with, the Holder as follows:

(a) The initial Warrant Price referenced on the first page of this Warrant is not greater than the price per share at which shares of the same class and series as the Shares were last issued in an arms-length transaction in which at least $500,000 of such shares were sold.

(b) All Shares which may be issued upon the exercise of the purchase right represented by this Warrant, and all securities, if any, issuable upon conversion of the Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and non-assessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein, under the Company's Bylaws or the Rights Agreement (as defined below), or under applicable federal and state securities laws.

(c) The Company's capitalization table attached hereto as Schedule 1 is true and complete as of the Issue Date.

3.2 Notice of Certain Events. If the Company proposes at any time (a) to declare any dividend or distribution upon the outstanding shares of the Class, whether in cash, property, stock, or other securities and whether or not a regular cash dividend; (b) to offer for subscription or sale pro rata to the holders of the outstanding shares of the Class any additional shares of any class or series of the Company's stock (other than pursuant to contractual pre-emptive rights); (c) to effect any reclassification, reorganization or recapitalization of the shares of the Class; or (d) to effect an Acquisition or to liquidate, dissolve or wind up; then, in connection with each such event, the Company shall give Holder: (1) at least 10 days prior written notice of the date on which a record will be taken for such dividend, distribution, or subscription rights (and specifying the date on which the holders of shares of the same class and series as the Shares will be entitled thereto) or for determining rights to vote, if any, in respect of the matters referred to in (c) and (d) above; and (2) in the case of the matters referred to in (c) and (d) above at least 10 days prior written notice of the date when the same will take place (and specifying the date on which the holders of shares of the same class and series as the Shares will be entitled to exchange their shares for the securities or other property deliverable upon the occurrence of such event).

3.3 Registration Under Securities Act of 1933, as amended. The Company agrees that the Shares or, if the Shares are convertible into common stock of the Company, such common stock, shall have certain incidental, or "Piggyback," and S-3 registration rights pursuant to and as set forth in the Company's Amended and Restated Investor Rights Agreement dated February 23, 2007, as amended and in effect from time to time (the "Rights Agreement"). Holder and the Company shall execute and deliver a joinder agreement, counterpart signature page, instrument of accession or similar instrument to the Rights Agreement for purposes of effecting the foregoing grant of registration rights.

3.4 No Shareholder Rights. Except as provided in this Warrant, Holder will not have any rights as a shareholder of the Company until the exercise of this Warrant.

3.5 Certain Information. The Company agrees to provide Holder at any time and from time to time with such information as Holder may reasonably request for purposes of Holder's compliance with regulatory, accounting and reporting requirements applicable to Holder.

ARTICLE 4. REPRESENTATIONS, WARRANTIES OF THE HOLDER. The Holder represents and warrants to the Company as follows:

4.1 Purchase for Own Account. This Warrant and the securities to be acquired upon exercise of this Warrant by Holder will be acquired for investment for Holder's account, not as a nominee or agent, and not with a view to the public resale or distribution within the meaning of the Act. Holder also represents that it has not been formed for the specific purpose of acquiring this Warrant or the Shares.

4.2 Disclosure of Information. Holder has received or has had full access to all the information it considers necessary or appropriate to make an informed investment decision with respect to the acquisition of this Warrant and its underlying securities. Holder further has had an opportunity to ask questions and receive answers from the Company regarding the terms and conditions of the offering of this Warrant and its underlying securities and to obtain additional information (to the extent the Company possessed such information or could acquire it without unreasonable effort or expense) necessary to verify any information furnished to Holder or to which Holder has access.

4.3 Investment Experience. Holder understands that the purchase of this Warrant and its underlying securities involves substantial risk. Holder has experience as an investor in securities of companies in the development stage and acknowledges that Holder can bear the economic risk of such Holder's investment in this Warrant and its underlying securities and has such knowledge and experience in financial or business matters that Holder is capable of evaluating the merits and risks of its investment in this Warrant and its underlying securities and/or has a preexisting personal or business relationship with the Company and certain of its officers, directors or controlling persons of a nature and duration that enables Holder to be aware of the character, business acumen and financial circumstances of such persons.

4.4 Accredited Investor Status. Holder is an "accredited investor" within the meaning of Regulation D promulgated under the Act.

4.5 The Act. Holder understands that this Warrant and the Shares issuable upon exercise or conversion hereof have not been registered under the Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of the Holder's investment intent as expressed herein. Holder understands that this Warrant and the Shares issued upon any exercise or conversion hereof must be held indefinitely unless subsequently registered under the Act and qualified under applicable state securities laws, or unless exemption from such registration and qualification are otherwise available.

ARTICLE 5. MISCELLANEOUS.

5.1 Term: This Warrant is exercisable in whole or in part at any time and from time to time on or before the Expiration Date.

5.2 Legends. This Warrant and the Shares (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) shall be imprinted with a legend in substantially the following form:

> THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE ACT, OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AND PURSUANT TO THE PROVISIONS OF ARTICLE 5 OF THAT CERTAIN WARRANT TO PURCHASE STOCK ISSUED BY THE COMPANY TO SILICON VALLEY BANK DATED AS OF NOVEMBER 24, 2008 MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND APPLICABLE STATE SECURITIES LAW OR, IN THE OPINION OF LEGAL COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS EXEMPT FROM REGISTRATION.

5.3 Compliance with Securities Laws on Transfer. This Warrant and the Shares issuable upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) may not be transferred or assigned in whole or in part without compliance with applicable federal and state securities laws by the transferor and the transferee (including, without limitation, the delivery of investment representation letters and legal opinions reasonably satisfactory to the Company, as reasonably requested by the Company). The Company shall not require Holder to provide an opinion of counsel if the transfer is to SVB Financial Group (Silicon Valley Bank's parent company) or any other affiliate of Holder, provided that any such transferee is an "accredited investor" as defined in Regulation D promulgated under the Act.

5.4 Transfer Procedure. After receipt by Silicon Valley Bank ("Bank") of the executed Warrant, Bank will transfer all of this Warrant to SVB Financial Group, Holder's parent company. Subject to the provisions of Article 5.3 and upon providing the Company with written notice, SVB Financial Group and any subsequent Holder may transfer all or part of this Warrant or the Shares issuable upon exercise of this Warrant (or the securities issuable directly or indirectly, upon conversion of the Shares, if any) to any transferee, provided, however, in connection with any such transfer, SVB Financial Group or any subsequent Holder will give the Company written notice of the portion of the Warrant being transferred with the name, address and taxpayer identification number of the transferee and Holder will surrender this Warrant to the Company for reissuance to the transferee(s) (and Holder if applicable). The Company may refuse to transfer this Warrant or the Shares to any person who directly competes with the Company, unless, in either case, the stock of the Company is publicly traded.

5.5 Notices. All notices and other communications from the Company to the Holder, or vice versa, shall be in writing and deemed delivered and effective when given personally or mailed by first-class registered or certified mail, postage prepaid (or on the first business day after transmission by facsimile), at such address as may have been furnished to the Company or Holder, as the case may be, in writing by the Company or such Holder from time to time. All notices to Holder shall be addressed as follows until the Company receives written notice of a change of address in connection with a transfer or otherwise:

SVB Financial Group
Attn: Treasury Department
3003 Tasman Drive, HA 200
Santa Clara, CA 95054
Telephone: 408-654-7400
Facsimile: 408-496-2405

Notice to the Company shall be addressed as follows until Holder receives notice of a change in address:

Chimerix, Inc.
Attn: Chief Executive Officer
2505 Meridian Parkway, Suite 340
Durham, NC 27713
Telephone: 919-806-1074
Facsimile: 919-806-1146

5.6 Waiver. This Warrant and any term hereof may be changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought.

5.7 Attorney's Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

5.8 Automatic Conversion upon Expiration. In the event that, upon the Expiration Date, the fair market value of one Share (or other security issuable upon the exercise hereof) as determined in accordance with Article 1.3 above is greater than the Warrant Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be converted pursuant to Article 1.2 above as to all Shares (or such other securities) for which it shall not previously have been exercised or converted, and the Company shall promptly deliver a certificate representing the Shares (or such other securities) issued upon such conversion to Holder.

5.9 Counterparts. This Warrant may be executed in counterparts, all of which together shall constitute one and the same agreement.

5.10 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of California, without giving effect to its principles regarding conflicts of law.

5.11 Market Stand-Off Provision. The Holder hereby agrees to be bound by the "Market Stand-Off" provision in Section 1.14 of the Rights Agreement

"COMPANY"

CHIMERIX, INC.

By: /s/ George R. Painter

Name: George R. Painter
(Print)

Title: Pres & CEO

"HOLDER"

SILICON VALLEY BANK

By: /s/ Corey Waters

Name: Corey Waters
(Print)

Title: VP/Relationship Manager

APPENDIX 1

NOTICE OF EXERCISE

1. Holder elects to purchase _____ shares of the Common/Series _____ Preferred [strike one] Stock of _____ pursuant to the terms of the attached Warrant, and tenders payment of the purchase price of the shares in full.

[or]

1. Holder elects to convert the attached Warrant into Shares/cash [strike one] in the manner specified in the Warrant. This conversion is exercised for _____ of the Shares covered by the Warrant.

[Strike paragraph that does not apply.]

2. Please issue a certificate or certificates representing the Shares in the name specified below:

_____
Holders Name

_____

_____
(Address)

3. By its execution below and for the benefit of the Company, Holder hereby restates each of the representations and warranties in Article 4 of the Warrant as of the date hereof.

HOLDER:

_____

By: _____

Name: _____

Title: _____

(Date): _____

Exhibit 4.5

NEITHER THIS WARRANT NOR THE SECURITIES ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. NO SALE OR DISPOSITION MAY BE EFFECTED EXCEPT IN COMPLIANCE WITH RULE 144 UNDER SAID ACT OR WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL FOR THE HOLDER, SATISFACTORY TO THE COMPANY, THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE ACT OR RECEIPT OF A NO-ACTION LETTER FROM THE SECURITIES AND EXCHANGE COMMISSION.

WARRANT TO PURCHASE **21,000** SHARES OF SERIES B-l PREFERRED STOCK

Nov. 5, 2003

THIS CERTIFIES THAT, for value received, **General Electric Capital Corporation** ("Holder") is entitled to subscribe for and purchase Twenty One Thousand (21,000) shares of the fully paid and nonassessable Series B-l Preferred Stock (the "Shares" or the "Preferred Stock") of CHIMERIX, INC., a Delaware corporation (the "Company"), at the Warrant Price (as hereinafter defined), subject to the provisions and upon the terms and conditions hereinafter set forth. As used herein, the term "Series B-l Preferred Stock" shall mean the Company's presently authorized Series B-l Preferred Stock and any stock into which such Series B-l Preferred Stock may hereafter be converted or exchanged.

1. Warrant Price. The "Warrant Price" shall initially be One and 50/100 dollars ($1.50) per share, subject to adjustment as provided in Section 7 below.

2. Conditions to Exercise. The purchase right represented by this Warrant may be exercised at any time, or from time to time, in whole or in part during the term commencing on the date hereof and ending at 5:00 P.M. Pacific time on the tenth anniversary of the date of this Warrant.

3. Method of Exercise; Payment; Issuance of Shares; Issuance of New Warrant.

(a) Cash Exercise. Subject to Section 2 hereof, the purchase right represented by this Warrant may be exercised by the Holder hereof, in whole or in part, by the surrender of this Warrant (with a duly executed Notice of Exercise in the form attached hereto) at the principal office of the Company (as set forth in Section 17 below) and by payment to the Company, by check, of an amount equal to the then applicable Warrant Price per share multiplied by the number of shares then being purchased. In the event of any exercise of the rights represented by this Warrant, certificates for the shares of stock so purchased shall be in the name of, and delivered to, the Holder hereof, or as such Holder may direct (subject to the terms of transfer contained herein and upon payment by such Holder hereof of any applicable transfer taxes). Such delivery shall be made within 30 days after exercise of the Warrant and at the Company's expense and, unless this Warrant has been fully exercised or expired, a new Warrant having terms and conditions substantially identical to this Warrant and representing the portion of the Shares, if any, with respect to which this Warrant shall not have been exercised, shall also be issued to the Holder hereof within 30 days after exercise of the Warrant.

(b) Net Issue Exercise. Holder may also elect to receive shares equal to the value of this Warrant (or of any portion thereof remaining unexercised) by surrender of this Warrant at the principal office of the Company together with notice of such election, in which event the Company shall issue to Holder the number of shares of the Company's Preferred Stock computed using the following formula:

$$X = \frac{Y\ (A-B)}{A}$$

Where X = the number of shares of Preferred Stock to be issued to Holder.
Y = the number of shares of Preferred Stock purchasable under this Warrant (at the date of such calculation).
A = the Fair Market Value of one share of the Company's Preferred Stock (at the date of such calculation).
B = Warrant Price (as adjusted to the date of such calculation).

(c) Fair Market Value. For purposes of this Section 3, Fair Market Value of one share of the Company's Preferred Stock shall mean:

(i) In the event of an exercise in connection with an initial public offering of the Company's Common Stock registered under the Act (as defined below), the per share Fair Market Value for the Preferred Stock shall be the offering price at which the underwriters initially sell Common Stock to the public (if applicable, multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible); or

(ii) The average of the closing bid and asked prices of Common Stock quoted in the Over-The-Counter Market Summary, the last reported sale price quoted on the Nasdaq National Market ("NNM") or on any exchange on which the Common Stock is listed, whichever is applicable, as published in the Western Edition of the Wall Street Journal for the ten (10) trading days prior to the date of determination of Fair Market Value, (if applicable, multiplied by the number of shares of Common Stock into which each share of Preferred Stock is then convertible); or

(iii) In the event of an exercise in connection with a merger, acquisition or other consolidation in which the Company is not the surviving entity, the per share Fair Market Value for the Preferred Stock shall be the value to be received per share of Preferred Stock by all holders of the Preferred Stock in such transaction as determined by the Board of Directors; or

(iv) In any other instance, the per share Fair Market Value for the Preferred Stock shall be as determined in good faith by the Company's Board of Directors.

In the event of 3(c)(iii) or 3(c)(iv), above, the Company's Board of Directors shall prepare a certificate, to be signed by an authorized officer of the Company, setting forth in reasonable detail the basis for and method of determination of the per share Fair Market Value of the Preferred Stock. The Board will also certify to the Holder that this per share Fair Market Value will be applicable to all holders of the Company's Preferred Stock. In the event such determination is made under 3(c)(iii), such certification must be made to Holder at least ten (10) days prior to the proposed effective date of the merger, consolidation, sale, or other triggering event as defined in 3(c)(iii).

(d) Automatic Exercise. To the extent this Warrant is not previously exercised, and its exercise in accordance with Sections 3(b) and 3(c) hereof would result in the issuance of shares of Preferred Stock, it shall be automatically exercised in accordance with Sections 3(b) and 3(c) hereof (even if not surrendered) immediately before its expiration, involuntary termination or cancellation.

4. Representations and Warranties of Holder and the Company

(a) Representations and Warranties by Holder. The Holder represents and warrants to the Company with respect to this purchase as follows:

(i) The Holder has substantial experience in evaluating and investing in private placement transactions of securities of companies similar to the Company so that the Holder is capable of evaluating the merits and risks of its investment in the Company and has the capacity to protect its interests.

(ii) Except for transfers to a Holder affiliate, the Holder is acquiring the Warrant and the Shares of Preferred Stock issuable upon exercise of the Warrant (collectively the "Securities") for investment for its own account and not with a view to, or for resale in connection with, any distribution thereof. The Holder understands that the Securities have not been registered under the Securities Act of 1933, as amended (the "Act") by reason of a specific exemption from the registration provisions of the Act which depends upon, among other things, the bona fide nature of the investment intent as expressed herein.

(iii) The Holder acknowledges that the Securities must be held indefinitely unless subsequently registered under the Act or an exemption from such registration is available. The Holder is aware of the provisions of Rule 144 promulgated under the Act.

(iv) The Holder is an "accredited investor" within the meaning of Regulation D promulgated under the Act.

(v) The Holder has had an opportunity to discuss the Company's business, management and financial affairs with its management and an opportunity to review the Company's facilities. The Holder understands that such discussions, as well as the written information issued by the Company, were intended to describe the aspects of the Company's business and prospects which the Company believes to be material but were not necessarily a thorough or exhaustive description.

(b) Company hereby represents and warrants to Holder that, except as set forth in the schedule attached to this Warrant as Exhibit A (the "Disclosure Schedule"), the statements in the following paragraphs of this Section 4(b) are true and correct (a) as of the date hereof and (b) except where any such representation and warranty relates specifically to an earlier date, as of the date of any exercise of this Warrant.

(i) Corporate Organization and Authority. Company (a) is a corporation duly organized, validly existing, and in good standing in its jurisdiction of incorporation, (b) has the corporate power and authority to own and operate its properties and to carry on its business as now conducted and as proposed to be conducted; and (c) is qualified as a foreign corporation in all jurisdictions where such qualification is required, except where the failure to so qualify would not have a material adverse effect on the Company's business.

(ii) Corporate Power. Company has all requisite legal and corporate power and authority to execute, issue and deliver the Warrant, to issue the Preferred Stock issuable upon exercise or conversion of the Warrant, and to carry out and perform its obligations under the Warrant.

(iii) Authorization; Enforceability. All corporate action on the part of Company, its officers, directors and shareholders necessary for the authorization, execution, delivery and performance of its obligations under this Warrant and for the authorization, issuance and delivery of the Warrant and the Preferred Stock issuable upon exercise of the Warrant has been taken and this Warrant constitutes the legally binding and valid obligation of Company enforceable against the Company in accordance with its terms, except as limited by (a) applicable bankruptcy and insolvency laws and (b) general principles of equity that restrict the availability of equitable remedies.

(iv) Valid Issuance of Warrant and Preferred Stock. The Warrant has been validly issued and is free of restrictions on transfer other than restrictions on transfer (a) created by or imposed upon the Holder through no action by the Company, or (b) as set forth herein or under applicable state and federal securities laws or the Company's Bylaws. The Preferred Stock issuable upon conversion of this Warrant, when issued, sold and delivered in accordance with the terms of this Warrant for the consideration expressed herein, will be duly and validly issued, fully paid and nonassessable, and will be free of restrictions on transfer other than restrictions on transfer (a) created by or imposed upon the Holder through no action by the Company, or (b) under this Warrant, applicable state and federal securities laws or the Company's Bylaws. Subject to applicable restrictions on transfer, the issuance and delivery of the Warrant and the Preferred Stock issuable upon conversion of the Warrant are not subject to any preemptive or other similar rights that will not have been properly complied with or waived. Assuming the accuracy of the Holder's representations and warranties set forth in Section 4(a) and pursuant to the Notice of Exercise in the form attached hereto, the offer, sale and issuance of the Warrant and Preferred Stock, respectively, as contemplated by this Warrant, are exempt from the prospectus and registration requirements of applicable United States federal and state security laws, and neither Company nor any authorized agent acting on its behalf has or will take any action hereafter that would cause the loss of such exemption.

(v) No Conflict with Other Instruments. The execution, delivery, and performance of this Warrant will not result in any violation of, be in conflict with, or constitute a default under, with or without the passage of time or the giving of notice (a) any provision of Company's Certificate of Incorporation or by-laws; (b) any provision of any judgment, decree, or order to which Company is a party or by which it is bound; (c) any contract, obligation, or commitment to which Company is a party or by which it is bound; or (d) any statute, rule, or governmental regulation applicable to Company, except in each case where such violation, conflict or default would not have a material adverse effect on the Company's business.

(vi) Capitalization. As of the date hereof, the authorized capital stock of Company consists of 15,000,000 shares of Common Stock, $0.001 par value, of which 4,165,000 are issued and outstanding, and 5,308,879 shares of Preferred Stock, $0.001 par value, of which 800,000 are designated Series A Preferred Stock, all of which are issued and outstanding, 2,233,879 are designated Series B Preferred Stock, all of which are issued and outstanding, and 2,275,000 are designated Series B-l Preferred Stock, 2,033,333 of which are issued and outstanding. Such outstanding shares have been duly authorized and validly issued (including, without limitation, issued in compliance with applicable federal and state securities laws) and are fully paid and nonassessable. Company has reserved 21,000 shares of Common Stock for issuance upon conversion of the Preferred Stock. Except as set forth in the Disclosure Schedule, as of the date hereof, there are no outstanding warrants, options, conversion privileges, preemptive rights or other rights or agreements to purchase or otherwise acquire or issue any equity securities or convertible securities of Company, nor has the issuance of any of the aforesaid rights to acquire securities of Company been authorized.

(vii) Governmental Consents. No consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority on the part of Company is required in connection with the offer, sale or issuance of the Warrant (and the Preferred Stock issuable upon exercise of the Warrant), except for the following: (a) the filing of a notice on Form D under the Act and (b) the compliance with other applicable state securities laws, which compliance will have occurred within the appropriate time periods therefor.

5 Legends.

(a) Each certificate representing the Securities shall be endorsed with the following legend:

> THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE TRANSFERRED UNLESS COVERED BY AN EFFECTIVE REGISTRATION STATEMENT UNDER SAID ACT, A "NO ACTION" LETTER FROM THE SECURITIES AND EXCHANGE COMMISSION WITH RESPECT TO SUCH TRANSFER, A TRANSFER MEETING THE REQUIREMENTS OF RULE 144 OF THE SECURITIES AND EXCHANGE COMMISSION, OR (IF REASONABLY REQUIRED BY THE COMPANY) AN OPINION OF COUNSEL SATISFACTORY TO THE ISSUER TO THE EFFECT THAT ANY SUCH TRANSFER IS EXEMPT FROM SUCH REGISTRATION.

The Company need not enter into its stock records a transfer of Securities unless the conditions specified in the foregoing legend are satisfied. The Company may also instruct its transfer agent not to allow the transfer of any of the Shares unless the conditions specified in the foregoing legend are satisfied.

(b) Removal of Legend and Transfer Restrictions. The legend relating to the Act endorsed on a certificate pursuant to paragraph 5(a) of this Warrant shall be removed and the Company shall issue a certificate without such legend to the Holder of the Securities if (i) the Securities are registered under the Act and a prospectus meeting the requirements of Section 10 of the Act is available or (ii) the Holder provides to the Company an opinion of counsel for the Holder reasonably satisfactory to the Company, a no-action letter or interpretive opinion of the staff of the SEC reasonably satisfactory to the Company, or other evidence reasonably satisfactory to the Company, to the effect that public sale, transfer or assignment of the Securities may be made without registration and without compliance with any restriction such as those set forth in Rule 144.

6. Condition of Transfer or Exercise of Warrant. Notwithstanding anything to the contrary set forth herein, neither this Warrant nor any rights hereunder shall be transferable, except to a Holder affiliate, without the prior written consent of the Company. It shall be a condition to any transfer or exercise of this Warrant that at the time of such transfer or exercise, the Holder shall provide the Company with a representation in writing that the Holder or transferee is acquiring this Warrant and the shares of Preferred Stock to be issued upon exercise for investment purposes only and not with a view to any sale or distribution, or will provide the Company with a statement of pertinent facts covering any proposed distribution. As a further condition to any transfer of this Warrant or any or all of the shares of Preferred Stock issuable upon exercise of this Warrant, other than a transfer registered under the Act, the Company may request a legal opinion, in form and substance satisfactory to the Company and its counsel, reciting the pertinent circumstances surrounding the proposed transfer and stating that such transfer is exempt from the registration and prospectus delivery requirements of the Act. The Company shall not require Holder to provide an opinion of counsel if the transfer is to an affiliate of Holder. Each certificate evidencing the shares issued upon exercise of the Warrant or upon any transfer of the shares (other than a transfer registered under the Act or any subsequent transfer of shares so registered) shall, at the Company's option, if the Shares are not freely saleable under Rule 144(k) under the Act, contain a legend in form and substance satisfactory to the Company and its counsel, restricting the transfer of the shares to sales or other dispositions exempt from the requirements of the Act. As further condition to each transfer, at the request of the Company, the Holder shall surrender this Warrant to the Company and the transferee shall receive and accept a Warrant, of like tenor and date, executed by the Company.

7. Adjustment for Certain Events. The number and kind of securities purchasable upon the exercise of this Warrant and the Warrant Price shall be subject to adjustment from time to time upon the occurrence of certain events, as follows:

(a) Reclassification or Merger. In case of any reclassification or change of securities of the class issuable upon exercise of this Warrant (other than a change in par value, or from par value to no par value, or from no par value to par value, or as a result of a subdivision or combination), or in case of any merger of the Company with or into another corporation (other than a merger with another corporation in which the Company is the acquiring and the surviving corporation and which does not result in any reclassification or change of outstanding securities issuable upon exercise of this Warrant), or in case of any sale of all or substantially all of the assets of the Company, the Company, or such successor or purchasing corporation, as the case may be, shall duly execute and deliver to the Holder a new Warrant (in form and substance satisfactory to the Holder of this Warrant), or the Company shall make appropriate provision without the issuance of a new Warrant, so that the Holder shall have the right to receive, at a total purchase price not to exceed that payable upon the exercise of the then unexercised portion of this Warrant, and in lieu of the shares of Preferred Stock theretofore issuable upon exercise of this Warrant, the kind and amount of shares of stock, other securities, money and property receivable upon such reclassification, change, merger or sale by a Holder of the number of shares of Preferred Stock then purchasable under this Warrant. Any new Warrant shall provide for adjustments that shall be as nearly equivalent as may be practicable to the adjustments provided for in this Section 7. The provisions of this subparagraph (a) shall similarly apply to successive reclassifications, changes, mergers and transfers.

(b) Subdivision or Combination of Shares. If the Company at any time while this Warrant remains outstanding and unexpired shall subdivide or combine its outstanding shares of Preferred Stock, the Warrant Price shall be proportionately decreased and the number of Shares issuable hereunder shall be proportionately increased in the case of a subdivision and the Warrant Price shall be proportionately increased and the number of Shares issuable hereunder shall be proportionately decreased in the case of a combination.

(c) Stock Dividends and Other Distributions. If the Company at any time while this Warrant is outstanding and unexpired shall (i) pay a dividend with respect to Preferred Stock payable in Preferred Stock, then the Warrant Price shall be adjusted, from and after the date of determination of shareholders entitled to receive such dividend or distribution, to that price determined by multiplying the Warrant Price in effect immediately prior to such date of determination by a fraction (A) the numerator of which shall be the total number of shares of Preferred Stock outstanding immediately prior to such dividend or distribution, and (B) the denominator of which shall be the total number of shares of Preferred Stock outstanding immediately after such dividend or distribution; or (ii) make any other distribution with respect to Preferred Stock (except any distribution specifically provided for in Sections 7(a) and 7(b)), then, in each such case, provision shall be made by the Company such that the Holder of this Warrant shall receive upon exercise of this Warrant a proportionate share of any such dividend or distribution as though it were the holder of the Preferred Stock (or Common Stock issuable upon conversion thereof) as of the record date fixed for the determination of the shareholders of the Company entitled to receive such dividend or distribution.

(d) Adjustment of Number of Shares. Upon each adjustment in the Warrant Price, the number of Shares purchasable hereunder shall be adjusted, to the nearest whole share, to the product obtained by multiplying the number of Shares purchasable immediately prior to such adjustment in the Warrant Price by a fraction, the numerator of which shall be the Warrant Price immediately prior to such adjustment and the denominator of which shall be the Warrant Price immediately thereafter.

8. Notice of Adjustments. Whenever any Warrant Price or the kind or number of securities issuable under this Warrant shall be adjusted pursuant to Section 7 hereof, the Company shall prepare a certificate signed by an officer of the Company setting forth, in reasonable detail, the event requiring the adjustment, the amount of the adjustment, the method by which such adjustment was calculated, and the Warrant Price and number or kind of shares issuable upon exercise of the Warrant after giving effect to such adjustment, and shall cause copies of such certificate to be mailed (by certified or registered mail, return receipt required, postage prepaid) within thirty (30) days of such adjustment to the Holder of this Warrant as set forth in Section 17 hereof.

9. Transferability of Warrant. This Warrant is transferable on the books of the Company at its principal office by the registered Holder hereof upon surrender of this Warrant properly endorsed, subject to compliance with Section 6 and applicable federal and state securities laws. The Company shall issue and deliver to the transferee a new Warrant representing the Warrant so transferred. Upon any partial transfer, the Company will issue and deliver to Holder a new Warrant with respect to the Warrant not so transferred. Holder shall not have any right to transfer any portion of this Warrant to any direct competitor of the Company.

10. Registration Rights. The Company grants registration rights to the Holder of this Warrant for any Common Stock of the Company obtained upon conversion of the Preferred Stock in parity to the registration rights granted to other holders of the Preferred Stock and agrees that the Holder of this Warrant shall be added as a party to that certain _____ dated as of _____ of the Company (the "Registration Rights Agreement"), and that the Shares shall be made "Registrable Securities" under the Registration Rights Agreement. 11. No fractional share of Preferred Stock will be issued in connection with any exercise hereunder, but in lieu of such fractional share the Company shall make a cash payment therefor upon the basis of the Warrant Price then in effect.

11. Charges, Taxes and Expenses. Issuance of certificates for shares of Preferred Stock upon the exercise of this Warrant shall be made without charge to the Holder for any United States or state of the United States documentary stamp tax or other incidental expense with respect to the issuance of such certificate, all of which taxes and expenses shall be paid by the Company, and such certificates shall be issued in the name of the Holder.

12. No Shareholder Rights Until Exercise. This Warrant does not entitle the Holder hereof to any voting rights or other rights as a shareholder of the Company prior to the exercise hereof.

13. Registry of Warrant. The Company shall maintain a registry showing the name and address of the registered Holder of this Warrant. This Warrant may be surrendered for exchange or exercise, in accordance with its terms, at such office or agency of the Company, and the Company and Holder shall be entitled to rely in all respects, prior to written notice to the contrary, upon such registry.

14. Loss, Theft, Destruction or Mutilation of Warrant. Upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant, and, in the case of loss, theft, or destruction, of indemnity reasonably satisfactory to it, and, if mutilated, upon surrender and cancellation of this Warrant, the Company will execute and deliver a new Warrant, having terms and conditions substantially identical to this Warrant, in lieu hereof.

15. Miscellaneous.

(a) Issue Date. The provisions of this Warrant shall be construed and shall be given effect in all respect as if it had been issued and delivered by the Company on the date hereof.

(b) Successors. This Warrant shall be binding upon any successors or assigns of the Company.

(c) Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Connecticut.

(d) Headings. The headings used in this Warrant are used for convenience only and are not to be considered in construing or interpreting this Warrant.

(e) Saturdays, Sundays, Holidays. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be a Saturday or a Sunday or shall be a legal holiday in the State of Connecticut, then such action may be taken or such right may be exercised on the next succeeding day not a legal holiday.

(f) Waiver of Jury Trial. Each of the parties hereto hereby waives to the fullest extent permitted by applicable law, any right it may have to a trial by jury in respect of any litigation directly or indirectly arising out of, under or in connection with this Warrant or the Preferred Shares.

(g) Attorney's Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorney's fees.

(h) Amendment. Any term of this Warrant may be amended or waived with the written consent of the Company and Holder.

(i) Counterparts; Facsimile. This Warrant may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Facsimile signatures shall be as effective as original signatures.

(j) Entire Agreement. This Warrant constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior understandings (whether written, verbal or implied) with respect to such subject matter.

(k) No Stockholder Rights. This Warrant in and of itself shall not entitle Holder to any voting rights or other rights as a stockholder of the Company.

16. No Impairment. The Company will not, by amendment of its Certificate of Incorporation or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder hereof against impairment.

17. Addresses. Any notice required or permitted hereunder shall be in writing and shall be mailed by overnight courier, registered or certified mail, return receipt required, and postage prepaid, or otherwise delivered by hand or by messenger, addressed as set forth below, or at such other address as the Company or the Holder hereof shall have furnished to the other party.

If to the Company:	**Chimerix, Inc.** 11149 North Torrey Pines Road Suite 200 La Jolla, CA 92037 Attn: Wendy Roos
If to the Holder:	**General Electric Capital Corporation** 401 Merritt 7, Suite 23 Norwalk, CT 06851-1177
Attn:	Credit Manager-Life Science and Technology Finance

18. Market Stand-Off Agreement. Holder shall not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to, any Preferred Stock (or other equity securities) of the Company held by Holder, for a period of time specified by the managing underwriter(s) (not to exceed one hundred eighty (180) days) following the effective date of a registration statement of the Company filed under the Act. Holder agrees to execute and deliver such other agreements as may be reasonably requested by the Company and/or the managing underwriter(s) which are consistent with the foregoing or which are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to such Common Stock (or other securities) until the end of such period. The Company's underwriter(s) are intended third party beneficiaries of this Section 18 and shall have the right, power and authority to enforce the provisions hereof as if they were a party hereto.

IN WITNESS WHEREOF, **Chimerix, Inc.** has caused this Warrant to be executed by its officers thereunto duly authorized.

Dated as of Nov 5, 2003.

By: /s/ Kevin P. Anderson
Name: Kevin P. Anderson
Title: VP Business Development

Acknowledged and agreed:

General Electric Capital Corporation

By: /s/ John Edel
Name: John Edel
Title: SVP

Exhibit A

DISCLOSURE SCHEDULE

This Disclosure Schedule is made and given by Chimerix, Inc. (the "Company") pursuant to the Warrant to Purchase 21,000 Shares of Series B-l Preferred Stock dated _____, 2003 (the "Warrant"). Nothing herein constitutes an admission of any liability or obligation on the Company's part nor an admission against the Company's interest. The inclusion of any disclosure herein should not be interpreted as indicating that the Company has determined that such an agreement or other matter is necessarily material to the Company. Copies of the agreements described herein are available upon request by Holder.

1. As of the date of the Warrant, 1,500,000 shares of the Company's Common Stock are reserved for issuance under the Company's 2002 Equity Incentive Plan (the "Plan"), of which (i) 629,284 shares are subject to outstanding stock options granted under the Plan, (ii) 525,000 shares have been issued upon the exercise of stock options previously granted under the Plan and (iii) 345,716 shares remain available for future issuance under the Plan.

2. In addition to the Warrant, the following warrants are outstanding as of the date of the Warrant: (i) a warrant issued to Asset Management Partners to purchase 38,461 shares of the Company's Common Stock, (ii) a warrant issued to Dr. William Freeman to purchase 35,000 shares of the Company's Common Stock and (iii) a warrant issued to Paul Grayson to purchase 25,000 shares of the Company's Common Stock.

3. Shares of the Company's outstanding Series A Preferred Stock, Series B Preferred Stock and Series B-l Preferred Stock are convertible into shares of the Company's Common Stock.

4. The Company has entered into an Amended and Restated Investor Rights Agreement, an Amended and Restated Right of First Refusal and Co-Sale Agreement and an Amended and Restated Co-Sale Agreement, each dated July 21, 2003, containing (among other things) preemptive rights, rights of first refusal and co-sale rights, as applicable, with respect to the Company's securities.

5. The Company's Bylaws contain a right of first refusal with respect to transfers of the Company's Common Stock.

NOTICE OF EXERCISE

TO:

1. The undersigned Warrantholder ("Holder") elects to acquire shares of the Series _____ Preferred Stock (the "Preferred Stock") of _____, (the "Company"), pursuant to the terms of the Stock Purchase Warrant dated _____, 200_, (the "Warrant").

2. The Holder exercises its rights under the Warrant as set forth below:

( ) The Holder elects to purchase _____ shares of Preferred Stock as provided in Section 3(a) and tenders herewith a check in the amount of $_____ as payment of the purchase price.

( ) The Holder elects to convert the purchase rights into shares of Preferred Stock as provided in Section 3(b) of the Warrant.

3. The Holder surrenders the Warrant with this Notice of Exercise.

The Holder confirms that the representations and warranties set forth in Section 4(a) of the Warrant are true and correct as of the date hereof with the same force and effect as of they had been made as of the date hereof.

Please issue a certificate representing the shares of the Preferred Stock in the name of the Holder or in such other name as is specified below:

Name:
Address:

Taxpayer I.D.:

_____
(Holder)

By: _____

Title: _____

Date: _____

Exhibit 4.6

AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT

This Amended and Restated Investor Rights Agreement (the ***"Agreement"***) is entered into as of February 7, 2011, by **Chimerix, Inc.**, a Delaware corporation (the ***"Company"***), and the investors listed on Schedule A, each of which is herein referred to as an ***"Investor."***

Recitals

Whereas, certain of the Investors are purchasing shares of the Company's Series F Preferred Stock (the ***"Series F Stock"***), and warrants to purchase additional shares of Series F Stock, pursuant to that certain Series F Preferred Stock and Warrant Purchase Agreement (the ***"Purchase Agreement"***) of even date herewith (the ***"Financing"***);

Whereas, certain of the Investors (the ***"Prior Investors"***) include (i) holders of the Company's Series A Preferred Stock (the ***"Series A Stock"***), Series B Preferred Stock (the ***"Series B Stock"***), Series B-1 Preferred Stock (the ***"Series B-1 Stock"***), Series C Preferred Stock (the ***"Series C Stock"***), Series D Preferred Stock (the ***"Series D Stock"***) and Series E Preferred Stock (the ***"Series E Stock"*** which, together with the Series A Stock, the Series B Stock, the Series B-1 Stock, the Series C Stock, the Series D Stock, and the Series F Stock, shall be referred to collectively as the ***"Preferred Stock"***), (ii) Shellwater & Co., as nominee for the University of California, San Diego, (iii) General Electric Capital Corporation and (iv) Silicon Valley Bank;

Whereas, the Prior Investors are parties to an Amended and Restated Investor Rights Agreement, dated July 24, 2009 (the ***"Prior Agreement"***);

Whereas, the Prior Investors desire to amend and restate and supersede in its entirety the Prior Agreement and to accept the rights and covenants herein, in lieu of their rights and covenants under the Prior Agreement;

Whereas, the obligations in the Purchase Agreement are conditioned upon the execution and delivery of this Agreement; and

Whereas, in connection with the consummation of the Financing, the Company and the Investors have agreed to the registration rights, information rights, and other rights as set forth below.

Now, Therefore, in consideration of these premises and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree hereto as follows:

SECTION 1. REGISTRATION RIGHTS.

The Company covenants and agrees as follows:

1.1 Definitions. For purposes of this Section 1:

(a) The term "Act" means the Securities Act of 1933, as amended.

(b) The term "Form S-3" means such form under the Act as in effect on the date hereof or any registration form under the Act subsequently adopted by the SEC (as defined below) which permits inclusion or incorporation of substantial information by reference to other documents filed by the Company with the SEC.

(c) The term "Holder" means any person owning or having the right to acquire Registrable Securities or any assignee thereof in accordance with Section 1.13 hereof.

(d) The term "1934 Act" shall mean the Securities Exchange Act of 1934, as amended.

(e) The term "register," "registered," and "registration" refer to a registration effected by preparing and filing a registration statement or similar document in compliance with the Act, and the declaration or ordering of effectiveness of such registration statement or document.

(f) The term "Registrable Securities" means (i) the Common Stock issuable or issued upon conversion of the Series A Stock, Series B Stock, Series B-1 Stock, Series C Stock, Series D Stock, Series E Stock and Series F Stock (including any of such shares issuable upon exercise of warrants issued pursuant to the Purchase Agreement), (ii) the Common Stock issuable or issued upon exercise of warrants outstanding as of the date of this Agreement, and (iii) any Common Stock of the Company issued as (or issuable upon the conversion or exercise of any warrant, right or other security that is issued as) a dividend or other distribution with respect to, or in exchange for, or in replacement of, the shares referenced in (i) or (ii) above.

(g) The number of shares of "Registrable Securities then outstanding" shall mean the number of shares of Common Stock outstanding, or issuable upon exercise of warrants outstanding, which are Registrable Securities, and the number of shares of Common Stock issuable upon conversion of the outstanding Series A Stock, Series B Stock, Series B-1 Stock, Series C Stock, Series D Stock, Series E Stock and Series F Stock which are Registrable Securities.

(h) The term "SEC" shall mean the Securities and Exchange Commission.

1.2 Demand Registration.

(a) If the Company shall receive at any time not earlier than the earlier of (i) four (4) years after the date of this Agreement and (ii) six (6) months after the effective date of the first registration statement for a public offering of securities of the Company (other than a registration statement relating either to the sale of securities to employees of the Company pursuant to a stock option, stock purchase or similar plan or a transaction pursuant to Rule 145 under the Act) a written request from the Series F Requisite Investors (as defined in the Purchase Agreement), that the Company register for sale under the Act all or any portion of the shares of Registrable Securities held by such Holders having an aggregate anticipated price to the public (before any underwriters' discounts or commissions) of not less than $5,000,000:

(i) within ten (10) days after the receipt thereof, give written notice of such request to all Holders; and

(ii) use its reasonable best efforts to file as soon as practicable the registration under the Act of all Registrable Securities which the Holders request to be registered, subject to the limitations of Section 1.2(b).

(b) If the Holders initiating the registration request hereunder (***"Initiating Holders"***) intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Section 1.2(a) and the Company shall include such information in the written notice referred to in Section 1.2(a). The underwriter will be selected by the Company and shall be reasonably acceptable to a majority in interest of the Initiating Holders. In such event, the right of any Holder to include its Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting (unless otherwise mutually agreed by a majority in interest of the Initiating Holders and such Holder) to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Section 1.4(e)) enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such underwriting. Notwithstanding any other provision of this Section 1.2, if the underwriter advises the Initiating Holders in writing that marketing factors require a limitation of the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities which would otherwise be underwritten pursuant to this Agreement, and the number of shares of Registrable Securities that may be included in the underwriting shall be allocated among all Holders, including the Initiating Holders, in proportion (as nearly as practicable) to the amount of Registrable Securities of the Company owned by each Holder; *provided, however*, that the number of shares of Registrable Securities to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting. For purposes of the preceding sentence concerning allocation, for any Holder that is a partnership or corporation, the partners, retired partners and stockholders of such Holder, or the estates and family members of any such partners and retired partners and any trusts for the benefit of any of the foregoing persons shall be deemed to be a single "Holder", and any *pro rata* reduction with respect to such Holder shall be based upon the aggregate amount of shares carrying registration rights owned by all entities and individuals included in such "Holder", as defined in this sentence.

(c) Notwithstanding the foregoing, if the Company shall furnish to Holders requesting a registration statement pursuant to this Section 1.2, a certificate signed by the Chief Executive Officer of the Company stating that in the good faith judgment of the Board of Directors of the Company, it would be detrimental to the Company and its stockholders for such registration statement to be filed and the filing of such registration statement should therefore be delayed, the Company shall have the right to delay taking action with respect to such filing for two periods of not more than sixty (60) days each in any twelve (12) month period after receipt of the request of the Initiating Holders.

(d) In addition, the Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to this Section 1.2:

(i) After the Company has effected two registrations pursuant to this Section 1.2 and such registrations have been declared or ordered effective;

(ii) During the period starting with the date sixty (60) days prior to the Company's good faith estimate of the date of filing of, and ending on a date one hundred eighty (180) days after the effective date of, a registration subject to Section 1.3 hereof; provided that the Company is actively employing in good faith all reasonable efforts to cause the Section 1.3 registration statement to become effective; or

(iii) If the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Section 1.12 below.

1.3 Company Registration. If (but without any obligation to do so) the Company proposes to register (including for this purpose a registration effected by the Company for stockholders other than the Holders) any of its stock or other securities under the Act in connection with the public offering of such securities solely for cash (other than a registration relating solely to the sale of securities to participants in a Company stock plan, a registration on any form which does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities or a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities which are also being registered), the Company shall, at such time, promptly give each Holder written notice of such registration. Upon the written request of each Holder given within twenty (20) days after the giving of such notice by the Company in accordance with Section 3.5, the Company shall, subject to the provisions of Section 1.8, cause to be registered under the Act all or part of the Registrable Securities that each such Holder has requested to be registered. If a Holder decides not to include all of its Registrable Securities in any registration statement thereafter filed by the Company, such Holder shall nevertheless continue to have the right to include any Registrable Securities in any subsequent registration statement or registration statements as may be filed by the Company with respect to offerings of its securities, all upon the terms and conditions set forth herein. Any Holder who elects to include some or all of its Registrable Securities pursuant to this Section 1.3 shall cooperate with the Company in the preparation of any and all documents and instruments the Company deems necessary or convenient for the preparation of any applicable registration statement, and such Holder shall supply the Company with any and all information the Company deems necessary or convenient with respect to any such registration statement.

1.4 Obligations of the Company. Whenever required under this Section 1 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably practicable:

(a) Prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its reasonable best efforts to cause such registration statement to become effective, and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to one hundred twenty (120) days or until the distribution contemplated in the Registration Statement has been completed; *provided, however*, that (i) such 120-day period shall be extended for a period of time equal to the period the Holder refrains from selling any securities included in such registration at the request of an underwriter of Common Stock (or other securities) of the Company; and (ii) in the case of any registration of Registrable Securities on Form S-3 which are intended to be offered on a continuous or delayed basis, such 120-day period shall be extended, if necessary, to keep the registration statement effective until the majority of such Registrable Securities are sold, provided that Rule 415 under the Act, or any successor rule under the Act, permits an offering on a continuous or delayed basis, and provided further that applicable rules under the Act governing the obligation to file a post-effective amendment permit, in lieu of filing a post-effective amendment which (I) includes any prospectus required by Section 5 of the Act or (II) reflects facts or events representing a material or fundamental change in the information set forth in the registration statement, the incorporation by reference of information required to be included in (I) and (II) above to be contained in periodic reports filed pursuant to Section 13 or 15(d) of the 1934 Act in the registration statement.

(b) Prepare and file with the SEC such amendments and supplements to such registration statement and the prospectus used in connection with such registration statement as may be necessary to comply with the provisions of the Act with respect to the disposition of all securities covered by such registration statement.

(c) Furnish to the Holders such numbers of copies of a prospectus, including a preliminary prospectus, in conformity with the requirements of the Act, and such other documents as they may reasonably request in order to facilitate the disposition of Registrable Securities owned by them.

(d) Use its reasonable best efforts to register and qualify the securities covered by such registration statement under such other securities or Blue Sky laws of such jurisdictions as shall be reasonably requested by the Holders; provided that the Company shall not be required in connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any such states or jurisdictions.

(e) In the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the managing underwriter of such offering. Each Holder participating in such underwriting shall also enter into and perform its obligations under such an agreement.

(f) Notify each Holder of Registrable Securities covered by such registration statement at any time when a prospectus relating to the registration statement is required to be delivered under the Act of the happening of any event as a result of which the prospectus included in such registration statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances then existing.

(g) Cause all such Registrable Securities registered pursuant to this Agreement to be listed on each securities exchange on which similar securities issued by the Company are then listed.

(h) Provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration.

(i) Use its reasonable best efforts to furnish, at the request of any Holder requesting registration of Registrable Securities, on the date that such Registrable Securities are delivered to the underwriters for sale, if such securities are being sold through underwriters or, if such securities are not being sold through underwriters, on the date that the registration statement with respect to such securities becomes effective, (i) an opinion, dated as of such date, of the counsel representing the Company for the purposes of such registration, in form and substance as is customarily given to underwriters in an underwritten public offering, or if not underwritten, in form and substance as is customarily given to underwriters and reasonably satisfactory to counsel to the Holder offering the greatest number of Registrable Securities for sale in the registration, addressed to the underwriters, if any, and to the Holders requesting registration of Registrable Securities, and (ii) a "comfort" letter dated as of such date, from the independent certified public accountants of the Company, in form and substance as is customarily given by independent certified public accountants to underwriters in an underwritten public offering, or if not underwritten, in form and substance as is customarily given to underwriters and reasonably satisfactory to counsel to the Holder offering the greatest number of Registrable Securities for sale in the registration, addressed to the underwriters, if any, and to the Holders requesting registration of Registrable Securities.

1.5 Furnish Information.

(a) It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 1 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as shall be required to effect the registration of such Holder's Registrable Securities.

(b) The Company shall have no obligation with respect to any registration requested pursuant to Section 1.2 or Section 1.12 if, due to the operation of Section 1.5(a), the number of shares or the anticipated aggregate offering price of the Registrable Securities to be included in the registration does not equal or exceed the number of shares or the anticipated aggregate offering price required to originally trigger the Company's obligation to initiate such registration as specified in Section 1.2(a) or Section 1.12(b)(2), whichever is applicable.

1.6 Expenses of Demand Registration. All expenses other than underwriting discounts and commissions incurred in connection with registrations, filings or qualifications pursuant to Section 1.2, including (without limitation) all registration, filing and qualification fees, printers' and accounting fees, fees and disbursements of one (1) special counsel for the selling Holders and another counsel for the Company shall be borne by the Company; *provided*, *however*, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Section 1.2 if the registration request is subsequently withdrawn at the request of a majority–in–interest of the Initiating Holders (in which case all participating Holders shall bear such expenses), unless such Initiating Holders agree to forfeit (on behalf of all Holders) the right to one demand registration pursuant to Section 1.2; *provided further, however*, that if at the time of such withdrawal, the Holders have learned of a material adverse change in the condition, business, or prospects of the Company not previously known to the Holders at the time of their request and have withdrawn the request with reasonable promptness following disclosure by the Company of such material adverse change, then the Holders shall not be required to pay any of such expenses and will not be required to forfeit any such right pursuant to Section 1.2.

1.7 Expenses of Company Registration. The Company shall bear and pay all expenses incurred in connection with any registration, filing or qualification of Registrable Securities with respect to the registrations pursuant to Section 1.3 for each Holder (which right may be assigned as provided in Section 1.13), including (without limitation) all registration, filing, and qualification fees, printers and accounting fees relating or apportionable thereto, but excluding underwriting discounts and commissions relating to Registrable Securities.

1.8 Underwriting Requirements. In connection with any offering involving an underwriting of shares of the Company's capital stock, the Company shall not be required under Section 1.3 to include any of the Holders' securities in such underwriting unless they accept the terms of the underwriting as agreed upon between the Company and the underwriters selected by the Company (or by other persons entitled to select the underwriters), and then only in such quantity as the underwriters determine in good faith and in their sole discretion will not, because of marketing factors, jeopardize the success of the offering by the Company. If the total amount of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the amount of securities that the underwriters determine in good faith and in their sole discretion is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities which the underwriters determine in their sole discretion will not, because of marketing factors, jeopardize the success of the offering (the securities so included to be allocated and apportioned first, to the Company; second, *pro rata* among the selling Holders according to the total amount of Registrable Securities owned by each such Holder or in such other proportion as shall be mutually agreed to by such Holders; and third, *pro rata* among any other selling stockholders according to the total amount of securities owned by each such selling stockholder or in such other proportion as shall mutually be agreed to by such selling stockholders) but in no event shall the amount of securities of the selling Holders included in the offering be reduced below thirty percent (30%) of the total amount of securities included in such offering, unless such offering is the initial public offering of the Company's securities, in which case all selling Holders and other selling stockholders may be excluded if the Company and underwriters make the determination described above. For purposes of the preceding parenthetical concerning allocation and apportionment, for any Holder or selling stockholder that is a partnership or corporation, the partners, retired partners and stockholders of such Holder or selling stockholder, or the estates and family members of any such partners and retired partners and any trusts for the benefit of any of the foregoing persons shall be deemed to be a single "Holder" or "selling stockholder", as applicable, and any *pro rata* reduction with respect to such Holder or selling stockholder shall be based upon the aggregate amount of shares carrying registration rights owned by all entities and individuals included in such "Holder" or "selling stockholder", as defined in this sentence.

1.9 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any such registration as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 1.

1.10 Indemnification. In the event any Registrable Securities are included in a registration statement under this Section 1:

(a) To the extent permitted by applicable federal and state law, the Company will indemnify and hold harmless each Holder, any underwriter (as defined in the Act) for such Holder and each person, if any, who controls such Holder or underwriter within the meaning of the Act or the 1934 Act, against any losses, claims, damages, or liabilities (joint or several) to which they may become subject under the Act, the 1934 Act or other federal or state law, insofar as such losses, claims, damages, or liabilities (or actions in respect thereof) arise out of or are based upon any of the following statements, omissions or violations (collectively a ***"Violation"***): (i) any untrue statement or alleged untrue statement of a material fact contained in such registration statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto, (ii) the omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading, or (iii) any violation or alleged violation by the Company of the Act, the 1934 Act, any state securities law or any rule or regulation promulgated under the Act, the 1934 Act or any state securities law; and the Company will pay to each such Holder, underwriter or controlling person, any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability, or action; *provided*, *however*, that the indemnity agreement contained in this Section 1.10(a) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability, or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld), nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon a Violation which occurs in reliance upon and in conformity with written information furnished expressly for use in connection with such registration by any such Holder, underwriter or controlling person.

(b) To the extent permitted by law, each selling Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who has signed the registration statement, each person, if any, who controls the Company within the meaning of the Act, any underwriter, any other Holder selling securities in such registration statement and any controlling person of any such underwriter or other Holder, against any losses, claims, damages, or liabilities (joint or several) to which any of the foregoing persons may become subject, under the Act, the 1934 Act or other federal or state law, insofar as such losses, claims, damages, or liabilities (or actions in respect thereto) arise out of or are based upon any Violation, in each case to the extent (and only to the extent) that such Violation occurs in reliance upon and in conformity with written information furnished by such Holder expressly for use in connection with such registration; and each such Holder will pay any legal or other expenses reasonably incurred by any person intended to be indemnified pursuant to this Section 1.10(b), in connection with investigating or defending any such loss, claim, damage, liability, or action; *provided*, *however*, that the indemnity agreement contained in this Section 1.10(b) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; provided, that, in no event shall any indemnity under this Section 1.10(b) exceed the net proceeds from the offering received by such Holder.

(c) Promptly after receipt by an indemnified party under this Section 1.10 of notice of the commencement of any action (including any governmental action), such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 1.10, deliver to the indemnifying party a written notice of the commencement thereof and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume the defense thereof with counsel mutually satisfactory to the parties; *provided*, *however*, that an indemnified party (together with all other indemnified parties which may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such proceeding. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action, if prejudicial to its ability to defend such action, shall relieve such indemnifying party of any liability to the indemnified party under this Section 1.10, but the omission so to deliver written notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Section 1.10.

(d) If the indemnification provided for in this Section 1.10 is held by a court of competent jurisdiction to be unavailable to an indemnified party with respect to any loss, liability, claim, damage, or expense referred to therein, then the indemnifying party, in lieu of indemnifying such indemnified party hereunder, shall contribute to the amount paid or payable by such indemnified party as a result of such loss, liability, claim, damage, or expense in such proportion as is appropriate to reflect the relative fault of the indemnifying party on the one hand and of the indemnified party on the other in connection with the statements or omissions that resulted in such loss, liability, claim, damage, or expense as well as any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission to state a material fact relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission. Notwithstanding the provisions of this paragraph of Section 1.10, in no case shall any one Holder be liable or responsible for any amount in excess of the net proceeds received by such Holder from the offering of Registrable Securities; *provided*, *however*, that no person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution for any person who was not guilty of such fraudulent misrepresentation. Any party entitled to contribution will, promptly after receipt of notice of commencement of any action, suit or proceeding against such party or parties under this Section, notify such party or parties from whom such contribution may be sought, but the omission so to notify such party or parties from contribution may be sought shall not relieve such party from any other obligation it or they may have thereunder or otherwise under this Section. No party shall be liable for contribution with respect to any action, suit, proceeding or claim settled without its prior written consent, which consent shall not be unreasonably withheld.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) The obligations of the Company and Holders under this Section 1.10 shall survive the completion of any offering of Registrable Securities in a registration statement under this Section 1, and otherwise.

1.11 Reports Under Securities Exchange Act of 1934. With a view to making available to the Holders the benefits of Rule 144 promulgated under the Act (***"Rule 144"***) and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company agrees to:

(a) make and keep public information available, as those terms are understood and defined in Rule 144, at all times after ninety (90) days after the effective date of the first registration statement filed by the Company for the offering of its securities to the general public;

(b) file with the SEC in a timely manner all reports and other documents required of the Company under the Act and the 1934 Act; and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) a written statement by the Company that it has complied with the reporting requirements of Rule 144 (at any time after ninety (90) days after the effective date of the first registration statement filed by the Company), the Act and the 1934 Act (at any time after it has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after it so qualifies), (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company, and (iii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC which permits the selling of any such securities without registration or pursuant to such form.

1.12 Form S-3 Registration. In case the Company shall receive from any Holder or Holders of Registrable Securities issued upon conversion of the Preferred Stock then outstanding a written request or requests that the Company effect a registration on Form S-3 and any related qualification or compliance with respect to all or a part of the Registrable Securities owned by such Holder or Holders, the Company will:

(a) promptly give written notice of the proposed registration, and any related qualification or compliance, to all other Holders; and

(b) as soon as practicable, effect such registration and all such qualifications and compliances as may be so requested and as would permit or facilitate the sale and distribution of all or such portion of such Holder's or Holders' Registrable Securities as are specified in such request, together with all or such portion of the Registrable Securities of any other Holder or Holders joining in such request as are specified in a written request given within 15 days after giving of such written notice by the Company; *provided, however*, that the Company shall not be obligated to effect any such registration, qualification or compliance, pursuant to this Section 1.12: (1) if Form S-3 is not available for such offering by the Holders; (2) if the Holders, together with the holders of any other securities of the Company entitled to inclusion in such registration, propose to sell Registrable Securities and such other securities (if any) at an aggregate price to the public (before any underwriters' discounts or commissions) of less than $2,500,000; (3) if the Company shall furnish to the Holders a certificate signed by the President of the Company stating that in the good faith judgment of the Board of Directors of the Company, it would be seriously detrimental to the Company and its stockholders for such Form S-3 registration to be effected at such time, in which event the Company shall have the right to defer the filing of the Form S-3 registration statement for one (1) period of not more than ninety (90) days after receipt of the request of the Holder or Holders under this Section 1.12 in any twelve (12) month period, provided that the Company shall not register any other of its securities during such ninety (90) day period other than pursuant to a Special Registration Statement (as defined below); (4) if the Company has already effected one (1) registration on Form S-3 within the preceding six (6) months; or (5) in any particular jurisdiction in which the Company would be required to qualify to do business or to execute a general consent to service of process in effecting such registration, qualification or compliance.

(c) Subject to the foregoing, the Company shall file a registration statement covering the Registrable Securities and other securities so requested to be registered as soon as practicable after receipt of the request or requests of the Holders. All expenses incurred in connection with a registration requested pursuant to Section 1.12, including (without limitation) all registration, filing, qualification, printer's and accounting fees and the reasonable fees and disbursements of one (1) special counsel for the selling Holder or Holders and another counsel for the Company, shall be borne by the Company; provided that following such time as the Company has effected two (2) registrations on Form S-3 pursuant to this Section 1.12 during any consecutive twelve (12) month period, all expenses incurred in connection with any further Form S-3 registrations effected pursuant to this Section 1.12 during such period shall be borne pro rata by the Holder or Holders participating in the Form S-3 registration. Registrations effected pursuant to this Section 1.12 shall not be counted as demands for registration or registrations effected pursuant to Sections 1.2 or 1.3, respectively.

1.13 Assignment of Registration Rights. The rights to cause the Company to register Registrable Securities pursuant to this Section 1 may be assigned (but only with all related obligations) by a Holder to (i) any partner or retired partner of any Holder which is a partnership, (ii) any family member or trust for the benefit of any individual Holder or any such family member, or (iii) any transferee or assignee (other than a competitor of the Company, as determined in good faith by the Company's Board of Directors) who acquires at least 25,000 shares of Registrable Securities (as adjusted for stock splits, dividends, recapitalizations and the like with respect to such shares) provided: (a) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee or assignee and the securities with respect to which such registration rights are being assigned; (b) such transferee or assignee agrees in writing to be bound by and subject to the terms and conditions of this Agreement, including without limitation the provisions of Section 1.15 below; and (c) such assignment shall be effective only if immediately following such transfer the further disposition of such securities by the transferee or assignee is restricted under the Act.

1.14 "Market Stand-Off" Agreement. Each Investor hereby agrees that, during the period of duration specified by the Company and an underwriter of Common Stock or other securities of the Company, following the effective date of a registration statement of the Company filed under the Act in connection with the Company's initial public offering, it shall not, to the extent requested by the Company and such underwriter, directly or indirectly sell, offer to sell, contract to sell (including, without limitation, any short sale), grant any option to purchase or otherwise transfer or dispose of (other than to donees who agree to be similarly bound, effective immediately upon the transfer of securities to any such donees) any securities of the Company held by it at any time during such period except Common Stock included in such registration; *provided*, *however*, that:

(a) such agreement shall not exceed one hundred eighty (180) days (or such longer period, not to exceed 18 days after the expiration of the 180-day period, as the underwriters or the Company shall request in order to facilitate compliance with NASD Rule 2711) following the effective date of such registration statement of the Company filed under the Act; and

(b) all executive officers and directors of the Company then holding Common Stock and each stockholder of the Company holding in the aggregate at least 1% of the Company's equity securities on a fully-diluted basis (whether or not pursuant to this Agreement) enter into similar agreements; *provided*, *however*, that all restrictions set forth in this Section 1.14 on all such Investors shall terminate and be of no further force or effect if any such officer or director or any such stockholder is released from, or otherwise no longer bound by, such restrictions.

In order to enforce the foregoing covenant, the Company may place restrictive legends on the certificates representing, and impose stop-transfer instructions with respect to, the Registrable Securities of the Investor (and the shares or securities of every other person subject to the foregoing restriction) until the end of such period. Notwithstanding the foregoing, the obligations described in this Section 1.14 shall not apply to a registration relating solely to employee benefit plans on Form S-l or Form S-8 or similar forms which may be promulgated in the future, or a registration relating solely to a Commission Rule 145 transaction on Form S-4 or similar forms which may be promulgated in the future (a ***"Special Registration Statement"***).

1.15 Termination of Registration Rights.

(a) No Holder shall be entitled to exercise any right provided for in this Section 1 after five (5) years following the consummation of the sale of securities pursuant to a registration statement filed by the Company under the Act in connection with the initial firm commitment underwritten offering of its securities to the general public, in connection with which all shares of Preferred Stock convert into Common Stock.

(b) In addition, the right of any Holder to request registration or inclusion in any registration pursuant to Section 1.3 shall terminate on the closing of the first Company-initiated registered public offering of Common Stock of the Company if all shares of Registrable Securities held or entitled to be held upon conversion by such Holder may immediately be sold under Rule 144 during any 90-day period, or on such date after the closing of the first Company-initiated registered public offering of Common Stock of the Company as all shares of Registrable Securities held or entitled to be held upon conversion by such Holder may immediately be sold under Rule 144 during any 90-day period.

1.16 Limitation on Subsequent Registration Rights. After the date of this Agreement, the Company shall not, without the prior written consent of the Series F Requisite Investors, enter into any agreement with any holder or prospective holder of any securities of the Company that would grant such holder registration rights on a parity with or senior to those granted to the Holders hereunder, other than the right to a Special Registration Statement.

SECTION 2. COVENANTS OF THE COMPANY.

2.1 Delivery of Financial Statements and Annual Operating Budget. Subject to Section 2.3, upon request the Company shall deliver to each Investor that holds a minimum aggregate of 500,000 shares of Preferred Stock (as adjusted for stock splits, dividends, recapitalizations and the like with respect to such shares) (a ***"Major Investor"***), as soon as practicable:

(a) but not later than 120 days following the end of each fiscal year of the Company, an income statement for such fiscal year, a balance sheet of the Company and statement of stockholder's equity as of the end of such fiscal year, and a schedule as to the sources and applications of funds for such fiscal year, such fiscal year-end financial reports to be in reasonable detail, prepared in accordance with generally accepted accounting principles, and audited and certified by independent public accountants selected by the Company's Board of Directors, including at least one of the Series F Directors (as such term is defined in the Company's Amended and Restated Certificate of Incorporation as in effect from time to time (the ***"Restated Certificate"***));

(b) but not later than 45 days following the end of each fiscal year of the Company, a preliminary unaudited income statement for such fiscal year, and a preliminary unaudited balance sheet of the Company and a preliminary unaudited statement of stockholder's equity as of the end of such fiscal year;

(c) but not later than 30 days following the end of each calendar month or fiscal quarter of the Company, unaudited financial statements of the Company for such month or fiscal quarter; and

(d) but not later than 30 days before the beginning of each fiscal year of the Company, an annual operating budget of the Company for such fiscal year, which shall be approved by the Company's Board of Directors prior to the commencement of such fiscal year.

2.2 Inspection. Subject to Section 2.3, the Company shall permit each Investor, at such Investor's expense, to visit and inspect the Company's properties, to examine its books of account and records and to discuss the Company's affairs, finances and accounts with its officers, all at such reasonable times as may be requested by the Investor; *provided*, *however*, that the Company shall not be obligated pursuant to this Section 2.2 to provide access to any information which it reasonably considers to be a trade secret or similar confidential information.

2.3 Confidentiality; Assignment of Information and Inspection Rights. Each Investor agrees to use the same degree of care as such Investor uses to protect its own confidential information to keep confidential any information furnished to such Investor (including pursuant to Sections 2.1 and 2.2) that the Company marks as being confidential or proprietary (so long as such information is not in the public domain), except that such Investor may disclose such proprietary or confidential information (i) to any partner, member, subsidiary, parent, affiliate, advisor, attorney, accountant or auditor of such Investor as long as such partner, member, subsidiary, parent or affiliate is advised of the confidentiality provisions of this Section 2.3, (ii) at such time as it enters the public domain through no fault of such Investor, (iii) that is communicated to it free of any obligation of confidentiality or (iv) that is developed by Investor or its agents independently of and without reference to any confidential information communicated by the Company. Each Investor may release without liability of any kind any information in its possession if such release is pursuant to a valid order of a court or other government body of the United States or any state thereof; *provided that* such Investor provides the Company with reasonable prior written notice of such disclosure and makes a reasonable effort to obtain, or to assist the Company in obtaining, a protective order preventing or limiting the disclosure and/or requiring that the confidential information so disclosed be used only for the purposes for which the law or regulation required, or for which the order was issued. Notwithstanding the foregoing, the terms of the Financing shall not be considered to be confidential or proprietary. The information and inspection rights set forth in Sections 2.1 and 2.2 may not be assigned or transferred other than to affiliates of an Investor.

2.4 Approval of Related Party Transactions. After the date of this Agreement, the Company shall not, without the approval of a majority of the disinterested members of the Board of Directors of the Company (to the extent applicable, including the affirmative vote or written consent of each of the Preferred Directors (as such term is defined in the Restated Certificate)), authorize or enter into any transaction with any director or officer of the Company, such director's or officer's affiliates or immediate family members, or the spouses of or trusts or other entities formed solely for the benefit of, or controlled by, such director, officer or immediate family members.

2.5 Insurance Policies. The Company shall at all times maintain (i) a directors' and officers' insurance policy in the amount of at least $5,000,000, which shall include employment practices liability coverage, and (ii) a "key person" life insurance policy in the amount of at least $1,000,000, naming the Company as beneficiary, for George Painter.

2.6 Assignment of Right of First Refusal. In the event the Company elects not to exercise any right of first refusal the Company may have on a proposed transfer of any of the Company's outstanding capital stock, the Company shall, to the extent it may do so, assign such right of first refusal to each Investor that holds at least 500,000 shares in the aggregate of Series C Stock, Series D Stock, Series E Stock and/or Series F Stock (as adjusted for stock splits, dividends, recapitalizations and the like with respect to such shares) (a ***"Series C/D/E/F Stock Major Investor"***) no later than 20 days prior to the expiration thereof. In the event of such assignment, each Series C/D/E/F Stock Major Investor shall have a right to purchase its *pro rata* portion of the capital stock proposed to be transferred within 10 days following the date of such assignment. For purposes of the preceding sentence, a Series C/D/E/F Stock Major Investor's *pro rata* portion shall be equal to the product obtained by multiplying (i) the aggregate number of shares proposed to be transferred by (ii) a fraction, the numerator of which is the number of shares of Common Stock issuable upon conversion of the Series C Stock, Series D Stock, Series E Stock and Series F Stock held by such Series C/D/E/F Stock Major Investor at the time of the proposed transfer and the denominator of which is the total number of shares of Common Stock issuable upon conversion of the Series C Stock, Series D Stock, Series E Stock and Series F Stock held by all Series C/D/E/F Stock Major Investors at the time of such proposed transfer. If all of the Series C/D/E/F Stock Major Investors do not elect to purchase their full *pro rata* portion of the capital stock proposed to be transferred within such 10 day period, each Series C/D/E/F Stock Major Investor who does so elect shall have the right to acquire its *pro rata* portion of the unsubscribed shares within the following 10 day period. For purposes of the preceding sentence, a Series C/D/E/F Stock Major Investor's *pro rata* portion shall be determined as described above, except that the denominator of the fraction described in clause (ii) above shall be the total number of shares of Common Stock issuable upon conversion of the Series C Stock, Series D Stock, Series E Stock and Series F Stock owned by all Series C/D/E/F Stock Major Investors who initially elect to purchase their full *pro rata* portion of the capital stock proposed to be transferred.

2.7 Right of First Offer. Subject to the terms and conditions specified in this Section 2.7, the Company hereby grants to each Major Investor a right of first offer with respect to future issuance or sales by the Company of its Shares (as defined below). A Major Investor shall be entitled to apportion the right of first offer granted under this Agreement among itself and its partners and affiliates in such proportions as it deems appropriate. Each time the Company proposes to offer any shares of, or securities convertible into or exercisable or exchangeable for any shares of, any class of its capital stock or any phantom stock or stock appreciation rights (***"Shares"***), the Company shall first make an offering of such Shares to each Major Investor in accordance with the following provisions:

(a) The Company shall deliver a notice by certified mail (***"Notice"***) to the Major Investors stating (i) its bona fide intention to offer such Shares, (ii) the number of such Shares to be offered, and (iii) the price and terms, if any, upon which it proposes to offer such Shares. If the consideration to be paid by others for the Shares is not cash, the fair market value of the consideration shall be determined in good faith by the Company's Board of Directors and a reasonably detailed explanation of such determination of fair market value shall be included in the Notice. All Major Investors electing to participate in the offering of such Shares shall pay the cash equivalent thereof as so determined.

(b) By written notification received by the Company within 20 calendar days after giving of the Notice, each Major Investor may elect to purchase or obtain, at the price and on the terms specified in the Notice, up to that portion of such Shares which equals the proportion that the number of shares of Common Stock issued and held, including all shares of Common Stock issuable upon conversion of the Preferred Stock then held, by such Major Investor bears to the total number of shares of Common Stock of the Company then outstanding (assuming full conversion of all convertible securities) (the ***"Pro Rata Portion"***). The Company shall promptly, in writing, inform each Major Investor which purchases all the shares available to it (***"Fully-Exercising Investor"***) of any other Major Investor's failure to do likewise (the ***"Non-Fully Exercising Investor"***). During the ten-day period commencing after such information is given, each Fully-Exercising Investor shall be entitled to obtain that portion of the Shares not subscribed for by the Major Investors which is equal to the proportion that the number of shares of Common Stock issued and held, including all shares of Common Stock issuable upon conversion of Preferred Stock then held, by such Fully-Exercising Investor bears to the total number of shares of Common Stock issued and held, including all shares of Common Stock issuable upon conversion of the Preferred Stock then held, by all Fully-Exercising Investors who wish to purchase some of the unsubscribed shares.

(c) If all Shares are not elected to be obtained as provided in Section 2.7(b), the Company may, for 90 business days following the expiration of the period provided in Section 2.7(b), offer the remaining unsubscribed portion of such Shares to any person or persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Notice. If the Company does not enter into an agreement for the sale of the Shares within such period, the right provided hereunder shall be deemed to be revived and such Shares shall not be offered unless first reoffered to the Major Investors in accordance herewith.

(d) The right of first offer in this Section 2.7 shall not be applicable to the issuance or sale of (i) (A) up to 7,242,242 shares of Common Stock (as adjusted for any stock dividends, combinations and splits with respect to such shares of Common Stock) issued pursuant to the exercise of the stock options granted pursuant to the Company's 2002 Equity Incentive Plan (as amended, the ***"Option Plan"***) and outstanding on the date hereof, (B) up to 3,770,584 shares of Common Stock (as adjusted for any stock dividends, combinations and splits with respect to such shares of Common Stock) issued as restricted stock awards, or issuable upon exercise of stock options issued or granted after the date hereof pursuant to the Option Plan or (C) shares of Common Stock issued as restricted stock awards, or issuable upon exercise of stock options issued or granted after the date hereof pursuant to the Option Plan to the extent that any stock options or restricted stock awards previously granted pursuant to clause (A) or clause (B) of this Section 2.7(d)(i) are canceled or expire unexercised or are repurchased upon termination of service to the Company, in each such case, issued to employees, officers, directors or consultants for the primary purpose of soliciting or retaining their employment or services for the benefit of the Company, (ii) Shares issued upon or after consummation of a bona fide, firmly underwritten public offering of shares of Common Stock, registered under the Act pursuant to a registration statement on Form S-1, in connection with which all shares of Preferred Stock convert into Common Stock, (iii) Shares issued pursuant to the exercise of warrants outstanding as of the date hereof, (iv) Shares issued as acquisition consideration in connection with a bona fide business acquisition by the Company, whether by merger, consolidation, sale of assets, sale or exchange of stock or otherwise, if such issuance or sale is approved by the Company's Board of Directors, (v) Shares in an amount covering up to 500,000 shares of Common Stock (as adjusted for stock splits, dividends, recapitalizations and the like with respect to such shares), issued pursuant to any leasing arrangement or debt financing from a bank or similar financial institution, or pursuant to any research and development or other strategic partnership, licensing or collaborative arrangements and other similar transactions, if such issuance or sale is approved by the Company's Board of Directors including the affirmative vote or written consent of at least one of the Series F Directors (as defined in the Restated Certificate), (vi) Shares issued pursuant to the Purchase Agreement, (vii) Shares issued upon the exercise of warrants issued pursuant to the Purchase Agreement, (viii) Shares issued upon conversion of the Preferred Stock or (ix) Shares issued in connection with any stock split or other stock dividend by the Company.

(e) Any and all rights arising under this Section 2.7 with respect to the issuance or sale of any Shares may be waived, either prospectively or retrospectively, by the written consent of (i) the Major Investors that hold a majority of the shares of Common Stock issued or issuable upon conversion of the shares of Series E Stock held by all Major Investors, voting as a separate class, and (ii) the Series F Requisite Investors, voting as a separate class, and any such waiver shall be effective as to all Major Investors with such rights under this Section 2.7.

2.8 Proprietary Information and Inventions Agreements. The Company hereby covenants that it shall require each new officer and employee of the Company and its subsidiaries to enter into and execute a Proprietary Information and Inventions Agreement in the standard form used by the Company, and that it shall require each new consultant of the Company and its subsidiaries to enter into and execute an agreement containing similar terms.

2.9 Use of Proceeds. Unless otherwise determined by the Company's Board of Directors (including the affirmative vote or written consent of the Series F Directors), the Company shall use the proceeds of the sale of Series F Stock in all material respects pursuant to the Company's business plan, including the use of funds schedule and work plan, provided to the holders of Series F Stock prior to the date hereof.

2.10 Qualified Small Business Stock. The Company will use reasonable efforts to not take any action that would cause the Series F Stock to not qualify as "Qualified Small Business Stock" under Section 1202 of the Internal Revenue Code of 1986, as amended. The Company will use reasonable efforts to comply with the reporting and record keeping requirements of Section 1202 of the Internal Revenue Code of 1986, as amended, any regulations promulgated thereunder and any similar state laws and regulations and agrees not to repurchase any stock of the Company if such repurchase would cause such shares not to so qualify as "Qualified Small Business Stock."

2.11 Stock Vesting. Unless otherwise approved by the Company's Board of Directors, including at least one of the Series F Directors, all stock options, rights to purchase stock and other stock equivalents (collectively, ***"Stock Awards"***) issued after the date of this Agreement to employees, directors, consultants and other service providers shall be subject to vesting as follows: (a) twenty-five percent (25%) of such stock shall vest at the end of the first year following either the date of issuance or the first of the month following such person's commencement of service to the Company, and (b) seventy-five percent (75%) of such stock shall vest ratably monthly over the remaining three (3) years; *provided, however*, that the vesting of any such stock (including any Stock Award issued on or prior to the date of this Agreement) may be accelerated upon the approval of the Company's Board of Directors, including at least one of the Series F Directors. Any Stock Awards issued after the date of this Agreement shall not be subject to any vesting acceleration or severance benefits, whether in stock, cash or other form, other than pursuant to the terms of the Option Plan or other employment agreements or severance agreements in effect as of the date hereof.

2.12 Management Carve-Out Plan. As soon as practicable following the Initial Closing, the Company and the Investors shall take all reasonable steps necessary to implement a management carve-out plan (the ***"Carve-Out Plan"***) whereby the Company's management will be entitled to a minimum of ten percent (10%) of the total proceeds available for distribution to the Company's stockholders upon the closing of an Acquisition or Asset Transfer (each as defined in the Restated Certificate). The Carve-Out Plan shall be subject to the approval of the Company's Board of Directors including the affirmative vote or written consent of both of the Series F Directors. It is anticipated that the Carve-Out Plan will contain provisions generally providing for reductions in proceeds payable thereunder based on in-the-money equity awards held by the Company's management, the specific terms of which shall be set forth in the Carve-Out Plan.

2.13 Termination of Covenants. The covenants set forth in Sections 2.1 through 2.12 (other than the covenant set forth in Section 2.3, which shall survive indefinitely) shall terminate and be of no further force or effect upon the earlier of (i) the consummation of an underwritten public offering of the Company's Common Stock under the Act in connection with which all shares of Preferred Stock convert into Common Stock or (ii) the closing of an Asset Transfer or Acquisition. In addition, the covenants set forth in Sections 2.1 and 2.2 shall terminate and be of no further force or effect in the event the Company otherwise becomes subject to the periodic reporting requirements of Sections 12(b) or 15(d) of the 1934 Act.

SECTION 3. MISCELLANEOUS.

3.1 Successors and Assigns. Except as otherwise provided herein, the terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties (including transferees of any Registrable Securities). Nothing in this Agreement is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

3.2 Governing Law. This Agreement shall be governed by and construed under the laws of the State of Delaware as applied to agreements among Delaware residents entered into and to be performed entirely within Delaware.

3.3 Counterparts; Facsimile. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Facsimile and .PDF format signatures shall be as effective as original signatures.

3.4 Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

3.5 Notices. All notices required or permitted hereunder shall be in writing and shall be deemed effectively given: (i) upon personal delivery to the party to be notified, (ii) when sent by confirmed facsimile if sent during normal business hours of the recipient, if not, then on the next business day; (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the address as set forth on the signature page hereof or at such other address as such party may designate by ten (10) days' advance written notice to the other parties hereto.

3.6 Expenses. If any action at law or in equity is necessary to enforce or interpret the terms of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which such party may be entitled.

3.7 Amendments and Waivers. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of (i) the Company, (ii) the Series F Requisite Investors and (iii) the Holders of a majority of the Registrable Securities issued or issuable upon conversion of the Series E Stock then outstanding, voting as a separate class. Notwithstanding the foregoing, no amendment or waiver, which by its express terms affects the express rights or obligations hereunder of any Holder materially, adversely and differently than the express rights or obligations hereunder of the other Holders shall be binding as to such Holder unless that Holder consents in writing to such amendment or waiver. Any amendment or waiver effected in accordance with this paragraph shall be binding upon each Investor, the Company and each of their respective successors and permitted assigns.

3.8 Severability. If one or more provisions of this Agreement are held to be unenforceable under applicable law, such provision shall be excluded from this Agreement and the balance of the Agreement shall be interpreted as if such provision were so excluded and shall be enforceable in accordance with its terms.

3.9 Aggregation of Stock. All shares of Preferred Stock and Common Stock issued upon conversion thereof held or acquired by affiliated entities or persons shall be aggregated together for the purpose of determining the availability of any rights under this Agreement.

3.10 Entire Agreement. This Agreement and the Purchase Agreement, each of even date herewith and the documents contemplated hereby and thereby constitute the full and entire understanding and agreement between the parties with regard to the subject matter hereof and thereof including the Prior Agreement.

3.11 Termination of Prior Agreement. This Agreement supersedes and replaces the Prior Agreement in its entirety, and such Prior Agreement shall be of no further force or effect upon execution of this Agreement by all parties hereto. Each of the Company and the Prior Investors that are party to the Prior Agreement hereby expressly consents and agrees to this amendment and restatement of the Prior Agreement and the Company represents and warrants to the other parties to the Purchase Agreement that this Agreement has been duly approved by consents of the parties to the Prior Agreement sufficient to constitute a valid amendment to the Prior Agreement that is binding on all parties to the Prior Agreement.

3.12 Delays or Omissions. It is agreed that no delay or omission to exercise any right, power or remedy accruing to any party, upon any breach, default or noncompliance by another party under this Agreement, shall impair any such right, power or remedy, nor shall it be construed to be a waiver of any such breach, default or noncompliance, or any acquiescence therein, or of or in any similar breach, default or noncompliance thereafter occurring. It is further agreed that any waiver, permit, consent or approval of any kind or character on any party's part of any breach, default or noncompliance under this Agreement or any waiver on such party's part of any provisions or conditions of this Agreement must be in writing and shall be effective only to the extent specifically set forth in such writing.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

In Witness Whereof, the parties have executed this Agreement as of the date first above written.

COMPANY:

CHIMERIX, INC.

By: /s/ Kenneth I. Moch
Kenneth I. Moch
Chief Executive Officer

Address: 2505 Meridian Parkway
Suite 340
Durham, NC 27713

Fax: (919) 806-1146

[SIGNATURE PAGE TO AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT]

INVESTORS:

ALTA BIOPHARMA PARTNERS III, L.P

By: Alta Biopharma Management Partners III, LLC

/s/ Hilary Strain

Name: Hilary Strain
Title: CFO

Address: One Embarcadero Center
37th Floor
San Francisco, CA 94111

Fax:

ALTA BIOPHARMA PARTNERS III GMBH & CO. BETEILIGUNGS KG

By: Alta Biopharma Management Partners III, LLC

/s/ Hilary Strain

Name: Hilary Strain
Title: CFO

Address: One Embarcadero Center
37th Floor
San Francisco, CA 94111

Fax:

ALTA EMBARCADERO BIOPHARMA PARTNERS III, LLC

/s/ Hilary Strain

Name: Hilary Strain
Title: CFO

Address: One Embarcadero Center
37th Floor
San Francisco, CA 94111

Fax:

INVESTORS:

ASSET MANAGEMENT PARTNERS 2004, L.P.

/s/ Franklin P. Johnson Jr.

Name: Franklin P. Johnson, Jr.
Title: Member of General Partner

ASSET MANAGEMENT PARTNERS

/s/ Franklin P. Johnson, Jr.

Name: Franklin P. Johnson, Jr.
Title: General Partner

Address: 2100 Geng Road, Suite 200
Palo Alto, CA 94303

Fax: (650) 856-1826

[SIGNATURE PAGE TO AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT]

INVESTORS:

CANAAN VII L.P.

By: Canaan Partners VII LLC

/s/ Seth A. Rudnick

Name: Seth A. Rudnick
Title: General Partner

Address: 285 Riverside Avenue
Suite 250
Westport, CT 06880

Fax: (203) 854-9117

INVESTORS:

FRAZIER HEALTHCARE IV, L.P.
FRAZIER AFFILIATES IV, L.P.

By: FHM IV, LP, its general partner
By: FHM IV, LLC, its general partner

By: /s/ Patrick Heron
Name: Patrick Heron
Title: Authorized Representative Officer

Address: c/o Frazier Healthcare Ventures
2 Union Sq Bldg., Suite 3200
601 Union St.
Seattle, WA 98012

Fax: (206) 621-1848

INVESTORS:

MORNINGSIDE VENTURE INVESTMENTS LIMITED

/s/ Lars Sorensen /s/ Louise Garbarino

Name: Lars Sorensen / Louise Garbarino
Title: Authorized Signatures

Address:
2nd Floor, Le Prince de Galles, 3-5
Avenue des Citronniers, MC98000
Monaco

[SIGNATURE PAGE TO AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT]

INVESTORS:

NEW LEAF VENTURES II, L.P.

By: New Leaf Venture Associates II, L.P.
Its: General Partner
By: New Leaf Venture Management II, L.L.C.
Its: General Partner

By: /s/ James Niedel

Name: James Niedel
Title: Managing Director

Address:
Times Square Tower
7 Times Square, Suite 1603
New York, NY 10036
Attention: Philippe Chambon

Fax: (646) 871-6450

With a copy (which shall not constitute notice) to:

Fulbright & Jaworski L.L.P.
666 Fifth Avenue
New York, NY 10103
Attention: Michael R. Flynn
Fax: (212) 318-3400

INVESTORS:

A.M. PAPPAS LIFE SCIENCE VENTURES IV, L.P.

By: AMP&A Management IV, LLC
Its: General Partner

By: /s/ Ford S. Worthy
Name: Ford S. Worthy
Title: Chief Financial Officer and Partner

PV IV CEO FUND, L.P.

By: AMP&A Management IV, LLC
Its: General Partner

By: /s/ Ford S. Worthy
Name: Ford S. Worthy
Title: Chief Financial Officer and Partner

A.M. PAPPAS LIFE SCIENCE VENTURES III, L.P.

By: AMP&A Management III, LLC
Its: General Partner

By: /s/ Ford S. Worthy
Name: Ford S. Worthy
Title: Chief Financial Officer and Partner

PV III CEO FUND, LP

By: AMP&A Management III, LLC
Its: General Partner

By: /s/ Ford S. Worthy
Name: Ford S. Worthy
Title: Chief Financial Officer and Partner

[SIGNATURE PAGE TO AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT]

INVESTORS:

SANDERLING VENTURE PARTNERS V, L.P.
SANDERLING V BIOMEDICAL, L.P.
SANDERLING V LIMITED PARTNERSHIP
SANDERLING V BETEILIGUNGS GMBH & CO. KG

By: Middleton, McNeil & Mills
Associates V, LLC

/s/ Timothy J. Wollaeger

Timothy J. Wollaeger
Managing Director

Address: 400 South El Camino Real
Suite 1200
San Mateo, CA 94402

Fax: (650) 375-7073

SANDERLING VENTURES MANAGEMENT V

/s/ Timothy J. Wollaeger

Timothy J. Wollaeger
Owner

Address: 400 South El Camino Real
Suite 1200
San Mateo, CA 94402

Fax: (650) 375-7073

INVESTORS:

SANDERLING VENTURE PARTNERS VI CO-INVESTMENT FUND, L.P.
SANDERLING VI BETEILIGUNGS GMBH & CO. KG
SANDERLING VI LIMITED PARTNERSHIP

By: Middleton, McNeil Mills & Associates VI, LLC

/s/ Timothy J. Wollaeger
Timothy J. Wollaeger
Managing Director

Address: 400 South El Camino Real
Suite 1200
San Mateo, CA 94402-1708

Fax: (650) 375-7073

SANDERLING VENTURES MANAGEMENT VI

/s/ Timothy J. Wollaeger
Timothy J. Wollaeger
Owner

Address: 400 South El Camino Real
Suite 1200
San Mateo, CA 94402-1708

Fax: (650) 375-7073

[SIGNATURE PAGE TO AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT]

INVESTORS:

SANDERLING V BIOMEDICAL CO-INVESTMENT FUND, L.P.
SANDERLING VENTURE PARTNERS V CO-INVESTMENT FUND, L.P.

By: Middleton, McNeil & Mills
Associates V, LLC

/s/ Timothy J. Wollaeger
Timothy J. Wollaeger
Managing Director

Address: 400 South El Camino Real
Suite 1200
San Mateo, CA 94402-1708

Fax: (650) 375-7073

INVESTORS:

SANDERLING V STRATEGIC EXIT FUND, L.P.

By: Middleton, McNeil & Mills Associates V, LLC

/s/ Timothy J. Wollaeger
Timothy J. Wollaeger
Managing Director

[SIGNATURE PAGE TO AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT]

INVESTORS:

Stephen Bloch

/s/ Stephen Bloch

Dan Ciporin

/s/ Dan Ciporin

Graham Crooke

/s/ Graham Crooke

Stephen Heidel

/s/ Stephen Heidel

Don Grayson

/s/ Don Grayson

SCHEDULE A

INVESTORS

Alta Biopharma Partners III, L.P.
Alta Biopharma Partners III GmbH & Co. Beteiligungs KG
Alta Embarcadero Biopharma Partners III, LLC
Asset Management Partners
Asset Management Partners 2004, L.P.
Stephen Bloch
Canaan VII L.P.
Dan Ciporin
Jonathan M. D. Cool
Graham Crooke
William R. Daniels III
Bennett Dubin
Frazier Healthcare IV, L.P.
Frazier Affiliates IV, L.P.
General Electric Capital Corporation **
Don Grayson
Stephen Heidel
Hutton Living Trust dated 12/10/96
Franklin P. Johnson, Jr.
Warren Lee
Morningside Venture Investments Limited
New Leaf Ventures II, L.P.
A.M. Pappas Life Science Ventures IV, L.P.
PV IV CEO Fund, L.P.
A.M. Pappas Life Science Ventures III, L.P.
PV III CEO Fund, LP
Sanderling Venture Partners V, L.P.
Sanderling V Biomedical, L.P.
Sanderling V Limited Partnership
Sanderling V Beteiligungs GmbH & Co. KG
Sanderling Ventures Management V
Sanderling V Biomedical Co-Investment Fund, L.P.
Sanderling Venture Partners V Co-Investment Fund, L.P.
Sanderling V Strategic Exit Fund, L.P.
Sanderling Venture Partners VI Co-Investment Fund, L.P.
Sanderling VI Beteiligungs GmbH & Co. KG
Sanderling VI Limited Partnership
Sanderling Ventures Management VI
Shellwater & Co., as nominee for the University of California, San Diego *
Silicon Valley Bank***

* Solely for purposes of the “piggyback” registration rights granted pursuant to Section 1.3 herein.
** Solely for purposes of the registration rights granted pursuant to Section 1 herein.
*** Solely for purposes of the “piggyback” and Form S-3 registration rights granted pursuant to Sections 1.3 and 1.12, respectively, herein.

Exhibit 10.1

INDEMNITY AGREEMENT

This Indemnity Agreement (this ***"Agreement"***) dated as of _____, is made by and between **Chimerix, Inc.**, a Delaware corporation (the ***"Company"***), and **_____** (***"Indemnitee"***).

Recitals

A. The Company desires to attract and retain the services of highly qualified individuals as directors, officers, employees and agents.

B. The Company's Amended and Restated Bylaws (the ***"Bylaws"***) require that the Company indemnify its directors, and empowers the Company to indemnify its officers, employees and agents, as authorized by the Delaware General Corporation Law, as amended (the ***"DGCL"***), under which the Company is organized, and such Bylaws expressly provide that the indemnification provided therein is not exclusive and contemplates that the Company may enter into separate agreements with its directors, officers and other persons to set forth specific indemnification provisions.

C. Indemnitee does not regard the protection currently provided by applicable law, the Company's governing documents and available insurance as adequate under the present circumstances, and the Company has determined that Indemnitee and other directors, officers, employees and agents of the Company may not be willing to serve or continue to serve in such capacities without additional protection.

D. The Company desires and has requested Indemnitee to serve or continue to serve as a director, officer, employee or agent of the Company, as the case may be, and has proffered this Agreement to Indemnitee as an additional inducement to serve in such capacity.

E. Indemnitee is willing to serve, or to continue to serve, as a director, officer, employee or agent of the Company, as the case may be, if Indemnitee is furnished the indemnity provided for herein by the Company.

Agreement

Now Therefore, in consideration of the mutual covenants and agreements set forth herein, the parties hereto, intending to be legally bound, hereby agree as follows:

1. Definitions.

(a) Agent. For purposes of this Agreement, the term "agent" of the Company means any person who: (i) is or was a director**,** officer, employee or other fiduciary of the Company or a subsidiary of the Company; or (ii) is or was serving at the request or for the convenience of, or representing the interests of, the Company or a subsidiary of the Company, as a director, officer, employee or other fiduciary of a foreign or domestic corporation, partnership, joint venture, trust or other enterprise.

(b) Expenses. For purposes of this Agreement, the term "expenses" shall be broadly construed and shall include, without limitation, all direct and indirect costs of any type or nature whatsoever (including, without limitation, all attorneys', witness, or other professional fees and related disbursements, and other out-of-pocket costs of whatever nature), actually and reasonably incurred by Indemnitee in connection with the investigation, defense or appeal of a proceeding or establishing or enforcing a right to indemnification under this Agreement, the DGCL or otherwise, and amounts paid in settlement by or on behalf of Indemnitee, but shall not include any judgments, fines or penalties actually levied against Indemnitee for such individual's violations of law. The term "expenses" shall also include reasonable compensation for time spent by Indemnitee for which he is not compensated by the Company or any subsidiary or third party (i) for any period during which Indemnitee is not an agent, in the employment of, or providing services for compensation to, the Company or any subsidiary; and (ii) if the rate of compensation and estimated time involved is approved by the directors of the Company who are not parties to any action with respect to which expenses are incurred, for Indemnitee while an agent of, employed by, or providing services for compensation to, the Company or any subsidiary.

(c) Proceedings. For purposes of this Agreement, the term "proceeding" shall be broadly construed and shall include, without limitation, any threatened, pending, or completed action, suit, arbitration, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or any other actual, threatened or completed proceeding, whether brought in the right of the Company or otherwise and whether of a civil, criminal, administrative or investigative nature, and whether formal or informal in any case, in which Indemnitee was, is or will be involved as a party or otherwise by reason of: (i) the fact that Indemnitee is or was a director or officer of the Company; (ii) any action taken by Indemnitee or any action on Indemnitee's part while acting as director, officer, employee or agent of the Company; or (iii) the fact that Indemnitee is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, and in any such case described above, whether or not serving in any such capacity at the time any liability or expense is incurred for which indemnification, reimbursement, or advancement of expenses may be provided under this Agreement.

(d) Subsidiary. For purposes of this Agreement, the term "subsidiary" means any corporation or limited liability company of which more than 50% of the outstanding voting securities or equity interests are owned, directly or indirectly, by the Company and one or more of its subsidiaries, and any other corporation, limited liability company, partnership, joint venture, trust, employee benefit plan or other enterprise of which Indemnitee is or was serving at the request of the Company as a director, officer, employee, agent or fiduciary.

(e) Independent Counsel. For purposes of this Agreement, the term "independent counsel" means a law firm, or a partner (or, if applicable, member) of such a law firm, that is experienced in matters of corporation law and neither presently is, nor in the past five (5) years has been, retained to represent: (i) the Company or Indemnitee in any matter material to either such party, or (ii) any other party to the proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "independent counsel" shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement.

2. Agreement to Serve. Indemnitee will serve, or continue to serve, as a director, officer, employee or agent of the Company or any subsidiary, as the case may be, faithfully and to the best of his or her ability, at the will of such corporation (or under separate agreement, if such agreement exists), in the capacity Indemnitee currently serves as an agent of such corporation, so long as Indemnitee is duly appointed or elected and qualified in accordance with the applicable provisions of the bylaws or other applicable charter documents of such corporation, or until such time as Indemnitee tenders his or her resignation in writing; provided, however, that nothing contained in this Agreement is intended as an employment agreement between Indemnitee and the Company or any of its subsidiaries or to create any right to continued employment of Indemnitee with the Company or any of its subsidiaries in any capacity.

The Company acknowledges that it has entered into this Agreement and assumes the obligations imposed on it hereby, in addition to and separate from its obligations to Indemnitee under the Bylaws, to induce Indemnitee to serve, or continue to serve, as a director, officer, employee or agent of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as a director, officer, employee or agent of the Company.

3. Indemnification.

(a) Indemnification in Third Party Proceedings. Subject to Section 10 below, the Company shall indemnify Indemnitee to the fullest extent permitted by the DGCL, as the same may be amended from time to time (but, only to the extent that such amendment permits Indemnitee to broader indemnification rights than the DGCL permitted prior to adoption of such amendment), if Indemnitee is a party to or threatened to be made a party to or otherwise involved in any proceeding, for any and all expenses, actually and reasonably incurred by Indemnitee in connection with the investigation, defense, settlement or appeal of such proceeding.

(b) Indemnification in Derivative Actions and Direct Actions by the Company. Subject to Section 10 below, the Company shall indemnify Indemnitee to the fullest extent permitted by the DGCL, as the same may be amended from time to time (but, only to the extent that such amendment permits Indemnitee to broader indemnification rights than the DGCL permitted prior to adoption of such amendment), if Indemnitee is a party to or threatened to be made a party to or otherwise involved in any proceeding by or in the right of the Company to procure a judgment in its favor, against any and all expenses actually and reasonably incurred by Indemnitee in connection with the investigation, defense, settlement, or appeal of such proceedings.

(c) Fund Indemnitors. The Company hereby acknowledges that the Indemnitee has or may have in the future certain rights to indemnification, advancement of expenses and/or insurance provided by entities and/or organizations other than the Company (collectively, the ***"Fund Indemnitors"***). In the event that the Indemnitee is, or is threatened to be made, a party to or a participant in any proceeding to the extent resulting from any claim based on the Indemnitee's service to the Company as a director or other fiduciary of the Company, then the Company shall (i) be an indemnitor of first resort (*i.e.*, its obligations to Indemnitee are primary and any obligation of the Fund Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by Indemnitee are secondary), (ii) be required to advance reasonable expenses incurred by Indemnitee, and (iii) be liable for the full amount of all expenses, judgments, penalties, fines and amounts paid in settlement to the extent legally permitted and as required by the terms of this Agreement and any provision of the Bylaws or the Company's Amended and Restated Certificate of Incorporation (the ***"Certificate of Incorporation"***) (or any other agreement between the Company and Indemnitee), without regard to any rights Indemnitee may have against the Fund Indemnitors. The Company irrevocably waives, relinquishes and releases the Fund Indemnitors from any and all claims against the Fund Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. No advancement or payment by the Fund Indemnitors on behalf of Indemnitee with respect to any claim for which Indemnitee has sought indemnification from the Company shall affect the foregoing and the Fund Indemnitors shall have a right of contribution or be subrogated to the extent of such advancement or payment to all of the rights of recovery of Indemnitee against the Company. The Fund Indemnitors are third party beneficiaries of the terms of this Section.

4. Indemnification of Expenses of Successful Party. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee has been successful on the merits or otherwise in defense of any proceeding or in defense of any claim, issue or matter therein, including the dismissal of any action without prejudice, the Company shall indemnify Indemnitee against all expenses actually and reasonably incurred in connection with the investigation, defense or appeal of such proceeding.

5. Partial Indemnification. If Indemnitee is entitled under any provision of this Agreement to indemnification by the Company for some or a portion of any expenses actually and reasonably incurred by Indemnitee in the investigation, defense, settlement or appeal of a proceeding, but is precluded by applicable law or the specific terms of this Agreement to indemnification for the total amount thereof, the Company shall nevertheless indemnify Indemnitee for the portion thereof to which Indemnitee is entitled.

6. Advancement of Expenses. To the extent not prohibited by law, the Company shall advance the expenses incurred by Indemnitee in connection with any proceeding, and such advancement shall be made within twenty (20) days after the receipt by the Company of a statement or statements requesting such advances (which shall include invoices received by Indemnitee in connection with such expenses but, in the case of invoices in connection with legal services, any references to legal work performed or to expenditures made that would cause Indemnitee to waive any privilege accorded by applicable law shall not be included with the invoice) and upon request of the Company, an undertaking to repay the advancement of expenses if and to the extent that it is ultimately determined by a court of competent jurisdiction in a final judgment, not subject to appeal, that Indemnitee is not entitled to be indemnified by the Company. Advances shall be unsecured, interest free and without regard to Indemnitee's ability to repay the expenses. Advances shall include any and all expenses actually and reasonably incurred by Indemnitee pursuing an action to enforce Indemnitee's right to indemnification under this Agreement, or otherwise and this right of advancement, including expenses incurred preparing and forwarding statements to the Company to support the advances claimed. Indemnitee acknowledges that the execution and delivery of this Agreement shall constitute an undertaking providing that Indemnitee shall, to the fullest extent required by law, repay the advance if and to the extent that it is ultimately determined by a court of competent jurisdiction in a final judgment, not subject to appeal, that Indemnitee is not entitled to be indemnified by the Company. The right to advances under this Section shall continue until final disposition of any proceeding, including any appeal therein. This Section 6 shall not apply to any claim made by Indemnitee for which indemnity is excluded pursuant to Section 10(b).

7. Notice and Other Indemnification Procedures.

(a) Notification of Proceeding. Indemnitee will notify the Company in writing promptly upon being served with any summons, citation, subpoena, complaint, indictment, information or other document relating to any proceeding or matter which may be subject to indemnification or advancement of expenses covered hereunder. The failure of Indemnitee to so notify the Company shall not relieve the Company of any obligation which it may have to Indemnitee under this Agreement or otherwise.

(b) Request for Indemnification and Indemnification Payments. Indemnitee shall notify the Company promptly in writing upon receiving notice of any demand, judgment or other requirement for payment that Indemnitee reasonably believes to be subject to indemnification under the terms of this Agreement, and shall request payment thereof by the Company. Indemnification payments requested by Indemnitee under Section 3 hereof shall be made by the Company no later than sixty (60) days after receipt of the written request of Indemnitee. Claims for advancement of expenses shall be made under the provisions of Section 6 herein.

(c) Application for Enforcement. In the event the Company fails to make timely payments as set forth in Sections 6 or 7(b) above, Indemnitee shall have the right to apply to any court of competent jurisdiction for the purpose of enforcing Indemnitee's right to indemnification or advancement of expenses pursuant to this Agreement. In such an enforcement hearing or proceeding, the burden of proof shall be on the Company to prove that indemnification or advancement of expenses to Indemnitee is not required under this Agreement or permitted by applicable law. Any determination by the Company (including its Board of Directors, stockholders or independent counsel) that Indemnitee is not entitled to indemnification hereunder, shall not be a defense by the Company to the action nor create any presumption that Indemnitee is not entitled to indemnification or advancement of expenses hereunder.

(d) Indemnification of Certain Expenses. The Company shall indemnify Indemnitee against all expenses incurred in connection with any hearing or proceeding under this Section 7 unless the Company prevails in such hearing or proceeding on the merits in all material respects.

8. Assumption of Defense. In the event the Company shall be requested by Indemnitee to pay the expenses of any proceeding, the Company, if appropriate, shall be entitled to assume the defense of such proceeding, or to participate to the extent permissible in such proceeding, with counsel reasonably acceptable to Indemnitee. Upon assumption of the defense by the Company and the retention of such counsel by the Company, the Company shall not be liable to Indemnitee under this Agreement for any fees of counsel subsequently incurred by Indemnitee with respect to the same proceeding, provided that Indemnitee shall have the right to employ separate counsel in such proceeding at Indemnitee's sole cost and expense. Notwithstanding the foregoing, if Indemnitee's counsel delivers a written notice to the Company stating that such counsel has reasonably concluded that there may be a conflict of interest between the Company and Indemnitee in the conduct of any such defense or the Company shall not, in fact, have employed counsel or otherwise actively pursued the defense of such proceeding within a reasonable time, then in any such event the fees and expenses of Indemnitee's counsel to defend such proceeding shall be subject to the indemnification and advancement of expenses provisions of this Agreement.

9. Insurance. To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, officers, employees, or agents of the Company or of any subsidiary (***"D&O Insurance"***), Indemnitee shall be covered by such policy or policies in accordance with its or their terms to the maximum extent of the coverage available for any such director, officer, employee or agent under such policy or policies. If, at the time of the receipt of a notice of a claim pursuant to the terms hereof, the Company has D&O Insurance in effect, the Company shall give prompt notice of the commencement of such proceeding to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of Indemnitee, all amounts payable as a result of such proceeding in accordance with the terms of such policies.

10. Exceptions.

(a) Certain Matters. Any provision herein to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement to indemnify Indemnitee on account of any proceeding with respect to (i) remuneration paid to Indemnitee if it is determined by final judgment or other final adjudication that such remuneration was in violation of law (and, in this respect, both the Company and Indemnitee have been advised that the Securities and Exchange Commission believes that indemnification for liabilities arising under the federal securities laws is against public policy and is, therefore, unenforceable and that claims for indemnification should be submitted to appropriate courts for adjudication, as indicated in Section 10(d) below); (ii) a final judgment rendered against Indemnitee for an accounting, disgorgement or repayment of profits made from the purchase or sale by Indemnitee of securities of the Company against Indemnitee or in connection with a settlement by or on behalf of Indemnitee to the extent it is acknowledged by Indemnitee and the Company that such amount paid in settlement resulted from Indemnitee's conduct from which Indemnitee received monetary personal profit, pursuant to the provisions of Section 16(b) of the Securities Exchange Act of 1934, as amended, or other provisions of any federal, state or local statute or rules and regulations thereunder; (iii) a final judgment or other final adjudication that Indemnitee's conduct was in bad faith, knowingly fraudulent or deliberately dishonest or constituted willful misconduct (but only to the extent of such specific determination); or (iv) on account of conduct that is established by a final judgment as constituting a breach of Indemnitee's duty of loyalty to the Company or resulting in any personal profit or advantage to which Indemnitee is not legally entitled. For purposes of the foregoing sentence, a final judgment or other adjudication may be reached in either the underlying proceeding or action in connection with which indemnification is sought or a separate proceeding or action to establish rights and liabilities under this Agreement.

(b) Claims Initiated by Indemnitee. Any provision herein to the contrary notwithstanding, the Company shall not be obligated to indemnify or advance expenses to Indemnitee with respect to proceedings or claims initiated or brought by Indemnitee against the Company or its directors, officers, employees or other agents and not by way of defense, except (i) with respect to proceedings brought to establish or enforce a right to indemnification under this Agreement or under any other agreement, provision in the Bylaws or Certificate of Incorporation or applicable law, or (ii) with respect to any other proceeding initiated by Indemnitee that is either approved by the Board of Directors or Indemnitee's participation is required by applicable law. However, indemnification or advancement of expenses may be provided by the Company in specific cases if the Board of Directors determines it to be appropriate.

(c) Unauthorized Settlements. Any provision herein to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement to indemnify Indemnitee under this Agreement for any amounts paid in settlement of a proceeding effected without the Company's written consent. Neither the Company nor Indemnitee shall unreasonably withhold consent to any proposed settlement; provided, however, that the Company may in any event decline to consent to (or to otherwise admit or agree to any liability for indemnification hereunder in respect of) any proposed settlement if the Company is also a party in such proceeding and determines in good faith that such settlement is not in the best interests of the Company and its stockholders.

(d) Securities Act Liabilities. Any provision herein to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement to indemnify Indemnitee or otherwise act in violation of any undertaking appearing in and required by the rules and regulations promulgated under the Securities Act of 1933, as amended (the ***"Act"***), or in any registration statement filed with the SEC under the Act. Indemnitee acknowledges that paragraph (h) of Item 512 of Regulation S-K currently generally requires the Company to undertake in connection with any registration statement filed under the Act to submit the issue of the enforceability of Indemnitee's rights under this Agreement in connection with any liability under the Act on public policy grounds to a court of appropriate jurisdiction and to be governed by any final adjudication of such issue. Indemnitee specifically agrees that any such undertaking shall supersede the provisions of this Agreement and to be bound by any such undertaking.

11. Nonexclusivity and Survival of Rights. The provisions for indemnification and advancement of expenses set forth in this Agreement shall not be deemed exclusive of any other rights which Indemnitee may at any time be entitled under any provision of applicable law, the Certificate of Incorporation, Bylaws or other agreements, both as to action in Indemnitee's official capacity and Indemnitee's action as an agent of the Company, in any court in which a proceeding is brought, and Indemnitee's rights hereunder shall continue after Indemnitee has ceased acting as an agent of the Company and shall inure to the benefit of the heirs, executors, administrators and assigns of Indemnitee. The obligations and duties of the Company to Indemnitee under this Agreement shall be binding on the Company and its successors and assigns until terminated in accordance with its terms. The Company shall require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business or assets of the Company, expressly to assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place.

No amendment, alteration or repeal of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his or her corporate status prior to such amendment, alteration or repeal. To the extent that a change in the DGCL, whether by statute or judicial decision, permits greater indemnification or advancement of expenses than would be afforded currently under the Certificate of Incorporation, Bylaws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change. No right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, by Indemnitee shall not prevent the concurrent assertion or employment of any other right or remedy by Indemnitee.

12. Subrogation. In the event of payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who, at the request and expense of the Company, shall execute all papers required and shall do everything that may be reasonably necessary to secure such rights, including the execution of such documents necessary to enable the Company effectively to bring suit to enforce such rights.

13. Interpretation of Agreement. It is understood that the parties hereto intend this Agreement to be interpreted and enforced so as to provide indemnification to Indemnitee to the fullest extent now or hereafter permitted by law.

14. Severability. If any provision of this Agreement shall be held to be invalid, illegal or unenforceable for any reason whatsoever, (a) the validity, legality and enforceability of the remaining provisions of the Agreement (including without limitation, all portions of any paragraphs of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that are not themselves invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby; and (b) to the fullest extent possible, the provisions of this Agreement (including, without limitation, all portions of any paragraph of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that are not themselves invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested by the provision held invalid, illegal or unenforceable and to give effect to Section 14 hereof.

15. Amendment and Waiver. No supplement, modification, amendment, or cancellation of this Agreement shall be binding unless executed in writing by the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provision hereof (whether or not similar) nor shall such waiver constitute a continuing waiver.

16. **Notice**. Except as otherwise provided herein, any notice or demand which, by the provisions hereof, is required or which may be given to or served upon the parties hereto shall be in writing and, if by telegram, telecopy or telex, shall be deemed to have been validly served, given or delivered when sent, if by overnight delivery, courier or personal delivery, shall be deemed to have been validly served, given or delivered upon actual delivery and, if mailed, shall be deemed to have been validly served, given or delivered three (3) business days after deposit in the United States mail, as registered or certified mail, with proper postage prepaid and addressed to the party or parties to be notified at the addresses set forth on the signature page of this Agreement (or such other address(es) as a party may designate for itself by like notice). If to the Company, notices and demands shall be delivered to the attention of the Secretary of the Company.

17. **Governing Law**. This Agreement shall be governed exclusively by and construed according to the laws of the State of Delaware, as applied to contracts between Delaware residents entered into and to be performed entirely within Delaware.

18. **Counterparts**. This Agreement may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute but one and the same Agreement. Only one such counterpart need be produced to evidence the existence of this Agreement.

19. **Headings**. The headings of the sections of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction hereof.

20. **Entire Agreement**. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements, understandings and negotiations, written and oral, between the parties with respect to the subject matter of this Agreement; provided, however, that this Agreement is a supplement to and in furtherance of the Certificate of Incorporation, Bylaws, the DGCL and any other applicable law, and shall not be deemed a substitute therefor, and does not diminish or abrogate any rights of Indemnitee thereunder.

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In Witness Whereof, the parties hereto have entered into this Agreement effective as of the date first above written.

CHIMERIX, INC.

By: _____
Name: _____
Title: _____

INDEMNITEE

_____
Signature of Indemnitee

_____
Print or Type Name of Indemnitee

CHIMERIX, INC.

2002 EQUITY INCENTIVE PLAN

ADOPTED: SEPTEMBER 27, 2002
APPROVED BY STOCKHOLDERS: OCTOBER 22, 2002
AMENDED: JULY 18, 2003
AMENDMENT APPROVED BY STOCKHOLDERS: JULY 18, 2003
AMENDED: OCTOBER 19, 2004
AMENDMENT APPROVED BY STOCKHOLDERS: OCTOBER 19, 2004
AMENDED: FEBRUARY 23, 2007
AMENDMENT APPROVED BY STOCKHOLDERS: FEBRUARY 23, 2007
AMENDED: MAY 5, 2009
AMENDMENT APPROVED BY STOCKHOLDERS: MAY 5, 2009
AMENDED: JULY 24, 2009
AMENDMENT APPROVED BY STOCKHOLDERS: JULY 24, 2009
AMENDED: FEBRUARY 7, 2011
AMENDMENT APPROVED BY STOCKHOLDERS: FEBRUARY 7, 2011

TERMINATION DATE: SEPTEMBER 26, 2012

1. PURPOSES.

(a) Eligible Stock Award Recipients. The persons eligible to receive Stock Awards are the Employees, Directors and Consultants of the Company and its Affiliates.

(b) Available Stock Awards. The purpose of the Plan is to provide a means by which eligible recipients of Stock Awards may be given an opportunity to benefit from increases in value of the Common Stock through the granting of the following Stock Awards: (i) Incentive Stock Options, (ii) Nonstatutory Stock Options, (iii) stock bonuses and (iv) rights to acquire restricted stock.

(c) General Purpose. The Company, by means of the Plan, seeks to retain the services of the group of persons eligible to receive Stock Awards, to secure and retain the services of new members of this group and to provide incentives for such persons to exert maximum efforts for the success of the Company and its Affiliates.

2. DEFINITIONS.

(a) ***"Affiliate"*** means any parent corporation or subsidiary corporation of the Company, whether now or hereafter existing, as those terms are defined in Sections 424(e) and (f), respectively, of the Code.

(b) ***"Board"*** means the Board of Directors of the Company.

(c) ***"Capitalization Adjustment"*** has the meaning ascribed to that term in Section 11(a).

(d) ***"Cause"*** means, with respect to a particular Participant, the occurrence of any of the following: (i) such Participant's conviction of any felony or any crime involving fraud; (ii) such Participant's participation (whether by affirmative act or omission) in a fraud or felonious act against the Company and/or its Affiliates; (iii) conduct by such Participant which, based upon a good faith and reasonable factual investigation by the Company (or, if such Participant is an Officer, by the Board), demonstrates such Participant's unfitness to serve; (iv) such Participant's violation of any statutory or fiduciary duty, or duty of loyalty owed to the Company and/or its Affiliates and which has a material adverse effect on the Company and/or its Affiliates; (v) such Participant's violation of state or federal law in connection with such Participant's performance of such Participant's job which has a material adverse effect on the Company and/or its Affiliates; (vi) breach of any material term of any contract between such Participant and the Company and/or its Affiliates; and (vii) such Participant's violation of any material Company policy. Notwithstanding the foregoing, such Participant's death or Disability shall not constitute Cause as set forth herein. The determination that a termination is for Cause shall be made by the Board or Committee, as applicable, in its sole and exclusive judgment and discretion.

(e) ***"Code"*** means the Internal Revenue Code of 1986, as amended.

(f) ***"Committee"*** means a committee of one or more members of the Board appointed by the Board in accordance with Section 3(c).

(g) ***"Common Stock"*** means the common stock of the Company.

(h) ***"Company"*** means Chimerix, Inc., a Delaware corporation.

(i) ***"Consultant"*** means any person, including an advisor, (i) engaged by the Company or an Affiliate to render consulting or advisory services and who is compensated for such services or (ii) serving as a member of the Board of Directors of an Affiliate and who is compensated for such services. However, the term "Consultant" shall not include Directors who are not compensated by the Company for their services as Directors, and the payment of a fee by the Company for services which the Board determines in its sole discretion are services as a Director, shall not cause a Director to be considered a "Consultant" for purposes of the Plan.

(j) ***"Continuous Service"*** means that the Participant's service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. A change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Consultant or Director or a change in the entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant's service with the Company or an Affiliate, shall not terminate a Participant's Continuous Service. For example, a change in status from an Employee of the Company to a Consultant to an Affiliate or a Director shall not constitute an interruption of Continuous Service. The Board or the Chief Executive Officer of the Company, in that party's sole discretion, may determine whether Continuous Service shall be considered interrupted in the case of any leave of absence approved by that party, including sick leave, military leave or any other personal leave. Notwithstanding the foregoing, a leave of absence shall be treated as Continuous Service for purposes of vesting in a Stock Award only to such extent as may be provided in the Company's leave of absence policy or in the written terms of the Participant's leave of absence.

(k) ***"Director"*** means a member of the Board of Directors of the Company.

(l) ***"Disability"*** means the inability of a person, in the opinion of a qualified physician acceptable to the Company, to perform the major duties of that person's position with the Company or an Affiliate because of the sickness or injury of the person.

(m) ***"Employee"*** means any person employed by the Company or an Affiliate. Service as a Director, or payment of a fee by the Company for services which the Board determines in its sole discretion are services as a Director or as a member of the Board of Directors of an Affiliate, shall not be sufficient to constitute "employment" by the Company or such Affiliate.

(n) ***"Entity"*** means a corporation, partnership or other entity.

(o) ***"Exchange Act"*** means the Securities Exchange Act of 1934, as amended.

(p) ***"Fair Market Value"*** means, as of any date, the value of the Common Stock determined in good faith by the Board, and in a manner consistent with Section 260.140.50 of Title 10 of the California Code of Regulations.

(q) ***"Incentive Stock Option"*** means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code and the regulations promulgated thereunder.

(r) ***"Listing Date"*** means the first date upon which any security of the Company is listed (or approved for listing) upon notice of issuance on any securities exchange or designated (or approved for designation) upon notice of issuance as a national market security on an interdealer quotation system if such securities exchange or interdealer quotation system has been certified in accordance with the provisions of Section 25100(o) of the California Corporate Securities Law of 1968.

(s) ***"Nonstatutory Stock Option"*** means an Option not intended to qualify as an Incentive Stock Option.

(t) ***"Officer"*** means any person designated by the Company as an officer.

(u) ***"Option"*** means an Incentive Stock Option or a Nonstatutory Stock Option granted pursuant to the Plan.

(v) ***"Option Agreement"*** means a written agreement between the Company and an Optionholder evidencing the terms and conditions of an individual Option grant. Each Option Agreement shall be subject to the terms and conditions of the Plan.

(w) ***"Optionholder"*** means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.

(x) ***"Own," "Owned," "Owner," "Ownership"*** A person or Entity shall be deemed to "Own," to have "Owned," to be the "Owner" of, or to have acquired "Ownership" of securities if such person or Entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.

(y) ***"Participant"*** means a person to whom a Stock Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Stock Award.

(z) ***"Plan"*** means this Chimerix, Inc. 2002 Equity Incentive Plan.

(aa) ***"Securities Act"*** means the Securities Act of 1933, as amended.

(bb) ***"Stock Award"*** means any right granted under the Plan, including an Option, a stock bonus and a right to acquire restricted stock.

(cc) ***"Stock Award Agreement"*** means a written agreement between the Company and a holder of a Stock Award evidencing the terms and conditions of an individual Stock Award grant. Each Stock Award Agreement shall be subject to the terms and conditions of the Plan.

(dd) ***"Ten Percent Stockholder"*** means a person who Owns (or is deemed to Own pursuant to Section 424(d) of the Code) stock possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or of any of its Affiliates.

3. ADMINISTRATION.

(a) **Administration by Board.** The Board shall administer the Plan unless and until the Board delegates administration to a Committee, as provided in Section 3(c).

(b) **Powers of Board.** The Board shall have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine from time to time which of the persons eligible under the Plan shall be granted Stock Awards; when and how each Stock Award shall be granted; what type or combination of types of Stock Award shall be granted; the provisions of each Stock Award granted (which need not be identical), including the time or times when a person shall be permitted to receive Common Stock pursuant to a Stock Award; and the number of shares of Common Stock with respect to which a Stock Award shall be granted to each such person.

(ii) To construe and interpret the Plan and Stock Awards granted under it, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan or in any Stock Award Agreement, in a manner and to the extent it shall deem necessary or expedient to make the Plan fully effective.

(iii) To amend the Plan or a Stock Award as provided in Section 12.

(iv) To terminate or suspend the Plan as provided in Section 13.

(v) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Plan.

(c) Delegation to Committee. The Board may delegate administration of the Plan to a Committee or Committees of one (1) or more members of the Board, and the term "Committee" shall apply to any person or persons to whom such authority has been delegated. If administration is delegated to a Committee, the Committee shall have, in connection with the administration of the Plan, the powers theretofore possessed by the Board, including the power to delegate to a subcommittee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board shall thereafter be to the Committee or subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. The Board may abolish the Committee at any time and revest in the Board the administration of the Plan.

(d) Effect of Board's Decision. All determinations, interpretations and constructions made by the Board in good faith shall not be subject to review by any person and shall be final, binding and conclusive on all persons.

4. SHARES SUBJECT TO THE PLAN.

(a) Share Reserve. Subject to the provisions of Section 11(a) relating to Capitalization Adjustments, the Common Stock that may be issued pursuant to Stock Awards shall not exceed in the aggregate 12,665,816 shares of Common Stock.

(b) Reversion of Shares to the Share Reserve. If any Stock Award shall for any reason expire or otherwise terminate, in whole or in part, without having been exercised in full, the shares of Common Stock not acquired under such Stock Award shall revert to and again become available for issuance under the Plan.

(c) Source of Shares. The shares of Common Stock subject to the Plan may be unissued shares or reacquired shares, bought on the market or otherwise.

(d) Share Reserve Limitation. To the extent required by Section 260.140.45 of Title 10 of the California Code of Regulations, the total number of shares of Common Stock issuable upon exercise of all outstanding Options and the total number of shares of Common Stock provided for under any stock bonus or similar plan of the Company shall not exceed the applicable percentage as calculated in accordance with the conditions and exclusions of Section 260.140.45 of Title 10 of the California Code of Regulations, based on the shares of Common Stock of the Company that are outstanding at the time the calculation is made.

5. ELIGIBILITY.

(a) Eligibility for Specific Stock Awards. Incentive Stock Options may be granted only to Employees. Stock Awards other than Incentive Stock Options may be granted to Employees, Directors and Consultants.

(b) Ten Percent Stockholders.

(i) A Ten Percent Stockholder shall not be granted an Incentive Stock Option unless the exercise price of such Option is at least one hundred ten percent (110%) of the Fair Market Value of the Common Stock on the date of grant and the Option is not exercisable after the expiration of five (5) years from the date of grant.

(ii) A Ten Percent Stockholder shall not be granted a Nonstatutory Stock Option unless the exercise price of such Option is at least (i) one hundred ten percent (110%) of the Fair Market Value of the Common Stock on the date of grant or (ii) such lower percentage of the Fair Market Value of the Common Stock on the date of grant as is permitted by Section 260.140.41 of Title 10 of the California Code of Regulations at the time of the grant of the Option.

(iii) A Ten Percent Stockholder shall not be granted a restricted stock award unless the purchase price of the restricted stock is at least (i) one hundred percent (100%) of the Fair Market Value of the Common Stock on the date of grant or (ii) such lower percentage of the Fair Market Value of the Common Stock on the date of grant as is permitted by Section 260.140.42 of Title 10 of the California Code of Regulations at the time of the grant of the restricted stock award.

(c) Consultants. A Consultant shall not be eligible for the grant of a Stock Award if, at the time of grant, either the offer or the sale of the Company's securities to such Consultant is not exempt under Rule 701 of the Securities Act ("Rule 701") because of the nature of the services that the Consultant is providing to the Company, because the Consultant is not a natural person, or because of some other provision of Rule 701, unless the Company determines that such grant need not comply with the requirements of Rule 701 and will satisfy another exemption under the Securities Act as well as comply with the securities laws of all other relevant jurisdictions.

6. OPTION PROVISIONS.

Each Option shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. All Options shall be separately designated Incentive Stock Options or Nonstatutory Stock Options at the time of grant, and, if certificates are issued, a separate certificate or certificates shall be issued for shares of Common Stock purchased on exercise of each type of Option. The provisions of separate Options need not be identical, but each Option shall include (through incorporation of provisions hereof by reference in the Option or otherwise) the substance of each of the following provisions:

(a) Term. Subject to the provisions of Section 5(b) regarding Ten Percent Stockholders, no Option shall be exercisable after the expiration of ten (10) years from the date it was granted.

(b) Exercise Price of an Incentive Stock Option. Subject to the provisions of Section 5(b) regarding Ten Percent Stockholders, the exercise price of each Incentive Stock Option shall be not less than one hundred percent (100%) of the Fair Market Value of the Common Stock subject to the Option on the date the Option is granted. Notwithstanding the foregoing, an Incentive Stock Option may be granted with an exercise price lower than that set forth in the preceding sentence if such Option is granted pursuant to an assumption or substitution for another option in a manner satisfying the provisions of Section 424(a) of the Code.

(c) Exercise Price of a Nonstatutory Stock Option. Subject to the provisions of Section 5(b) regarding Ten Percent Stockholders, the exercise price of each Nonstatutory Stock Option shall be not less than eighty-five percent (85%) of the Fair Market Value of the Common Stock subject to the Option on the date the Option is granted. Notwithstanding the foregoing, a Nonstatutory Stock Option may be granted with an exercise price lower than that set forth in the preceding sentence if such Option is granted pursuant to an assumption or substitution for another option in a manner satisfying the provisions of Section 424(a) of the Code.

(d) Consideration. The purchase price of Common Stock acquired pursuant to an Option shall be paid, to the extent permitted by applicable statutes and regulations, either (i) in cash at the time the Option is exercised or (ii) at the discretion of the Board at the time of the grant of the Option (or subsequently in the case of a Nonstatutory Stock Option) (1) by delivery to the Company of other Common Stock, (2) according to a deferred payment or other similar arrangement with the Optionholder or (3) in any other form of legal consideration that may be acceptable to the Board. Unless otherwise specifically provided in the Option, the purchase price of Common Stock acquired pursuant to an Option that is paid by delivery to the Company of other Common Stock acquired, directly or indirectly from the Company, shall be paid only by shares of the Common Stock of the Company that have been held for more than six (6) months (or such longer or shorter period of time required to avoid a charge to earnings for financial accounting purposes). At any time that the Company is incorporated in Delaware, payment of the Common Stock's "par value," as defined in the Delaware General Corporation Law, shall not be made by deferred payment.

In the case of any deferred payment arrangement, interest shall be compounded at least annually and shall be charged at the minimum rate of interest necessary to avoid (1) the treatment as interest, under any applicable provisions of the Code, of any amounts other than amounts stated to be interest under the deferred payment arrangement and (2) the treatment of the Option as a variable award for financial accounting purposes.

(e) Transferability of an Incentive Stock Option. An Incentive Stock Option shall not be transferable except by will or by the laws of descent and distribution and shall be exercisable during the lifetime of the Optionholder only by the Optionholder. Notwithstanding the foregoing, the Optionholder may, by delivering written notice to the Company, in a form satisfactory to the Company, designate a third party who, in the event of the death of the Optionholder, shall thereafter be entitled to exercise the Option.

(f) Transferability of a Nonstatutory Stock Option. A Nonstatutory Stock Option shall not be transferable except by will or by the laws of descent and distribution and, to the extent provided in the Option Agreement, to such further extent as permitted by Section 260.140.41(d) of Title 10 of the California Code of Regulations at the time of the grant of the Option, and shall be exercisable during the lifetime of the Optionholder only by the Optionholder. If the Nonstatutory Stock Option does not provide for transferability, then the Nonstatutory Stock Option shall not be transferable except by will or by the laws of descent and distribution and shall be exercisable during the lifetime of the Optionholder only by the Optionholder. Notwithstanding the foregoing, the Optionholder may, by delivering written notice to the Company, in a form satisfactory to the Company, designate a third party who, in the event of the death of the Optionholder, shall thereafter be entitled to exercise the Option.

(g) Vesting Generally. The total number of shares of Common Stock subject to an Option may, but need not, vest and therefore become exercisable in periodic installments that may, but need not, be equal. The Option may be subject to such other terms and conditions on the time or times when it may be exercised (which may be based on performance or other criteria) as the Board may deem appropriate. The vesting provisions of individual Options may vary. The provisions of this Section 6(g) are subject to any Option provisions governing the minimum number of shares of Common Stock as to which an Option may be exercised.

(h) Minimum Vesting. Notwithstanding the foregoing Section 6(g), to the extent that the following restrictions on vesting are required by Section 260.140.41(f) of Title 10 of the California Code of Regulations at the time of the grant of the Option, then:

(i) Options granted to an Employee who is not an Officer, Director or Consultant shall provide for vesting of the total number of shares of Common Stock at a rate of at least twenty percent (20%) per year over five (5) years from the date the Option was granted, subject to reasonable conditions such as continued employment; and

(ii) Options granted to Officers, Directors or Consultants may be made fully exercisable, subject to reasonable conditions such as continued employment, at any time or during any period established by the Company.

(i) Termination of Continuous Service. In the event that an Optionholder's Continuous Service terminates (for reasons other than Cause or upon the Optionholder's death or Disability), the Optionholder may exercise his or her Option (to the extent that the Optionholder was entitled to exercise such Option as of the date of termination) but only within such period of time ending on the earlier of (i) the date three (3) months following the termination of the Optionholder's Continuous Service (or such longer or shorter period specified in the Option Agreement, which period shall not be less than thirty (30) days unless such termination is for Cause), or (ii) the expiration of the term of the Option as set forth in the Option Agreement. If, after termination, the Optionholder does not exercise his or her Option within the time specified in the Option Agreement, the Option shall terminate.

(j) Extension of Termination Date. An Optionholder's Option Agreement may also provide that if the exercise of the Option following the termination of the Optionholder's Continuous Service (for reasons other than Cause or upon the Optionholder's death or Disability) would be prohibited at any time solely because the issuance of shares of Common Stock would violate the registration requirements under the Securities Act, then the Option shall terminate on the earlier of (i) the expiration of the term of the Option set forth in Section 6(a) or (ii) the expiration of a period of three (3) months after the termination of the Optionholder's Continuous Service during which the exercise of the Option would not be in violation of such registration requirements.

(k) Disability of Optionholder. In the event that an Optionholder's Continuous Service terminates as a result of the Optionholder's Disability, the Optionholder may exercise his or her Option (to the extent that the Optionholder was entitled to exercise such Option as of the date of termination), but only within such period of time ending on the earlier of (i) the date twelve (12) months following such termination (or such longer or shorter period specified in the Option Agreement, which period shall not be less than six (6) months) or (ii) the expiration of the term of the Option as set forth in the Option Agreement. If, after termination, the Optionholder does not exercise his or her Option within the time specified herein, the Option shall terminate.

(l) Death of Optionholder. In the event that (i) an Optionholder's Continuous Service terminates as a result of the Optionholder's death or (ii) the Optionholder dies within the period (if any) specified in the Option Agreement after the termination of the Optionholder's Continuous Service for a reason other than death, then the Option may be exercised (to the extent the Optionholder was entitled to exercise such Option as of the date of death) by the Optionholder's estate, by a person who acquired the right to exercise the Option by bequest or inheritance or by a person designated to exercise the option upon the Optionholder's death pursuant to Section 6(e) or 6(f), but only within the period ending on the earlier of (1) the date eighteen (18) months following the date of death (or such longer or shorter period specified in the Option Agreement, which period shall not be less than six (6) months) or (2) the expiration of the term of such Option as set forth in the Option Agreement. If, after death, the Option is not exercised within the time specified herein, the Option shall terminate.

(m) Termination for Cause. In the event an Optionholder's Continuous Service is terminated for Cause, the Option shall terminate upon the termination date of such Optionholder's Continuous Service and the Optionholder is prohibited from exercising his or her Option as of the time of such termination.

(n) Early Exercise. The Option may, but need not, include a provision whereby the Optionholder may elect at any time before the Optionholder's Continuous Service terminates to exercise the Option as to any part or all of the shares of Common Stock subject to the Option prior to the full vesting of the Option. Subject to the "Repurchase Limitation" in Section 10(h), any unvested shares of Common Stock so purchased may be subject to a repurchase option in favor of the Company or to any other restriction the Board determines to be appropriate.

(o) Right of Repurchase. Subject to the "Repurchase Limitation" in Section 10(h), the Option may, but need not, include a provision whereby the Company may elect to repurchase all or any part of the vested shares of Common Stock acquired by the Optionholder pursuant to the exercise of the Option.

(p) Right of First Refusal. The Option may, but need not, include a provision whereby the Company may elect to exercise a right of first refusal following receipt of notice from the Optionholder of the intent to transfer all or any part of the shares of Common Stock received upon the exercise of the Option. Such right of first refusal shall comply with any applicable provisions of the Bylaws of the Company.

7. Provisions of Stock Awards other than Options.

(a) Stock Bonus Awards. Each stock bonus agreement shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. The terms and conditions of stock bonus agreements may change from time to time, and the terms and conditions of separate stock bonus agreements need not be identical, but each stock bonus agreement shall include (through incorporation of provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) Consideration. A stock bonus may be awarded in consideration for past services actually rendered to the Company or an Affiliate for its benefit.

(ii) Vesting. Subject to the "Repurchase Limitation" in Section 10(h), shares of Common Stock awarded under the stock bonus agreement may, but need not, be subject to a share repurchase option in favor of the Company in accordance with a vesting schedule to be determined by the Board.

(iii) Termination of Participant's Continuous Service. Subject to the "Repurchase Limitation" in Section 10(h), in the event that a Participant's Continuous Service terminates, the Company may reacquire any or all of the shares of Common Stock held by the Participant that have not vested as of the date of termination under the terms of the stock bonus agreement.

(iv) Transferability. Rights to acquire shares of Common Stock under the stock bonus agreement shall not be transferable except by will or by the laws of descent and distribution and shall be exercisable during the lifetime of the Participant only by the Participant.

(b) Restricted Stock Awards. Each restricted stock purchase agreement shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. The terms and conditions of the restricted stock purchase agreements may change from time to time, and the terms and conditions of separate restricted stock purchase agreements need not be identical, but each restricted stock purchase agreement shall include (through incorporation of provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) Purchase Price. Subject to the provisions of Section 5(b) regarding Ten Percent Stockholders, the purchase price of restricted stock awards shall not be less than eighty-five percent (85%) of the Common Stock's Fair Market Value on the date such award is made or at the time the purchase is consummated.

(ii) Consideration. The purchase price of Common Stock acquired pursuant to the restricted stock purchase agreement shall be paid either: (i) in cash at the time of purchase; (ii) at the discretion of the Board, according to a deferred payment or other similar arrangement with the Participant; or (iii) in any other form of legal consideration that may be acceptable to the Board in its discretion; *provided, however,* that at any time that the Company is incorporated in Delaware, then payment of the Common Stock's "par value," as defined in the Delaware General Corporation Law, shall not be made by deferred payment.

(iii) Vesting. Subject to the "Repurchase Limitation" in Section 10(h), shares of Common Stock acquired under the restricted stock purchase agreement may, but need not, be subject to a share repurchase option in favor of the Company in accordance with a vesting schedule to be determined by the Board.

(iv) Termination of Participant's Continuous Service. Subject to the "Repurchase Limitation" in Section 10(h), in the event that a Participant's Continuous Service terminates, the Company may repurchase or otherwise reacquire any or all of the shares of Common Stock held by the Participant that have not vested as of the date of termination under the terms of the restricted stock purchase agreement.

(v) Transferability. Rights to acquire shares of Common Stock under the restricted stock purchase agreement shall not be transferable except by will or by the laws of descent and distribution and shall be exercisable during the lifetime of the Participant only by the Participant.

8. Covenants of the Company.

(a) Availability of Shares. During the terms of the Stock Awards, the Company shall keep available at all times the number of shares of Common Stock required to satisfy such Stock Awards.

(b) Securities Law Compliance. The Company shall seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Stock Awards and to issue and sell shares of Common Stock upon exercise of the Stock Awards; *provided, however,* that this undertaking shall not require the Company to register under the Securities Act the Plan, any Stock Award or any Common Stock issued or issuable pursuant to any such Stock Award. If, after reasonable efforts, the Company is unable to obtain from any such regulatory commission or agency the authority which counsel for the Company deems necessary for the lawful issuance and sale of Common Stock under the Plan, the Company shall be relieved from any liability for failure to issue and sell Common Stock upon exercise of such Stock Awards unless and until such authority is obtained.

9. USE OF PROCEEDS FROM STOCK.

Proceeds from the sale of Common Stock pursuant to Stock Awards shall constitute general funds of the Company.

10. MISCELLANEOUS.

(a) Acceleration of Exercisability and Vesting. The Board shall have the power to accelerate the time at which a Stock Award may first be exercised or the time during which a Stock Award or any part thereof will vest in accordance with the Plan, notwithstanding the provisions in the Stock Award stating the time at which it may first be exercised or the time during which it will vest.

(b) Stockholder Rights. No Participant shall be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to such Stock Award unless and until such Participant has satisfied all requirements for exercise of the Stock Award pursuant to its terms.

(c) No Employment or other Service Rights. Nothing in the Plan or any instrument executed or Stock Award granted pursuant thereto shall confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Stock Award was granted or shall affect the right of the Company or an Affiliate to terminate (i) the employment of an Employee with or without notice and with or without Cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate or (iii) the service of a Director pursuant to the Bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state in which the Company or the Affiliate is incorporated, as the case may be.

(d) Incentive Stock Option $100,000 Limitation. To the extent that the aggregate Fair Market Value (determined at the time of grant) of Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any Optionholder during any calendar year (under all plans of the Company and its Affiliates) exceeds one hundred thousand dollars ($100,000), the Options or portions thereof that exceed such limit (according to the order in which they were granted) shall be treated as Nonstatutory Stock Options, notwithstanding any contrary provision of a Stock Award Agreement.

(e) Investment Assurances. The Company may require a Participant, as a condition of exercising or acquiring Common Stock under any Stock Award, (i) to give written assurances satisfactory to the Company as to the Participant's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters and that he or she is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Stock Award; and (ii) to give written assurances satisfactory to the Company stating that the Participant is acquiring Common Stock subject to the Stock Award for the Participant's own account and not with any present intention of selling or otherwise distributing the Common Stock. The foregoing requirements, and any assurances given pursuant to such requirements, shall be inoperative if (1) the issuance of the shares of Common Stock upon the exercise or acquisition of Common Stock under the Stock Award has been registered under a then currently effective registration statement under the Securities Act or (2) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may, upon advice of counsel to the Company, place legends on stock certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the Common Stock.

(f) Withholding Obligations. To the extent provided by the terms of a Stock Award Agreement, the Participant may satisfy any federal, state or local tax withholding obligation relating to the exercise or acquisition of Common Stock under a Stock Award by any of the following means (in addition to the Company's right to withhold from any compensation paid to the Participant by the Company) or by a combination of such means: (i) tendering a cash payment; (ii) authorizing the Company to withhold shares of Common Stock from the shares of Common Stock otherwise issuable to the Participant as a result of the exercise or acquisition of Common Stock under the Stock Award; *provided, however,* that no shares of Common Stock are withheld with a value exceeding the minimum amount of tax required to be withheld by law (or such lower amount as may be necessary to avoid variable award accounting); or (iii) delivering to the Company owned and unencumbered shares of Common Stock.

(g) Information Obligation. To the extent required by Section 260.140.46 of Title 10 of the California Code of Regulations, the Company shall deliver financial statements to Participants at least annually. This Section 10(g) shall not apply to key Employees whose duties in connection with the Company assure them access to equivalent information.

(h) Repurchase Limitation. The terms of any repurchase option shall be specified in the Stock Award. To the extent required by Section 260.140.41 and Section 260.140.42 of Title 10 of the California Code of Regulations at the time a Stock Award is made, any repurchase option contained in a Stock Award granted to a person who is not an Officer, Director or Consultant shall be upon the terms described below:

(i) Fair Market Value. If the repurchase option gives the Company the right to repurchase the shares of Common Stock upon termination of employment at not less than the Fair Market Value of the shares of Common Stock to be purchased on the date of termination of Continuous Service, then (i) the right to repurchase shall be exercised for cash or cancellation of purchase money indebtedness for the shares of Common Stock within ninety (90) days of termination of Continuous Service (or in the case of shares of Common Stock issued upon exercise of Stock Awards after such date of termination, within ninety (90) days after the date of the exercise) or such longer period as may be agreed to by the Company and the Participant (for example, for purposes of satisfying the requirements of Section 1202(c)(3) of the Code regarding "qualified small business stock") and (ii) the right terminates when the shares of Common Stock become publicly traded.

(ii) Original Purchase Price. If the repurchase option gives the Company the right to repurchase the shares of Common Stock upon termination of Continuous Service at the original purchase price then (x) the right to repurchase at the original purchase price shall lapse at the rate of at least twenty percent (20%) of the shares of Common Stock per year over five (5) years from the date the Stock Award is granted (without respect to the date the Stock Award was exercised or became exercisable) and (y) the right to repurchase shall be exercised for cash or cancellation of purchase money indebtedness for the shares of Common Stock within ninety (90) days of termination of Continuous Service (or in the case of shares of Common Stock issued upon exercise of Options after such date of termination, within ninety (90) days after the date of the exercise) or such longer period as may be agreed to by the Company and the Participant (for example, for purposes of satisfying the requirements of Section 1202(c)(3) of the Code regarding "qualified small business stock").

11. ADJUSTMENTS UPON CHANGES IN STOCK.

(a) Capitalization Adjustments. If any change is made in, or other event occurs with respect to, the Common Stock subject to the Plan or subject to any Stock Award without the receipt of consideration by the Company (through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other transaction not involving the receipt of consideration by the Company (each a "Capitalization Adjustment"), the Plan will be appropriately adjusted in the class(es) and maximum number of securities subject to the Plan pursuant to Section 4(a), and the outstanding Stock Awards will be appropriately adjusted in the class(es) and number of securities and price per share of Common Stock subject to such outstanding Stock Awards. The Board shall make such adjustments, and its determination shall be final, binding and conclusive. (The conversion of any convertible securities of the Company shall not be treated as a transaction "without receipt of consideration" by the Company.)

(b) Dissolution or Liquidation. In the event of a dissolution or liquidation of the Company, then all outstanding Stock Awards shall terminate immediately prior to the completion of such dissolution or liquidation.

(c) Asset Sale, Merger, Consolidation or Reverse Merger. In the event of (i) a sale, lease or other disposition of all or substantially all of the assets of the Company, (ii) a merger or consolidation in which the Company is not the surviving corporation or (iii) a reverse merger in which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger are converted by virtue of the merger into other property, whether in the form of securities, cash or otherwise (individually, a "Corporate Transaction"), then any surviving corporation or acquiring corporation shall assume any Stock Awards outstanding under the Plan or shall substitute similar stock awards (including an award to acquire the same consideration paid to the stockholders in the Corporate Transaction for those outstanding under the Plan). In the event any surviving corporation or acquiring corporation fails or refuses to assume such Stock Awards or to substitute similar stock awards for those outstanding under the Plan, then with respect to Stock Awards held by Participants whose Continuous Service has not terminated, the vesting of such Stock Awards (and, if applicable, the time during which such Stock Awards may be exercised) shall be accelerated in full, and the Stock Awards shall terminate if not exercised (if applicable) at or prior to the Corporate Transaction. With respect to any other Stock Awards outstanding under the Plan, such Stock Awards shall terminate if not exercised (if applicable) prior to the Corporate Transaction.

12. Amendment of the Plan and Stock Awards.

(a) Amendment of Plan. The Board at any time, and from time to time, may amend the Plan. However, except as provided in Section 11(a) relating to Capitalization Adjustments, no amendment shall be effective unless approved by the stockholders of the Company to the extent stockholder approval is necessary to satisfy the requirements of Section 422 of the Code.

(b) Stockholder Approval. The Board, in its sole discretion, may submit any other amendment to the Plan for stockholder approval.

(c) Contemplated Amendments. It is expressly contemplated that the Board may amend the Plan in any respect the Board deems necessary or advisable to provide eligible Employees with the maximum benefits provided or to be provided under the provisions of the Code and the regulations promulgated thereunder relating to Incentive Stock Options and/or to bring the Plan and/or Incentive Stock Options granted under it into compliance therewith.

(d) No Impairment of Rights. Rights under any Stock Award granted before amendment of the Plan shall not be impaired by any amendment of the Plan unless (i) the Company requests the consent of the Participant and (ii) the Participant consents in writing.

(e) Amendment of Stock Awards. The Board at any time, and from time to time, may amend the terms of any one or more Stock Awards; *provided, however,* that the rights under any Stock Award shall not be impaired by any such amendment unless (i) the Company requests the consent of the Participant and (ii) the Participant consents in writing.

13. Termination or Suspension of the Plan.

(a) Plan Term. The Board may suspend or terminate the Plan at any time. Unless sooner terminated, the Plan shall terminate on the day before the tenth (10th) anniversary of the date the Plan is adopted by the Board or approved by the stockholders of the Company, whichever is earlier. No Stock Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

(b) No Impairment of Rights. Suspension or termination of the Plan shall not impair rights and obligations under any Stock Award granted while the Plan is in effect except with the written consent of the Participant.

14. Effective Date of Plan.

The Plan shall become effective as determined by the Board, but no Stock Award shall be exercised (or, in the case of a stock bonus, shall be granted) unless and until the Plan has been approved by the stockholders of the Company, which approval shall be within twelve (12) months before or after the date the Plan is adopted by the Board.

15. Choice of Law.

The law of the State of California shall govern all questions concerning the construction, validity and interpretation of this Plan, without regard to such state's conflict of laws rules.

CHIMERIX, INC.
2002 EQUITY INCENTIVE PLAN
STOCK OPTION AGREEMENT
(INCENTIVE STOCK OPTION OR NONSTATUTORY STOCK OPTION)

Pursuant to your Stock Option Grant Notice (the "Grant Notice") and this Stock Option Agreement, Chimerix, Inc. (the "Company") has granted you an option under its 2002 Equity Incentive Plan (the "Plan") to purchase the number of shares of the Company's Common Stock indicated in your Grant Notice at the exercise price indicated in your Grant Notice. Defined terms not explicitly defined in this Stock Option Agreement but defined in the Plan shall have the same definitions as in the Plan.

The details of your option are as follows:

1. VESTING. Subject to the limitations contained herein, your option will vest as provided in your Grant Notice, provided that vesting will cease upon the termination of your Continuous Service.

a. Special Acceleration Provision. If a Change in Control (defined below) occurs and as of, or within thirteen (13) months after, the effective time of such Change in Control your Continuous Service terminates due to an involuntary termination (not including death or Disability) without Cause (as defined in the Plan) or due to a voluntary termination with Good Reason (as defined herein), then, as of the date of termination of your Continuous Service, the vesting and exercisability of your option shall be accelerated in full or any reacquisition or repurchase rights held by the Company with respect to such option shall lapse in full, as appropriate.

For purposes of this subsection 1(a) only, "Change in Control" means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events: (i) a sale or other disposition of all or substantially all of the assets of the Company; (ii) a merger or consolidation involving the Company in which the Company is not the surviving Entity, and in which the stockholders of the Company immediately prior to such transaction Own, immediately after the transaction, less than fifty percent (50%) of the voting power of the surviving Entity or its parent; (iii) a reverse merger in which the Company is the surviving Entity and the stockholders of the Company immediately prior to such reverse merger Own less than fifty percent (50%) of the voting power of the Company or its parent immediately after the transaction; or (iv) an acquisition by any person, Entity or group within the meaning of Section 13(d) or 14(d) of the Exchange Act, or any comparable successor provisions (excluding any employee benefit plan, or related trust, sponsored or maintained by the Company or subsidiary of the Company or other Entity controlled by the Company) of the beneficial Ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act, or comparable successor rule) of securities of the Company representing at least fifty percent (50%) of the voting power entitled to vote in the election of Directors, excluding in any case issuances of securities by the Company in transactions the primary purpose of which is to raise capital for the Company.

For purposes of this subsection 1(a) only, "Good Reason" means the occurrence of any of the following events, conditions or actions taken by the Company without Cause and without your consent: (A) a change in your job title with the Company to a job title involving a materially reduced level of responsibility (provided however, a change in your job title without a material reduction in your level of responsibility shall not constitute "Good Reason"), (B) a material reduction in your level of base salary, or (C) a relocation of your place of employment by more than fifty (50) miles.

b. Parachute Payments. If any payment or benefit you would receive pursuant to a Change in Control from the Company or otherwise (a "Payment") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then such Payment shall be reduced to the Reduced Amount. The "Reduced Amount" shall be either (x) the largest portion of the Payment that would result in no portion of the Payment being subject to the Excise Tax or (y) the largest portion, up to and including the total, of the Payment, whichever amount, after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in your receipt, on an after-tax basis, of the greater amount of the Payment notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in payments or benefits constituting "parachute payments" is necessary so that the Payment equals the Reduced Amount, reduction shall occur in the following order unless you elect in writing a different order (provided, however, that such election shall be subject to Company approval if made on or after the effective date of the event that triggers the Payment): reduction of cash payments; cancellation of accelerated vesting of Stock Awards; reduction of employee benefits. In the event that acceleration of vesting of Stock Award compensation is to be reduced, such acceleration of vesting shall be cancelled in the reverse order of the date of grant of your Stock Awards unless you elect in writing a different order for cancellation.

The accounting firm engaged by the Company for general audit purposes as of the day prior to the effective date of the Change in Control shall perform the foregoing calculations. If the accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting the Change in Control, the Company shall appoint a nationally recognized accounting firm to make the determinations required hereunder. The Company shall bear all expenses with respect to the determinations by such accounting firm required to be made hereunder.

The accounting firm engaged to make the determinations hereunder shall provide its calculations, together with detailed supporting documentation, to you and the Company within fifteen (15) calendar days after the date on which your right to a Payment is triggered (if requested at that time by you or the Company) or such other time as requested by you or the Company. If the accounting firm determines that no Excise Tax is payable with respect to a Payment, either before or after the application of the Reduced Amount, it shall furnish you and the Company with an opinion reasonably acceptable to you that no Excise Tax will be imposed with respect to such Payment. Any good faith determinations of the accounting firm made hereunder shall be final, binding and conclusive upon you and the Company.

2. Number of Shares and Exercise Price. The number of shares of Common Stock subject to your option and your exercise price per share referenced in your Grant Notice may be adjusted from time to time for Capitalization Adjustments.

3. Exercise Prior to Vesting ("Early Exercise"). If permitted in your Grant Notice (i.e., the "Exercise Schedule" indicates that "Early Exercise" of your option is permitted) and subject to the provisions of your option, you may elect at any time that is both (i) during the period of your Continuous Service and (ii) during the term of your option, to exercise all or part of your option, including the nonvested portion of your option; *provided, however,* that:

a. a partial exercise of your option shall be deemed to cover first vested shares of Common Stock and then the earliest vesting installment of unvested shares of Common Stock;

b. any shares of Common Stock so purchased from installments that have not vested as of the date of exercise shall be subject to the purchase option in favor of the Company as described in the Company's form of Early Exercise Stock Purchase Agreement;

c. you shall enter into the Company's form of Early Exercise Stock Purchase Agreement with a vesting schedule that will result in the same vesting as if no early exercise had occurred; and

d. if your option is an Incentive Stock Option, then, to the extent that the aggregate Fair Market Value (determined at the time of grant) of the shares of Common Stock with respect to which your option plus all other Incentive Stock Options you hold are exercisable for the first time by you during any calendar year (under all plans of the Company and its Affiliates) exceeds one hundred thousand dollars ($100,000), your option(s) or portions thereof that exceed such limit (according to the order in which they were granted) shall be treated as Nonstatutory Stock Options.

4. Method of Payment. Payment of the exercise price is due in full upon exercise of all or any part of your option. You may elect to make payment of the exercise price in cash or by check or in any other manner ***permitted by your Grant Notice,*** which may include one or more of the following:

a. In the Company's sole discretion at the time your option is exercised and provided that at the time of exercise the Common Stock is publicly traded and quoted regularly in *The Wall Street Journal*, pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of Common Stock, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds.

b. Provided that at the time of exercise the Common Stock is publicly traded and quoted regularly in *The Wall Street Journal*, by delivery of already-owned shares of Common Stock either that you have held for the period required to avoid a charge to the Company's reported earnings (generally six (6) months) or that you did not acquire, directly or indirectly from the Company, that are owned free and clear of any liens, claims, encumbrances or security interests, and that are valued at Fair Market Value on the date of exercise. "Delivery" for these purposes, in the sole discretion of the Company at the time you exercise your option, shall include delivery to the Company of your attestation of ownership of such shares of Common Stock in a form approved by the Company. Notwithstanding the foregoing, you may not exercise your option by tender to the Company of Common Stock to the extent such tender would violate the provisions of any law, regulation or agreement restricting the redemption of the Company's stock.

c. Pursuant to the following deferred payment alternative:

1) Not less than one hundred percent (100%) of the aggregate exercise price, plus accrued interest, shall be due four (4) years from date of exercise or, at the Company's election, upon termination of your Continuous Service.

2) Interest shall be compounded at least annually and shall be charged at the minimum rate of interest necessary to avoid (1) the treatment as interest, under any applicable provisions of the Code, of any amounts other than amounts stated to be interest under the deferred payment arrangement and (2) the treatment of the Option as a variable award for financial accounting purposes.

3) At any time that the Company is incorporated in Delaware, payment of the Common Stock's "par value," as defined in the Delaware General Corporation Law, shall be made in cash and not by deferred payment.

4) In order to elect the deferred payment alternative, you must, as a part of your written notice of exercise, give notice of the election of this payment alternative and, in order to secure the payment of the deferred exercise price to the Company hereunder, if the Company so requests, you must tender to the Company a promissory note and a pledge agreement covering the purchased shares of Common Stock, both in form and substance satisfactory to the Company, or such other or additional documentation as the Company may request.

5. Whole Shares. You may exercise your option only for whole shares of Common Stock.

6. Securities Law Compliance. Notwithstanding anything to the contrary contained herein, you may not exercise your option unless the shares of Common Stock issuable upon such exercise are then registered under the Securities Act or, if such shares of Common Stock are not then so registered, the Company has determined that such exercise and issuance would be exempt from the registration requirements of the Securities Act. The exercise of your option also must comply with other applicable laws and regulations governing your option, and you may not exercise your option if the Company determines that such exercise would not be in material compliance with such laws and regulations.

7. TERM. You may not exercise your option before the commencement or after the expiration of its term. The term of your option commences on the Date of Grant and expires upon the earliest of the following:

a. immediately upon the termination of your Continuous Service for Cause;

b. three (3) months after the termination of your Continuous Service for any reason other than Cause or your Disability or death, provided that if during any part of such three (3) month period your option is not exercisable solely because of the condition set forth in Section 6, your option shall not expire until the earlier of the Expiration Date or until it shall have been exercisable for an aggregate period of three (3) months after the termination of your Continuous Service;

c. twelve (12) months after the termination of your Continuous Service due to your Disability;

d. eighteen (18) months after your death if you die either during your Continuous Service or within three (3) months after your Continuous Service terminates;

e. the Expiration Date indicated in your Grant Notice; or

f. the day before the tenth (10th) anniversary of the Date of Grant.

If your option is an Incentive Stock Option, note that to obtain the federal income tax advantages associated with an Incentive Stock Option, the Code requires that at all times beginning on the date of grant of your option and ending on the day three (3) months before the date of your option's exercise, you must be an employee of the Company or an Affiliate, except in the event of your death or Disability. The Company has provided for extended exercisability of your option under certain circumstances for your benefit but cannot guarantee that your option will necessarily be treated as an Incentive Stock Option if you continue to provide services to the Company or an Affiliate as a Consultant or Director after your employment terminates or if you otherwise exercise your option more than three (3) months after the date your employment with the Company or an Affiliate terminates.

8. EXERCISE.

a. You may exercise the vested portion of your option (and the unvested portion of your option if your Grant Notice so permits) during its term by delivering a Notice of Exercise (in a form designated by the Company) together with the exercise price to the Secretary of the Company, or to such other person as the Company may designate, during regular business hours, together with such additional documents as the Company may then require.

b. By exercising your option you agree that, as a condition to any exercise of your option, the Company may require you to enter into an arrangement providing for the payment by you to the Company of any tax withholding obligation of the Company arising by reason of (1) the exercise of your option, (2) the lapse of any substantial risk of forfeiture to which the shares of Common Stock are subject at the time of exercise, or (3) the disposition of shares of Common Stock acquired upon such exercise.

c. If your option is an Incentive Stock Option, by exercising your option you agree that you will notify the Company in writing within fifteen (15) days after the date of any disposition of any of the shares of the Common Stock issued upon exercise of your option that occurs within two (2) years after the date of your option grant or within one (1) year after such shares of Common Stock are transferred upon exercise of your option.

d. By exercising your option you agree that you shall not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to, any shares of Common Stock or other securities of the Company held by you, for a period of time specified by the managing underwriter(s) (not to exceed one hundred eighty (180) days) following the effective date of a registration statement of the Company filed under the Securities Act (the "Lock Up Period"); *provided, however*, that nothing contained in this section shall prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company and/or the underwriter(s) that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. The underwriters of the Company's stock are intended third party beneficiaries of this Section 8(d) and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

9. **Transferability.** Your option is not transferable, and is exercisable during your life only by you, except by will or by the laws of descent and distribution or as otherwise provided in this Section 9 (notwithstanding Section 6(e) and 6(f) of the Plan).

a. **Certain Trusts.** Upon receiving written permission from the Board or its duly authorized designee, you may transfer your option to a trust if you are considered to be the sole beneficial owner (determined under Section 671 of the Code and applicable state law) while the option is held in the trust, provided that you and the trustee enter into transfer and other applicable agreements required by the Company.

b. **Domestic Relations Orders.** Upon receiving written permission from the Board or its duly authorized designee, and provided that you and the designated transferee enter into transfer and other applicable agreements required by the Company, you may transfer your option pursuant to a domestic relations order that contains the information required by the Company to effectuate the transfer. You are encouraged to discuss the proposed terms of any division of this option with the Company prior to finalizing the domestic relations order to help ensure the required information is contained within the domestic relations order. If this option is an Incentive Stock Option, this option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.

c. Other Approved Transfers. If this option is a Nonstatutory Stock Option, upon receiving written permission from the Board or its duly authorized designee, and provided that you and the designated transferee enter into transfer and other applicable agreements required by the Company, you may transfer your option to such further extent as permitted by Rule 701 of the Securities Act (or any successor provision thereto) and as permitted by any other applicable law.

d. Beneficiary Designation. Upon receiving written permission from the Board or its duly authorized designee, you may, by delivering written notice to the Company, in a form provided by or otherwise satisfactory to the Company (and, if applicable, any broker designated by the Company to effect option exercises), designate a third party who, in the event of your death, shall thereafter be entitled to exercise this option and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, your executor or administrator of your estate shall be entitled to exercise this option and receive, on behalf of your estate, the Common Stock or other consideration resulting from such exercise.

10. Right of First Refusal. Shares of Common Stock that you acquire upon exercise of your option are subject to any right of first refusal that may be described in the Company's bylaws in effect at such time the Company elects to exercise its right, or in any other agreement entered into between you and the Company; *provided, however,* that if your option is an Incentive Stock Option and the right of first refusal described in the Company's bylaws in effect at the time the Company elects to exercise its right is more beneficial to you than the right of first refusal described in the Company's bylaws on the Date of Grant, then the right of first refusal described in the Company's bylaws on the Date of Grant shall apply.

11. Right of Repurchase. To the extent provided in the Company's bylaws in effect at such time the Company elects to exercise its right, or any other agreement entered into between you and the Company, the Company shall have the right to repurchase all or any part of the shares of Common Stock you acquire pursuant to the exercise of your option.

12. Option not a Service Contract. Your option is not an employment or service contract, and nothing in your option shall be deemed to create in any way whatsoever any obligation on your part to continue in the employ of the Company or an Affiliate, or of the Company or an Affiliate to continue your employment. In addition, nothing in your option shall obligate the Company or an Affiliate, their respective stockholders, Boards of Directors, Officers or Employees to continue any relationship that you might have as a Director or Consultant for the Company or an Affiliate.

13. Withholding Obligations.

a. At the time you exercise your option, in whole or in part, or at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for (including by means of a "cashless exercise" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Company), any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company or an Affiliate, if any, which arise in connection with the exercise of your option.

b. Upon your request and subject to approval by the Company, in its sole discretion, and compliance with any applicable legal conditions or restrictions, the Company may withhold from fully vested shares of Common Stock otherwise issuable to you upon the exercise of your option a number of whole shares of Common Stock having a Fair Market Value, determined by the Company as of the date of exercise, not in excess of the minimum amount of tax required to be withheld by law (or such lower amount as may be necessary to avoid variable award accounting). If the date of determination of any tax withholding obligation is deferred to a date later than the date of exercise of your option, share withholding pursuant to the preceding sentence shall not be permitted unless you make a proper and timely election under Section 83(b) of the Code, covering the aggregate number of shares of Common Stock acquired upon such exercise with respect to which such determination is otherwise deferred, to accelerate the determination of such tax withholding obligation to the date of exercise of your option. Notwithstanding the filing of such election, shares of Common Stock shall be withheld solely from fully vested shares of Common Stock determined as of the date of exercise of your option that are otherwise issuable to you upon such exercise. Any adverse consequences to you arising in connection with such share withholding procedure shall be your sole responsibility.

c. You may not exercise your option unless the tax withholding obligations of the Company and/or any Affiliate are satisfied. Accordingly, you may not be able to exercise your option when desired even though your option is vested, and the Company shall have no obligation to issue a certificate for such shares of Common Stock or release such shares of Common Stock from any escrow provided for herein unless such obligations are satisfied.

14. Notices. Any notices provided for in your option or the Plan shall be given in writing and shall be deemed effectively given upon receipt or, in the case of notices delivered by mail by the Company to you, five (5) days after deposit in the United States mail, postage prepaid, addressed to you at the last address you provided to the Company.

15. Governing Plan Document. Your option is subject to all the provisions of the Plan, the provisions of which are hereby made a part of your option, and is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. Except as explicitly provided herein, in the event of any conflict between the provisions of your option and those of the Plan, the provisions of the Plan shall control.

CHIMERIX, INC.
2002 EQUITY INCENTIVE PLAN
NOTICE OF EXERCISE

Chimerix, Inc.
2505 Meridian Parkway, Suite 340
Durham, NC 27713

Date of Exercise: _____

Ladies and Gentlemen:

This constitutes notice under my Option that I elect to purchase the number of shares for the price set forth below.

Type of Option (check one):	Incentive ☐	Nonstatutory ☐
Option dated:	_____	
Number of shares as to which Option is exercised:	_____	
Certificates to be issued in name of:	_____	
Total exercise price:	$_____	
Cash payment delivered herewith:	$_____	

By this exercise, I agree (i) to provide such additional documents as you may require pursuant to the terms of the 2002 Equity Incentive Plan, (ii) to provide for the payment by me to you (in the manner designated by you) of your withholding obligation, if any, relating to the exercise of this option, and (iii) if this exercise relates to an Incentive Stock Option, to notify you in writing within fifteen (15) days after the date of any disposition of any of the shares of Common Stock issued upon exercise of this Option that occurs within two (2) years after the date of grant of this Option or within one (1) year after such shares of Common Stock are issued upon exercise of this Option.

I hereby make the following certifications and representations with respect to the number of shares of Common Stock of the Company listed above (the "Shares"), which are being acquired by me for my own account upon exercise of this Option as set forth above:

I acknowledge that the Shares have not been registered under the Securities Act of 1933, as amended (the "Securities Act"), and are deemed to constitute "restricted securities" under Rule 701 and Rule 144 promulgated under the Securities Act. I warrant and represent to the Company that I have no present intention of distributing or selling such Shares, except as permitted under the Securities Act and any applicable state securities laws.

I further acknowledge that I will not be able to resell the Shares under Rule 701 for at least ninety (90) days after the stock of the Company becomes publicly traded (*i.e.*, subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934) and that more restrictive conditions apply to affiliates of the Company under Rule 144.

I further acknowledge that all certificates representing any of the Shares subject to the provisions of the Option shall have endorsed thereon appropriate legends reflecting the foregoing limitations, as well as any legends reflecting restrictions pursuant to the Company's Certificate of Incorporation, Bylaws and/or applicable securities laws.

I further agree that, if required by the Company (or a representative of the underwriters) in connection with the first underwritten registration of the offering of any securities of the Company under the Securities Act, I will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to, any Shares or other securities of the Company held by me, for a period of time specified by the underwriter(s) (not to exceed one hundred eighty (180) days) following the effective date of the registration statement of the Company filed under the Securities Act (the "Lock Up Period"); *provided, however*, that nothing contained in this section shall prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock Up Period. I further agree to execute and deliver such other agreements as may be reasonably requested by the Company and/or the underwriter(s) that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to such Shares or other securities until the end of such period.

Very truly yours,

_____

CHIMERIX, INC.
2002 EQUITY INCENTIVE PLAN
STOCK OPTION GRANT NOTICE

CHIMERIX, INC. (the "Company"), pursuant to its 2002 Equity Incentive Plan (the "Plan"), hereby grants to Optionholder an option to purchase the number of shares of the Company's Common Stock set forth below. This Option is subject to all of the terms and conditions set forth herein and in the Stock Option Agreement, the Plan and the Notice of Exercise, each of which is attached hereto and incorporated herein in its entirety.

Optionholder:	_____
Date of Grant:	_____
Vesting Commencement Date:	_____
Number of Shares Subject to Option:	_____
Exercise Price per Share:	_____
Total Exercise Price:	_____
Expiration Date:	_____

Type of Grant: ☐ Incentive Stock Option[1] ☐ Nonstatutory Stock Option

Exercise Schedule: ☐ Same as Vesting Schedule ☐ Early Exercise Permitted

Vesting Schedule: **[**1/4th of the shares vest one year after the Vesting Commencement Date.
The remainder of the shares vest in equal monthly installments thereafter over the next three years.**]**

Payment: By one or a combination of the following items (described in the Stock Option Agreement):

☐ By cash or check
☐ Pursuant to a Regulation T Program if the Shares are publicly traded
☐ By delivery of already-owned shares if the Shares are publicly traded
[☐ By deferred payment**]**

Additional Terms/Acknowledgements: The undersigned Optionholder acknowledges receipt of, and understands and agrees to, this Grant Notice, the Stock Option Agreement and the Plan. Optionholder further acknowledges that as of the Date of Grant, this Grant Notice, the Stock Option Agreement and the Plan set forth the entire understanding between Optionholder and the Company regarding the acquisition of stock in the Company and supersede all prior oral and written agreements on that subject with the exception of (i) Stock Awards previously granted and delivered to Optionholder under the Plan, and (ii) the following agreements only:

OTHER AGREEMENTS: _____

_____

CHIMERIX, INC.	**OPTIONHOLDER:**
By: _____	_____
Signature	Signature
Title: _____	Date: _____
Date: _____	

ATTACHMENTS: (I) Stock Option Agreement, (II) 2002 Equity Incentive Plan and (III) Notice of Exercise

[1] If this is an Incentive Stock Option, it (plus other outstanding Incentive Stock Options) cannot be first *exercisable* for more than $100,000 in value (measured by exercise price) in any calendar year. Any excess over $100,000 is treated as a Nonstatutory Stock Option.

CHIMERIX, INC.

2012 EQUITY INCENTIVE PLAN

ADOPTED BY THE BOARD OF DIRECTORS: FEBRUARY 16, 2012
APPROVED BY THE STOCKHOLDERS: FEBRUARY 22, 2012
TERMINATION DATE: FEBRUARY 15, 2022

1. GENERAL.

(a) Successor to and Continuation of Prior Plan. The Plan is intended as the successor to and continuation of the Chimerix, Inc. 2002 Equity Incentive Plan (the "***Prior Plan***"). Following the Effective Date, no additional stock awards may be granted under the Prior Plan. Any unallocated shares remaining available for issuance pursuant to the exercise of options or issuance or settlement of stock awards not previously granted under the Prior Plan as of 12:01 a.m. Eastern time on the Effective Date (the "***Prior Plan's Available Reserve***") will cease to be available under the Prior Plan at such time and will be added to the Share Reserve (as further described in Section 3(a) below) and be then immediately available for issuance pursuant to Stock Awards granted hereunder. In addition, from and after 12:01 a.m. Eastern time on the Effective Date, all outstanding stock awards granted under the Prior Plan will remain subject to the terms of the Prior Plan; *provided*, *however*, that any shares subject to outstanding stock awards granted under the Prior Plan that (i) expire or terminate for any reason prior to exercise or settlement, (ii) are forfeited because of the failure to meet a contingency or condition required to vest such shares or repurchased at the original issuance price, or (iii) are reacquired, withheld (or not issued) to satisfy a tax withholding obligation in connection with an award (the "***Returning Shares***") will immediately be added to the Share Reserve (as further described in Section 3(a) below) as and when such shares become Returning Shares, and become available for issuance pursuant to Awards granted hereunder. All Stock Awards granted on or after 12:01 a.m. Eastern time on the Effective Date of this Plan will be subject to the terms of this Plan.

(b) Eligible Stock Award Recipients. Employees, Directors and Consultants are eligible to receive Stock Awards.

(c) Available Stock Awards. The Plan provides for the grant of the following types of Stock Awards: (i) Incentive Stock Options, (ii) Nonstatutory Stock Options, (iii) Stock Appreciation Rights, (iv) Restricted Stock Awards, (v) Restricted Stock Unit Awards and (vi) Other Stock Awards.

(d) Purpose. The Plan, through the granting of Stock Awards, is intended to help the Company secure and retain the services of eligible award recipients, provide incentives for such persons to exert maximum efforts for the success of the Company and any Affiliate and provide a means by which the eligible recipients may benefit from increases in value of the Common Stock.

2. ADMINISTRATION.

(a) Administration by Board. The Board will administer the Plan. The Board may delegate administration of the Plan to a Committee or Committees, as provided in Section 2(c).

(b) Powers of Board. The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine (A) who will be granted Stock Awards; (B) when and how each Stock Award will be granted; (C) what type of Stock Award will be granted; (D) the provisions of each Stock Award (which need not be identical), including when a person will be permitted to exercise or otherwise receive cash or Common Stock under the Stock Award; (E) the number of shares of Common Stock subject to a Stock Award; and (F) the Fair Market Value applicable to a Stock Award.

(ii) To construe and interpret the Plan and Stock Awards granted under it, and to establish, amend and revoke rules and regulations for administration of the Plan and Stock Awards. The Board, in the exercise of these powers, may correct any defect, omission or inconsistency in the Plan or in any Stock Award Agreement, in a manner and to the extent it will deem necessary or expedient to make the Plan or Stock Award fully effective.

(iii) To settle all controversies regarding the Plan and Stock Awards granted under it.

(iv) To accelerate, in whole or in part, the time at which a Stock Award may be exercised or vest (or at which cash or shares of Common Stock may be issued).

(v) To suspend or terminate the Plan at any time. Except as otherwise provided in the Plan or a Stock Award Agreement, suspension or termination of the Plan will not impair a Participant's rights under his or her then-outstanding Stock Award without his or her written consent except as provided in subsection (viii) below.

(vi) To amend the Plan in any respect the Board deems necessary or advisable, including, without limitation, by adopting amendments relating to Incentive Stock Options and certain nonqualified deferred compensation under Section 409A of the Code and/or to make the Plan or Stock Awards granted under the Plan compliant with the requirements for Incentive Stock Options or exempt from or compliant with the requirements for nonqualified deferred compensation under Section 409A of the Code, subject to the limitations, if any, of applicable law. However, if required by applicable law, and except as provided in Section 9(a) relating to Capitalization Adjustments, the Company will seek stockholder approval of any amendment of the Plan that (A) materially increases the number of shares of Common Stock available for issuance under the Plan, (B) materially expands the class of individuals eligible to receive Stock Awards under the Plan, (C) materially increases the benefits accruing to Participants under the Plan, (D) materially reduces the price at which shares of Common Stock may be issued or purchased under the Plan, (E) materially extends the term of the Plan, or (F) materially expands the types of Stock Awards available for issuance under the Plan. Except as provided in the Plan (including subsection (viii) below) or a Stock Award Agreement, no amendment of the Plan will impair a Participant's rights under an outstanding Stock Award unless (1) the Company requests the consent of the affected Participant, and (2) such Participant consents in writing.

(vii) To submit any amendment to the Plan for stockholder approval, including, but not limited to, amendments to the Plan intended to satisfy the requirements of Section 422 of the Code regarding Incentive Stock Options.

(viii) To approve forms of Stock Award Agreements for use under the Plan and to amend the terms of any one or more Stock Awards, including, but not limited to, amendments to provide terms more favorable to the Participant than previously provided in the Stock Award Agreement, subject to any specified limits in the Plan that are not subject to Board discretion; *provided however*, that a Participant's rights under any Stock Award will not be impaired by any such amendment unless (A) the Company requests the consent of the affected Participant, and (B) such Participant consents in writing. Notwithstanding the foregoing, (1) a Participant's rights will not be deemed to have been impaired by any such amendment if the Board, in its sole discretion, determines that the amendment, taken as a whole, does not materially impair the Participant's rights, and (2) subject to the limitations of applicable law, if any, the Board may amend the terms of any one or more Stock Awards without the affected Participant's consent (A) to maintain the qualified status of the Stock Award as an Incentive Stock Option under Section 422 of the Code; (B) to change the terms of an Incentive Stock Option, if such change results in impairment of the Award solely because it impairs the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (C) to clarify the manner of exemption from, or to bring the Stock Award into compliance with, Section 409A of the Code; or (D) to comply with other applicable laws.

(ix) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Plan or Stock Awards.

(x) To adopt such procedures and sub-plans as are necessary or appropriate to permit participation in the Plan by Employees, Directors or Consultants who are foreign nationals or employed outside the United States (provided that Board approval will not be necessary for immaterial modifications to the Plan or any Stock Award Agreement that are required for compliance with the laws of the relevant foreign jurisdiction).

(xi) To effect, with the consent of any adversely affected Participant, (A) the reduction of the exercise, purchase or strike price of any outstanding Stock Award; (B) the cancellation of any outstanding Stock Award and the grant in substitution therefor of a new (1) Option or SAR, (2) Restricted Stock Award, (3) Restricted Stock Unit Award, (4) Other Stock Award, (5) cash and/or (6) other valuable consideration determined by the Board, in its sole discretion, with any such substituted award (x) covering the same or a different number of shares of Common Stock as the cancelled Stock Award and (y) granted under the Plan or another equity or compensatory plan of the Company; or (C) any other action that is treated as a repricing under generally accepted accounting principles.

(c) Delegation to Committee. The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration of the Plan is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee of the Committee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board will thereafter be to the Committee or subcommittee). Any delegation of administrative powers will be reflected in resolutions, not inconsistent with the provisions of the Plan, adopted from time to time by the Board or Committee (as applicable). The Committee may, at any time, abolish the subcommittee and/or revest in the Committee any powers delegated to the subcommittee. The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revest in the Board some or all of the powers previously delegated.

(d) Delegation to an Officer. The Board may delegate to one (1) or more Officers the authority to do one or both of the following: (i) designate Employees who are not Officers to be recipients of Options and SARs (and, to the extent permitted by applicable law, other Stock Awards) and, to the extent permitted by applicable law, the terms of such Stock Awards; and (ii) determine the number of shares of Common Stock to be subject to such Stock Awards granted to such Employees; *provided*, *however*, that the Board resolutions regarding such delegation will specify the total number of shares of Common Stock that may be subject to the Stock Awards granted by such Officer and that such Officer may not grant a Stock Award to himself or herself. Any such Stock Awards will be granted on the form of Stock Award Agreement most recently approved for use by the Committee or the Board, unless otherwise provided for in the resolutions approving the delegation authority. The Board may not delegate authority to an Officer who is acting solely in the capacity of an Officer (and not also as a Director) to determine the Fair Market Value pursuant to Section 13(t) below.

(e) Effect of Board's Decision. All determinations, interpretations and constructions made by the Board in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.

3. Shares Subject to the Plan.

(a) Share Reserve.

(i) Subject to Section 9(a) relating to Capitalization Adjustments, the aggregate number of shares of Common Stock that may be issued pursuant to Stock Awards from and after the Effective Date will not exceed (A) 1,597,646 shares (which number is the number of shares subject to the Prior Plan's Available Reserve), plus (B) the Returning Shares, if any, in an amount not to exceed 9,340,180 shares, which become available for grant under this Plan from time to time (such aggregate number of shares described in (A) and (B) above, the "***Share Reserve***"). For clarity, the Share Reserve in this Section 3(a) is a limitation on the number of shares of Common Stock that may be issued pursuant to the Plan. Accordingly, this Section 3(a) does not limit the granting of Stock Awards except as provided in Section 7(a).

(b) Reversion of Shares to the Share Reserve. If a Stock Award or any portion thereof (i) expires or otherwise terminates without all of the shares covered by such Stock Award having been issued or (ii) is settled in cash (*i.e.*, the Participant receives cash rather than stock), such expiration, termination or settlement will not reduce (or otherwise offset) the number of shares of Common Stock that may be available for issuance under the Plan. If any shares of Common Stock issued pursuant to a Stock Award are forfeited back to or repurchased by the Company because of the failure to meet a contingency or condition required to vest such shares in the Participant, then the shares that are forfeited or repurchased will revert to and again become available for issuance under the Plan. Any shares reacquired by the Company in satisfaction of tax withholding obligations on a Stock Award or as consideration for the exercise or purchase price of a Stock Award will again become available for issuance under the Plan.

(c) Incentive Stock Option Limit. Subject to the Share Reserve and Section 9(a) relating to Capitalization Adjustments, the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options will be 22,000,000 shares of Common Stock.

(d) Source of Shares. The stock issuable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market or otherwise.

4. ELIGIBILITY.

(a) Eligibility for Specific Stock Awards. Incentive Stock Options may be granted only to employees of the Company or a "parent corporation" or "subsidiary corporation" thereof (as such terms are defined in Sections 424(e) and 424(f) of the Code). Stock Awards other than Incentive Stock Options may be granted to Employees, Directors and Consultants; *provided*, *however*, that Stock Awards may not be granted to Employees, Directors and Consultants who are providing Continuous Service only to any "parent" of the Company, as such term is defined in Rule 405, unless (i) the stock underlying such Stock Awards is treated as "service recipient stock" under Section 409A of the Code (for example, because the Stock Awards are granted pursuant to a corporate transaction such as a spin off transaction), or (ii) the Company, in consultation with its legal counsel, has determined that such Stock Awards are otherwise exempt from or alternatively comply with the distribution requirements of Section 409A of the Code.

(b) Ten Percent Stockholders. A Ten Percent Stockholder will not be granted an Incentive Stock Option unless the exercise price of such Option is at least one hundred ten percent (110%) of the Fair Market Value on the date of grant and the Option is not exercisable after the expiration of five (5) years from the date of grant.

(c) Consultants. A Consultant will not be eligible for the grant of a Stock Award if, at the time of grant, either the offer or sale of the Company's securities to such Consultant is not exempt under Rule 701 because of the nature of the services that the Consultant is providing to the Company, because the Consultant is not a natural person, or because of any other provision of Rule 701, unless the Company determines that such grant need not comply with the requirements of Rule 701 and will satisfy another exemption under the Securities Act as well as comply with the securities laws of all other relevant jurisdictions**.**

5. Provisions Relating to Options and Stock Appreciation Rights.

Each Option or SAR will be in such form and will contain such terms and conditions as the Board deems appropriate. All Options will be separately designated Incentive Stock Options or Nonstatutory Stock Options at the time of grant, and, if certificates are issued, a separate certificate or certificates will be issued for shares of Common Stock purchased on exercise of each type of Option. If an Option is not specifically designated as an Incentive Stock Option, or if an Option is designated as an Incentive Stock Option but some portion or all of the Option fails to qualify as an Incentive Stock Option under the applicable rules, then the Option (or portion thereof) will be a Nonstatutory Stock Option. The provisions of separate Options or SARs need not be identical; *provided, however*, that each Stock Award Agreement will conform to (through incorporation of provisions hereof by reference in the applicable Stock Award Agreement or otherwise) the substance of each of the following provisions:

(a) Term. Subject to the provisions of Section 4(b) regarding Ten Percent Stockholders, no Option or SAR will be exercisable after the expiration of ten (10) years from the date of its grant or such shorter period specified in the Stock Award Agreement.

(b) Exercise Price. Subject to the provisions of Section 4(b) regarding Ten Percent Stockholders, the exercise or strike price of each Option or SAR will be not less than one hundred percent (100%) of the Fair Market Value of the Common Stock subject to the Option or SAR on the date the Stock Award is granted. Notwithstanding the foregoing, an Option or SAR may be granted with an exercise or strike price lower than one hundred percent (100%) of the Fair Market Value of the Common Stock subject to the Stock Award if such Stock Award is granted pursuant to an assumption of or substitution for another option or stock appreciation right pursuant to a Corporate Transaction and in a manner consistent with the provisions of Section 409A of the Code and, if applicable, Section 424(a) of the Code. Each SAR will be denominated in shares of Common Stock equivalents.

(c) Purchase Price for Options. The purchase price of Common Stock acquired pursuant to the exercise of an Option may be paid, to the extent permitted by applicable law and as determined by the Board in its sole discretion, by any combination of the methods of payment set forth below. The Board will have the authority to grant Options that do not permit all of the following methods of payment (or otherwise restrict the ability to use certain methods) and to grant Options that require the consent of the Company to use a particular method of payment. The permitted methods of payment are as follows:

(i) by cash, check, bank draft or money order payable to the Company;

(ii) pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of the stock subject to the Option, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds;

(iii) by delivery to the Company (either by actual delivery or attestation) of shares of Common Stock;

(iv) if an Option is a Nonstatutory Stock Option, by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; provided, however, that the Company will accept a cash or other payment from the Participant to the extent of any remaining balance of the aggregate exercise price not satisfied by such reduction in the number of whole shares to be issued. Shares of Common Stock will no longer be subject to an Option and will not be exercisable thereafter to the extent that (A) shares issuable upon exercise are used to pay the exercise price pursuant to the "net exercise," (B) shares are delivered to the Participant as a result of such exercise, and (C) shares are withheld to satisfy tax withholding obligations;

(v) according to a deferred payment or similar arrangement with the Optionholder; *provided, however*, that interest will compound at least annually and will be charged at the minimum rate of interest necessary to avoid (A) the imputation of interest income to the Company and compensation income to the Optionholder under any applicable provisions of the Code, and (B) the classification of the Option as a liability for financial accounting purposes; or

(vi) in any other form of legal consideration that may be acceptable to the Board and specified in the applicable Stock Award Agreement.

(d) Exercise and Payment of a SAR. To exercise any outstanding SAR, the Participant must provide written notice of exercise to the Company in compliance with the provisions of the Stock Award Agreement evidencing such SAR. The appreciation distribution payable on the exercise of a SAR will be not greater than an amount equal to the excess of (A) the aggregate Fair Market Value (on the date of the exercise of the SAR) of a number of shares of Common Stock equal to the number of Common Stock equivalents in which the Participant is vested under such SAR, and with respect to which the Participant is exercising the SAR on such date, over (B) the strike price. The appreciation distribution may be paid in Common Stock, in cash, in any combination of the two or in any other form of consideration, as determined by the Board and contained in the Stock Award Agreement evidencing such SAR.

(e) Transferability of Options and SARs. The Board may, in its sole discretion, impose such limitations on the transferability of Options and SARs as the Board will determine. In the absence of such a determination by the Board to the contrary, the following restrictions on the transferability of Options and SARs will apply:

(i) Restrictions on Transfer. An Option or SAR will not be transferable except by will or by the laws of descent and distribution (and pursuant to subsections (ii) and (iii) below), and will be exercisable during the lifetime of the Participant only by the Participant. The Board may permit transfer of the Option or SAR in a manner that is not prohibited by applicable tax and securities laws. Except as explicitly provided herein, neither an Option nor a SAR may be transferred for consideration.

(ii) Domestic Relations Orders. Subject to the approval of the Board or a duly authorized Officer, an Option or SAR may be transferred pursuant to the terms of a domestic relations order, official marital settlement agreement or other divorce or separation instrument as permitted by Treasury Regulation 1.421-1(b)(2). If an Option is an Incentive Stock Option, such Option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.

(iii) Beneficiary Designation. Subject to the approval of the Board or a duly authorized Officer, a Participant may, by delivering written notice to the Company, in a form approved by the Company (or the designated broker), designate a third party who, upon the death of the Participant, will thereafter be entitled to exercise the Option or SAR and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, the executor or administrator of the Participant's estate will be entitled to exercise the Option or SAR and receive the Common Stock or other consideration resulting from such exercise. However, the Company may prohibit designation of a beneficiary at any time, including due to any conclusion by the Company that such designation would be inconsistent with the provisions of applicable laws.

(f) Vesting Generally. The total number of shares of Common Stock subject to an Option or SAR may vest and therefore become exercisable in periodic installments that may or may not be equal. The Option or SAR may be subject to such other terms and conditions on the time or times when it may or may not be exercised (which may be based on the satisfaction of performance goals or other criteria) as the Board may deem appropriate. The vesting provisions of individual Options or SARs may vary. The provisions of this Section 5(f) are subject to any Option or SAR provisions governing the minimum number of shares of Common Stock as to which an Option or SAR may be exercised.

(g) Termination of Continuous Service. Except as otherwise provided in the applicable Stock Award Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates (other than for Cause and other than upon the Participant's death or Disability), the Participant may exercise his or her Option or SAR (to the extent that the Participant was entitled to exercise such Stock Award as of the date of termination of Continuous Service) within the period of time ending on the earlier of (i) the date three (3) months following the termination of the Participant's Continuous Service (or such longer or shorter period specified in the applicable Stock Award Agreement, which period will not be less than thirty (30) days if necessary to comply with applicable laws unless such termination is for Cause) and (ii) the expiration of the term of the Option or SAR as set forth in the Stock Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR within the applicable time frame, the Option or SAR (as applicable) will terminate.

(h) Extension of Termination Date. Except as otherwise provided in the applicable Stock Award Agreement or other agreement between the Participant and the Company, if the exercise of an Option or SAR following the termination of the Participant's Continuous Service (other than for Cause and other than upon the Participant's death or Disability) would be prohibited at any time solely because the issuance of shares of Common Stock would violate the registration requirements under the Securities Act, then the Option or SAR will terminate on the earlier of (i) the expiration of a total period of three (3) months (that need not be consecutive) after the termination of the Participant's Continuous Service during which the exercise of the Option or SAR would not be in violation of such registration requirements, or (ii) the expiration of the term of the Option or SAR as set forth in the applicable Stock Award Agreement. In addition, unless otherwise provided in a Participant's Stock Award Agreement, if the sale of any Common Stock received upon exercise of an Option or SAR following the termination of the Participant's Continuous Service (other than for Cause) would violate the Company's insider trading policy, then the Option or SAR will terminate on the earlier of (i) the expiration of a period of time (that need not be consecutive) equal to the applicable post-termination exercise period after the termination of the Participant's Continuous Service during which the sale of the Common Stock received upon exercise of the Option or SAR would not be in violation of the Company's insider trading policy, or (ii) the expiration of the term of the Option or SAR as set forth in the applicable Stock Award Agreement.

(i) Disability of Participant. Except as otherwise provided in the applicable Stock Award Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates as a result of the Participant's Disability, the Participant may exercise his or her Option or SAR (to the extent that the Participant was entitled to exercise such Option or SAR as of the date of termination of Continuous Service), but only within such period of time ending on the earlier of (i) the date twelve (12) months following such termination of Continuous Service (or such longer or shorter period specified in the Stock Award Agreement, which period will not be less than six (6) months if necessary to comply with applicable laws), and (ii) the expiration of the term of the Option or SAR as set forth in the Stock Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR within the applicable time frame, the Option or SAR (as applicable) will terminate.

(j) Death of Participant. Except as otherwise provided in the applicable Stock Award Agreement or other agreement between the Participant and the Company, if (i) a Participant's Continuous Service terminates as a result of the Participant's death, or (ii) the Participant dies within the period (if any) specified in the Stock Award Agreement for exercisability after the termination of the Participant's Continuous Service (for a reason other than death), then the Option or SAR may be exercised (to the extent the Participant was entitled to exercise such Option or SAR as of the date of death) by the Participant's estate, by a person who acquired the right to exercise the Option or SAR by bequest or inheritance or by a person designated to exercise the Option or SAR upon the Participant's death, but only within the period ending on the earlier of (i) the date eighteen (18) months following the date of death (or such longer or shorter period specified in the Stock Award Agreement, which period will not be less than six (6) months if necessary to comply with applicable laws), and (ii) the expiration of the term of such Option or SAR as set forth in the Stock Award Agreement. If, after the Participant's death, the Option or SAR is not exercised within the applicable time frame, the Option or SAR (as applicable) will terminate.

(k) Termination for Cause. Except as explicitly provided otherwise in a Participant's Stock Award Agreement or other individual written agreement between the Company or any Affiliate and the Participant, if a Participant's Continuous Service is terminated for Cause, the Option or SAR will terminate immediately upon such Participant's termination of Continuous Service, and the Participant will be prohibited from exercising his or her Option or SAR from and after the time of such termination of Continuous Service.

(l) Non-Exempt Employees. If an Option or SAR is granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, the Option or SAR will not be first exercisable for any shares of Common Stock until at least six (6) months following the date of grant of the Option or SAR (although the Stock Award may vest prior to such date). Consistent with the provisions of the Worker Economic Opportunity Act, (i) if such non-exempt Employee dies or suffers a Disability, (ii) upon a Corporate Transaction in which such Option or SAR is not assumed, continued, or substituted, (iii) upon a Change in Control, or (iv) upon the Participant's retirement (as such term may be defined in the Participant's Stock Award Agreement, in another agreement between the Participant and the Company, or, if no such definition, in accordance with the Company's then current employment policies and guidelines), the vested portion of any Options and SARs may be exercised earlier than six (6) months following the date of grant. The foregoing provision is intended to operate so that any income derived by a non-exempt employee in connection with the exercise or vesting of an Option or SAR will be exempt from his or her regular rate of pay. To the extent permitted and/or required for compliance with the Worker Economic Opportunity Act to ensure that any income derived by a non-exempt employee in connection with the exercise, vesting or issuance of any shares under any other Stock Award will be exempt from the employee's regular rate of pay, the provisions of this Section 5(l) will apply to all Stock Awards and are hereby incorporated by reference into such Stock Award Agreements.

(m) Early Exercise of Options. An Option may, but need not, include a provision whereby the Optionholder may elect at any time before the Optionholder's Continuous Service terminates to exercise the Option as to any part or all of the shares of Common Stock subject to the Option prior to the full vesting of the Option. Subject to the "Repurchase Limitation" in Section 8(m), any unvested shares of Common Stock so purchased may be subject to a repurchase right in favor of the Company or to any other restriction the Board determines to be appropriate. Provided that the "Repurchase Limitation" in Section 8(m) is not violated, the Company will not be required to exercise its repurchase right until at least six (6) months (or such longer or shorter period of time required to avoid classification of the Option as a liability for financial accounting purposes) have elapsed following exercise of the Option unless the Board otherwise specifically provides in the Option Agreement.

(n) Right of Repurchase. Subject to the "Repurchase Limitation" in Section 8(m), the Option or SAR may include a provision whereby the Company may elect to repurchase all or any part of the vested shares of Common Stock acquired by the Participant pursuant to the exercise of the Option or SAR.

(o) Right of First Refusal. The Option or SAR may include a provision whereby the Company may elect to exercise a right of first refusal following receipt of notice from the Participant of the intent to transfer all or any part of the shares of Common Stock received upon the exercise of the Option or SAR. Such right of first refusal will be subject to the "Repurchase Limitation" in Section 8(m). Except as expressly provided in this Section 5(o) or in the Stock Award Agreement, such right of first refusal will otherwise comply with any applicable provisions of the bylaws of the Company.

6. Provisions of Stock Awards Other than Options and SARs.

(a) Restricted Stock Awards. Each Restricted Stock Award Agreement will be in such form and will contain such terms and conditions as the Board deems appropriate. To the extent consistent with the Company's bylaws, at the Board's election, shares of Common Stock may be (i) held in book entry form subject to the Company's instructions until any restrictions relating to the Restricted Stock Award lapse; or (ii) evidenced by a certificate, which certificate will be held in such form and manner as determined by the Board. The terms and conditions of Restricted Stock Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Award Agreements need not be identical. Each Restricted Stock Award Agreement will conform to (through incorporation of the provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) Consideration. A Restricted Stock Award may be awarded in consideration for (A) cash, check, bank draft or money order payable to the Company, (B) past services to the Company or an Affiliate, or (C) any other form of legal consideration (including future services) that may be acceptable to the Board, in its sole discretion, and permissible under applicable law.

(ii) Vesting. Subject to the "Repurchase Limitation" in Section 8(m), shares of Common Stock awarded under the Restricted Stock Award Agreement may be subject to forfeiture to the Company in accordance with a vesting schedule to be determined by the Board.

(iii) Termination of Participant's Continuous Service. If a Participant's Continuous Service terminates, the Company may receive through a forfeiture condition or a repurchase right, any or all of the shares of Common Stock held by the Participant that have not vested as of the date of termination of Continuous Service under the terms of the Restricted Stock Award Agreement.

(iv) Transferability. Rights to acquire shares of Common Stock under the Restricted Stock Award Agreement will be transferable by the Participant only upon such terms and conditions as are set forth in the Restricted Stock Award Agreement, as the Board will determine in its sole discretion, so long as Common Stock awarded under the Restricted Stock Award Agreement remains subject to the terms of the Restricted Stock Award Agreement.

(v) Dividends. A Restricted Stock Award Agreement may provide that any dividends paid on Restricted Stock will be subject to the same vesting and forfeiture restrictions as apply to the shares subject to the Restricted Stock Award to which they relate.

(b) Restricted Stock Unit Awards. Each Restricted Stock Unit Award Agreement will be in such form and will contain such terms and conditions as the Board deems appropriate. The terms and conditions of Restricted Stock Unit Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Unit Award Agreements need not be identical. Each Restricted Stock Unit Award Agreement will conform to (through incorporation of the provisions hereof by reference in the Agreement or otherwise) the substance of each of the following provisions:

(i) Consideration. At the time of grant of a Restricted Stock Unit Award, the Board will determine the consideration, if any, to be paid by the Participant upon delivery of each share of Common Stock subject to the Restricted Stock Unit Award. The consideration to be paid (if any) by the Participant for each share of Common Stock subject to a Restricted Stock Unit Award may be paid in any form of legal consideration that may be acceptable to the Board, in its sole discretion, and permissible under applicable law.

(ii) Vesting. At the time of the grant of a Restricted Stock Unit Award, the Board may impose such restrictions on or conditions to the vesting of the Restricted Stock Unit Award as it, in its sole discretion, deems appropriate.

(iii) Payment. A Restricted Stock Unit Award may be settled by the delivery of shares of Common Stock, their cash equivalent, any combination thereof or in any other form of consideration, as determined by the Board and contained in the Restricted Stock Unit Award Agreement.

(iv) Additional Restrictions. At the time of the grant of a Restricted Stock Unit Award, the Board, as it deems appropriate, may impose such restrictions or conditions that delay the delivery of the shares of Common Stock (or their cash equivalent) subject to a Restricted Stock Unit Award to a time after the vesting of such Restricted Stock Unit Award.

(v) Dividend Equivalents. Dividend equivalents may be credited in respect of shares of Common Stock covered by a Restricted Stock Unit Award, as determined by the Board and contained in the Restricted Stock Unit Award Agreement. At the sole discretion of the Board, such dividend equivalents may be converted into additional shares of Common Stock covered by the Restricted Stock Unit Award in such manner as determined by the Board. Any additional shares covered by the Restricted Stock Unit Award credited by reason of such dividend equivalents will be subject to all of the same terms and conditions of the underlying Restricted Stock Unit Award Agreement to which they relate.

(vi) Termination of Participant's Continuous Service. Except as otherwise provided in the applicable Restricted Stock Unit Award Agreement, such portion of the Restricted Stock Unit Award that has not vested will be forfeited upon the Participant's termination of Continuous Service.

(vii) Compliance with Section 409A of the Code. Notwithstanding anything to the contrary set forth herein, any Restricted Stock Unit Award granted under the Plan that is not exempt from the requirements of Section 409A of the Code shall contain such provisions so that such Restricted Stock Unit Award will comply with the requirements of Section 409A of the Code. Such restrictions, if any, shall be determined by the Board and contained in the Restricted Stock Unit Award Agreement evidencing such Restricted Stock Unit Award. For example, such restrictions may include, without limitation, a requirement that any Common Stock that is to be issued in a year following the year in which the Restricted Stock Unit Award vests must be issued in accordance with a fixed pre-determined schedule.

(c) Other Stock Awards. Other forms of Stock Awards valued in whole or in part by reference to, or otherwise based on, Common Stock, including the appreciation in value thereof (e.g., options or stock rights with an exercise price or strike price less than one hundred percent (100%) of the Fair Market Value of the Common Stock at the time of grant) may be granted either alone or in addition to Stock Awards provided for under Section 5 and the preceding provisions of this Section 6. Subject to the provisions of the Plan, the Board will have sole and complete authority to determine the persons to whom and the time or times at which such Other Stock Awards will be granted, the number of shares of Common Stock (or the cash equivalent thereof) to be granted pursuant to such Other Stock Awards and all other terms and conditions of such Other Stock Awards.

7. COVENANTS OF THE COMPANY.

(a) Availability of Shares. The Company will keep available at all times the number of shares of Common Stock reasonably required to satisfy then-outstanding Stock Awards.

(b) Securities Law Compliance. The Company will seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Stock Awards and to issue and sell shares of Common Stock upon exercise of the Stock Awards; *provided, however,* that this undertaking will not require the Company to register under the Securities Act the Plan, any Stock Award or any Common Stock issued or issuable pursuant to any such Stock Award. If, after reasonable efforts and at a reasonable cost, the Company is unable to obtain from any such regulatory commission or agency the authority that counsel for the Company deems necessary for the lawful issuance and sale of Common Stock under the Plan, the Company will be relieved from any liability for failure to issue and sell Common Stock upon exercise of such Stock Awards unless and until such authority is obtained. A Participant will not be eligible for the grant of a Stock Award or the subsequent issuance of cash or Common Stock pursuant to the Stock Award if such grant or issuance would be in violation of any applicable securities law.

(c) No Obligation to Notify or Minimize Taxes. The Company will have no duty or obligation to any Participant to advise such holder as to the time or manner of exercising such Stock Award. Furthermore, the Company will have no duty or obligation to warn or otherwise advise such holder of a pending termination or expiration of a Stock Award or a possible period in which the Stock Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of a Stock Award to the holder of such Stock Award.

8. MISCELLANEOUS.

(a) Use of Proceeds from Sales of Common Stock. Proceeds from the sale of shares of Common Stock pursuant to Stock Awards will constitute general funds of the Company.

(b) Corporate Action Constituting Grant of Stock Awards. Corporate action constituting a grant by the Company of a Stock Award to any Participant will be deemed completed as of the date of such corporate action, unless otherwise determined by the Board, regardless of when the instrument, certificate, or letter evidencing the Stock Award is communicated to, or actually received or accepted by, the Participant. In the event that the corporate records (e.g., Board consents, resolutions or minutes) documenting the corporate action constituting the grant contain terms (e.g., exercise price, vesting schedule or number of shares) that are inconsistent with those in the Stock Award Agreement as a result of a clerical error in the papering of the Stock Award Agreement, the corporate records will control and the Participant will have no legally binding right to the incorrect term in the Stock Award Agreement.

(c) Stockholder Rights. No Participant will be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to a Stock Award unless and until (i) such Participant has satisfied all requirements for exercise of, or the issuance of shares of Common Stock under, the Stock Award pursuant to its terms, and (ii) the issuance of the Common Stock subject to the Stock Award has been entered into the books and records of the Company.

(d) No Employment or Other Service Rights. Nothing in the Plan, any Stock Award Agreement or any other instrument executed thereunder or in connection with any Stock Award granted pursuant thereto will confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Stock Award was granted or will affect the right of the Company or an Affiliate to terminate (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate, or (iii) the service of a Director pursuant to the bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state in which the Company or the Affiliate is incorporated, as the case may be.

(e) Change in Time Commitment. In the event a Participant's regular level of time commitment in the performance of his or her services for the Company and any Affiliates is reduced (for example, and without limitation, if the Participant is an Employee of the Company and the Employee has a change in status from a full-time Employee to a part-time Employee) after the date of grant of any Stock Award to the Participant, the Board has the right in its sole discretion to (x) make a corresponding reduction in the number of shares subject to any portion of such Stock Award that is scheduled to vest or become payable after the date of such change in time commitment, and (y) in lieu of or in combination with such a reduction, extend the vesting or payment schedule applicable to such Stock Award. In the event of any such reduction, the Participant will have no right with respect to any portion of the Stock Award that is so reduced or extended.

(f) Incentive Stock Option Limitations. To the extent that the aggregate Fair Market Value (determined at the time of grant) of Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any Optionholder during any calendar year (under all plans of the Company and any Affiliates) exceeds one hundred thousand dollars ($100,000) (or such other limit established in the Code) or otherwise does not comply with the rules governing Incentive Stock Options, the Options or portions thereof that exceed such limit (according to the order in which they were granted) or otherwise do not comply with such rules will be treated as Nonstatutory Stock Options, notwithstanding any contrary provision of the applicable Option Agreement(s).

(g) Investment Assurances. The Company may require a Participant, as a condition of exercising or acquiring Common Stock under any Stock Award, (i) to give written assurances satisfactory to the Company as to the Participant's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters and that he or she is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Stock Award; and (ii) to give written assurances satisfactory to the Company stating that the Participant is acquiring Common Stock subject to the Stock Award for the Participant's own account and not with any present intention of selling or otherwise distributing the Common Stock. The foregoing requirements, and any assurances given pursuant to such requirements, will be inoperative if (A) the issuance of the shares upon the exercise or acquisition of Common Stock under the Stock Award has been registered under a then currently effective registration statement under the Securities Act, or (B) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may, upon advice of counsel to the Company, place legends on stock certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the Common Stock.

(h) Withholding Obligations. Unless prohibited by the terms of a Stock Award Agreement, the Company may, in its sole discretion, satisfy any federal, state or local tax withholding obligation relating to a Stock Award by any of the following means or by a combination of such means: (i) causing the Participant to tender a cash payment; (ii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to the Participant in connection with the Stock Award; *provided, however*, that no shares of Common Stock are withheld with a value exceeding the minimum amount of tax required to be withheld by law (or such lesser amount as may be necessary to avoid classification of the Stock Award as a liability for financial accounting purposes); (iii) withholding cash from a Stock Award settled in cash; (iv) withholding payment from any amounts otherwise payable to the Participant; or (v) by such other method as may be set forth in the Stock Award Agreement.

(i) Electronic Delivery. Any reference herein to a "written" agreement or document will include any agreement or document delivered electronically or posted on the Company's intranet (or other shared electronic medium controlled by the Company to which the Participant has access).

(j) Deferrals. To the extent permitted by applicable law, the Board, in its sole discretion, may determine that the delivery of Common Stock or the payment of cash, upon the exercise, vesting or settlement of all or a portion of any Stock Award may be deferred and may establish programs and procedures for deferral elections to be made by Participants. Deferrals by Participants will be made in accordance with Section 409A of the Code. Consistent with Section 409A of the Code, the Board may provide for distributions while a Participant is still an employee or otherwise providing services to the Company. The Board is authorized to make deferrals of Stock Awards and determine when, and in what annual percentages, Participants may receive payments, including lump sum payments, following the Participant's termination of Continuous Service, and implement such other terms and conditions consistent with the provisions of the Plan and in accordance with applicable law.

(k) Compliance with Section 409A of the Code. To the extent that the Board determines that any Stock Award granted hereunder is subject to Section 409A of the Code, the Stock Award Agreement evidencing such Stock Award shall incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code. To the extent applicable, the Plan and Stock Award Agreements shall be interpreted in accordance with Section 409A of the Code.

(l) Compliance with Exemption Provided by Rule 12h-1(f). If at the end of the Company's most recently completed fiscal year: (i) the aggregate of the number of persons who hold outstanding compensatory employee stock options to purchase shares of Common Stock granted pursuant to the Plan or otherwise (such persons, "***Holders of Options***") equals or exceeds five hundred (500), and (ii) the Company's assets exceed $10 million, then the following restrictions will apply during any period during which the Company does not have a class of its securities registered under Section 12 of the Exchange Act and is not required to file reports under Section 15(d) of the Exchange Act: (A) the Options and, prior to exercise, the shares of Common Stock to be issued on exercise of the Options may not be transferred until the Company is no longer relying on the exemption provided by Rule 12h-1(f) promulgated under the Exchange Act ("***Rule 12h-1(f)***"), except: (1) as permitted by Rule 701(c) promulgated under the Securities Act, (2) to a guardian upon the disability of the Holder of Options, or (3) to an executor upon the death of the Holder of Options (collectively, the "***Permitted Transferees***"); provided, however, the following transfers are permitted: (i) transfers by Holders of Options to the Company, and (ii) transfers in connection with a change of control or other acquisition involving the Company, if following such transaction, the Options no longer remain outstanding and the Company is no longer relying on the exemption provided by Rule 12h-1(f); provided further, that any Permitted Transferees may not further transfer the Options; (B) except as otherwise provided in (A) above, the Options and shares of Common Stock issuable on exercise of the Options are restricted as to any pledge, hypothecation, or other transfer, including any short position, any "put equivalent position" as defined by Rule 16a-1(h) promulgated under the Exchange Act, or any "call equivalent position" as defined by Rule 16a-1(b) promulgated under the Exchange Act by Holders of Options prior to exercise of an Option until the Company is no longer relying on the exemption provided by Rule 12h-1(f); and (C) at any time that the Company is relying on the exemption provided by Rule 12h-1(f), the Company will deliver to Holders of Options (whether by physical or electronic delivery or written notice of the availability of the information on an internet site) the information required by Rule 701(e)(3), (4), and (5) promulgated under the Securities Act every six (6) months, including financial statements that are not more than one hundred eighty (180) days old; provided, however, that the Company may condition the delivery of such information upon the Holder of Options' agreement to maintain its confidentiality.

(m) Repurchase Limitation. The terms of any repurchase right will be specified in the Stock Award Agreement. The repurchase price for vested shares of Common Stock will be the Fair Market Value of the shares of Common Stock on the date of repurchase. The repurchase price for unvested shares of Common Stock will be the lower of (i) the Fair Market Value of the shares of Common Stock on the date of repurchase or (ii) their original purchase price. However, the Company will not exercise its repurchase right until at least six (6) months (or such longer or shorter period of time necessary to avoid classification of the Stock Award as a liability for financial accounting purposes) have elapsed following delivery of shares of Common Stock subject to the Stock Award, unless otherwise specifically provided by the Board.

9. Adjustments upon Changes in Common Stock; Other Corporate Events.

(a) Capitalization Adjustments. In the event of a Capitalization Adjustment, the Board will appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 3(a), (ii) the class(es) and maximum number of securities that may be issued pursuant to the exercise of Incentive Stock Options pursuant to Section 3(c), and (iii) the class(es) and number of securities and price per share of stock subject to outstanding Stock Awards. The Board will make such adjustments, and its determination will be final, binding and conclusive.

(b) Dissolution or Liquidation. Except as otherwise provided in the Stock Award Agreement, in the event of a dissolution or liquidation of the Company, all outstanding Stock Awards (other than Stock Awards consisting of vested and outstanding shares of Common Stock not subject to a forfeiture condition or the Company's right of repurchase) will terminate immediately prior to the completion of such dissolution or liquidation, and the shares of Common Stock subject to the Company's repurchase rights or subject to a forfeiture condition may be repurchased or reacquired by the Company notwithstanding the fact that the holder of such Stock Award is providing Continuous Service, *provided*, *however,* that the Board may, in its sole discretion, cause some or all Stock Awards to become fully vested, exercisable and/or no longer subject to repurchase or forfeiture (to the extent such Stock Awards have not previously expired or terminated) before the dissolution or liquidation is completed but contingent on its completion.

(c) Corporate Transaction. The following provisions will apply to Stock Awards in the event of a Corporate Transaction unless otherwise provided in the instrument evidencing the Stock Award or any other written agreement between the Company or any Affiliate and the Participant or unless otherwise expressly provided by the Board at the time of grant of a Stock Award. In the event of a Corporate Transaction, then any surviving corporation or acquiring corporation shall assume any Stock Awards outstanding under the Plan or shall substitute similar stock awards (including an award to acquire the same consideration paid to the stockholders in the Corporate Transaction for those outstanding under the Plan). In the event any surviving corporation or acquiring corporation fails or refuses to assume such Stock Awards or to substitute similar stock awards for those outstanding under the Plan, then with respect to Stock Awards held by Participants whose Continuous Service has not terminated, the vesting of such Stock Awards (and, if applicable, the time during which such Stock Awards may be exercised) shall be accelerated in full, and the Stock Awards shall terminate if not exercised (if applicable) at or prior to the Corporate Transaction. With respect to any other Stock Awards outstanding under the Plan, such Stock Awards shall terminate if not exercised (if applicable) prior to the Corporate Transaction.

(d) Change in Control. A Stock Award may be subject to additional acceleration of vesting and exercisability upon or after a Change in Control as may be provided in the Stock Award Agreement for such Stock Award or as may be provided in any other written agreement between the Company or any Affiliate and the Participant, but in the absence of such provision, no such acceleration will occur.

10. Plan Term; Earlier Termination or Suspension of the Plan.

(a) Plan Term. The Board may suspend or terminate the Plan at any time. Unless terminated sooner by the Board, the Plan will automatically terminate on the day before the tenth (10th) anniversary of the earlier of (i) the date the Plan is adopted by the Board, or (ii) the date the Plan is approved by the stockholders of the Company. No Stock Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

(b) No Impairment of Rights. Suspension or termination of the Plan will not impair rights and obligations under any Stock Award granted while the Plan is in effect except with the written consent of the affected Participant or as otherwise permitted in the Plan.

11. Effective Date of Plan.

This Plan will become effective on the Effective Date.

12. Choice of Law.

The laws of the State of North Carolina will govern all questions concerning the construction, validity and interpretation of this Plan, without regard to that state's conflict of laws rules.

13. Definitions. As used in the Plan, the following definitions will apply to the capitalized terms indicated below:

(a) "***Affiliate***" means, at the time of determination, any "parent" or "majority-owned subsidiary" of the Company, as such terms are defined in Rule 405. The Board will have the authority to determine the time or times at which "parent" or "majority-owned subsidiary" status is determined within the foregoing definition.

(b) "***Board***" means the Board of Directors of the Company.

(c) "***Capitalization Adjustment***" means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Stock Award after the Effective Date without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, reverse stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure, or any similar equity restructuring transaction, as that term is used in Statement of Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.

(d) "***Cause***" will have the meaning ascribed to such term in any written agreement between the Participant and the Company defining such term and, in the absence of such agreement, such term means, with respect to a Participant, the occurrence of any of the following events: (i) such Participant's conviction of any felony or any crime involving fraud; (ii) such Participant's participation (whether by affirmative act or omission) in a fraud or felonious act against the Company and/or its Affiliates; (iii) conduct by such Participant which, based upon a good faith and reasonable factual investigation by the Company (or, if such Participant is an Officer, by the Board), demonstrates such Participant's unfitness to serve; (iv) such Participant's violation of any statutory or fiduciary duty, or duty of loyalty owed to the Company and/or its Affiliates and which has a material adverse effect on the Company and/or its Affiliates; (v) such Participant's violation of state or federal law in connection with such Participant's performance of such Participant's job which has a material adverse effect on the Company and/or its Affiliates; (vi) breach of any material term of any contract between such Participant and the Company and/or its Affiliates; and (vii) such Participant's violation of any material Company policy. Notwithstanding the foregoing, such Participant's death or Disability shall not constitute Cause as set forth herein. The determination that a termination of the Participant's Continuous Service is either for Cause or without Cause will be made by the Board or Committee, as applicable, in its sole and exclusive judgment and discretion. Any determination by the Company that the Continuous Service of a Participant was terminated with or without Cause for the purposes of outstanding Stock Awards held by such Participant will have no effect upon any determination of the rights or obligations of the Company or such Participant for any other purpose.

(e) "***Change in Control***" means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) any Exchange Act Person becomes the Owner, directly or indirectly, of securities of the Company representing more than fifty percent (50%) of the combined voting power of the Company's then outstanding securities other than by virtue of a merger, consolidation or similar transaction. Notwithstanding the foregoing, a Change in Control will not be deemed to occur (A) on account of the acquisition of securities of the Company directly from the Company, (B) on account of the acquisition of securities of the Company by an investor, any affiliate thereof or any other Exchange Act Person that acquires the Company's securities in a transaction or series of related transactions the primary purpose of which is to obtain financing for the Company through the issuance of equity securities or (C) solely because the level of Ownership held by any Exchange Act Person (the "***Subject Person***") exceeds the designated percentage threshold of the outstanding voting securities as a result of a repurchase or other acquisition of voting securities by the Company reducing the number of shares outstanding, provided that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of voting securities by the Company, and after such share acquisition, the Subject Person becomes the Owner of any additional voting securities that, assuming the repurchase or other acquisition had not occurred, increases the percentage of the then outstanding voting securities Owned by the Subject Person over the designated percentage threshold, then a Change in Control will be deemed to occur;

(ii) there is consummated a merger, consolidation or similar transaction involving (directly or indirectly) the Company and, immediately after the consummation of such merger, consolidation or similar transaction, the stockholders of the Company immediately prior thereto do not Own, directly or indirectly, either (A) outstanding voting securities representing more than fifty percent (50%) of the combined outstanding voting power of the surviving Entity in such merger, consolidation or similar transaction or (B) more than fifty percent (50%) of the combined outstanding voting power of the parent of the surviving Entity in such merger, consolidation or similar transaction, in each case in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such transaction;

(iii) the stockholders of the Company approve or the Board approves a plan of complete dissolution or liquidation of the Company, or a complete dissolution or liquidation of the Company will otherwise occur, except for a liquidation into a parent corporation; or

(iv) there is consummated a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries, other than a sale, lease, license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries to an Entity, more than fifty percent (50%) of the combined voting power of the voting securities of which are Owned by stockholders of the Company in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such sale, lease, license or other disposition.

Notwithstanding the foregoing definition or any other provision of this Plan, (A) the term Change in Control will not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company, and (B) the definition of Change in Control (or any analogous term) in an individual written agreement between the Company or any Affiliate and the Participant will supersede the foregoing definition with respect to Stock Awards subject to such agreement; *provided*, *however*, that if no definition of Change in Control or any analogous term is set forth in such an individual written agreement, the foregoing definition will apply.

(f) "***Code***" means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(g) "***Committee***" means a committee of one (1) or more Directors to whom authority has been delegated by the Board in accordance with Section 2(c).

(h) "***Common Stock***" means the common stock of the Company.

(i) "***Company***" means Chimerix, Inc., a Delaware corporation.

(j) "***Consultant***" means any person, including an advisor, who is (i) engaged by the Company or an Affiliate to render consulting or advisory services and is compensated for such services, or (ii) serving as a member of the board of directors of an Affiliate and is compensated for such services. However, service solely as a Director, or payment of a fee for such service, will not cause a Director to be considered a "Consultant" for purposes of the Plan.

(k) "***Continuous Service***" means that the Participant's service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. A change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Director or Consultant or a change in the Entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant's service with the Company or an Affiliate, will not terminate a Participant's Continuous Service; *provided*, *however*, that if the Entity for which a Participant is rendering services ceases to qualify as an Affiliate, as determined by the Board in its sole discretion, such Participant's Continuous Service will be considered to have terminated on the date such Entity ceases to qualify as an Affiliate. For example, a change in status from an Employee of the Company to a Consultant of an Affiliate or to a Director will not constitute an interruption of Continuous Service. To the extent permitted by law, the Board or the chief executive officer of the Company, in that party's sole discretion, may determine whether Continuous Service will be considered interrupted in the case of (i) any leave of absence approved by the Board or chief executive officer, including sick leave, military leave or any other personal leave, or (ii) transfers between the Company, an Affiliate, or their successors. Notwithstanding the foregoing, a leave of absence will be treated as Continuous Service for purposes of vesting in a Stock Award only to such extent as may be provided in the Company's leave of absence policy, in the written terms of any leave of absence agreement or policy applicable to the Participant, or as otherwise required by law.

(l) "***Corporate Transaction***" means the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) a sale or other disposition of all or substantially all, as determined by the Board in its sole discretion, of the consolidated assets of the Company and its Subsidiaries;

(ii) a sale or other disposition of at least ninety percent (90%) of the outstanding securities of the Company;

(iii) a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or

(iv) a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

(m) "***Director***" means a member of the Board.

(n) "***Disability***" means, with respect to a Participant, the inability of such Participant to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or that has lasted or can be expected to last for a continuous period of not less than twelve (12) months as provided in Sections 22(e)(3) and 409A(a)(2)(c)(i) of the Code, and will be determined by the Board on the basis of such medical evidence as the Board deems warranted under the circumstances.

(o) "***Effective Date***" means the effective date of this Plan, which is the earlier of (i) the date that this Plan is first approved by the Company's stockholders, and (ii) the date this Plan is adopted by the Board.

(p) "***Employee***" means any person employed by the Company or an Affiliate. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an "Employee" for purposes of the Plan.

(q) "***Entity***" means a corporation, partnership, limited liability company or other entity.

(r) "***Exchange Act***" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(s) "***Exchange Act Person***" means any natural person, Entity or "group" (within the meaning of Section 13(d) or 14(d) of the Exchange Act), except that "Exchange Act Person" will not include (i) the Company or any Subsidiary of the Company, (ii) any employee benefit plan of the Company or any Subsidiary of the Company or any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any Subsidiary of the Company, (iii) an underwriter temporarily holding securities pursuant to an offering of such securities, (iv) an Entity Owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their Ownership of stock of the Company; or (v) any natural person, Entity or "group" (within the meaning of Section 13(d) or 14(d) of the Exchange Act) that, as of the Effective Date, is the Owner, directly or indirectly, of securities of the Company representing more than fifty percent (50%) of the combined voting power of the Company's then outstanding securities.

(t) "***Fair Market Value***" means, as of any date, the value of the Common Stock determined by the Board in compliance with Section 409A of the Code or, in the case of an Incentive Stock Option, in compliance with Section 422 of the Code.

(u) "***Incentive Stock Option***" means an option granted pursuant to Section 5 of the Plan that is intended to be, and that qualifies as, an "incentive stock option" within the meaning of Section 422 of the Code.

(v) "***Nonstatutory Stock Option***" means any option granted pursuant to Section 5 of the Plan that does not qualify as an Incentive Stock Option.

(w) "***Officer***" means any person designated by the Company as an officer.

(x) "***Option***" means an Incentive Stock Option or a Nonstatutory Stock Option to purchase shares of Common Stock granted pursuant to the Plan.

(y) "***Option Agreement***" means a written agreement between the Company and an Optionholder evidencing the terms and conditions of an Option grant. Each Option Agreement will be subject to the terms and conditions of the Plan.

(z) "***Optionholder***" means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.

(aa) "***Other Stock Award***" means an award based in whole or in part by reference to the Common Stock which is granted pursuant to the terms and conditions of Section 6(c).

(bb) "***Other Stock Award Agreement***" means a written agreement between the Company and a holder of an Other Stock Award evidencing the terms and conditions of an Other Stock Award grant. Each Other Stock Award Agreement will be subject to the terms and conditions of the Plan.

(cc) "***Own***," "***Owned***," "***Owner***," "***Ownership***" A person or Entity will be deemed to "Own," to have "Owned," to be the "Owner" of, or to have acquired "Ownership" of securities if such person or Entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.

(dd) "***Participant***" means a person to whom a Stock Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Stock Award.

(ee) "***Plan***" means this Chimerix, Inc. 2012 Equity Incentive Plan.

(ff) "***Restricted Stock Award***" means an award of shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(a).

(gg) "***Restricted Stock Award Agreement***" means a written agreement between the Company and a holder of a Restricted Stock Award evidencing the terms and conditions of a Restricted Stock Award grant. Each Restricted Stock Award Agreement will be subject to the terms and conditions of the Plan.

(hh) "***Restricted Stock Unit Award***" means a right to receive shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(b).

(ii) "***Restricted Stock Unit Award Agreement***" means a written agreement between the Company and a holder of a Restricted Stock Unit Award evidencing the terms and conditions of a Restricted Stock Unit Award grant. Each Restricted Stock Unit Award Agreement will be subject to the terms and conditions of the Plan.

(jj) "***Rule 405***" means Rule 405 promulgated under the Securities Act.

(kk) "***Rule 701***" means Rule 701 promulgated under the Securities Act.

(ll) "***Securities Act***" means the Securities Act of 1933, as amended.

(mm) "***Stock Appreciation Right***" or "***SAR***" means a right to receive the appreciation on Common Stock that is granted pursuant to the terms and conditions of Section 5.

(nn) "***Stock Appreciation Right Agreement***" means a written agreement between the Company and a holder of a Stock Appreciation Right evidencing the terms and conditions of a Stock Appreciation Right grant. Each Stock Appreciation Right Agreement will be subject to the terms and conditions of the Plan.

(oo) "***Stock Award***" means any right to receive Common Stock granted under the Plan, including an Incentive Stock Option, a Nonstatutory Stock Option, a Restricted Stock Award, a Restricted Stock Unit Award, a Stock Appreciation Right or any Other Stock Award.

(pp) "***Stock Award Agreement***" means a written agreement between the Company and a Participant evidencing the terms and conditions of a Stock Award grant. Each Stock Award Agreement will be subject to the terms and conditions of the Plan.

(qq) "***Subsidiary***" means, with respect to the Company, (i) any corporation of which more than fifty percent (50%) of the outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether, at the time, stock of any other class or classes of such corporation will have or might have voting power by reason of the happening of any contingency) is at the time, directly or indirectly, Owned by the Company, and (ii) any partnership, limited liability company or other entity in which the Company has a direct or indirect interest (whether in the form of voting or participation in profits or capital contribution) of more than fifty percent (50%).

(rr) "***Ten Percent Stockholder***" means a person who Owns (or is deemed to Own pursuant to Section 424(d) of the Code) stock possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Affiliate.

CHIMERIX, INC.
2012 EQUITY INCENTIVE PLAN

OPTION AGREEMENT
(INCENTIVE STOCK OPTION OR NONSTATUTORY STOCK OPTION)

Pursuant to your Stock Option Grant Notice ("***Grant Notice***") and this Option Agreement, Chimerix, Inc. (the "***Company***") has granted you an option under its 2012 Equity Incentive Plan (the "***Plan***") to purchase the number of shares of the Company's Common Stock indicated in your Grant Notice at the exercise price indicated in your Grant Notice. The option is granted to you effective as of the date of grant set forth in the Grant Notice (the "***Date of Grant***"). If there is any conflict between the terms in this Option Agreement and the Plan, the terms of the Plan will control. Capitalized terms not explicitly defined in this Option Agreement or in the Grant Notice but defined in the Plan will have the same definitions as in the Plan.

The details of your option, in addition to those set forth in the Grant Notice and the Plan, are as follows:

1. VESTING. Subject to the limitations contained herein, your option will vest as provided in your Grant Notice. Vesting will cease upon the termination of your Continuous Service.

a. Special Acceleration Provision. If a Change in Control occurs and within thirteen (13) months after, the effective time of such Change in Control your Continuous Service terminates due to an involuntary termination (not including death or Disability) without Cause or due to a voluntary termination with Good Reason, then, as of the date of termination of Continuous Service, the vesting and exercisability of your option will be accelerated in full and any reacquisition or repurchase rights held by the Company with respect to such option will lapse in full, as appropriate.

For purposes of this subsection 1(a) only, "***Good Reaso***n" means that one or more of the following are undertaken by the Company without Cause and without your express written consent: (i) a change in your job title with the Company to a job title involving a materially reduced level of authority, duties or responsibility (provided however, a change in your job title without a material reduction in your level of authoirty, duties or responsibility shall not constitute "Good Reason"), (ii) a material reduction in your level of base salary, or (iii) a relocation of your place of employment by more than fifty (50) miles.

b. Parachute Payments. If any payment or benefit you would receive pursuant to a Change in Control from the Company or otherwise (a "***Payment***") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "***Excise Tax***"), then such Payment shall be reduced to the Reduced Amount. The "Reduced Amount" shall be either (x) the largest portion of the Payment that would result in no portion of the Payment being subject to the Excise Tax or (y) the largest portion, up to and including the total, of the Payment, whichever amount, after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in your receipt, on an after-tax basis, of the greater amount of the Payment notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in payments or benefits constituting "parachute payments" is necessary so that the Payment equals the Reduced Amount, reduction shall occur in the manner that results in the greatest economic benefit for you.

The accounting firm engaged by the Company for general audit purposes as of the day prior to the effective date of the Change in Control shall perform the foregoing calculations. If the accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting the Change in Control, the Company shall appoint a nationally recognized accounting firm to make the determinations required hereunder. The Company shall bear all expenses with respect to the determinations by such accounting firm required to be made hereunder.

The accounting firm engaged to make the determinations hereunder shall provide its calculations, together with detailed supporting documentation, to you and the Company within fifteen (15) calendar days after the date on which your right to a Payment is triggered (if requested at that time by you or the Company) or such other time as requested by you or the Company. If the accounting firm determines that no Excise Tax is payable with respect to a Payment, either before or after the application of the Reduced Amount, it shall furnish you and the Company with an opinion reasonably acceptable to you that no Excise Tax will be imposed with respect to such Payment. Any good faith determinations of the accounting firm made hereunder shall be final, binding and conclusive upon you and the Company.

2. Number of Shares and Exercise Price. The number of shares of Common Stock subject to your option and your exercise price per share in your Grant Notice will be adjusted for Capitalization Adjustments.

3. Exercise Restriction for Non-Exempt Employees. If you are an Employee eligible for overtime compensation under the Fair Labor Standards Act of 1938, as amended (that is, a "***Non-Exempt Employee***"), and except as otherwise provided in the Plan, you may not exercise your option until you have completed at least six (6) months of Continuous Service measured from the Date of Grant, even if you have already been an employee for more than six (6) months. Consistent with the provisions of the Worker Economic Opportunity Act, you may exercise your option as to any vested portion prior to such six (6) month anniversary in the case of (i) your death or disability, (ii) a Corporate Transaction in which your option is not assumed, continued or substituted, (iii) a Change in Control or (iv) your termination of Continuous Service on your "retirement" (as defined in the Company's benefit plans).

4. Exercise prior to Vesting ("Early Exercise"). If permitted in your Grant Notice (*i.e.*, the "Exercise Schedule" indicates "Early Exercise Permitted") and subject to the provisions of your option, you may elect at any time that is both (i) during the period of your Continuous Service and (ii) during the term of your option, to exercise all or part of your option, including the unvested portion of your option; *provided, however,* that:

a. a partial exercise of your option will be deemed to cover first vested shares of Common Stock and then the earliest vesting installment of unvested shares of Common Stock;

b. any shares of Common Stock so purchased from installments that have not vested as of the date of exercise will be subject to the purchase option in favor of the Company as described in the Company's form of Early Exercise Stock Purchase Agreement;

c. you will enter into the Company's form of Early Exercise Stock Purchase Agreement with a vesting schedule that will result in the same vesting as if no early exercise had occurred; and

d. if your option is an Incentive Stock Option, then, to the extent that the aggregate Fair Market Value (determined at the Date of Grant) of the shares of Common Stock with respect to which your option plus all other Incentive Stock Options you hold are exercisable for the first time by you during any calendar year (under all plans of the Company and its Affiliates) exceeds one hundred thousand dollars ($100,000), your option(s) or portions thereof that exceed such limit (according to the order in which they were granted) will be treated as Nonstatutory Stock Options.

5. METHOD OF PAYMENT. You must pay the full amount of the exercise price for the shares you wish to exercise. You may pay the exercise price in cash or by check, bank draft or money order payable to the Company or in any other manner ***permitted by your Grant Notice,*** which may include one or more of the following:

a. Provided that at the time of exercise the Common Stock is publicly traded, pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of Common Stock, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds. This manner of payment is also known as a "broker-assisted exercise", "same day sale", or "sell to cover".

b. Provided that at the time of exercise the Common Stock is publicly traded, by delivery to the Company (either by actual delivery or attestation) of already-owned shares of Common Stock that are owned free and clear of any liens, claims, encumbrances or security interests, and that are valued at Fair Market Value on the date of exercise. "Delivery" for these purposes, in the sole discretion of the Company at the time you exercise your option, will include delivery to the Company of your attestation of ownership of such shares of Common Stock in a form approved by the Company. You may not exercise your option by delivery to the Company of Common Stock if doing so would violate the provisions of any law, regulation or agreement restricting the redemption of the Company's stock.

c. If this option is a Nonstatutory Stock Option, subject to the consent of the Company at the time of exercise, by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issued upon exercise of your option by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price. You must pay any remaining balance of the aggregate exercise price not satisfied by the "net exercise" in cash or other permitted form of payment. Shares of Common Stock will no longer be outstanding under your option and will not be exercisable thereafter if those shares (i) are used to pay the exercise price pursuant to the "net exercise," (ii) are delivered to you as a result of such exercise, and (iii) are withheld to satisfy your tax withholding obligations.

d. Pursuant to the following deferred payment alternative:

1) Not less than one hundred percent (100%) of the aggregate exercise price, plus accrued interest, will be due four (4) years from date of exercise or, at the Company's election, upon termination of your Continuous Service.

2) Interest will be compounded at least annually and will be charged at the minimum rate of interest necessary to avoid (1) the treatment as interest, under any applicable provisions of the Code, of any amounts other than amounts stated to be interest under the deferred payment arrangement and (2) the classification of your option as a liability for financial accounting purposes.

3) In order to elect the deferred payment alternative, you must, as a part of your written notice of exercise, give notice of the election of this payment alternative and, in order to secure the payment of the deferred exercise price to the Company hereunder, if the Company so requests, you must tender to the Company a promissory note and a pledge agreement covering the purchased shares of Common Stock, both in form and substance satisfactory to the Company, or such other or additional documentation as the Company may request.

6. **Whole Shares.** You may exercise your option only for whole shares of Common Stock.

7. **Securities Law Compliance.** In no event may you exercise your option unless the shares of Common Stock issuable upon exercise are then registered under the Securities Act or, if not registered, the Company has determined that your exercise and the issuance of the shares would be exempt from the registration requirements of the Securities Act. The exercise of your option also must comply with all other applicable laws and regulations governing your option, and you may not exercise your option if the Company determines that such exercise would not be in material compliance with such laws and regulations (including any restrictions on exercise required for compliance with Treas. Reg. 1.401(k)-1(d)(3), if applicable).

8. **Term.** You may not exercise your option before the Date of Grant or after the expiration of the option's term. The term of your option expires, subject to the provisions of Section 5(h) of the Plan, upon the earliest of the following:

a. immediately upon the termination of your Continuous Service for Cause;

b. three (3) months after the termination of your Continuous Service for any reason other than Cause, your Disability or your death (except as otherwise provided in Section 8(d) below); *provided, however,* that if during any part of such three (3) month period your option is not exercisable solely because of the condition set forth in the section above relating to "Securities Law Compliance," your option will not expire until the earlier of the Expiration Date or until it has been exercisable for an aggregate period of three (3) months after the termination of your Continuous Service; *provided further,* that if (i) you are a Non-Exempt Employee, (ii) your Continuous Service terminates within six (6) months after the Date of Grant, and (iii) you have vested in a portion of your option at the time of your termination of Continuous Service, your option will not expire until the earlier of (x) the later of (A) the date that is seven (7) months after the Date of Grant, and (B) the date that is three (3) months after the termination of your Continuous Service, and (y) the Expiration Date;

c. twelve (12) months after the termination of your Continuous Service due to your Disability (except as otherwise provided in Section 8(d)) below;

d. eighteen (18) months after your death if you die either during your Continuous Service or within three (3) months after your Continuous Service terminates for any reason other than Cause;

e. the Expiration Date indicated in your Grant Notice; or

f. the day before the tenth (10^{th}) anniversary of the Date of Grant.

If your option is an Incentive Stock Option, note that to obtain the federal income tax advantages associated with an Incentive Stock Option, the Code requires that at all times beginning on the Date of Grant and ending on the day three (3) months before the date of your option's exercise, you must be an employee of the Company or an Affiliate, except in the event of your death or Disability. The Company has provided for extended exercisability of your option under certain circumstances for your benefit but cannot guarantee that your option will necessarily be treated as an Incentive Stock Option if you continue to provide services to the Company or an Affiliate as a Consultant or Director after your employment terminates or if you otherwise exercise your option more than three (3) months after the date your employment with the Company or an Affiliate terminates.

9. EXERCISE.

a. You may exercise the vested portion of your option (and the unvested portion of your option if your Grant Notice so permits) during its term by (i) delivering a Notice of Exercise (in a form designated by the Company) or completing such other documents and/or procedures designated by the Company for exercise and (ii) paying the exercise price and any applicable withholding taxes to the Company's Secretary, stock plan administrator, or such other person as the Company may designate, together with such additional documents as the Company may then require.

b. By exercising your option you agree that, as a condition to any exercise of your option, the Company may require you to enter into an arrangement providing for the payment by you to the Company of any tax withholding obligation of the Company arising by reason of (i) the exercise of your option, (ii) the lapse of any substantial risk of forfeiture to which the shares of Common Stock are subject at the time of exercise, or (iii) the disposition of shares of Common Stock acquired upon such exercise.

c. If your option is an Incentive Stock Option, by exercising your option you agree that you will notify the Company in writing within fifteen (15) days after the date of any disposition of any of the shares of the Common Stock issued upon exercise of your option that occurs within two (2) years after the Date of Grant or within one (1) year after such shares of Common Stock are transferred upon exercise of your option.

d. By exercising your option you agree that you will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company held by you, for a period of one hundred eighty (180) days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as the underwriters or the Company will request to facilitate compliance with FINRA Rule 2711 or NYSE Member Rule 472 or any successor or similar rule or regulation (the "***Lock-Up Period***"); *provided, however*, that nothing contained in this section will prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. You also agree that any transferee of any shares of Common Stock (or other securities) of the Company held by you will be bound by this Section 9(d). The underwriters of the Company's stock are intended third party beneficiaries of this Section 9(d) and will have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

10. **Transferability.** Except as otherwise provided in this Section 10, your option is not transferable, except by will or by the laws of descent and distribution, and is exercisable during your life only by you.

a. **Certain Trusts.** Upon receiving written permission from the Board or its duly authorized designee, you may transfer your option to a trust if you are considered to be the sole beneficial owner (determined under Section 671 of the Code and applicable state law) while the option is held in the trust. You and the trustee must enter into transfer and other agreements required by the Company.

b. **Domestic Relations Orders.** Upon receiving written permission from the Board or its duly authorized designee, and provided that you and the designated transferee enter into transfer and other agreements required by the Company, you may transfer your option pursuant to the terms of a domestic relations order, official marital settlement agreement or other divorce or separation instrument as permitted by Treasury Regulation 1.421-1(b)(2) that contains the information required by the Company to effectuate the transfer. You are encouraged to discuss the proposed terms of any division of this option with the Company prior to finalizing the domestic relations order or marital settlement agreement to help ensure the required information is contained within the domestic relations order or marital settlement agreement. If this option is an Incentive Stock Option, this option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.

c. Other Approved Transfers. If this option is a Nonstatutory Stock Option, upon receiving written permission from the Board or its duly authorized designee, and provided that you and the designated transferee enter into transfer and other applicable agreements required by the Company, you may transfer your option to such further extent as permitted by Rule 701 (or any successor provision thereto) and as permitted by any other applicable law.

d. Beneficiary Designation. Upon receiving written permission from the Board or its duly authorized designee, you may, by delivering written notice to the Company, in a form provided by or otherwise satisfactory to the Company (and, if applicable, any broker designated by the Company to handle option exercises), designate a third party who, in the event of your death, will thereafter be entitled to exercise this option and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, your executor or administrator of your estate will be entitled to exercise this option and receive, on behalf of your estate, the Common Stock or other consideration resulting from such exercise.

11. Right of First Refusal. Shares of Common Stock that you acquire upon exercise of your option are subject to any right of first refusal that may be described in the Company's bylaws in effect at such time the Company elects to exercise its right. The Company's right of first refusal will expire on the first date upon which any security of the Company is listed (or approved for listing) upon notice of issuance on a national securities exchange or quotation system.

12. Right of Repurchase. To the extent provided in the Company's bylaws in effect at such time the Company elects to exercise its right, the Company will have the right to repurchase all or any part of the shares of Common Stock you acquire pursuant to the exercise of your option.

13. Option not a Service Contract. Your option is not an employment or service contract, and nothing in your option will be deemed to create in any way whatsoever any obligation on your part to continue in the employ of the Company or an Affiliate, or of the Company or an Affiliate to continue your employment. In addition, nothing in your option will obligate the Company or an Affiliate, their respective shareholders, boards of directors, officers or employees to continue any relationship that you might have as a Director or Consultant for the Company or an Affiliate.

14. Withholding Obligations.

a. At the time you exercise your option, in whole or in part, and at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for (including by means of a "same day sale" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Company), any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company or an Affiliate, if any, which arise in connection with the exercise of your option.

b. If this option is a Nonstatutory Stock Option, then upon your request and subject to approval by the Company, and compliance with any applicable legal conditions or restrictions, the Company may withhold from fully vested shares of Common Stock otherwise issuable to you upon the exercise of your option a number of whole shares of Common Stock having a Fair Market Value, determined by the Company as of the date of exercise, not in excess of the minimum amount of tax required to be withheld by law (or such lower amount as may be necessary to avoid classification of your option as a liability for financial accounting purposes). If the date of determination of any tax withholding obligation is deferred to a date later than the date of exercise of your option, share withholding pursuant to the preceding sentence shall not be permitted unless you make a proper and timely election under Section 83(b) of the Code, covering the aggregate number of shares of Common Stock acquired upon such exercise with respect to which such determination is otherwise deferred, to accelerate the determination of such tax withholding obligation to the date of exercise of your option. Notwithstanding the filing of such election, shares of Common Stock shall be withheld solely from fully vested shares of Common Stock determined as of the date of exercise of your option that are otherwise issuable to you upon such exercise. Any adverse consequences to you arising in connection with such share withholding procedure shall be your sole responsibility.

c. You may not exercise your option unless the tax withholding obligations of the Company and/or any Affiliate are satisfied. Accordingly, you may not be able to exercise your option when desired even though your option is vested, and the Company will have no obligation to issue a certificate for such shares of Common Stock or release such shares of Common Stock from any escrow provided for herein, if applicable, unless such obligations are satisfied.

15. **Tax Consequences**. You hereby agree that the Company does not have a duty to design or administer the Plan or its other compensation programs in a manner that minimizes your tax liabilities. You will not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from your option or your other compensation. In particular, you acknowledge that this option is exempt from Section 409A of the Code only if the exercise price per share specified in the Grant Notice is at least equal to the "fair market value" per share of the Common Stock on the Date of Grant and there is no other impermissible deferral of compensation associated with the option. Because the Common Stock is not traded on an established securities market, the Fair Market Value is determined by the Board, perhaps in consultation with an independent valuation firm retained by the Company. You acknowledge that there is no guarantee that the Internal Revenue Service will agree with the valuation as determined by the Board, and you will not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates in the event that the Internal Revenue Service asserts that the valuation determined by the Board is less than the "fair market value" as subsequently determined by the Internal Revenue Service.

16. **NOTICES.** Any notices provided for in your option or the Plan will be given in writing (including electronically) and will be deemed effectively given upon receipt or, in the case of notices delivered by mail by the Company to you, five (5) days after deposit in the United States mail, postage prepaid, addressed to you at the last address you provided to the Company. The Company may, in its sole discretion, decide to deliver any documents related to participation in the Plan and this option by electronic means or to request your consent to participate in the Plan by electronic means. By accepting this option, you consent to receive such documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

17. **GOVERNING PLAN DOCUMENT.** Your option is subject to all the provisions of the Plan, the provisions of which are hereby made a part of your option, and is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. If there is any conflict between the provisions of your option and those of the Plan, the provisions of the Plan will control.

NOTICE OF EXERCISE

Chimerix, Inc.
2505 Meridian Parkway, Suite 340
Durham, NC 27713

Date of Exercise: _____

This constitutes notice to Chimerix, Inc. (the "***Company***") under my stock option that I elect to purchase the below number of shares of Common Stock of the Company (the "***Shares***") for the price set forth below.

Type of option (check one):	Incentive ☐	Nonstatutory ☐
Stock option dated:	_____	_____
Number of Shares as to which option is exercised:	_____	_____
Certificates to be issued in name of:	_____	_____
Total exercise price:	$_____	$_____
Cash payment delivered herewith:	$_____	$_____
[Value of _____ Shares delivered herewith[1]:	$_____	$_____]
[Value of _____ Shares pursuant to net exercise[2]:	$_____	$_____]
[Regulation T Program (cashless exercise[3]):	$_____	$_____]

[1] Shares must meet the public trading requirements set forth in the option. Shares must be valued in accordance with the terms of the option being exercised, and must be owned free and clear of any liens, claims, encumbrances or security interests. Certificates must be endorsed or accompanied by an executed assignment separate from certificate.

[2] The option must be a Nonstatutory Stock Option, and Chimerix, Inc. must have established net exercise procedures at the time of exercise, in order to utilize this payment method.

[3] Shares must meet the public trading requirements set forth in the option.

By this exercise, I agree (i) to provide such additional documents as you may require pursuant to the terms of the 2012 Equity Incentive Plan (ii) to provide for the payment by me to you (in the manner designated by you) of your withholding obligation, if any, relating to the exercise of this option, and (iii) if this exercise relates to an incentive stock option, to notify you in writing within fifteen (15) days after the date of any disposition of any of the Shares issued upon exercise of this option that occurs within two (2) years after the date of grant of this option or within one (1) year after such Shares are issued upon exercise of this option.

I hereby make the following certifications and representations with respect to the number of Shares listed above, which are being acquired by me for my own account upon exercise of the option as set forth above:

I acknowledge that the Shares have not been registered under the Securities Act of 1933, as amended (the "***Securities Act***"), and are deemed to constitute "restricted securities" under Rule 701 and Rule 144 promulgated under the Securities Act. I warrant and represent to the Company that I have no present intention of distributing or selling said Shares, except as permitted under the Securities Act and any applicable state securities laws.

I further acknowledge that I will not be able to resell the Shares for at least ninety (90) days after the stock of the Company becomes publicly traded (*i.e.*, subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934) under Rule 701 and that more restrictive conditions apply to affiliates of the Company under Rule 144.

I further acknowledge that all certificates representing any of the Shares subject to the provisions of the Option shall have endorsed thereon appropriate legends reflecting the foregoing limitations, as well as any legends reflecting restrictions pursuant to the Company's Articles of Incorporation, Bylaws and/or applicable securities laws.

I further agree that, if required by the Company (or a representative of the underwriters) in connection with the first underwritten registration of the offering of any securities of the Company under the Securities Act, I will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company for a period of one hundred eighty (180) days following the effective date of a registration statement of the Company filed under the Securities Act (or such longer period as the underwriters or the Company shall request to facilitate compliance with FINRA Rule 2711 or NYSE Member Rule 472 or any successor or similar rule or regulation) (the "***Lock-Up Period***"). I further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of such period.

Very truly yours,

_____

CHIMERIX, INC.
STOCK OPTION GRANT NOTICE
(2012 EQUITY INCENTIVE PLAN)

Chimerix, Inc. (the "***Company***"), pursuant to its 2012 Equity Incentive Plan (the "***Plan***"), hereby grants to Optionholder an option to purchase the number of shares of the Company's Common Stock set forth below. This option is subject to all of the terms and conditions as set forth in this notice, in the Option Agreement, the Plan and the Notice of Exercise, all of which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Option Agreement will have the same definitions as in the Plan or the Option Agreement. If there is any conflict between the terms in this notice and the Plan, the terms of the Plan will control.

Optionholder:	
Date of Grant:	
Vesting Commencement Date:	
Number of Shares Subject to Option:	
Exercise Price (Per Share):	
Total Exercise Price:	
Expiration Date:	

Type of Grant: ☐ Incentive Stock Option[2] ☐ Nonstatutory Stock Option

Exercise Schedule: ☐ Same as Vesting Schedule ☐ Early Exercise Permitted

Vesting Schedule: [One fourth ($1/4^{th}$) of the shares vest one year after the Vesting Commencement Date; the balance of the shares vest in a series of thirty six (36) successive equal monthly installments measured from the first anniversary of the Vesting Commencement Date, subject to Optionholder's Continuous Service as of each such date.]

Payment: By one or a combination of the following items (described in the Option Agreement):

x By cash, check, bank draft or money order payable to the Company
x Pursuant to a Regulation T Program if the shares are publicly traded
x By delivery of already-owned shares if the shares are publicly traded
☐ By deferred payment
x If and only to the extent this option is a Nonstatutory Stock Option, and subject to the Company's consent at the time of exercise, by a "net exercise" arrangement

Additional Terms/Acknowledgements: Optionholder acknowledges receipt of, and understands and agrees to, this Stock Option Grant Notice, the Option Agreement and the Plan. Optionholder acknowledges and agrees that this Stock Option Grant Notice and the Option Agreement may not be modified, amended or revised except as provided in the Plan. Optionholder further acknowledges that as of the Date of Grant, this Stock Option Grant Notice, the Option Agreement, and the Plan set forth the entire understanding between Optionholder and the Company regarding this stock option award and supersede all prior oral and written agreements, promises and/or representations on that subject with the exception of (i) options previously granted and delivered to Optionholder, and (ii) the following agreements only. By accepting this option, you consent to receive such documents by electronic delivery and to participate in the Plan through an on line or electronic system established and maintained by the Company or another third party designated by the Company.

[2] If this is an Incentive Stock Option, it (plus other outstanding Incentive Stock Options) cannot be first *exercisable* for more than $100,000 in value (measured by exercise price) in any calendar year. Any excess over $100,000 is a Nonstatutory Stock Option.

OTHER AGREEMENTS: _____

_____

CHIMERIX, INC.

By: _____
Signature

Title: _____

Date: _____

OPTIONHOLDER:

_____
Signature

Date: _____

ATTACHMENTS: Option Agreement, 2012 Equity Incentive Plan and Notice of Exercise

CHIMERIX, INC.
2012 EQUITY INCENTIVE PLAN

RESTRICTED STOCK UNIT AGREEMENT

Pursuant to the Restricted Stock Unit Grant Notice (the "***Grant Notice***") and this Restricted Stock Unit Agreement (the "***Agreement***") and in consideration of your services, Chimerix, Inc. (the "***Company***") has awarded you a Restricted Stock Unit Award (the "***Award***") under its 2012 Equity Incentive Plan (the "***Plan***") for the number of restricted stock units set forth on the Grant Notice. Capitalized terms not explicitly defined in this Agreement will have the same meanings given to them in the Plan or the Grant Notice, as applicable. Except as otherwise explicitly provided herein, in the event of any conflict between the terms in this Agreement and the Plan, the terms of the Plan will control.

The details of your Award, in addition to those set forth in the Grant Notice and the Plan, are as follows.

1. GRANT OF THE AWARD. This Award represents your right to be issued on a future date the number of shares of Common Stock that is equal to the number of restricted stock units indicated in the Grant Notice (the "***Stock Units***"). As of the Date of Grant, the Company will credit to a bookkeeping account maintained by the Company for your benefit (the "***Account***") the number of Stock Units subject to the Award. This Award was granted in consideration of your services to the Company. Except as otherwise provided herein, you will not be required to make any payment to the Company (other than past and future services to the Company) with respect to your receipt of the Award, the vesting of the Stock Units or the delivery of the Common Stock to be issued in respect of the Award. Notwithstanding the foregoing, the Company reserves the right to issue you the cash equivalent of Common Stock, in part or in full satisfaction of the delivery of Common Stock upon vesting of your Stock Units, and, to the extent applicable, references in this Agreement and the Grant Notice to Common Stock issuable in connection with your Stock Units will include the potential issuance of its cash equivalent pursuant to such right.

2. VESTING. Subject to the limitations contained herein, your Award will vest, if at all, in accordance with the vesting schedule provided in the Grant Notice, provided that vesting will cease upon the termination of your Continuous Service. Upon such termination of your Continuous Service, the Stock Units credited to the Account that were not vested on the date of such termination will be forfeited at no cost to the Company and you will have no further right, title or interest in such Stock Units or the shares of Common Stock to be issued in respect of such portion of the Award.

3. NUMBER OF STOCK UNITS AND SHARES OF COMMON STOCK.

a. The number of Stock Units subject to your Award may be adjusted from time to time for Capitalization Adjustments, as provided in the Plan.

b. Any additional Stock Units that become subject to the Award pursuant to this Section 3, if any, will be subject, in a manner determined by the Board, to the same forfeiture restrictions, restrictions on transferability, and time and manner of delivery as applicable to the other Stock Units covered by your Award.

c. Notwithstanding the provisions of this Section 3, no fractional shares or rights for fractional shares of Common Stock will be created pursuant to this Section 3. The Board will, in its discretion, determine an equivalent benefit for any fractional shares or fractional shares that might be created by the adjustments referred to in this Section 3.

4. Securities Law Compliance. You may not be issued any shares of Common Stock in respect of your Award unless either (i) the shares are registered under the Securities Act; or (ii) the Company has determined that such issuance would be exempt from the registration requirements of the Securities Act. Your Award also must comply with other applicable laws and regulations governing the Award, and you will not receive such shares if the Company determines that such receipt would not be in material compliance with such laws and regulations.

5. Transfer Restrictions. Your Award is not transferable, except by will or by the laws of descent and distribution. In addition to any other limitation on transfer created by applicable securities laws, you agree not to assign, hypothecate, donate, encumber or otherwise dispose of any interest in any of the shares of Common Stock subject to the Award until the shares are issued to you in accordance with Section 6 of this Agreement. After the shares have been issued to you, you are free to assign, hypothecate, donate, encumber or otherwise dispose of any interest in such shares provided that any such actions are in compliance with the provisions herein, any applicable Company policies (including, but not limited to, insider trading and window period policies) and applicable securities laws. Notwithstanding the foregoing, by delivering written notice to the Company, in a form satisfactory to the Company, you may designate a third party who, in the event of your death, will thereafter be entitled to receive any distribution of Common Stock to which you were entitled at the time of your death pursuant to this Agreement.

6. Date of Issuance.

a. To the extent the Award is exempt from application of Section 409A of the Code and any state law of similar effect (collectively "***Section 409A***"), the Company will deliver to you a number of shares of Common Stock equal to the number of vested Stock Units subject to your Award, including any additional Stock Units received pursuant to Section 3 above that relate to those vested Stock Units, on the applicable vesting date. However, if a scheduled delivery date falls on a date that is not a business day, such delivery date will instead fall on the next following business day. Notwithstanding the foregoing, shares may be delivered on a date later than the applicable vesting date or its next following business day in certain circumstances as determined by the Company, but in no event will shares be delivered later than the fifteenth (15th) day of the third calendar month of the calendar year following the calendar year in which the applicable shares covered by the Award vest. For example, to the extent applicable at a vesting date when shares are registered under the Securities Act, in the event that (i) any shares covered by your Award are scheduled to be delivered on a day (the "***Original Distribution Date***") that does not occur: (A) during an open "window period" applicable to you under the Company's policy permitting officers, directors and other designated individuals to sell shares only during certain "window" periods, in effect from time to time (the "***Policy***"), (B) on a day on which you are permitted to sell shares of Common Stock pursuant to a written plan that meets the requirements of Rule 10b5-1 under the Exchange Act, as determined by the Company in accordance with the Policy, or (C) on a date when you are otherwise permitted to sell shares of Common Stock on the open market, and (ii) the Company elects not to satisfy its tax withholding obligations by withholding shares from your distribution or withholding from other compensation otherwise payable to you by the Company, then such shares will not be delivered on such Original Distribution Date and will instead be delivered on the first business day of the next occurring open "window period" applicable to you pursuant to such Policy (regardless of whether you are still providing continuous services at such time) or the next business day when you are not prohibited from selling shares of Common Stock in the open market, but in no event later than the fifteenth (15th) day of the third calendar month of the calendar year following the calendar year in which the applicable shares covered by the Award vest. Delivery of the shares pursuant to the provisions of this Section 6(a) is intended to comply with the requirements for the short-term deferral exemption available under Treasury Regulations Section 1.409A-1(b)(4) and will be construed and administered in such manner. The form of such delivery of the shares (e.g., a stock certificate or electronic entry evidencing such shares) will be determined by the Company.

If the Company elects to issue you cash in part or in full satisfaction of the shares of Common Stock issuable upon vesting of your Stock Units, then the foregoing provisions of this Section 6(a) will not apply and such cash will be paid to you in a lump sum at any time on after the vesting date of your Stock Units, but in no event later than the fifteenth (15th) day of the third calendar month of the calendar year following the calendar year in which your Stock Units vest.

7. Dividends. You will receive no benefit or adjustment to your Award with respect to any cash dividend, stock dividend or other distribution that does not result from a Capitalization Adjustment as provided in the Plan; provided, however, that this sentence will not apply with respect to any shares of Common Stock that are delivered to you in connection with your Award after such shares have been delivered to you.

8. Restrictive Legends. The shares issued in respect of your Award will be endorsed with appropriate legends determined by the Company.

9. Award not a Service Contract.

a. Your Continuous Service with the Company or an Affiliate is not for any specified term and may be terminated by you or by the Company or an Affiliate at any time, for any reason, with or without cause and with or without notice. Nothing in this Agreement (including, but not limited to, the vesting of your Award pursuant to the schedule set forth in the Grant Notice herein or the issuance of the shares in respect of your Award), the Plan or any covenant of good faith and fair dealing that may be found implicit in this Agreement or the Plan will: (i) confer upon you any right to continue in the employ of, or affiliation with, the Company or an Affiliate; (ii) constitute any promise or commitment by the Company or an Affiliate regarding the fact or nature of future positions, future work assignments, future compensation or any other term or condition of employment or affiliation; (iii) confer any right or benefit under this Agreement or the Plan unless such right or benefit has specifically accrued under the terms of this Agreement or Plan; or (iv) deprive the Company of the right to terminate you at will and without regard to any future vesting opportunity that you may have.

b. By accepting this Award, you acknowledge and agree that the right to continue vesting in the Award pursuant to the vesting schedule set forth in Section 2 and in the Grant Notice is earned only by continuing as an employee, director or consultant at the will of the Company (not through the act of being hired, being granted this Award or any other award or benefit) and that the Company has the right to reorganize, sell, spin-out or otherwise restructure one or more of its businesses or Affiliates at any time or from time to time, as it deems appropriate (a "reorganization"). You further acknowledge and agree that such a reorganization could result in the termination of your Continuous Service, or the termination of Affiliate status of your employer and the loss of benefits available to you under this Agreement, including but not limited to, the termination of the right to continue vesting in the Award. You further acknowledge and agree that this Agreement, the Plan, the transactions contemplated hereunder and the vesting schedule set forth herein or any covenant of good faith and fair dealing that may be found implicit in any of them do not constitute an express or implied promise of continued engagement as an employee or consultant for the term of this Agreement, for any period, or at all, and will not interfere in any way with your right or the Company's right to terminate your Continuous Service at any time, with or without cause and with or without notice.

10. WITHHOLDING OBLIGATIONS.

a. On or before the time you receive a distribution of the shares of Common Stock subject to your Award, or at any time thereafter as requested by the Company, you hereby authorize any required withholding from the Common Stock issuable to you and/or otherwise agree to make adequate provision in cash for any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company or any Affiliate which arise in connection with your Award (the "***Withholding Taxes***"). Additionally, the Company may, in its sole discretion, satisfy all or any portion of the Withholding Taxes obligation relating to your Award by any of the following means or by a combination of such means: (i) withholding from any compensation otherwise payable to you by the Company; (ii) causing you to tender a cash payment; (iii) permitting or requiring you to enter into a "same day sale" commitment, if applicable, with a broker-dealer that is a member of the Financial Industry Regulatory Authority (a "***FINRA Dealer***") whereby you irrevocably elect to sell a portion of the shares to be delivered in connection with your Restricted Stock Units to satisfy the Withholding Taxes and whereby the FINRA Dealer irrevocably commits to forward the proceeds necessary to satisfy the Withholding Taxes directly to the Company and/or its Affiliates; or (iv) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to you in connection with the Award with a Fair Market Value (measured as of the date shares of Common Stock are issued to pursuant to Section 6) equal to the amount of such Withholding Taxes; provided, however, that the number of such shares of Common Stock so withheld will not exceed the amount necessary to satisfy the Company's required tax withholding obligations using the minimum statutory withholding rates for federal, state, local and foreign tax purposes, including payroll taxes, that are applicable to supplemental taxable income; and provided further, that to the extent necessary to qualify for an exemption from application of Section 16(b) of the Exchange Act, if applicable, such share withholding procedure will be subject to the express prior approval of the Company's Compensation Committee.

b. Unless the tax withholding obligations of the Company and/or any Affiliate are satisfied, the Company will have no obligation to deliver to you any Common Stock pursuant to this Award.

c. In the event the Company's obligation to withhold arises prior to the delivery to you of Common Stock or it is determined after the delivery of Common Stock to you that the amount of the Company's withholding obligation was greater than the amount withheld by the Company, you agree to indemnify and hold the Company harmless from any failure by the Company to withhold the proper amount.

11. Lock-Up Period. By accepting your Award, you agree that you will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company held by you, for a period of one hundred eighty (180) days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as the underwriters or the Company will request to facilitate compliance with FINRA Rule 2711 or NYSE Member Rule 472 or any successor or similar rule or regulation (the "***Lock-Up Period***"); *provided*, *however*, that nothing contained in this section shall prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. You also agree that any transferee of any shares of Common Stock (or other securities) of the Company held by you will be bound by this Section. The underwriters of the Company's stock are intended third party beneficiaries of this Section and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

12. Unsecured Obligation. Your Award is unfunded, and as a holder of a vested Award, you will be considered an unsecured creditor of the Company with respect to the Company's obligation, if any, to issue shares pursuant to this Agreement. You will not have voting or any other rights as a stockholder of the Company with respect to the shares to be issued pursuant to this Agreement until such shares are issued to you pursuant to Section 6 of this Agreement. Upon such issuance, you will obtain full voting and other rights as a stockholder of the Company. Nothing contained in this Agreement, and no action taken pursuant to its provisions, will create or be construed to create a trust of any kind or a fiduciary relationship between you and the Company or any other person.

13. **Notices.** Any notices provided for in your Award or the Plan will be given in writing (including electronically) and will be deemed effectively given upon receipt or, in the case of notices delivered by the Company to you, five (5) days after deposit in the United States mail, postage prepaid, addressed to you at the last address you provided to the Company. Notwithstanding the foregoing, the Company may, in its sole discretion, decide to deliver any documents related to participation in the Plan and this Award by electronic means or to request your consent to participate in the Plan by electronic means. By accepting this Award you consent to receive such documents by electronic delivery and, if requested, to agree to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

14. **Miscellaneous.**

a. The rights and obligations of the Company under your Award will be transferable to any one or more persons or entities, and all covenants and agreements hereunder will inure to the benefit of, and be enforceable by the Company's successors and assigns. Your rights and obligations under your Award may only be assigned with the prior written consent of the Company.

b. You agree upon request to execute any further documents or instruments necessary or desirable in the sole determination of the Company to carry out the purposes or intent of your Award.

c. You acknowledge and agree that you have reviewed your Award in its entirety, have had an opportunity to obtain the advice of counsel prior to executing and accepting your Award, and fully understand all provisions of your Award.

d. This Agreement will be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.

e. All obligations of the Company under the Plan and this Agreement will be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business and/or assets of the Company.

15. **Governing Plan Document.** Your Award is subject to all the provisions of the Plan, the provisions of which are hereby made a part of your Award, and is further subject to all interpretations, amendments, rules and regulations which may from time to time be promulgated and adopted pursuant to the Plan. Except as expressly provided in this Agreement, in the event of any conflict between the provisions of your Award and those of the Plan, the provisions of the Plan will control. In addition, your Award (and any compensation paid or shares issued under your Award) is subject to recoupment in accordance with The Dodd–Frank Wall Street Reform and Consumer Protection Act and any implementing regulations thereunder, any clawback policy adopted by the Company and any compensation recovery policy otherwise required by applicable law.

16. **Severability.** If all or any part of this Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Agreement (or part of such a Section) so declared to be unlawful or invalid will, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

17. **Effect on Other Employee Benefit Plans.** The value of the Award subject to this Agreement will not be included as compensation, earnings, salaries, or other similar terms used when calculating the Employee's benefits under any employee benefit plan sponsored by the Company or any Affiliate, except as such plan otherwise expressly provides. The Company expressly reserves its rights to amend, modify, or terminate any of the Company's or any Affiliate's employee benefit plans.

18. **Amendment.** This Agreement may not be modified, amended or terminated except by an instrument in writing, signed by you and by a duly authorized representative of the Company. Notwithstanding the foregoing, this Agreement may be amended solely by the Board by a writing which specifically states that it is amending this Agreement, so long as a copy of such amendment is delivered to you, and provided that no such amendment adversely affecting your rights hereunder may be made without your written consent. Without limiting the foregoing, the Board reserves the right to change, by written notice to you, the provisions of this Agreement in any way it may deem necessary or advisable to carry out the purpose of the grant as a result of any change in applicable laws or regulations or any future law, regulation, ruling, or judicial decision, provided that any such change will be applicable only to rights relating to that portion of the Award which is then subject to restrictions as provided herein.

19. **No Obligation to Minimize Taxes.** The Company has no duty or obligation to minimize the tax consequences to you of this Award and will not be liable to you for any adverse tax consequences to you arising in connection with this Award. You are hereby advised to consult with your own personal tax, financial and/or legal advisors regarding the tax consequences of this Award and by signing the Grant Notice, you have agreed that you have done so or knowingly and voluntarily declined to do so.

* * *

This Agreement will be deemed to be signed by you upon the signing by you of the Grant Notice to which it is attached.

CHIMERIX, INC.
RESTRICTED STOCK UNIT GRANT NOTICE
(2012 EQUITY INCENTIVE PLAN)

Chimerix, Inc. (the ***"Company"***) hereby awards to Participant the number of restricted stock units specified and on the terms set forth below (the ***"Award"***). The Award is subject to all of the terms and conditions as set forth herein and in the Company's 2012 Equity Incentive Plan (the ***"Plan"***) and the Restricted Stock Unit Agreement (the "***Award Agreement***"), both of which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Award Agreement will have the meanings set forth in the Plan or the Award Agreement. Except as explicitly provided herein or in the Award Agreement, in the event of any conflict between the terms in the Award and the Plan, the terms of the Plan will control.

Participant:	
Date of Grant:	
Vesting Commencement Date:	
Number of Restricted Stock Units:	
Consideration:	Participant's Services

Vesting Schedule: The Restricted Stock Units will become immediately vested upon the earlier of (i) a Change in Control and (ii) the effective date of a registration statement of the Company filed under the Securities Act for the sale of the Company's Common Stock (either event described in (i) or (ii), a "***Vesting Event***"), subject to the Participant's Continuous Service with the Company as of the Vesting Event. If a Vesting Event has not occurred at the time of the Participant's termination of Continuous Service, then the Award will terminate in its entirety immediately as of such termination date.

Issuance Schedule: One share of Common Stock (or its cash equivalent, at the discretion of the Company) will be issued for each restricted stock unit which vests at the time set forth in Section 6 of the Award Agreement.

Additional Terms/Acknowledgements: The undersigned Participant acknowledges receipt of, and understands and agrees to, this Restricted Stock Unit Grant Notice, the Award Agreement and the Plan. Participant further acknowledges that as of the Date of Grant, this Restricted Stock Unit Grant Notice, the Award Agreement and the Plan set forth the entire understanding between Participant and the Company regarding the Award and supersedes all prior oral and written agreements on that subject. By accepting this Award, the undersigned Participant consents to receive Plan documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

CHIMERIX, INC.	**PARTICIPANT:**
By: _____	_____
Signature	Signature
Title: _____	Date: _____
Date: _____	

ATTACHMENTS: Award Agreement, 2012 Equity Incentive Plan

Exhibit 10.6

October 20, 2009

Mr. Kenneth I. Moch
68 Willow Avenue
Larchmont, New York 10538

Re: Employment Agreement

Dear Ken:

This letter is to confirm our understanding with respect to your employment by Chimerix, Inc. (the "Company"). The terms and conditions agreed to in this letter are hereinafter referred to as the "Agreement". In consideration of the mutual promises and covenants contained in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which are hereby mutually acknowledged, we have agreed as follows:

1. Employment.

(a) General. The Company will employ you, and you will be employed by the Company, as Chief Operating Officer ("COO") of the Company, reporting to the Company's President and Chief Executive Officer ("CEO"), and you shall have the responsibilities, duty and authority commensurate with that position. You will also perform such reasonable other and/or different services for the Company as may be assigned to you from time to time consistent with those customarily performed by a COO. You agree that if your employment hereunder ends for any reason, you will tender your resignation to the Company of all offices with the Company as of the date of your termination.

(b) Devotion to Duties. While you are employed hereunder, you will devote your full business time and energies to the business and affairs of the Company. While you are employed hereunder, you will not undertake any other employment from, or consulting arrangement with, any person or entity without the prior written consent of the Company. You may, however, (i) continue your current outside consulting arrangement with MediciNova, Inc. through no later than December 31, 2009, and (ii) serve as a member of the board of up to three other companies or organizations (including, for the avoidance of confusion, your current service as a director of Emisphere Technologies, Inc., Virgin Health Bank and Moffitt Genetics Corporation), with or without compensation, provided that you notify the Company's Board of Directors (the "Board") in advance of commencing any such membership and the Board determines that such membership does not conflict with your obligations to the Company, except that no such notification or determination shall be required with respect to your current service as a director of the companies disclosed in this subsection. The Company acknowledges that you will not fully relocate to the Durham area until some time in 2010 and agrees and understands that you may perform your services hereunder remotely from time to time from your New York residence but you agree to generally perform your services for the Company four days per week in the Company's Durham office until such time as you complete your relocation.

2. Term. The Company hereby agrees to employ you, and you hereby accept employment with the Company, upon the terms set forth in this Agreement, for the period commencing as of June 8, 2009 (the "Commencement Date") and ending on the second anniversary of the Commencement Date (such period is the "Initial Term"), subject to earlier termination as provided in section 4; provided, however, that at the end of such Initial Term and each anniversary date thereafter, the term of this Agreement will automatically be extended for an additional year unless, not less than thirty (30) days prior to the end of such Initial Term or one (1) year extension period, as the case may be, the Company or you shall have given written notice that it or you elects not to have the term extended. The term of this Agreement as extended and defined by this section shall be referred to as the "Agreement Term."

3. Compensation.

(a) Base Salary. While you are employed hereunder, the Company will pay you a base salary at the annual rate of no less than $395,000, payable in accordance with the Company's customary payroll practices (the "Base Salary"). The Company will deduct from such salary payments all amounts required to be deducted or withheld under applicable law or under any employee benefit plan in which you participate. Your Base Salary shall be evaluated by the Board or the Compensation Committee of the Board (the "Compensation Committee") on or about the first anniversary of the Commencement Date and at such time shall be subject to increase, but not decrease, by the Board or the Compensation Committee.

(b) Collaboration Bonus. You will be paid a one-time cash bonus in the amount of $250,000 in the event the Company executes a definitive agreement for a collaboration transaction on or before September 30, 2010, subject to your continued employment by the Company through the date such definitive agreement is executed, and provided that both of the following conditions are met as determined by the Board or the Compensation Committee in its good faith discretion: (i) the Company receives gross cash proceeds of at least $10,000,000 pursuant to such definitive agreement on or before September 30, 2010 and (ii) such definitive agreement includes a binding commitment of the collaborator to pay the Company total gross cash proceeds of at least $50,000,000 (including the payment referred to in clause (i) above) by no later than the third anniversary of the execution date of such definitive agreement (the "Collaboration Bonus"). For the avoidance of confusion, milestone-based or other contingent payments and royalty payments shall not be considered committed payments for purposes of determining whether the Collaboration Bonus has been earned. The Collaboration Bonus, if any, shall be paid within fourteen (14) business days following the execution of the definitive agreement for the collaboration transaction and the receipt of the payment referred to in clause (i) above.

(c) Performance Bonus. You will be eligible to receive an annual cash bonus in an amount determined by the Board or the Compensation Committee, based upon the Company's good faith assessment of your achievement of individual goals, and of the Company's achievement of its goals, which assessment shall be done by the CEO in conjunction with the Board or the Compensation Committee (the "Performance Bonus"). It is understood that the Compensation Committee's intent is for your target annual cash bonus plus your Base Salary to place you in the 50th to 75th percentile for total cash compensation (salary plus bonus) for chief executive officers of companies you and the Company agree are similarly situated as set forth in the then applicable Radford or comparable executive compensation survey. Individual goals for each calendar year will be established, and modified, in good faith by you and the CEO. If the Company awards you a Performance Bonus, you shall under no circumstances be entitled to or otherwise be deemed to have earned such Performance Bonus unless and until the Performance Bonus is calculated, which calculation shall occur by February 15 of each applicable year, and paid to you, which payment shall be in the form of a lump-sum no later than two and a half months following the close of the calendar year to which such bonus relates. For the first partial year of your employment, your Performance Bonus will be awarded on a pro rata basis based upon the number of days you are employed during such year.

(d) Equity Compensation.

(i) The Company has granted you a stock option under the Chimerix, Inc. 2002 Equity Incentive Plan, as amended (the "Stock Plan") to purchase 800,000 shares of common stock of the Company (the "Initial Option") at an exercise price equal to $0.44 per share with a vesting commencement date of June 8, 2009 (the "Vesting Commencement Date"). One quarter of the Initial Option shall vest on the first anniversary of the Vesting Commencement Date, and thereafter, the remaining portion of the Initial Option shall vest in equal monthly installments over the following 36 month period until the Initial Option is fully vested, subject to your continued employment by the Company through the applicable vesting dates, and subject to the terms of this Agreement; *provided* that the exercisability of the Initial Option shall be structured so that the Initial Option shall qualify in its entirety as an incentive stock option under the Code (as defined below). Except as provided herein, the Initial Option is subject to the terms and conditions of the Stock Plan and the Company's standard form of stock option agreement.

(ii) In addition, the Company has granted you a stock option under the Stock Plan to purchase 500,000 shares of common stock of the Company (the "Additional Option") at an exercise price equal to $0.89 per share. One quarter of the Additional Option shall vest on the first anniversary of the Vesting Commencement Date, and thereafter, the remaining portion of the Additional Option shall vest in equal monthly installments over the following 36 month period until the Additional Option is fully vested, subject to your continued employment by the Company through the applicable vesting dates, and subject to the terms of this Agreement; *provided* that the vesting of the Additional Option shall be structured so that the maximum possible portion of the Additional Option shall qualify as an incentive stock option under the Code, and the remaining portion of the Additional Option will contain an early exercise provision. Except as provided herein, the Additional Option is subject to the terms and conditions of the Stock Plan and the Company's standard form of stock option agreement.

(iii) In addition, as soon as practicable following the date of this Agreement, the Company shall grant you two further options under the Company's Stock Plan to purchase additional shares of common stock of the Company in an amount such that in the aggregate, you will have 5% of the total fully diluted ownership interest of the Company as of immediately following such option grants (and calculated after giving effect thereto) at an exercise price equal to the Fair Market Value (as defined in the Stock Plan) of the Company's common stock on the date of such grant. The shares subject to such two option grants (the "CEO Option" and the "Performance Option", respectively) shall be equivalent in number. The CEO Option shall vest in equal monthly installments commencing on the 1st of the month following your promotion to the position of the Company's President and CEO and continuing thereafter for 47 months until the CEO Option is fully vested. The CEO Option shall vest subject to your continued employment by the Company through the applicable vesting dates described above, and subject to the terms of this Agreement. The Performance Option shall vest in equal monthly installments commencing on the 1st of the month following the satisfaction of the following conditions set forth in this subsection and continuing thereafter for 47 months until the Performance Option is fully vested: (A) the Company has executed a definitive agreement for a collaboration transaction triggering the payment of the Collaboration Bonus and has actually received gross cash proceeds of at least $30,000,000 pursuant to the definitive agreement for such collaboration transaction, and (B) the Company or the Spin-off Company (as defined below) has been awarded a grant from the Biomedical Advanced Research and Development Authority for the procurement of smallpox antiviral drug for the Strategic National Stockpile and has actually received gross cash proceeds of at least $100,000,000 from such grant; or (C) the satisfaction of such conditions as the Compensation Committee or Board may determine in its good faith discretion. The Performance Option shall vest subject to your continued employment by the Company through the applicable vesting dates described above, and subject to the terms of this Agreement. Except as provided herein, the CEO Option and the Performance Option will be subject to the terms and conditions of the Stock Plan and the Company's standard form of stock option agreement. Notwithstanding anything to the contrary set forth herein or therein, no portion of the CEO Option shall vest in the event you are not first promoted to the position of the Company's President and CEO, and no portion of the Performance Option shall vest in the event the relevant performance conditions specified above are not satisfied.

(iv) The stock options to be received in the spin-out of the existing biodefense business and operations (the "Spin-off Company") in accordance with Section 11(a) of the Stock Plan (the "Spin-off Options") shall provide that for so long as you remain employed by either the Company or the Spin-off Company the Spin-off Options shall continue to vest and remain exercisable and the termination date of the Spin-off Options in the event of your termination of employment shall be determined based upon the later of your termination of employment with the Company or the Spin-off Company.

(v) To the extent allowed pursuant to Section 422 of the Internal Revenue Code of 1986, as amended and the regulations and other guidance promulgated thereunder (the "Code"), each option referred to in subparagraphs (i), (ii) and (iii) hereof shall be deemed to be an incentive stock option and to the extent any option is non-qualified, such option shall contain an early exercise provision.

(e) Vacation. You will be entitled to paid vacation and paid holidays, accrued and used in accordance with the Company's policies as to senior executives as currently in effect. All vacation days will be taken at times mutually agreed by you and the Company and will be subject to the business needs of the Company.

(f) Fringe Benefits. You will be entitled to participate in employee benefit plans which the Company provides or may establish for the benefit of its senior executives (for example, group life, disability, medical, dental and other insurance, retirement, pension, profit-sharing and similar plans) (collectively, the "Fringe Benefits"). Your eligibility to participate in the Fringe Benefits and receive benefits thereunder will be subject to the plan documents governing such Fringe Benefits.

(g) Reimbursement of Certain Expenses.

(i) Business Expenses. You shall be reimbursed for such reasonable and necessary business expenses incurred by you while you are employed by the Company, which are directly related to the furtherance of the Company's business. You must submit any request for reimbursement no later than ninety (90) days following the date that such business expense is incurred in accordance with the Company's reimbursement policy regarding same and business expenses must be substantiated by appropriate receipts and documentation. If a business expense reimbursement is not exempt from Section 409A of the Code, any reimbursement in one calendar year shall not affect the amount that may be reimbursed in any other calendar year and a reimbursement (or right thereto) may not be exchanged or liquidated for another benefit or payment. Any business expense reimbursements subject to Section 409A of the Code shall be made no later than the end of the calendar year following the calendar year in which you incur such business expense. Subject to the requirements of subparagraph 7(k), your legal fees associated with the preparation, negotiation and execution of this Agreement shall be reimbursed in accordance with this subparagraph 3(g)(i) in an amount up to $10,000 upon your presentation of invoices to the Company.

(ii) Other Expenses.

(1) The Company will either directly pay or fully reimburse you for all reasonable expenses incurred by you for transportation, phone, food and lodging as well as travel between your New York home and the Company offices in Durham until such time as you fully relocate to Durham.

(2) **(A)** The Company will either directly pay or fully reimburse you for all reasonable expenses incurred by you during 2010 associated with the sale of your home in New York and the transport of your belongings to Durham and otherwise reasonably associated with your relocation to the Durham area. Notwithstanding the foregoing, the total amount of any payments and reimbursements under this subparagraph 3(g)(ii)(2)(A) shall not exceed $125,000. The reimbursements provided for in this subparagraph 3(g)(ii)(2)(A) shall be subject to the expense reimbursement requirements of subparagraph 3(g)(i), including the applicable deadlines for submission of substantiating documentation and reimbursement of expenses. In the event any such payment or reimbursement is deemed taxable income to you under this subparagraph 3(g)(ii)(2)(A), the Company will gross you up for such taxes such that you are made whole. Any such tax gross-up payment shall be made no later than the end of the calendar year next following the calendar year in which the taxes are remitted by you.

(B) Alternatively, at your request the Company will provide you in 2009 a loan in the principal amount of $125,000, to be used solely toward the down payment on the purchase of a home in the Durham area. The loan would have a one-year term, bear interest at the applicable federal rate, and have other terms and conditions reasonably agreed upon by you and the Company. At any time when the loan is outstanding, or in the event the loan is forgiven by the Company, you would not be eligible for the payments and reimbursements provided for in subparagraph 3(g)(ii)(2)(A).

(h) Indemnification and Directors and Officers Insurance. You and the Company shall enter into the Company's standard form of Indemnification Agreement, which is attached hereto as Exhibit A. The Company shall purchase and maintain in full force and effect at all times during your employment policies of directors and officers insurance with such coverage and limits as may be approved from time to time by the Board.

4. Termination. The Agreement shall terminate upon the occurrence of any of the following:

(a) Termination of the Agreement Term. The Agreement shall terminate at the expiration of the Agreement Term as set forth in section 2.

(b) Termination by the Company for Cause. The Agreement shall terminate, at the election of the Company, for Cause upon written notice by the Company to you. For the purposes of this section, "Cause" for termination shall be limited to the following:

(i) Your conviction of a felony; or

(ii) (A) you commit fraud, (B) you commit misconduct, or (C) a final judicial determination from which there is no right of appeal adjudicates your violation of an applicable law or regulation or your breach of fiduciary duty, each of which (A), (B) and (C) results in material and demonstrable damage to the business or reputation of the Company; or

(iii) Your intentional and willful refusal to perform the duties associated with your position with Company, which is not cured within thirty (30) days following written notice to you; provided, however, that your refusal to take any action that you reasonably believe violates any applicable law or regulation or fiduciary duty, shall not constitute grounds for the application of this subsection.

(c) Termination by the Company Without Cause. This Agreement shall terminate at the election of the Company, without Cause, at any time upon 30 days prior written notice by the Company to you.

(d) Termination Upon Death or Disability. The Agreement shall automatically terminate upon your death or disability.

(e) Voluntary Termination by You. You may terminate this Agreement at your election other than for Good Reason (as defined herein) upon not less than 30 days prior written notice to the Company, or for Good Reason subject to the prior notice requirements specified herein.

(f) Definition of Good Reason. As used in this Agreement, "Good Reason" means if the Company, without your written consent, fails to cure any one or more of the events or circumstances listed below within 10 business days after receiving notice from you:

(i) the assignment to you of duties materially inconsistent with this Agreement or a material diminution in title or authority;

(ii) any material reduction in compensation including Base Salary, or any material failure to provide other payments and benefits to which you are entitled under this Agreement including without limitation the obligation to purchase and keep in force a policy of officers and directors liability insurance, *provided* that you may not trigger a Good Reason resignation if, prior to a Change of Control (as such term is defined below), a Company-wide reduction of total compensation takes place, including benefits, for employees of the Company generally (such exception shall not apply if such reduction takes place after the effective date of any Change of Control); or

(iii) the requirement that you relocate to a location more than 50 miles outside of the Durham area after you relocate to that area from New York.

(g) Supervision of Packing of Valuables in the Event of Termination. The Company agrees that if it terminates you for any reason, or elects not to renew the Agreement and permits it to expire, it shall allow you to personally pack your office, providing such packing is done under the supervision of a Company employee.

5. Effect of Termination.

(a) In the event (i) you are terminated for Cause; (ii) you are terminated due to death; or (iii) you voluntarily terminate your employment (other than for Good Reason), unless otherwise specifically provided herein, you, or your estate, shall be eligible only to receive (i) the portion of your Base Salary as has accrued prior to the effectiveness of such termination and has not yet been paid, (ii) an amount equal to the value of your accrued but unused vacation days, and (iii) reimbursement for expenses properly incurred by you on behalf of the Company prior to such termination if such expenses are properly documented in accordance with Company policy and practice and submitted for reimbursement within 30 days of the termination date (collectively, the "Accrued Obligations"). Such amounts will be paid promptly after termination in accordance with applicable law.

(b) In the event you are terminated due to disability, in addition to the Accrued Obligations, and contingent on your executing a complete release of claims against the Company within forty-five days of your termination, and you do not revoke such release (a fully effective release is hereafter, the "Release," a form of which is attached hereto as Exhibit B), you shall be entitled to receive continuation of your Base Salary in effect at the time of termination (less any disability pay or sick benefits to which you may be entitled under the Company's policies), for a period of six (6) months following the effectiveness of the Release. The Base Salary continuation severance benefits provided pursuant to this section 5(b) shall be payable in periodic installments commencing immediately after the effective date of the Release in accordance with the Company's regular payroll procedures in effect as of the date of this Agreement.

(c) In the event (i) you are terminated without Cause; or (ii) you resign for Good Reason, in addition to the Accrued Obligations, and contingent on your executing a Release within forty-five days of your termination, and you do not revoke such Release, you shall be entitled to receive continuation of your Base Salary in effect at the time of termination, for a period of six (6) months following the effectiveness of the Release. Such benefits shall be calculated by reference to your Base Salary prior to any reduction in Base Salary that would give rise to your right to resign for Good Reason. The Base Salary continuation severance benefits provided pursuant to this section 5(c) shall be payable in periodic installments commencing immediately after the effective date of the Release in accordance with the Company's regular payroll procedures in effect as of the date of this Agreement. In addition to the foregoing, in the event (i) you are terminated without Cause; or (ii) you resign for Good Reason, if you timely and accurately elect to continue your health insurance benefits under the Consolidated Omnibus Budget Reconciliation Act of 1985 ("COBRA") and comply with the Release related conditions specified above, you shall be entitled to receive reimbursement of COBRA premiums to maintain medical and dental benefits for you and your qualified beneficiaries, if any, at the same level of coverage in effect at the time of termination for the earlier of (x) six (6) months following the termination, (y) the date you become eligible for a medical insurance plan providing similar benefits to that of the Company plan or (z) the expiration of your continuation coverage under COBRA and any applicable state COBRA-like statute that provides mandated continuation coverage.

(d) In the event the Agreement Term expires and the Company elects not to renew the Agreement, then in addition to the Accrued Obligations, you shall be entitled to the same benefits provided in section 5(e) herein, subject to your execution of the Release. The benefits in this subsection are subject to the same limitations of 409A of the Code as set forth in section 7(k).

(e) Additional Benefits Upon a Change of Control.

(i) In the event of a Change of Control, you shall be entitled to accelerated vesting of your options, restricted stock and other equity awards with respect to such number of shares subject to such awards as would have vested during the 12 months immediately following the effective date of such Change of Control. Following such acceleration, subject to the continuation, assumption or substitution of your awards and your continued employment by the Company or the successor or surviving company in such Change of Control, any unvested shares remaining subject to your options, restricted stock or other equity awards shall continue to vest at the same rate and in the same amounts as prior to such acceleration. For example, assume at the time immediately prior to a Change of Control (i) the number of unvested shares subject to your option is 36 shares and (ii) such shares are vesting monthly such that 1 share is vesting each month. In such event, following both a Change of Control and the related 12-month vesting acceleration described herein, the remaining unvested shares subject to your option (i.e., 24) shall continue to vest at the same rate (and in the same amounts) as prior to such acceleration (i.e., 1 share per month) over the remaining vesting period, thereby shortening the vesting period provided in this example by 12 months.

(ii) In the event you are terminated without Cause or you resign for Good Reason following a Change of Control, then, in addition to any other benefits to which you are entitled pursuant to this Agreement, all options shall fully vest and be immediately accelerated and the restrictions on any restricted stock, if any, shall lapse. If, in such event, any portion of the payments, benefits and vesting to or for your benefit (including, but not limited to, payments, benefits and vesting under this Agreement but determined without regard to this paragraph) (collectively "Payment") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax "), then such Payment shall be reduced to the Reduced Amount. The "Reduced Amount" shall be either (x) the largest portion of the Payment that would result in no portion of the Payment being subject to the Excise Tax or (y) the largest portion, up to and including the total, of the Payment, whichever amount, after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in your receipt, on an after-tax basis, of the greater amount of the Payment notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in payments or benefits constituting "parachute payments" is necessary so that the Payment equals the Reduced Amount, reduction shall occur in the following order: reduction of cash payments; cancellation of accelerated vesting of stock awards; reduction of employee benefits. In the event that acceleration of vesting of stock award compensation is to be reduced, such acceleration of vesting shall be cancelled in the reverse order of the date of grant of your stock awards. The determination as to whether your payments, benefits and vesting are parachute payments and, if so, the Reduced Amount shall be calculated at the Company's expense by such certified public accounting firm as the Board may designate prior to a Change of Control (the "accounting firm"). Any good faith determinations of the accounting firm made hereunder shall be final, binding and conclusive upon you and the Company.

(g) "Change of Control". As used herein, a "Change of Control" shall occur or be deemed to have occurred only upon any one or more of the following events:

(i) any "person" (as such term is used in Sections 13(d) and 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) becomes a "beneficial owner" (as such term is defined in Rule 13d-3 promulgated under the Exchange Act) (other than the Company, any trustee or other fiduciary holding securities under an employee benefit plan of the Company, or any corporation owned, directly or indirectly, by the stockholders of the Company, in substantially the same proportions as their ownership of stock of the Company), directly or indirectly, of securities of the Company, representing fifty percent (50%) or more of the combined voting power of the Company's then outstanding securities, *provided* that changes in beneficial ownership resulting from issuances of securities by the Company in capital-raising transactions shall be disregarded in determining whether a Change of Control has occurred;

(ii) persons who, as of the date of this Agreement, constituted the Company's Board of Directors (the "Incumbent Board") cease for any reason including, without limitation, as a result of a tender offer, proxy contest, merger, consolidation or similar transaction, to constitute at least a majority of the Board of Directors, provided that any person becoming a director of the Company subsequent to the date of this Agreement whose election was approved or recommended by at least a majority of the directors then comprising the Incumbent Board shall, for purposes of this section 6(f), be considered a member of the Incumbent Board;

(iii) the consummation of a merger or consolidation of the Company with any other corporation or other entity, other than (1) a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) fifty percent (50%) or more of the combined voting power of the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation or (2) a merger or consolidation effected to implement a recapitalization of the Company (or similar transaction) in which no "person" (as hereinabove defined) acquires more than fifty percent (50%) of the combined voting power of the Company's then outstanding securities;

(iv) the stockholders of the Company approve a plan of complete liquidation of the Company; or the consummation of the sale or disposition by the Company of all or substantially all of the Company's assets.

6. Employee Proprietary Information and Inventions Agreement. You agree to simultaneously execute the Company's standard Employee Proprietary Information and Inventions Agreement with the execution of this Agreement in the form annexed as Exhibit C.

7. General.

(a) Notices. Whenever any notice is required hereunder, it shall be given in writing addressed as follows:

To Company:	Chimerix, Inc. 2505 Meridian Parkway, Suite 340 Durham, NC 27713
To the Executive:	Kenneth I. Moch 68 Willow Avenue Larchmont, New York 10538

All notices, requests, consents and other communications hereunder which are required to be provided, or which the sender elects to provide, in writing, will be addressed to the receiving party's address set forth above or to such other address as a party may designate by notice hereunder, and will be either (i) delivered by hand, (ii) sent by overnight courier, or (iii) sent by registered or certified mail, return receipt requested, postage prepaid. All notices, requests, consents and other communications hereunder will be deemed to have been given either (i) if by hand, at the time of the delivery thereof to the receiving party at the address of such party set forth above, (ii) if sent by overnight courier, on the next business day following the day such notice is delivered to the courier service, or (iii) if sent by registered or certified mail, on the 5th business day following the day such mailing is made.

(b) Entire Agreement. This Agreement, together with any Stock Option Agreements executed by you and the Company (either prior to or in conjunction with this Agreement), the Indemnification Agreement, the Arbitration Agreement (as defined below) and the Employee Proprietary Information and Inventions Agreement embody the entire agreement and understanding between the parties hereto with respect to the subject matter hereof and supersedes all prior oral or written agreements and understandings relating to the subject matter hereof. No statement, representation, warranty, covenant or agreement of any kind not expressly set forth in this Agreement will affect, or be used to interpret, change or restrict, the express terms and provisions of this Agreement.

(c) Modifications and Amendments. The terms and provisions of this Agreement may be modified or amended only by written agreement executed by the parties hereto (which in the case of the Company, shall be approved by the Board or the Compensation Committee).

(d) Waivers and Consents. The terms and provisions of this Agreement may be waived, or consent for the departure therefrom granted, only by written document executed by the party entitled to the benefits of such terms or provisions (which in the case of the Company, shall be approved by the Board or the Compensation Committee). No such waiver or consent will be deemed to be or will constitute a waiver or consent with respect to any other terms or provisions of this Agreement, whether or not similar. Each such waiver or consent will be effective only in the specific instance and for the purpose for which it was given, and will not constitute a continuing waiver or consent.

(e) Assignment. The Company may assign its rights and obligations hereunder to any person or entity that succeeds to all or substantially all of the Company's business or that aspect of the Company's business in which you are principally involved or to any parent, subsidiary or other affiliated entity of the Company. You may not assign your rights and obligations under this Agreement without the prior written consent of the Company and any such attempted assignment by you without the prior written consent of the Company will be void; provided, however, in the event of your death, your rights, compensation and benefits under this Agreement shall inure to the benefit of your estate, such that, for example, stock issuable to you, and awards and payments payable to you, shall be issued and paid to your estate.

(f) Governing Law. This Agreement and the rights and obligations of the parties hereunder will be construed in accordance with and governed by the law of the State of North Carolina without giving effect to the conflict of law principles thereof.

(g) Dispute Resolution. You and the Company agree to resolve any disputes arising from or relating to this Agreement solely through arbitration as provided in the Company's standard Mutual Agreement to Arbitrate Claims annexed as Exhibit D (the "Arbitration Agreement"). Nothing in this section applies to or governs disputes arising under or relating to the Employee Proprietary Information and Inventions Agreement. Any arbitration proceeding arising out of or relating to this Agreement shall be brought in the State of North Carolina and each of the parties irrevocably waives any objection it may now or hereafter have to venue or to convenience of forum, agrees that all claims in respect of the arbitration proceeding shall be heard and determined only in any such venues and agrees not to bring any proceeding arising out of or relating to this Agreement in any other venue.

(h) Severability. The parties intend this Agreement to be enforced as written. However, if any portion or provision of this Agreement is to any extent declared illegal or unenforceable by a duly authorized court having jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, will not be affected thereby, and each portion and provision of this Agreement will be valid and enforceable to the fullest extent permitted by law.

(i) Headings and Captions. The headings and captions of the various subdivisions of this Agreement are for convenience of reference only and will in no way modify or affect the meaning or construction of any of the terms or provisions hereof.

(j) Taxes. All payments required to be made by the Company to you under this Agreement shall be subject to the withholding of such amounts for taxes and other payroll deductions as the Company may reasonably determine it should withhold pursuant to any applicable law or regulation. The Company does not guarantee the tax treatment or tax consequences associated with any payment or benefit arising under this Agreement.

(k) Compliance with Code Section 409A. This Agreement is intended to comply with the requirements of Internal Revenue Code Section 409A, or any applicable exemptions from Code Section 409A, as the case may be. Any payments that qualify for the "short-term deferral" exception or another exception under Code Section 409A will be paid under such exception. Despite any contrary provision of this Agreement:

(i) All payments to be made upon a termination of employment under this Agreement may only be made upon a "separation from service" under Section 409A of the Code. In no event may you, directly or indirectly, designate the calendar year of any payment under this Agreement. Any reference to termination of employment or your date of termination shall mean and refer to the date of your "separation from service," as that term is defined in Treas. Reg. Section 1.409A-1(h).

(ii) All reimbursements and in-kind benefits provided under this Agreement will be made or provided in accordance with the requirements of Code Section 409A, including, where applicable, the requirement that (w) any reimbursement is for expenses incurred during your lifetime (or during a shorter period of time specified in this Agreement); (x) the amount of expenses eligible for reimbursement, or in kind benefits provided, during a calendar year may not affect the expenses eligible for reimbursement, or in kind benefits to be provided, in any other calendar year; (y) the reimbursement of an eligible expense will be made no later than the last day of the calendar year following the year in which the expense is incurred; and (z) the right to reimbursement or in kind benefits is not subject to liquidation or exchange for another benefit.

(iii) If you are a "specified employee" for purposes of Code Section 409A (as determined in accordance with the methodology established by the Company as in effect on the date of termination), (x) any payment that constitutes nonqualified deferred compensation within the meaning of Code Section 409A that is otherwise due to you under this Agreement during the six-month period following your separation from service (as determined in accordance with Code Section 409A) will be accumulated and paid to you on the first business day of the seventh month following your separation from service (the "Delayed Payment Date") and (y) in the event any equity compensation awards that vest upon termination of your employment constitute nonqualified deferred compensation within the meaning of Code Section 409A, the delivery of shares of common stock (or cash) as applicable in settlement of such awards shall be made on the earliest permissible payment date (including the Delayed Payment Date) or event under Code Section 409A on which the shares (or cash) would otherwise be delivered or paid. You will be entitled to interest on any delayed cash payments from the date of termination to the Delayed Payment Date at a rate equal to the applicable federal short-term rate in effect under Code Section 1274(d) for the month in which separation from service occurs. If you die during the postponement period, the amounts and entitlements delayed on account of Code Section 409A will be paid to your personal representative on the first to occur of the Delayed Payment Date or 30 days after the date of your death.

(iv) For purposes of the limitations on nonqualified deferred compensation under Code Section, each payment of compensation under this Agreement will be treated as a separate payment of compensation for purposes of applying the Code Section 409A deferral election rules and the exclusion under Code Section 409A for certain short-term deferral amounts.

(v) Within the time period permitted by the applicable Code Section 409A or other applicable guidance, the parties may by mutual written agreement modify the Agreement in order to cause the provisions of the Agreement to comply with the requirements of Code Section 409A, so as to avoid the imposition of taxes and penalties.

(l) Counterparts. This Agreement may be executed in two or more counterparts, and by different parties hereto on separate counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

If the foregoing accurately sets forth our agreement, please so indicate by signing and returning to us the enclosed copy of this Agreement.

Very truly yours,

Chimerix, Inc.

By: /s/ George R. Painter III, Ph.D.
Name: George R. Painter II, Ph.D.
Title: Chief Executive Officer

Accepted and Approved:

/s/ Kenneth I. Moch	October 27, 2009
Kenneth I. Moch	Date

Exhibit A

Indemnification Agreement

INDEMNIFICATION AGREEMENT

THIS INDEMIFICATION AGREEMENT is made and entered into as of the 20th day of October, 2009 (the "Agreement"), by and between Chimerix, Inc., a Delaware corporation (the "Company"), and Kenneth I Moch (the "Indemnitee"), with reference to the following facts:

A. The Company desires the benefits of having Indemnitee serve as an officer and/or director secure in the knowledge that any expenses, liability and/or losses incurred by Indemnitee in Indemnitee's good faith service to the Company will be borne by the Company or its successors and assigns;

B. Indemnitee is willing to serve in Indemnitee's position with the Company only on the condition that Indemnitee be indemnified for such expenses, liability and/or losses;

C. The Company and Indemnitee recognize the increasing difficulty in obtaining liability insurance for directors, officers and agents of a corporation at reasonable cost;

D. The Company and Indemnitee recognize that there has been an increase in litigation against corporate directors, officers and agents; and

E. The Company's Bylaws allow the Company to indemnify its directors, officers and agents to the maximum extent permitted under Delaware law.

NOW, THEREFORE, the parties hereby agree as follows:

1. Definitions. For purposes of this Agreement:

1.1 "Agent" shall mean any person who is or was a director, officer, employee or agent of the Company or a subsidiary of the Company whether serving in such capacity or as a director, officer, employee, agent, fiduciary or other official of another corporation, joint venture, trust or other enterprise at the request of, for the convenience of, or to represent the interests of the Company or a subsidiary of the Company.

1.2 "Change of Control" shall mean the occurrence of any of the following events after the date of this Agreement:

(a) A change in the composition of the board of directors of the Company (the "Board"), as a result of which fewer than two-thirds of the incumbent directors are directors who either (a) had been directors of the Company 24 months prior to such change or (b) were elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the directors who had been directors of the Company 24 months prior to such change and who were still in office at the time of the election or nomination; or

(b) Any "person" (as such term is used in sections 13(d) - and 14(d) of the Securities Exchange Act of 1934 (the "Exchange Act"), as amended) through the acquisition or aggregation of securities is or becomes the beneficial owner, directly or indirectly, of securities of the Company representing 20 percent or more of the combined voting power of the Company's then outstanding securities ordinarily (and apart from rights accruing under special circumstances) having the right to vote at elections of directors (the "Capital Stock"); provided, however, that any change in ownership of the Company's securities by any person resulting solely from a reduction in the aggregate number of outstanding shares of Capital Stock, and any decrease thereafter in such person's ownership of securities, shall be disregarded until such person increases in any manner, directly or indirectly, such person's beneficial ownership of any securities of the Company; and provided, further, that any change in ownership of the Company's securities resulting solely from issuances of Capital Stock by the Company primarily for the purpose of raising capital shall be disregarded.

1.3 "Disinterested Director" shall mean a director of the Company who is not and was not a party to the Proceeding in respect of which indemnification is being sought by Indemnitee.

1.4 "Expenses" shall be broadly construed and shall include, without limitation, (a) all direct and indirect costs incurred, paid or accrued, (b) all attorneys' fees, retainers, court costs, transcripts, fees of experts, witness fees, travel expenses, food and lodging expenses while traveling, duplicating costs, printing and binding costs, telephone charges, postage, delivery service, freight or other transportation fees and expenses, (c) all other disbursements and out-of-pocket expenses, (d) amounts paid in settlement, to the extent not prohibited by Delaware Law, and (e) reasonable compensation for time spent by Indemnitee for which Indemnitee is otherwise not compensated by the Company or any third party, actually and reasonably incurred in connection with or arising out of a Proceeding, including a Proceeding by Indemnitee to establish or enforce a right to indemnification under this Agreement, applicable law or otherwise.

1.5 "Independent Counsel" shall mean a law firm or a member of a law firm that neither is presently nor in the past five years has been retained to represent: (a) the Company, an affiliate of the Company or Indemnitee in any matter material to either party or (b) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "Independent Counsel" shall not include any person who, under the applicable standards of professional conduct then prevailing would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's right to indemnification under this Agreement.

1.6 "Liabilities" shall mean liabilities of any type whatsoever, including, but not limited to, judgments or fines, ERISA or other excise taxes and penalties, and amounts paid in settlement (including all interest, assessments or other charges paid or payable in connection with any of the foregoing) actually and reasonably incurred by Indemnitee in connection with a Proceeding.

1.7 "Delaware Law" means the Delaware General Corporation Law, as amended and in effect from time to time or any successor or other statutes of Delaware having similar import and effect.

1.8 "Proceeding" shall mean any pending, threatened or completed action, hearing, suit or any other proceeding, whether civil, criminal, arbitrative, administrative, investigative or any alternative dispute resolution mechanism, including without limitation any such Proceeding brought by or in the right of the Company.

2. Employment Rights and Duties. Subject to any other obligations imposed on either of the parties by contract or by law, and with the understanding that this Agreement is not intended to confer employment rights on either party which they did not possess on the date of its execution, Indemnitee agrees to serve as a director or officer so long as Indemnitee is duly appointed or elected and qualified in accordance with the applicable provisions of the Amended and Restated Certificate of Incorporation (the "Certificate") and Bylaws (the "Bylaws") of the Company or any subsidiary of the Company and until such time as Indemnitee resigns or fails to stand for election or until Indemnitee's employment terminates. Indemnitee may at any time and for any reason resign or be removed from such position (subject to any other contractual obligation or other obligation imposed by operation of law), in which event the Company shall have no obligation under this Agreement to continue Indemnitee in any such position.

2.1 Directors' and Officers' Insurance.

(a) The Company hereby covenants and agrees that, so long as Indemnitee shall continue to serve as a director or officer of the Company and thereafter so long as Indemnitee shall be subject to any possible Proceeding, the Company, subject to Section 2.1(c), shall maintain directors' and officers' insurance in full force and effect.

(b) In all policies of directors' and officers' insurance, Indemnitee shall be named as an insured in such a manner as to provide Indemnitee the same rights and benefits, subject to the same limitations, as are accorded to the Company's directors or officers most favorably insured by such policy.

(c) The Company shall have no obligation to maintain directors' and officers' insurance if the Company determines in good faith that such insurance is not reasonably available, the premium costs for such insurance are disproportionate to the amount of coverage provided, or the coverage provided by such insurance is limited by exclusions so as to provide an insufficient benefit.

3. Indemnification. The Company shall indemnify Indemnitee to the fullest extent authorized or permitted by Delaware Law and the provisions of the Certificate and Bylaws of the Company in effect on the date hereof, and as Delaware Law, the Certificate and Bylaws may from time to time be amended (but, in the case of any such amendment, only to the extent such amendment permits the Company to provide broader indemnification rights than Delaware Law, the Certificate and/or Bylaws permitted the Company to provide before such amendment). The right to indemnification conferred in the Certificate shall be presumed to have been relied upon by Indemnitee in serving or continuing to serve the Company as a director or officer and shall be enforceable as a contract right. Without in any way diminishing the scope of the indemnification provided by the Certificate and this Section 3, the Company shall indemnify Indemnitee if and whenever he is or was a witness, party or is threatened to be made a witness or a party to any Proceeding, by reason of the fact that Indemnitee is or was an Agent or by reason of anything done or not done, or alleged to have been done or not done, by Indemnitee in such capacity, against all Expenses and Liabilities actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection with the investigation, defense, settlement or appeal of such Proceeding. In addition to, and not as a limitation of, the foregoing, the rights of indemnification of Indemnitee provided under this Agreement shall include those rights set forth in Sections 4 and 5 below.

4. Payment of Expenses.

4.1 All Expenses incurred by or on behalf of Indemnitee shall be advanced by the Company to Indemnitee within 20 days after the receipt by the Company of a written request for such advance which may be made from time to time, whether prior to or after final disposition of a Proceeding (unless there has been a final determination by a court of competent jurisdiction that Indemnitee is not entitled to be indemnified for such Expenses). Indemnitee's entitlement to advancement of Expenses shall include those incurred in connection with any Proceeding by Indemnitee seeking a determination, an adjudication or an award in arbitration pursuant to this Agreement. The requests shall reasonably evidence the Expenses incurred by Indemnitee in connection therewith. Indemnitee hereby undertakes to repay the amounts advanced if it shall ultimately be determined that Indemnitee is not entitled to be indemnified pursuant to the terms of this Agreement.

4.2 Notwithstanding any other provision in this Agreement, to the extent that Indemnitee has been successful on the merits or otherwise in defense of any Proceeding, Indemnitee shall be indemnified against all Expenses actually and reasonably incurred by Indemnitee in connection therewith.

5. Presumptions and Effect of Certain Proceedings. Upon making a request for indemnification, Indemnitee shall be presumed to be entitled to indemnification under this Agreement and the Company shall have the burden of proof to overcome that presumption in reaching any contrary determination. The termination of any Proceeding by judgment, order, settlement, arbitration award or conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, (a) adversely affect the rights of Indemnitee to indemnification except as indemnification may be expressly prohibited under this Agreement, (b) create a presumption that Indemnitee did not act in good faith and in a manner which Indemnitee reasonably believed to be in or not opposed to the best interests of the Company or (c) with respect to any criminal action or proceeding, create a presumption that Indemnitee had reasonable cause to believe that Indemnitee's conduct was unlawful.

6. Remedies of Indemnitee in Cases of Determination not to Indemnify or to Advance Expenses.

6.1 In the event that (a) a determination is made that Indemnitee is not entitled to indemnification, (b) advances for Expenses are not made when and as required by this Agreement, (c) payment has not been timely made following a determination of entitlement to indemnification pursuant to this Agreement or (d) Indemnitee otherwise seeks enforcement of this Agreement, Indemnitee shall be entitled to a final adjudication in an appropriate court of the State of Delaware of Indemnitee's entitlement to such indemnification or advance. Alternatively, Indemnitee at Indemnitee's option may seek an award in arbitration. If the parties are unable to agree on an arbitrator, the parties shall provide JAMS Endispute ("JAMS") with a statement of the nature of the dispute and the desired qualifications of the arbitrator. JAMS will then provide a list of three available arbitrators. Each party may strike one of the names on the list, and the remaining person will serve as the arbitrator. If both parties strike the same person, JAMS will select the arbitrator from the other two names. The arbitration award shall be made within 90 days following the demand for arbitration. Except as set forth herein, the provisions of Delaware law shall apply to any such arbitration. The Company shall not oppose Indemnitee's right to seek any such adjudication or arbitration award. In any such proceeding or arbitration Indemnitee shall be presumed to be entitled to indemnification under this Agreement and the Company shall have the burden of proof to overcome that presumption.

6.2 A determination, in whole or in part, that Indemnitee is not entitled to indemnification shall create no presumption in any judicial proceeding or arbitration that Indemnitee has not met the applicable standard of conduct for, or is otherwise not entitled to, indemnification.

6.3 If a determination is made or deemed to have been made pursuant to the terms of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in the absence of (a) a misrepresentation of a material fact by Indemnitee in the request for indemnification or (b) a specific finding {which has become final) by a court of competent jurisdiction that all or any part of such indemnification is expressly prohibited by law.

6.4 The Company and Indemnitee agree herein that a monetary remedy for breach of this Agreement, at some later date, will be inadequate, impracticable and difficult of proof, and further agree that such breach would cause Indemnitee irreparable harm. Accordingly, the Company and Indemnitee agree that Indemnitee shall be entitled to temporary and permanent injunctive relief to enforce this Agreement without the necessity of proving actual damages or irreparable harm. The Company and Indemnitee further agree that Indemnitee shall be entitled to such injunctive relief, including temporary restraining orders, preliminary injunctions and permanent injunctions, without the necessity of posting bond or other undertaking in connection therewith. Any such requirement of bond or undertaking is hereby waived by the Company, and the Company acknowledges that in the absence of such a waiver, a bond or undertaking may be required by the court.

6.5 The Company shall be precluded from asserting that the procedures and presumptions of this Agreement are not valid, binding and enforceable. The Company shall stipulate in any such court or before any such arbitrator that the Company is bound by all the provisions of this Agreement and is precluded from making any assertion to the contrary.

6.6 Expenses incurred by Indemnitee in connection with Indemnitee's request for indemnification under, seeking enforcement of, or to recover damages for breach of, this Agreement shall be borne and advanced by the Company.

7. Other Rights to Indemnification. Indemnitee's rights of indemnification and advancement of expenses provided by this Agreement shall not be deemed exclusive of any other rights to which Indemnitee may now or in the future be entitled under applicable law, the Certificate, the Bylaws, an employment agreement, a vote of stockholders or Disinterested Directors, insurance or other financial arrangements or otherwise.

8. Limitations on Indemnification. No indemnification pursuant to Section 3 shall be paid by the Company nor shall Expenses be advanced pursuant to Section 3:

8.1 Insurance. To the extent that Indemnitee is reimbursed pursuant to such insurance as may exist for Indemnitee's benefit. Notwithstanding the availability of such insurance, Indemnitee also may claim indemnification from the Company pursuant to this Agreement by assigning to the Company any claims under such insurance to the extent Indemnitee is paid by the Company. Indemnitee shall reimburse the Company for any sums Indemnitee receives as indemnification from other sources to the extent of any amount paid to Indemnitee for that purpose by the Company;

8.2 Section 16(b). On account and to the extent of any wholly or partially successful claim against Indemnitee for an accounting of profits made from the purchase or sale by Indemnitee of securities of the Company pursuant to the provisions of Section 16(b) or the Securities Exchange Act of 1934, as amended, and amendments thereto or similar provisions of any federal, state or local statutory law; or

8.3 Indemnitee's Proceedings. Except as otherwise provided in this Agreement, in connection with all or any part of a Proceeding which is initiated by or on behalf of Indemnitee, or any Proceeding by Indemnitee against the Company or its directors, officers, employees or other agents, unless (a) such indemnification is expressly required to be made by Delaware Law, (b) the Proceeding was authorized by a majority of the Disinterested Directors (c) there has been a Change of Control or (d) such indemnification is provided by the Company, in its sole discretion, pursuant to the powers vested in the Company under Delaware Law.

9. Duration and Scope of Agreement; Binding Effect. This Agreement shall continue so long as Indemnitee shall be subject to any possible Proceeding subject to indemnification by reason of the fact that Indemnitee is or was an Agent and shall be applicable to Proceedings commenced or continued after execution of this Agreement, whether arising from acts or omissions occurring before or after such execution. This Agreement shall be binding upon the Company and its successors and assigns (including any direct or indirect successor by purchase, merger, consolidation or otherwise to all or substantially all of the business or assets of the Company) and shall inure to the benefit of Indemnitee and Indemnitee's spouse, assigns, heirs, devisees, executors, administrators and other legal representatives.

10. Notice by Indemnitee and Defense of Claims. Indemnitee agrees promptly to notify the Company in writing upon being served with any summons, citation, subpoena, complaint, indictment, information or other document relating to any matter, which may be subject to indemnification hereunder, whether civil, criminal, arbitrative, administrative or investigative; but the omission so to notify the Company will not relieve it from any liability which it may have to Indemnitee if such omission does not actually prejudice the Company's rights and, if such omission does prejudice the Company's rights, it will relieve the Company from liability only to the extent of such prejudice; nor will such omission relieve the Company from any liability which it may have to if Indemnitee otherwise than under this Agreement with respect to any Proceeding:

(a) The Company will be entitled to participate therein at its own expense;

(b) Except as otherwise provided below, to the extent that it may wish, the Company jointly with any other indemnifying party similarly notified will be entitled to assume the defense thereof, with counsel reasonably satisfactory to Indemnitee. After notice from the Company to Indemnitee of its election so to assume the defense thereof and the assumption of such defense, the Company will not be liable to Indemnitee under this Agreement for any attorney fees or costs subsequently incurred by Indemnitee in connection with Indemnitee's defense except as otherwise provided below. Indemnitee shall have the right to employ counsel in such Proceeding but the fees and expenses of such counsel incurred after notice from the Company of its assumption of the defense thereof and the assumption of such defense shall be at the expense of Indemnitee unless (i) the employment of counsel by Indemnitee has been authorized by the Company, (ii) Indemnitee shall have reasonably concluded that there may be a conflict of interest between the Company and Indemnitee in the conduct of the defense of such action or that the Company's counsel may not be adequately representing Indemnitee or (iii) the Company shall not in fact have employed counsel to assume the defense of such action, in each of which cases the fees and expenses of counsel shall be at the expense of the Company; and

(c) The Company shall not be liable to indemnify Indemnitee under this Agreement for any amounts paid in settlement of any action or claim effected without its written consent. The Company shall not settle any action or claim which would impose any limitation or penalty on Indemnitee without Indemnitee's written consent. Neither the Company nor Indemnitee will unreasonably withhold Indemnitee's consent to any proposed settlement.

10.2 Contribution. In order to provide for just and equitable contribution in circumstances in which the indemnification provided for in this Agreement is held by a court of competent jurisdiction to be unavailable to Indemnitee in whole or part, the Company shall, in such an event, after taking into account, among other things, contributions by other directors and officers of the Company pursuant to indemnification agreements or otherwise, and, in the absence of personal enrichment, acts of intentional fraud or dishonesty or criminal conduct on the part of Indemnitee, contribute to the payment of Indemnitee's losses in proportion to the relative benefits received by the Company and all officers, directors or employees of the Company other than Indemnitee who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, from the transaction from which such action, suit or proceeding arose; provided, however, that the proportion determined on the basis of relative benefit may, to the extent necessary to conform to law, be further adjusted by reference to the relative fault of the Company and all officers, directors or employees of the Company other than Indemnitee who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, in connection with the events that resulted in such expenses, judgments, fines or settlement amounts, as well as any other equitable considerations which the law may require to be considered. The relative fault of the Company and all officers, directors or employees of the Company other than Indemnitee who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, shall be determined by reference to, among other things, the degree to which their actions were motivated by intent to gain personal profit or advantage, the degree to which their liability is primary or secondary, and the degree to which their conduct is active or passive.

11. Establishment of Trust. In order to secure the obligations of the Company to indemnify and to advance Expenses to Indemnitee pursuant to this Agreement, upon a Change of Control of the Company, the Company or its successor or assign shall establish a Trust (the "Trust") for the benefit of the Indemnitee, the trustee (the "Trustee") of which shall be chosen by the Company and which is reasonably acceptable to the Indemnitee. Thereafter, from time to time, upon receipt of a written request from Indemnitee, the Company shall fund the Trust in amounts sufficient to satisfy any and all Liabilities and Expenses reasonably anticipated at the time of such request for which the Company may indemnify Indemnitee hereunder. The amount or amounts to be deposited in the Trust pursuant to the foregoing funding obligation shall be determined by mutual agreement of the Indemnitee and the Company or, if the Company and the Indemnitee are unable to reach such an agreement, by Independent Counsel selected jointly by the Company and the Indemnitee. The terms of the Trust shall provide that except upon the consent of the Indemnitee and the Company, (i) the Trust shall not be revoked or the principal thereof invaded, without the written consent of the Indemnitee, (ii) the Trustee shall advance to the Indemnitee, within 20 days of a request by the Indemnitee, any and all Expenses, the Indemnitee hereby agreeing to reimburse the Trustee of the Trust for all Expenses so advanced if a final determination is made by a court in a final adjudication from which there is no further right of appeal that the Indemnitee is not entitled to be indemnified under this Agreement, (iii) the Trust shall continue to be funded by the Company in accordance with the funding obligations set forth in this Section, (iv) the Trustee shall promptly pay to the Indemnitee any amounts to which the Indemnitee shall be entitled pursuant to this Agreement, and (v) all unexpended funds in the Trust shall revert to the Company upon a final determination by Independent Counsel selected by Indemnitee or a court of competent jurisdiction that Indemnitee has been fully indemnified with respect to the Proceeding giving rise to the funding of the Trust under the terms of this Agreement. The establishment of the Trust shall not, in any way, diminish the Company's obligation to indemnify Indemnitee against Expenses and Liabilities to the full extent required by this Agreement.

12. Miscellaneous Provisions.

12.1 Severability: Partial Indemnity. If any provision or provisions of this Agreement (or any portion thereof) shall be held by a court of competent jurisdiction to be invalid, illegal or unenforceable for any reason whatever: (a) such provision shall be limited or modified in its application to the minimum extent necessary to avoid the invalidity, illegality or unenforceability of such provision; (b) the validity, legality and enforceability of the remaining provisions of this Agreement shall not in any way be affected or impaired thereby; and (c) to the fullest extent possible, the provisions of this Agreement shall be construed so as to give effect to the intent manifested by the provision (or portion thereof) held invalid, illegal or unenforceable. If Indemnitee is entitled under any provision of this Agreement to indemnification by the Company for some or a portion of any Expenses or Liabilities of any type whatsoever incurred by Indemnitee in the investigation, defense, settlement or appeal of a Proceeding but not entitled to all of the total amount thereof, the Company shall nevertheless indemnify Indemnitee for such total amount except as to the portion thereof for which it has been determined that Indemnitee is not entitled.

12.2 Identical Counterparts. This Agreement may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. Only one such counterpart signed by the party against whom enforceability is sought needs to be produced to evidence the existence of this Agreement.

12.3 Interpretation of Agreement. It is understood that the parties hereto intend this Agreement to be interpreted and enforced so as to provide indemnification to Indemnitee to the fullest extent not now or hereafter prohibited by law.

12.4 Headings. The headings of the Sections and paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof.

12.5 Pronouns. Use of the masculine pronoun shall be deemed to include use of the feminine pronoun where appropriate.

12.6 Modification and Waiver. No supplement, modification or amendment of this Agreement shall be binding unless executed in writing by both of the parties to this Agreement. No waiver of any provision of this Agreement shall be deemed to constitute a waiver of any of the provisions hereof (whether or not similar) nor shall such waiver constitute a continuing waiver. No waiver of any provision of this Agreement shall be effective unless executed in writing.

12.7 Notices. All notices, requests, demands and other communications hereunder shall be in writing and shall be deemed to have been duly given if (i) delivered by hand and receipted for by the party to whom said notice or other communication shall have been directed or (ii) mailed by certified or registered mail with postage prepaid, on the third business day after the date on which it is so mailed:

(a) If to Indemnitee, to:

Kenneth I. Moch
505 Meridian Parkway, Suite 340
Durham, NC 27713
Telephone: (919) 806-1074
Telefax: (919) 806-1146

(b) If to the Company to:
Chimerix, Inc.
Attn: President
2505 Meridian Parkway, Suite 340
Durham, NC 27713
Telephone: (919) 806-1074
Telefax: (919) 806-1146

with a copy to:
Jason Kent, Esq.
Cooley Godward Kronish LLP
4401 Eastgate Mall
San Diego, CA 92121

or to such other address as may have been furnished to Indemnitee by the Company or to the Company by Indemnitee, as the case may be.

12.8 Governing Law. The parties agree that this Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware, as applied to contracts between Delaware residents entered into and to be performed entirely within Delaware.

12.9 Entire Agreement. This Agreement represents the entire agreement and amends, restates and supersedes any prior indemnification agreement between the parties hereto. There are no other agreements, contracts or understanding between the parties hereto with respect to the subject matter of this Agreement, except as specifically referred to herein or as provided in Sections 7 and 2.1 hereof.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

Chimerix, Inc.

By: /s/ George R. Painter III
George R. Painter III, Ph.D.
President and CEO

/s/ Kenneth I. Moch
10/20/2009
Kenneth I. Moch

Exhibit B

Waiver and Release

You hereby agree and acknowledge that by signing this Waiver and Release, and for other good and valuable consideration, you are waiving your right to assert any and all forms of legal claims against the Company[1] of any kind whatsoever, whether known or unknown, arising from the beginning of time through the date you execute this Waiver and Release (the "Execution Date"). Except as set forth below, your waiver and release herein is intended to bar any form of legal claim, complaint or any other form of action (hereafter, "Claim" or "Claims") against the Company seeking any form of relief including, without limitation, equitable relief (whether declaratory, injunctive or otherwise), the recovery of any damages, or any other form of monetary recovery whatsoever (including, without limitation, back pay, front pay, compensatory damages, emotional distress damages, punitive damages, attorneys fees and any other costs) against the Company, for any alleged action, inaction or circumstance existing or arising through the Execution Date.

Without limiting the foregoing general waiver and release, you specifically waive and release the Company from any Claim arising from or related to your prior employment relationship with the Company or the termination thereof, including, without limitation:

** Claims under any state or federal discrimination, fair employment practices or other employment related statute, regulation or Employee order (as they may have been amended through the Execution Date) prohibiting discrimination or harassment based upon any protected status including, without limitation, race, national origin, age, gender, marital status, disability, veteran status or sexual orientation. Without limitation, specifically included in this paragraph are any Claims arising under the Federal Age Discrimination in Employment Act, Title VII of the Civil Rights Act of 1964, the Civil Rights Act of 1991, the Americans With Disabilities Act and any similar Federal and state statute.

** Claims under any other state or federal employment related statute, regulation or Employee order (as they may have been amended through the Execution Date) relating to wages, hours or any other terms and conditions of employment.

** Claims under any state or federal common law theory including, without limitation, wrongful discharge, breach of express or implied contract, promissory estoppel, unjust enrichment, breach of a covenant of good faith and fair dealing, violation of public policy, defamation, interference with contractual relations, intentional or negligent infliction of emotional distress, invasion of privacy, misrepresentation, deceit, fraud or negligence.

[1] For purposes of this Waiver and Release, the Company includes the Company and any of its divisions, affiliates (which means all persons and entities directly or indirectly controlling, controlled by or under common control with the Company), subsidiaries and all other related entities, and its and their directors, officers, employees, trustees, agents, successors and assigns.

** Any other Claim arising under state or federal law.

You acknowledge and agree that, but for providing this Waiver and Release, you would not be receiving the economic benefits being provided to you under the terms of this Waiver and Release.

It is the Company's desire and intent to make certain that you fully understand the provisions and effects of this Waiver and Release. To that end, you have been encouraged and given the opportunity to consult with legal counsel for the purpose of reviewing the terms of this Waiver and Release. Also, because you are over the age of 40 and consistent with the provisions of the Federal Age Discrimination in Employment Act, which prohibits discrimination on the basis of age, the Company is providing you with twenty-one (21) days in which to consider and accept the terms of this Waiver and Release by signing below and returning it to the Company.

You may rescind your assent to this Waiver and Release if, within seven (7) days after you sign this Waiver and Release, you deliver by hand or send by mail a written notice of rescission to the Company. The eighth day following your signing of this Waiver and Release is the Effective Date.

Also, consistent with the provisions of federal and state discrimination laws, nothing in this Waiver and Release shall be deemed to prohibit you from challenging the validity of this Waiver and Release under such discrimination laws (the "Discrimination Laws") or from filing a charge or complaint of age or other employment related discrimination with the Equal Employment Opportunity Commission ("EEOC") or state equivalent, or from participating in any investigation or proceeding conducted by the EEOC or state equivalent. Further, nothing in this Waiver and Release shall be deemed to limit the Company's right to seek immediate dismissal of such charge or complaint on the basis that your signing of this Waiver and Release constitutes a full release of any individual rights under the Discrimination Laws, or to seek restitution to the extent permitted by law of the economic benefits provided to you under this Waiver and Release in the event that you successfully challenge the validity of this Waiver and Release and prevail in any claim under the Discrimination Laws.

By: _____
Employee

Date: _____

Exhibit C

Employee Proprietary Information and Inventions Agreement

CHIMERIX, INC.

EMPLOYEE PROPRIETARY INFORMATION AND INVENTIONS AGREEMENT

In consideration of my employment or continued employment by **CHIMERIX, INC.** (the "**Company**"), and the compensation now and hereafter paid to me, I hereby agree as follows:

1. NONDISCLOSURE.

1.1 Recognition of Rights; Nondisclosure. At all times during my employment and thereafter, I will hold in strictest confidence and will not disclose, use, lecture upon or publish any of the Proprietary Information (as defined below) of the Company and its affiliates, except as such disclosure, use or publication may be required in connection with my work for the Company, or unless an officer of the Company expressly authorizes such in writing. I will obtain the Company's written approval before publishing or submitting for publication any material (written, verbal, or otherwise) that relates to my work at the Company and/or incorporates any Proprietary Information of the Company and its affiliates. I hereby assign to the Company and its affiliates any rights I may have or acquire in such Proprietary Information and recognize that all Proprietary Information shall be the sole property of the Company and its affiliates.

1.2 Proprietary Information. The term **"Proprietary Information"** shall mean any and all confidential and/or proprietary knowledge, data or information of the Company and its affiliates. By way of illustration but not limitation, **"Proprietary Information"** includes (a) chemical compounds, building blocks, chemical libraries, reaction protocols for chemical libraries, chemical structures, chemical design and model relationship data, chemical databases, assays, samples, media and other biological materials, procedures and formulations for producing any such materials, products, processes, ideas, know-how, trade secrets, drawings, inventions, improvements, formulas, equations, methods, developmental or experimental work, research or clinical data, discoveries, developments, designs, techniques, instruments, devices, computer software and hardware (collectively, "**Inventions**"); and (b) information regarding research, development, new service offerings or products, marketing and selling, business plans, business methods, budgets, finances, licensing, collaboration and development arrangements, prices and costs, buying habits and practices, contact and mailing lists and databases, vendors, customers and clients, and potential business opportunities; and (c) information regarding the names, addresses, identities, skills and compensation of employees, independent contractors and consultants of the Company and its affiliates and (d) any other information regarding the Company, its affiliates and their businesses that the Company and its affiliates treat in a confidential manner and is not readily available to the public. Notwithstanding the foregoing, it is understood that, at all such times, I am free to use information which is generally known in the trade or industry, which is not gained as result of a breach of this Agreement, and my own skill, knowledge, know-how and experience to whatever extent and in whichever way I wish.

1.3 Third Party Information. I understand, in addition, that the Company and its affiliates have received and in the future will receive from third parties confidential or proprietary information **("Third Party Information")** subject to a duty on the part of the Company and its affiliates to maintain the confidentiality of such information and to use it only for certain limited purposes. During the term of my employment and thereafter, I will hold Third Party Information in the strictest confidence and will not disclose to anyone (other than personnel who need to know such information in connection with their work for the Company or its affiliates) or use, except in connection with my work for the Company, Third Party Information unless expressly authorized by an officer of the Company in writing.

1.4 No Improper Use of Information of Prior Employers and Others. During my employment by the Company, I will not improperly use or disclose any confidential information or trade secrets, if any, of any former employer or any other person to whom I have an obligation of confidentiality, except to the extent that such confidential information or trade secrets relate to any asset assigned to or owned by the Company or its affiliates, and I will not bring onto the premises of the Company or its affiliates any unpublished documents or any property belonging to any former employer or any other person to whom I have an obligation of confidentiality unless consented to in writing by that former employer or person. I will use in the performance of my duties only information which is generally known and used by persons with training and experience comparable to my own, which is common knowledge in the industry or otherwise legally in the public domain, or which is otherwise provided or developed by the Company or its affiliates.

2. ASSIGNMENT OF INVENTIONS.

2.1 Proprietary Rights. The term **"Proprietary Rights"** shall mean all trade secret, patent, copyright, mask work and other intellectual property rights throughout the world.

2.2 Prior Inventions. Inventions, if any, patented or unpatented, which I made prior to the commencement of my employment with the Company are excluded from the scope of this Agreement. To preclude any possible uncertainty, I have set forth on *Exhibit B* (Prior Inventions) attached hereto a complete list of all Inventions that I have, alone or jointly with others, conceived, developed or reduced to practice or caused to be conceived, developed or reduced to practice prior to the commencement of my employment with the Company, that I consider to be my property or the property of third parties and that I wish to have excluded from the scope of this Agreement (collectively, **"Prior Inventions").** If disclosure of any such Prior Invention would cause me to violate any prior confidentiality agreement, I understand that I am not to list such Prior Invention in *Exhibit B* but am only to disclose a cursory name for each such invention, a listing of the party to whom it belongs and the fact that full disclosure as to such Prior Invention has not been made for that reason. A space is provided on *Exhibit B* for such purpose. If no such disclosure is attached, I represent that there are no Prior Inventions. If, in the course of my employment with the Company, I incorporate a Prior Invention into a product, process or development of the Company or its affiliates, the Company and its affiliates are hereby granted and shall have a nonexclusive, royalty-free, irrevocable, perpetual, worldwide license (with rights to sublicense through multiple tiers of sub licensees) to make, have made, modify, use and sell such Prior Invention. Notwithstanding the foregoing, I agree that I will not incorporate, or permit to be incorporated, Prior Inventions in any Company Inventions (as defined below) without the Company's prior written consent.

2.3 Assignment of Inventions. Subject to Sections 2.4 and 2.6, I hereby assign and agree to assign in the future (when any such Inventions or Proprietary Rights are first reduced to practice or first fixed in a tangible medium, as applicable) to the Company all my right, title and interest in and to any and all Inventions (and all Proprietary Rights with respect thereto) whether or not patentable or registrable under copyright or similar statutes, made or conceived or reduced to practice or learned by me, either alone or jointly with others, during the period of my employment with the Company. Inventions assigned to the Company, or to a third party as directed by the Company pursuant to this Section 2, are collectively referred to as **"Company Inventions."**

2.4 Nonassignable Inventions. This Agreement does not apply to an Invention which qualifies fully as a nonassignable Invention under Section 66-57.1 of the NC General Statutes **("Section 66-57.1").** I have reviewed the notification on *Exhibit A* (Limited Exclusion Notification) and agree that my signature acknowledges receipt of such notification.

2.5 Obligation to Keep Company Informed. During the period of my employment and for six (6) months after termination of my employment with the Company, I will promptly disclose to the Company fully and in writing all Inventions authored, conceived or reduced to practice by me, either alone or jointly with others. In addition, I will promptly disclose to the Company all patent applications filed by me or on my behalf within twelve (12) months after termination of my employment with the Company. At the time of each such disclosure, I will advise the Company in writing of any Inventions that I believe fully qualify for protection under Section 66-57.1; and I will at that time provide to the Company in writing all evidence necessary to substantiate that belief. The Company will keep in confidence and will not use for any purpose or disclose to third parties without my consent any confidential information disclosed in writing to the Company pursuant to this Agreement relating to Inventions that qualify fully for protection under the provisions of Section 66-57.1. I will preserve the confidentiality of any Invention that does not fully qualify for protection under Section 66-57.1.

2.6 Government or Third Party. I also agree to assign all my right, title and interest in and to any particular Company Invention to a third party, including without limitation the United States government, as directed by the Company.

2.7 Works for Hire. I acknowledge that all original works of authorship which are made by me (solely or jointly with others) within the scope of my employment and which are protectable by copyright are "works made for hire," pursuant to the United States Copyright Act (17 U.S.C., Section 101).

2.8 Enforcement of Proprietary Rights. I will assist the Company in every proper way to obtain, and from time to time enforce, United States and foreign Proprietary Rights relating to Company Inventions in any and all countries. To that end I will execute, verify and deliver such documents and perform such other acts (including appearances as a witness) as the Company may reasonably request for use in applying for, obtaining, perfecting, evidencing, sustaining and enforcing such Proprietary Rights and the assignment thereof. In addition, I will execute, verify and deliver assignments of such Proprietary Rights to the Company or its designee. My obligation to assist the Company with respect to Proprietary Rights relating to such Company Inventions in any and all countries shall continue beyond the termination of my employment, but the Company shall compensate me at a reasonable rate after such termination for the time actually spent by me at the Company's request on such assistance.

In the event the Company is unable for any reason, after reasonable effort, to secure my signature on any document needed in connection with the actions specified in the preceding paragraph, I hereby irrevocably designate and appoint the Company and its duly authorized officers and agents as my agent and attorney in fact, which appointment is coupled with an interest, to act for and in my behalf to execute, verify and file any such documents and to do all other lawfully permitted acts to further the purposes of the preceding paragraph with the same legal force and effect as if executed by me. I hereby waive and quitclaim to the Company any and all claims, of any nature whatsoever, which I now or may hereafter have for infringement of any Proprietary Rights assigned hereunder to the Company.

3. **Records**. I agree to keep and maintain adequate and current records (in the form of notes, sketches, drawings and in any other form that may be required by the Company) of all Proprietary Information developed by me and all Inventions made by me during the period of my employment at the Company, which records shall be available to and remain the sole property of the Company at all times.

4. **Additional Activities; Nonsolicitation**. I agree that during the period of my employment by the Company I will not, without the Company's express written consent, engage in any employment or business activity which is competitive with, or would otherwise conflict with, my employment by the Company. I agree further that for the period of my employment by the Company and for one (1) year after the date of termination of my employment by the Company I will not, either directly or through others, induce, solicit or attempt to solicit any employee, independent contractor or consultant of the Company or any affiliate to terminate his or her relationship with the Company or such affiliate. At all times during my employment and thereafter, I will not use any Proprietary Information of the Company or any affiliate to induce, solicit or attempt to solicit any customer, client or vendor of the Company or any affiliate to terminate its relationship with the Company or such affiliate.

5. **No Conflicting Obligation**. I represent that my performance of all the terms of this Agreement and as an employee of the Company does not and will not breach any agreement to keep in confidence information acquired by me in confidence or in trust prior to my employment by the Company. I have not entered into, and I agree I will not enter into, any agreement either written or oral in conflict herewith.

6. **Return of Company Documents**. When I leave the employ of the Company, I will deliver to the Company any and all drawings, notes, memoranda, specifications, devices, formulas, and documents, together with all copies thereof, and any other material containing or disclosing any Company Inventions, Third Party Information or Proprietary Information of the Company and its affiliates. I further agree that any property situated on the premises of the Company and its affiliates and owned by the Company and its affiliates, including disks and other storage media, filing cabinets or other work areas, is subject to inspection by Company personnel at any time with or without notice. Prior to leaving, I will cooperate with the Company in completing and signing the Company's termination statement.

7. **Legal and Equitable Remedies**. Because my services are personal and unique and because I may have access to and become acquainted with the Proprietary Information of the Company and its affiliates, the Company shall have the right to enforce this Agreement and any of its provisions by injunction, specific performance or other equitable relief, without bond and without prejudice to any other rights and remedies that the Company may have for a breach of this Agreement.

8. **Notices**. Any notices required or permitted hereunder shall be given to the appropriate party at the address specified below or at such other address as the party shall specify in writing. Such notice shall be deemed given upon personal delivery to the appropriate address or if sent by certified or registered mail, three (3) days after the date of mailing.

9. **Notification of New Employer**. In the event that I leave the employ of the Company, I hereby consent to the notification of my new employer of my rights and obligations under this Agreement.

10. **General Provisions.**

10.1 **Governing Law; Consent to Personal Jurisdiction**. This Agreement will be governed by and construed according to the laws of the State of North Carolina; as such laws are applied to agreements entered into and to be performed entirely within North Carolina between North Carolina residents. I hereby expressly consent to the personal jurisdiction of the state and federal courts located in North Carolina for any lawsuit filed there against me by the Company arising from or related to this Agreement.

10.2 **Severability**. In case any one or more of the provisions contained in this Agreement shall, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect the other provisions of this Agreement, and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein. If moreover, any one or more of the provisions contained in this Agreement shall for any reason be held to be excessively broad as to duration, geographical scope, activity or subject, it shall be construed by limiting and reducing it, so as to be enforceable to the extent compatible with the applicable law as it shall then appear.

10.3 Successors and Assigns. This Agreement will be binding upon my heirs, executors, administrators and other legal representatives and will be for the benefit of the Company, its successors, and its assigns.

10.4 Survival. The provisions of this Agreement shall survive the termination of my employment and the assignment of this Agreement by the Company to any successor in interest or other assignee.

10.5 Employment. I agree and understand that nothing in this Agreement shall confer any right with respect to continuation of employment by the Company, nor shall it interfere in any way with my right or the Company's right to terminate my employment at any time, with or without cause.

10.6 Waiver. No waiver by the Company of any breach of this Agreement shall be a waiver of any preceding or succeeding breach, No waiver by the Company of any right under this Agreement shall be construed as a waiver of any other right. The Company shall not be required to give notice to enforce strict adherence to all terms of this Agreement.

10.7 Legal Fees. In the event of a violation by me of this Agreement, I agree to pay to the Company all costs and expenses, including reasonable attorneys fees, court costs and ancillary expenses, incurred by the Company in enforcing its rights hereunder.

10.8 Advice of Counsel. I acknowledge that, in executing this Agreement, I have had the opportunity to seek the advice of independent legal counsel, and I have read and understood all of the terms and provisions of this Agreement. This Agreement shall not be construed against any party by reason of the drafting or preparation hereof.

10.9 Entire Agreement. The obligations pursuant to Sections 1 and 2 of this Agreement shall apply to any time during which I was previously employed, or am in the future employed, by the Company as a consultant if no other agreement governs nondisclosure and assignment of inventions during such period. This Agreement is the final, complete and exclusive agreement of the parties with respect to the subject matter hereof and supersedes and merges all prior discussions between us. No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, will be effective unless in writing and signed by the party to be charged. Any subsequent change or changes in my duties, salary or compensation will not affect the validity or scope of this Agreement.

This Agreement shall be effective as of the first day of my employment with the Company, namely: June 8, 2009.

I HAVE READ THIS AGREEMENT CAREFULLY AND UNDERSTAND ITS TERMS. I HAVE COMPLETELY FILLED OUT EXHIBIT B TO THIS AGREEMENT.

Dated: 10/19/09

/s/ Kenneth I. Moch
(Signature)

Kenneth I. Moch

ACCEPTED AND AGREED TO:

CHIMERIX, INC.

By: /s/ Denise Berry

Title: HR Mgr./ Financial Analyst

2505 Meridian Parkway, Suite 340
(Address)

Durham, NC 27713

Dated: 10/17/09

Exhibit D

Mutual Agreement to Arbitrate Claims

ADDENDUM TO THE EMPLOYMENT AGREEMENT FOR KENNETH I. MOCH

This Addendum to the Employment Agreement for Kenneth I. Moch *("**Addendum**")* is effective the 14th day of April, 2010, by and between Chimerix, Inc. (the *"**Company**")* and Kenneth I. Moch (the *"**Executive**")* (jointly the "parties"). This Addendum is attached to and made a part of the Employment Agreement between the Company and the Executive dated October 20, 2009 (the *"**Employment Agreement**")*.

RECITALS

WHEREAS, the Company and the Executive are parties to the Employment Agreement and have mutually agreed to modify its terms; and

WHEREAS, pursuant to Section 7(c) of the Employment Agreement it may be modified or amended by a written agreement executed by the parties;

NOW THEREFORE, in consideration of the mutual promises, covenants and conditions hereinafter set forth, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto mutually agree as follows:

1. EMPLOYMENT.

Section 1(a) of the Employment Agreement is hereby amended to provide that the Company will employ Executive as the President and Chief Executive Officer of the Company, reporting to the Company's Board of Directors (the *"**Board**")* and all other provisions of the Employment Agreement relating to the Executive's position and reporting requirements shall be updated accordingly to reflect such amendment.

2. EQUITY COMPENSATION.

The stock options to purchase shares of common stock of the Company granted to Executive at the April 14, 2010 Board meeting the *"**Modified Options**")* shall fully satisfy the Company's obligation to grant Executive the CEO Option and Performance Option (as defined in the Employment Agreement) pursuant to Section 3(d)(iii) of the Employment Agreement and any portion of Section 3(d)(iii) of the Employment Agreement which is inconsistent with, or obligates the Company to provide benefits in addition to, the terms of the Modified Options is hereby deleted from the Employment Agreement.

[Signature Page to Follow]

In Witness Whereof, the parties hereto have executed this **Addendum to the Employment Agreement** as of the date first above written. Except as specifically modified in this Addendum the terms of the Employment Agreement remain in full force and effect.

Company:

Chimerix, Inc.

By: /s/ George R. Painter III
Name:
Title:

Date: 5/17/2010

Executive:

Kenneth I. Moch

By: /s/ Kenneth I. Moch
Name: Kenneth I. Moch

Date: 5/17/2010

December 24, 2012

Mr. Kenneth I. Moch
68 Willow Avenue
Larchmont, New York 10538

Re: Employment Agreement Clarification

Dear Ken:

This letter relates to your Employment Agreement with Chimerix, Inc. (the "Company") dated October 20, 2009 (the "Employment Agreement") to clarify that the benefits provided under the Employment Agreement are intended to be exempt from or compliant with Section 409A of the Internal Revenue Code of 1986, as amended and the regulations and other guidance thereunder and any state law of similar effect (collectively "Section 409A"). For good and valuable consideration, you and the Company agree that the Employment Agreement is hereby amended and clarified as set forth in this letter.

You understand and agree that if the severance benefits under your Employment Agreement are not covered by one or more exemptions from the application of Section 409A and the Release (as defined in the Employment Agreement) could become effective in the calendar year following the calendar year in which your "separation from service" under Section 409A occurs, the Release will not be deemed effective any earlier than the latest permitted date on which you may return the Release and permit such Release to become effective in accordance with its terms. None of the severance benefits will be paid or otherwise delivered prior to the effective date of the Release. Except to the minimum extent that payments must be delayed because you are a "specified employee" for purposes of Section 409A or until the effectiveness of the Release, all amounts will be paid as soon as practicable in accordance with the Company's normal payroll practices and the terms of the Employment Agreement. In addition, you understand and agree that for purposes of receiving severance benefits pursuant to the Employment Agreement upon termination due to your disability, "disability" has the meaning set forth in Treasury Regulation Section 1.409A-3(i)(4).

This letter agreement amends and clarifies the Employment Agreement only as expressly set forth herein. This letter, together with the Employment Agreement (including any exhibits and addendums thereto), forms the complete and exclusive statement of your employment agreement with the Company and supersedes any other agreements or promises made to you by anyone, whether oral or written.

Please sign and return this letter to us no later than December 31, 2012.

Sincerely,

Chimerix, Inc.

By: /s/ Timothy W. Trost

Accepted:

/s/ Kenneth I. Moch	12/24/12
Kenneth I. Moch	Date

Exhibit 10.7

March 16, 2011

Mr. Timothy W. Trost
5412 Shoreline Court
Holly Springs, NC 27540

Dear Tim,

I am pleased to extend an offer of employment to you for the position of, Senior V.P., CFO reporting directly to me. Your hire date of March 16, 2011 has been mutually agreed upon. The details of this offer are as follows:

Base Salary: An annualized base salary of $250,000 paid semi-monthly in accordance with Chimerix's normal payroll schedule.

Stock Options: You will be granted an option to purchase 600,000 shares of Chimerix common stock. All stock option grants are subject to the vesting schedule and terms and conditions outlined in the Chimerix 2002 Equity Incentive Plan ("the Plan"). You will be issued a grant notice, option agreement and details of the Plan. Such shares shall vest over a period of four (4) years so long as you continue to provide services to the Company, with 25% vesting one year from July 26, 2010 and the balance vesting at the rate of 1/36 per month over the remaining three (3) years.

Benefits: As an employee of Chimerix you will be eligible for comprehensive health and dental insurance benefits for yourself and your eligible dependents, effective on the first day of employment. For 2011, Chimerix pays the entire monthly premium for this coverage. You will also be eligible for company-paid term life insurance, short term and long-term disability insurance, effective on your hire date.

Additional benefits for which you will be eligible include: accrued vacation equal to twenty (20) days per year and twelve (12) paid holidays per calendar year. You will also be eligible to participate in the Chimerix 401(k) Plan, effective on the first day of the month, following your date of hire. Full details of group benefits will be provided once you are on board.

Chimerix is an at-will employer and as such your employment must be entered into voluntarily and for no specified period. As a result, you are free to resign or the company may terminate your employment at any time, for any reason, with or without cause. No one other than the CEO has the authority to alter this employment relationship, either verbally or in writing.

As with all new employees, you will be asked to provide to the Company documentary evidence of your eligibility for employment in the United States when you join the Company. Such documentation must be provided to us within three business days of your date of hire, or our employment relationship with you may be terminated.

You will be required to execute a standard Proprietary Information and Inventions Agreement with the Company, a copy of which is attached as Exhibit A.

If you accept this offer, the terms described in this letter, together with the Proprietary Information and Inventions Agreement, shall be the terms of your employment, provided, however, that your duties are performed in accordance with all standards and policies adopted by the company. Your duties may change from time to time, depending upon the needs of the company and your skills. This letter supersedes any prior agreements, representations or promises of any kind express or implied, concerning your employment and it constitutes the full and complete agreement between you and the Company.

Tim, we are very excited about the prospect of your joining our team. We are confident that you have much to contribute to the success of Chimerix. The strength of our technology, the quality and experience of our personnel and your presence will facilitate this success.

This offer expires one week after your receipt of this letter. If the terms described herein are acceptable to you, please acknowledge your acceptance by signing below and returning the original to me. Please keep a copy for your records.

Sincerely,

/s/ Kenneth I. Moch
Kenneth I. Moch
President and CEO

Accepted:

/s/ Timothy W. Trost	3/23/11
Timothy W. Trost	Date

Exhibit A

Exhibit 10.8

November 7, 2012

M. Michelle Berrey, M.D., MPH
3915 Chippenham Road
Durham, NC 27707

Dear Michelle,

Chimerix is pleased to extend an offer of employment to you for the position of Chief Medical Officer, reporting to me. We are hopeful that you will accept this offer and look forward to the prospect of having a mutually successful relationship with you. Your anticipated hire date will be November 12, 2012.

The following are the terms of this offer:

Base Salary: Your per pay period base salary will be $14,166.67 (annualized, $340,000.00). Currently, paychecks are issued semi-monthly for a total of 24 pay periods per year.

Stock Options: You will be granted an option to purchase 625,000 shares of Chimerix common stock. All stock option grants are subject to the vesting schedule and terms and conditions outlined in the Chimerix 2012 Equity Incentive Plan ("the Plan"). You will be issued a grant notice, option agreement and details of the Plan. Such shares shall vest over a period of four (4) years so long as you continue to provide services to the Company, with 25% vesting one year from the vesting commencement date and the balance vesting at the rate of 1/36 per month over the remaining three (3) years.

Benefits: As an employee of Chimerix you will be eligible for comprehensive health and dental insurance benefits for yourself and your eligible dependents, effective on the first day of employment. For the current plan year, 02/01/11-01/31/2012, Chimerix pays the entire monthly premium for this coverage. You will also be eligible for Company-paid term life insurance, short term and long-term disability insurance, effective on your hire date.

Additional benefits for which you will be eligible include: accrued vacation equal to Twenty (20) days per year and twelve (12) paid holidays per calendar year. With a November 12th start date, your vacation time in 2012 will be 2.5 days. You will also be eligible to participate in the Chimerix 401(k) Plan, effective on the first day of the month, following your date of hire (December 1, 2012). Full details of group benefits will be provided once you are on board.

Chimerix is an at-will employer and as such your employment must be entered into voluntarily and for no specified period. As a result, you are free to resign or the company may terminate your employment at any time, for any reason, with or without cause. No one other than the CEO has the authority to alter this employment relationship, either verbally or in writing.

As with all new employees, you will be asked to provide to the Company documentary evidence of your eligibility for employment in the United States when you join the Company. Such documentation must be provided to us within three business days of your date of hire, or our employment relationship with you may be terminated.

Please understand it is the policy of the Company not to solicit or accept proprietary information and/or trade secrets of other companies. If you have or have had access to trade secrets or other confidential, proprietary information developed by your former employer; the use of such information in performing your duties at Chimerix is prohibited. This may include, but is not limited to, confidential or proprietary information in the form of documents, magnetic media, software, customer lists, formulae and business plans or strategies. You will be required to execute a standard Proprietary Information and Inventions Agreement with Chimerix, a copy of which is attached as Exhibit A.

If you accept this offer, the terms described in this letter, together with the Proprietary Information and Inventions Agreement, shall be the terms of your employment, provided, however, that your duties are performed in accordance with all standards and policies adopted by the company. Your duties may change from time to time, depending upon the needs of the company and your skills. This letter supersedes any prior agreements, representations or promises of any kind, express or implied, concerning your employment and it constitutes the full and complete agreement between you and the Company.

We are very excited about the prospect of your joining our team. We are confident that you have much to contribute to the success of Chimerix. The strength of our technology, the quality and experience of our personnel and your presence will facilitate this success.

This offer expires five business days after your receipt of this letter and is contingent on you passing our pre-employment background check. If the terms described herein are acceptable to you, please acknowledge your acceptance by signing below and returning the original to us in the envelope provided. You may also forward your acceptance via secured fax to 919-313-6781. Please keep a copy for your records.

Michelle, all of us at Chimerix look forward to your joining our team!

With warm regards,

CHIMERIX, INC.

/s/ Kenneth I. Moch
Kenneth I. Moch
President and CEO

Enclosures

Accepted:

/s/ M. Michelle Berrey	09 Nov 12
M. Michelle Berrey	Date

Exhibit 10.9

CONSULTING AGREEMENT

THIS CONSULTING AGREEMENT (the ***"Agreement"***) is made as of August 12, 2011 (the ***"Effective Date"*),** by and between **CHIMERIX, INC.**, a Delaware corporation (the ***"Company"*),** and EPD Pharma Solutions, LLC, Dr. J. Michael Grindel, an individual (the ***"Consultant"*).**

The Company desires to benefit from Consultant's expertise by retaining Consultant as a consultant, and Consultant wishes to perform consulting services for the Company, as provided below. In consideration of the mutual covenants set forth below, the parties hereby agree as follows:

1. Consulting Services. The Company hereby engages Consultant, and Consultant hereby agrees to provide consulting services to the Company in support of Company's Contract No. HHSO100201100013C (the "Prime Contract") with the U.S. Government (the "Government") and other Company activities as described in **Exhibit A** hereto (the ***"Services"***) during the term of this Agreement, as requested by the Company. Consultant agrees to exercise the highest degree of professionalism and to utilize Consultant's expertise and creative talents in performing the Services. Prime Contract provisions applicable to Services provided in support of the Prime Contract under this Agreement are set forth in Exhibit B hereto and hereby incorporated by reference in this Agreement.

2. Compensation. As full and complete compensation for performing the Services, the Company shall pay Consultant in accordance with **Exhibit A** hereto.

3. Independent Contractor. Consultant's relationship with Company is that of an independent contractor and nothing in this Agreement should be construed to create a partnership, joint venture, or employer-employee relationship. Consultant is not the agent of Company and is not authorized to make any representation, contract, or commitment on behalf of Company except as required by the scope of work set forth in Exhibit A hereto. Consultant will not be entitled to any of the benefits that Company may make available to its employees, such as group insurance, profit-sharing, or retirement benefits. Consultant shall be solely responsible for all tax returns and payments required to be filed with or made to any federal, state, or local tax authority with respect to Consultant's performance of services and receipt of fees under this Agreement. The Company will report amounts paid to Consultant by filing Form 1099-MISC with the Internal Revenue Service as required by law. Because Consultant is an independent contractor, the Company will not withhold or make payments for social security, make unemployment insurance or disability insurance contributions, or obtain worker's compensation insurance on Consultant's behalf. Consultant agrees to accept exclusive liability for complying with all applicable state and federal laws governing self-employed individuals, including obligations such as payment of taxes, social security, disability, and other contributions based on fees paid to Consultant, his agents, or employees under this Agreement. Consultant hereby agrees to indemnify and defend the Company against any and all such taxes or contributions, including penalties and interest.

4. Confidentiality.

(a) Confidential Information. The term ***"Confidential Information"*** shall mean any and all trade secrets, confidential knowledge, know-how, data or other proprietary information or materials, in whatever form, tangible or intangible, pertaining in any manner to the Company's business. By way of illustration but not limitation, Confidential Information may include inventions, ideas, discoveries, developments, designs, techniques, tangible and intangible information, chemical compounds, building blocks, chemical libraries, reaction protocols for chemical libraries, chemical structures, chemical design and model relationship data, chemical databases, assays, samples, media and other biological materials, procedures and formulations for producing any such materials, products, processes, drawings, improvements, formulas, equations, methods, developmental or experimental work, research or clinical data, instruments, devices, computer software and hardware, and information regarding research, development, current and proposed products and services, marketing and selling, business plans, business methods, budgets, finances, licensing, collaboration and development arrangements, prices and costs, buying habits and practices, contact and mailing lists and databases, vendors, customers and clients, and potential business opportunities.

(b) Exceptions. Information to which Consultant receives access pursuant to this Agreement will not be considered to be Confidential Information to the extent that Consultant can demonstrate by competent written evidence that such information: (i) is or becomes publicly known other than as a result of any breach of this Agreement by Consultant; (ii) is disclosed to Consultant on a non-confidential basis by a third party who rightfully possesses the information; or (iii) was known to Consultant prior to its first receipt from the Company (whether such first receipt occurred before or during the term of this Agreement), except in the case of the Company Inventions, which shall not be subject to the exception in this clause (iii).

(c) Non-Disclosure and Non-Use. At all times during the term of Consultant's association with the Company and thereafter, Consultant shall hold the Confidential Information in trust and confidence and shall not disclose or use any Confidential Information, except to the extent such disclosure or use is required in direct connection with Consultant's performance of requested Services for the Company or is expressly authorized in writing by the Company.

(d) Third Party Information. Consultant acknowledges that the Company has received and in the future will receive from third parties confidential or proprietary information (***"Third Party Information"***) subject to a duty on the Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. During the term of Consultant's association and thereafter, Consultant shall hold Third Party Information in the strictest confidence and shall not disclose or use Third Party Information, except to the extent such disclosure or use is required in direct connection with Consultant's performance of requested Services for the Company or is expressly authorized in writing by the Company.

5. Intellectual Property Rights.

(a) Ownership of Company Inventions. Consultant agrees that any and all ideas, inventions, discoveries, improvements, know-how, techniques and information that the Consultant conceives, reduces to practice, develops or generates during the term of the Agreement, alone or in conjunction with others, during the performance of, or as a direct result of performing, the Services for the Company under this Agreement, including, without limitation, any and all intellectual property rights therein (collectively, ***"Company Inventions"***), shall be the sole and exclusive property of the Company. Notwithstanding the foregoing, the term "Company Inventions" shall not include "Subject Inventions" as defined in Federal Acquisition Regulation 52.227-11, Patent Rights-Ownership by the Contractor (Dec 2007), which is incorporated by reference at Exhibit B hereto. Consultant hereby irrevocably assigns to the Company all right, title and interest in and to all Company Inventions and agrees to execute, verify, and deliver assignments of Company Inventions to the Company or its designee promptly upon request. In addition, Consultant hereby designates the Company as his or her agent for, and grants to the Company a power of attorney with full power of substitution, which power of attorney shall be deemed coupled with an interest, solely for the purpose of effecting the assignment of Company Inventions from the Consultant to the Company. Subject to the rights granted to the Government under FAR 52.227-11, Consultant unconditionally and irrevocably grants to the Company an exclusive, irrevocable, perpetual, worldwide, fully-paid and royalty-free license, with rights to sublicense through multiple levels of sublicensees, to develop, make, have made, use, sell, have sold, offer for sale, import, reproduce, create derivative works of, distribute, publicly perform, and publicly display by all means now known or later developed, Subject Inventions for purposes of performing the Prime Contract.

(b) Company Inventions Not Capable of Assignment. If Consultant has any rights to Company Inventions that cannot, under applicable law, be assigned to the Company, Consultant unconditionally and irrevocably waives the enforcement of such rights and all claims and causes of action of any kind against the Company with respect to such rights. Consultant agrees, at the Company's request and expense, to consent to and join in any action to enforce such rights. If Consultant has any right to Company Inventions that can neither be assigned to the Company nor waived by Consultant, Consultant unconditionally and irrevocably grants to the Company during the term of such rights, an exclusive, irrevocable, perpetual, worldwide, fully-paid and royalty-free license, with rights to sublicense through multiple levels of sublicensees, to develop, make, have made, use, sell, have sold, offer for sale, import, reproduce, create derivative works of, distribute, publicly perform, and publicly display by all means now known or later developed, Company Inventions.

(c) Cooperation and Assistance. Consultant agrees to cooperate with the Company and its designee(s), both during and after the term of this Agreement, in the procurement and maintenance of the Company's rights in Company Inventions, and to execute, when requested, any other documents deemed necessary by the Company to carry out the purpose of this Section 5. Consultant shall assist the Company in every proper way to obtain, prosecute, maintain and enforce United States and foreign patent rights, copyrights and other intellectual property rights or protections claiming, covering or relating to Company Inventions in any and all countries. To that end, Consultant shall execute, verify and deliver such documents and perform such other acts (including appearances as a witness) as the Company may reasonably request for use in applying for, obtaining, perfecting, evidencing, sustaining, and enforcing such rights and the assignment thereof. Consultant's obligations under this Section 5(c) shall continue beyond the expiration or termination of this Agreement, but after expiration or termination of this Agreement, the Company shall compensate Consultant at a reasonable rate for the time actually spent by Consultant at the Company's request on such assistance.

6. **No Conflicts.** During the term of this Agreement, Consultant shall not, without the prior written consent of the Company, engage in any commercial business activity that competes with the Company's business or enter into any consulting or advisory relationship with any third party commercial entity that is engaged in any business activity that competes with the Company's business. If any restriction set forth above in this Section 6 is found by any court of competent jurisdiction to be unenforceable because it extends for too long a period of time or over too great a range of activities or in too broad a geographic area, it shall be interpreted to extend only over the maximum period of time, range of activities or geographic area as to which it may be enforceable.

7. **Representations and Warranties.** Consultant represents and warrants to the Company that Consultant's performance of the Services and of its obligations under this Agreement do not and will not breach or conflict with any agreement between Consultant and any third party (including, without limitation, Institution).

8. **No Improper Use of Materials.** Consultant agrees not to bring to the Company or to use in the performance of Services for the Company any materials or documents of a present or former employer of Consultant, or any materials or documents obtained by Consultant from a third party under an obligation of confidentiality, unless such materials or documents are generally available to the public or Consultant has written authorization from such present or former employer or third party for the possession and unrestricted use of such materials. Consultant understands that Consultant is not to breach any obligation of confidentiality that Consultant has to present or former employers or clients, and agrees to fulfill all such obligations during the term of this Agreement.

9. **Term; Termination.** The term of this Agreement, and Consultant's Services hereunder, shall commence on the Effective Date and, unless earlier terminated as provided below, shall expire February 15, 2012. The Company may terminate this Agreement in its sole discretion: (a) upon 15 days prior written notice to Consultant; or (b) immediately upon written notice to Consultant upon Consultant's material breach of Section 4, Section 6 and/or Section 10. Upon expiration or any termination of this Agreement, or earlier as requested by the Company, Consultant shall deliver to the Company any and all drawings, notes, memoranda, specifications, devices, formulas, and documents, together with all copies thereof, and any other material containing or disclosing any Company Inventions, Third Party Information, or Confidential Information of the Company. Consultant further agrees that any property situated on the Company's premises and owned by the Company, including disks and other storage media, filing cabinets or other work areas, is subject to inspection by Company personnel at any time with or without notice. The provisions of Sections 4, 5, 9, 10 and 11 shall survive expiration or termination of this Agreement. In addition, those provisions of Exhibit B that by their nature should survive shall also survive expiration or termination of this Agreement.

10. **Non-interference with Business.** During the term of this Agreement and for a period of two (2) years thereafter, Consultant agrees not to solicit or induce any employee or independent contractor of the Company to terminate or breach an employment, contractual, or other relationship with the Company.

11. General Provisions.

(a) Governing Law. This Agreement will be governed and construed in accordance with the laws of the State of North Carolina, without regard to its conflicts of laws principles except that any provision in this Subcontract that is (a) incorporated in full text or by reference from the Federal Acquisition Regulation (FAR) or (b) incorporated in full text or by reference from any agency regulation that implements or supplements the FAR or (c) that is substantially based on any such FAR provision or agency regulation, shall be construed and interpreted according to the federal common law of government contracts as enunciated and applied by federal judicial bodies, boards of contract appeals, and quasi-judicial agencies of the federal government.

(b) Severability. In case any one or more of the provisions contained in this Agreement shall, for any reason, be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect the other provisions of this Agreement, and this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein. If moreover, any one or more of the provisions contained in this Agreement shall for any reason be held to be excessively broad as to duration, geographical scope, activity, or subject, it shall be construed by limiting and reducing it, so as to be enforceable to the extent compatible with the applicable law as it shall then appear.

(c) No Assignment. Consultant may not assign or delegate Consultant's obligations under this Agreement either in whole or in part without the prior written consent of the Company. Any attempted assignment or delegation by Consultant without the Company's prior written consent shall be void and of no effect.

(d) Injunctive Relief. Consultant hereby acknowledges and agrees that in the event of any breach of this Agreement by Consultant, including, without limitation, the actual or threatened disclosure or unauthorized use of Confidential Information without the prior express written consent of the Company, the Company would suffer an irreparable injury such that no remedy at law would adequately protect or appropriately compensate the Company for such injury. Accordingly, Consultant agrees that the Company shall have the right to enforce this Agreement and any of its provisions by injunction, specific performance or other equitable relief, without bond and without prejudice to any other rights and remedies that the Company may have for a breach of this Agreement.

(e) Notices. All notices, requests, and other communications under this Agreement must be in writing and must be mailed by registered or certified mail, postage prepaid and return receipt requested, sent by overnight courier or delivered by hand to the party to whom such notice is required or permitted to be given. If mailed, any such notice will be considered to have been given five (5) business days after it was mailed, as evidenced by the postmark. If sent by overnight courier or delivered by hand, any such notice will be considered to have been given when received by the party to whom notice is given, as evidenced by written and dated receipt of such party. The mailing address for notice to either party will be the address shown on the signature page of this Agreement. Either party may change its mailing address by notice as provided by this section.

(f) Disputes. (l) Any dispute arising under or related to this Agreement or the Services contemplated herein which relates to a matter for which Company has recourse against the Government under the Prime Contract shall be resolved in accordance with Section 3 of Exhibit B hereto. (2) In the event of any dispute between the parties arising out of or in connection with the Agreement or the Services contemplated herein that does not relate to a matter for which Company has recourse against the Government under the Prime Contract; the parties agree to first make a good faith effort to resolve the dispute informally. Negotiations shall take place between the designated principals of each party. If the parties are unable to resolve the dispute through negotiation within 45 days of the receipt of written notice of the dispute, then either party may elect to submit the controversy to a court of competent jurisdiction. Each party shall be responsible for its own costs and expenses including attorneys' fees and court costs incurred in the course of any dispute under this sub-paragraph (f)(2).

(g) Export. Consultant agrees not to export, directly or indirectly, any U.S. source technical data acquired from the Company or any products utilizing such data to countries outside the United States, which export may be in violation of the United States export laws or regulations.

(h) Waiver. No waiver by the Company of any breach of this Agreement shall be a waiver of any preceding or succeeding breach. No waiver by the Company of any right under this Agreement shall be construed as a waiver of any other right. The Company shall not be required to give notice to enforce strict adherence to all terms of this Agreement.

(i) Entire Agreement. This Agreement is the final, complete, and exclusive agreement of the parties with respect to the subject matter hereof. This Agreement supersedes all prior discussions between the parties. No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, will be effective unless in writing and signed by the party to be charged. The terms of this Agreement will govern all Services undertaken by Consultant for the Company.

(j) Headings. The headings preceding the text of the sections of this Agreement are inserted solely for convenience and ease of reference only and shall not constitute any part of this Agreement, or have any effect on its interpretation or construction.

(k) Counterparts. This Agreement may be executed in one or more counterparts each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

(l) Indemnification. Consultant agrees to indemnify, defend and hold harmless Company, its affiliates and their respective directors, officers, employees, agents, subcontractors and/or assigns (***"Company Indemnitees"***) from and against any and all losses, expenses (including reasonable legal counsel fees and expenses), costs, liabilities or damages collectively ***"Company Loss"***) to which any Company Indemnitee may become subject as a result of any claim, demand, action or other proceeding by any third party arising out of Consultant's performance of this Agreement (collectively ***"Claim"***) to the extent the Company Loss is caused, results from or arises out of (a) the material breach by Consultant of any representation, warranty, covenant or other provision of this Agreement, or (b) the negligence or willful misconduct of Consultant, its affiliates and their respective directors, officers, employees, agents,subcontractors and/or assigns. Consultant shall not compromise or settle any Claim without Company's written consent. Consultant's agreement to indemnify, defend and hold the Company Indemnitees harmless is conditioned upon Company: (a) providing written notice to Consultant of any Claim arising out of the indemnified activities within 30 days after Company has knowledge of such Claim; (b) permitting Consultant to assume full responsibility and authority to investigate, prepare for and defend against any such Claim; (c) assisting Consultant, at Consultant's reasonable expense, in the investigation of, preparation for and defense of any such Claim; and (d) not compromising or settling such Claim without Consultant's written consent.

(m) Limitation of Liability. Notwithstanding any other provision of this Agreement to the contrary, in no event will Company's liability to Consultant for damages under this Agreement exceed the total amount paid by Company to Consultant hereunder.

(n) Reserved.

(o) Insurance. Consultant represents and warrants that it has sufficient insurance to cover all risks associated with full performance of its responsibilities hereunder. Upon written request, Consultant shall provide Company evidence of its insurance. Consultant shall provide to Company written notice of cancellation of its insurance coverage at least thirty (30) days prior to any such cancellation.

(p) Order of Precedence. In the event of any inconsistency or conflict between or among the provisions of this Agreement, such inconsistency or conflict shall be resolved by giving precedence in the following order: (1) Exhibit B, Prime Contract Provisions; (2) Exhibit A, Services and Compensation; and (3) the preamble and Sections 1-11 of this Agreement.

In Witness Whereof, the parties have, by duly authorized persons, executed this Agreement as of the Effective Date.

Chimerix, Inc.

By: /s/ Timothy W. Trost

Name: Timothy W. Trost

Title: SVP & CFO

Address:

2505 Meridian Parkway, Suite 340
Durham, NC 27713
USA
Attention: Contract Coordinator
Email: rheath@chimerix.com

EPD Pharma Solutions, LLC

Signature: /s/ J. Michael Grindel

Name: J. Michael Grindel, Ph.D.

Title: President

Address:

115 Otter Shaw Court
Johns Creek, GA 30022
USA
Phone: 678-580-0274
Email: mgrindel@epdps.com

EXHIBIT A

Services and Compensation

1. Services. Consultant shall provide one or more of the following services, as requested by the Company:

Consultant shall provide program management leadership of the Company's efforts in the performance of the Prime Contract. In particular, Consultant shall ensure that Company meets all the requirements of the following sections of the Prime Contract:

- Section C, Description/Specifications/Work Statement
- Section F, Deliveries or Performance
- Attachment J.1, Scope of Work.

Consultant shall also ensure that the Company's communications with the customer are effective, accurate, thorough and transparent. The objective of these communications is to convince the customer that Company has conducted the research required by the Prime Contract in accordance with all Prime Contract requirements and best industry practices.

In connection with services performed for Chimerix, the consultant is to assume the role as Head of Development and Program Management. He will work on non-BARDA activities as needed by the Company.

2. Compensation:

The Company will pay the consultant at a fixed price of $6,000 a week for 27 weeks resulting in a grand total of $162,000 for work performed under the BARDA contract.

The Company will pay the consultant at a fixed price of $2,000 a week for 27 weeks resulting in a grand total of $54,000 for work performed as Head of Development and Program Management for non-BARDA related activities.

3. Expenses:

Company shall reimburse Consultant, in accordance with Company's reimbursement policy and the Federal Acquisition Regulation, for the following expenses incurred in connection with the performance of Services under this Agreement, provided Consultant obtains Company's prior written approval thereof and submits verification of such expenses as Company may reasonably require:

- Coach airfare to Raleigh Durham, NC
- Hotel accommodations at the Doubletree hotel in Durham
- Meals
- Car Rental

4. **Invoices.** Invoices should be emailed to:

accountspayable@chimerix.com
OR

Invoices may be mailed in duplicate to:

Accounts Payable
Chimerix, Inc.
2505 Meridian Parkway
Suite 340
Durham, NC 27713

Consultant shall submit a single invoice for Services performed in support of the Prime Contract and for other Company activities. Each invoice for Services performed in support of the Prime Contract shall identify the Prime Contract number as shown on the first page of this Agreement and the applicable WBS number(s) shown in Section 1 above. If more than one WBS number applies to the Services, the invoice must show a break out of the amounts requested by WBS number.

Consultant may invoice once a month for work performed in the preceding month. The calculation of the number of weeks in the preceding month will be based upon the number of Mondays in that month.

5. **Payment.** Company shall pay invoices submitted in accordance with Section 4 above within ten (10) working days of Company's receipt of payment from the Government for services covered by such invoices or, if the Services are not provided in support of the Prime Contract, within 30 days of receipt of the invoice.

EXHIBIT B

PRIME CONTRACT
PROVISIONS APPLICABLE TO SUBCONTRACTS FOR
COMMERCIAL SERVICES

Chimerix, Inc. ("SPONSOR") and EPD Pharma Solutions, LLC ("SUBCONTRACTOR") agree to the following additional terms and conditions from Contract No. HHSO100201100013C (the "Prime Contract"), SPONSOR's contract with the U.S. Government (the "Government"):

1. SPECIAL CONTRACT REQUIREMENTS (FROM SECTION H OF PRIME CONTRACT)

1.1 Prohibition on the Use of Appropriated Funds for Lobbying Activities

1.1.1 SUBCONTRACTOR is hereby notified of the restrictions on the use of Department of Health and Human Service's funding for lobbying of Federal, State and Local legislative bodies.

1.1.2 The Department of Health and Human Services Appropriations Act applicable to this Agreement (the Act) provides that no part of any appropriation contained in the Act shall be used, other than for normal and recognized executive-legislative relationships, for publicity or propaganda purposes, for the preparation, distribution, or use of any kit, pamphlet, booklet, publication, radio, television, or video presentation designed to support, or defeat legislation pending before the Congress, or any State or Local legislature except in presentation to the Congress, or any State or Local legislative body itself.

1.1.3 The Act also provides that no part of any appropriation contained in the Act shall be used to pay the salary or expenses of any contract or grant recipient, or agent acting for such recipient, related to any activity designed to influence legislation or appropriations pending before the Congress, or any State or Local legislature.

1.2 Review and Approval of Publications

SUBCONTRACTOR shall not release any reports, manuscripts, press releases, abstracts or any other information about the work being performed under this contract, without written approval in advance from SPONSOR.

1.3 Identification and Disposition of Data

SUBCONTRACTOR shall keep copies of all data required by the Food and Drug Administration (FDA) relevant to this Agreement for the time specified by the FDA. SPONSOR will be required to provide certain data generated under this Agreement to the SPONSOR and Department of Health and Human Services (DHHS). SPONSOR reserves the right to review any other data determined by SPONSOR or DHHS to be relevant to work under this Agreement.

1.4 Privacy Act Applicability

1.4.1 Notification is hereby given that SUBCONTRACTOR and its employees are subject to criminal penalties for violation of the Privacy Act to the same extent as employees of the Government. SUBCONTRACTOR shall assure that each of its employees knows the prescribed rules of conduct and that each is aware that he or she can be subjected to criminal penalty for violation of the act. The Privacy Act Regulations, 45 CFR part 5b, may be accessed at http://www.gpoaccess.gov/cfr/index.html.

1.4.2 SPONSOR's Contract Manager is hereby designated as the official who is responsible for monitoring SUBCONTRACTOR compliance with the Privacy Act.

1.4.3 The SUBCONTRACTOR shall follow the Privacy Act guidance as contained in the Privacy Act System of Records Number 09-25-0200. This document may be obtained at the following link: http://oma.od.nih.gov/ms/privacy/pa-files/0200.htm.

1.5 Prohibition on Involvement with Terrorist Activities

SUBCONTRACTOR acknowledges that U.S. Executive Orders and Laws, including but not limited to Executive Order 13224 and Public Law 107-56, prohibit transactions with, and the provision of resources and support to, individuals and organizations associated with terrorism. It is the legal responsibility of SUBCONTRACTOR to ensure compliance with these Executive Orders and Laws. This clause must be included in all subcontracts issued under this Agreement.

1.6 Human Subjects

The following provisions apply if this Agreement requires SUBCONTRACTOR to conduct or participate in research involving human subjects.

1.6.1 Research involving human subjects will not be conducted under this Agreement until the applicable protocols have been approved by SPONSOR and the Government, written notice of such approval has been provided to SUBCONTRACTOR by SPONSOR and SUBCONTRACTOR has provided to SPONSOR a properly completed Optional Form 310 certifying Institutional Review Board review and approval of the protocol.

1.6.2 The SUBCONTRACTOR agrees that the rights and welfare of human subjects involved in research under this contract shall be protected in accordance with 45 CFR Part 46 and with the SUBCONTRACTOR's current Assurance of Compliance on file with the Office for Human Research Protections (OHRP), Department of Health and Human Services. The SUBCONTRACTOR further agrees to provide certification to SPONSOR at least annually that the Institutional Review Board has reviewed and approved the procedures, which involve human subjects in accordance with 45 CFR Part 46 and the Assurance of Compliance.

1.6.3 The SUBCONTRACTOR shall bear full responsibility for the performance of all work and services involving the use of human subjects under this Agreement and shall ensure that work is conducted in a proper manner and as safely as is feasible. The SUBCONTRACTOR shall not deem anything in this Agreement to constitute the SUBCONTRACTOR or any subcontractor, agent or employee of the SUBCONTRACTOR, or any other person, organization, institution, or group of any kind whatsoever, as the agent or employee of the Government. The SUBCONTRACTOR agrees that it has entered into this Agreement and will discharge its obligations, duties, and undertakings and the work pursuant thereto, whether requiring professional judgment or otherwise, as an independent contractor without imputing liability on the part of the Government for the acts of the SUBCONTRACTOR or its employees.

1.6.4 If at any time during the performance of this Agreement, the SPONSOR or the Government determines that the SUBCONTRACTOR is not in compliance with any of the requirements and/or standards stated in paragraphs 1.6.2 and 1.6.3 above, the SPONSOR may immediately suspend, in whole or in part, work and further payments under this Agreement until the SUBCONTRACTOR corrects the noncompliance. The SPONSOR may communicate the notice of suspension by telephone with confirmation in writing. If the SUBCONTRACTOR fails to complete corrective action within the period of time designated in the SPONSOR**'**s written notice of suspension, the SPONSOR may terminate this Agreement in whole or in part, and the SUBCONTRACTOR**'**s name may be removed from the list of those contractors with approved Human Subject Assurances.

1.7 Human Specimen Materials

If this Agreement involves the acquisition, supply or use of human specimen materials (including fetal materials), the provisions of clauses H.2 and H.3 of the Prime Contract shall apply except that the term "Contractor" shall mean "SUBCONTRACTOR" and the term "Contracting Officer" shall mean SPONSOR's Contract Manager.

1.8 Animal Welfare

1.8.1 If this Agreement involves the use of live, vertebrate animals, the SUBCONTRACTOR shall comply with all requirements of the Public Health Service Policy on Humane Care and Use of Laboratory Animals. This document may be obtained at the following link: http://grants1.nih.gov/grants/olaw/references/phspol.htm.

1.8.2 In addition to the foregoing, the SUBCONTRACTOR shall comply with the provisions of clauses H.6, H.8, H.19, H.20 and H.21 of the Prime Contract, except that the term "Contractor" shall mean "SUBCONTRACTOR" and the term "Contracting Officer" shall mean SPONSOR**'**s Contract Manager.

1.9 Manufacturing Standards

The current Good Manufacturing Practice Regulations (21 CFR Parts 210-211) will be the standard to be applied for manufacturing, processing and packing of product delivered under this Agreement. If at any time during the life of the contract, the SUBCONTRACTOR fails to comply with GMP in the manufacturing, processing, packaging, storage, stability and other testing of the manufactured drug substance or product and delivery of this product and such failure results in a material adverse effect on the safety, purity or potency of the product (a material failure) as identified by the FDA, the SUBCONTRACTOR shall have thirty (20) calendar days from the time such material failure is identified to cure such material failure. If, within the thirty (20) calendar day period, the SUBCONTRACTOR fails to take such an action to the satisfaction of SPONSOR, or fails to provide a remediation plan that is acceptable to the SPONSOR, then the Agreement may be terminated.

1.10 Laboratory License Requirements

The SUBCONTRACTOR shall comply with all applicable requirements of section 353 of the Public Health Service Act (Clinical Laboratory Improvement Act as amended). This requirement shall also be included in any subcontract for services under this Agreement.

1.11 Possession, Use and Transfer of Selected Biological Agents

When performance of this Agreement is expected to involve possession, use and/or transfer of select biological agents or toxins, the provisions of clause H.22 of the Prime Contract shall apply to this Agreement, except that the term "Contractor" shall mean "SUBCONTRACTOR", the term "Contracting Officer" shall mean SPONSOR**'**s Contract Manager and the term "Government" shall mean the "Government and SPONSOR".

1.12 Organizational Conflict of Interest

The SUBCONTRACTOR represents and warrants that, to the best of the SUBCONTRACTOR's knowledge and belief, there are no relevant facts or circumstances which could give rise to an organizational conflict of interest, as defined in FAR Subpart 9.5, or that the SUBCONTRACTOR has disclosed all such relevant information. Prior to commencement of any work, the SUBCONTRACTOR agrees to notify the SPONSOR Contract Manager promptly that, to the best of its knowledge and belief, no actual or potential conflict of interest exists or to identify to the SPONSOR Contract Manager any actual or potential conflict of interest the firm may have. In emergency situations, however, work may begin but notification shall be made within five (5) working days. The SUBCONTRACTOR agrees that if an actual or potential organizational conflict of interest is identified during performance, the SUBCONTRACTOR shall promptly make a full disclosure in writing to the SPONSOR Contract Manager. This disclosure shall include a description of actions, which the SUBCONTRACTOR has taken or proposes to take, after consultation with the SPONSOR Contract Manager, to avoid, mitigate, or neutralize the actual or potential conflict of interest. The SUBCONTRACTOR shall continue performance until notified by the SPONSOR Contract Manager of any contrary action to be taken. Remedies include termination of this contract for convenience, in whole or in part, if the SPONSOR Contract Manager deems such termination necessary to avoid an organizational conflict of interest. If the SUBCONTRACTOR was aware of a potential organizational conflict of interest prior to award or discovered an actual or potential conflict after award and did not disclose it or misrepresented relevant information to the SPONSOR Contract Manager, the SPONSOR may terminate the contract for default, report the SUBCONTRACTOR to Government debarment officials, or pursue such other remedies as may be permitted by law or this Agreement.

2. REIMBURSEMENT OF TRAVEL COSTS

The Cost Principles set forth at Federal Acquisition Regulation (FAR) Subpart 31.2, including FAR 31.205-46, Travel Costs, apply to any SUBCONTRACTOR request for reimbursement of travel costs under this Agreement. SPONSOR shall have no obligation to reimburse SUBCONTRACTOR for any amounts that are unallowable under these Cost Principles. SUBCONTRACTOR may not add any charges for indirect costs or profit to its request for reimbursement of travel costs.

3. DISPUTE RESOLUTION

3.1 Any dispute arising under or related to this Agreement which relates to a matter for which SPONSOR has recourse against the Government under the Prime Contract shall be resolved as follows unless the parties otherwise agree in writing.

3.2 SUBCONTRACTOR shall give SPONSOR a fully supported written claim concerning any such dispute within one year after the claim accrues, but in no event later than final payment under this Agreement, or SUBCONTRACTOR shall be barred from any remedy for such claim.

3.3 SPONSOR shall forward such claim to the Contracting Officer on SUBCONTRACTOR**'**s behalf for final decision, subject to the limitations and other conditions contained in this provision. SPONSOR shall in good faith consult with SUBCONTRACTOR concerning the forwarding of such claim to the Contracting Officer.

3.4 Any decision of the Contracting Officer under the Prime Contract as it relates to this Agreement, whether or not it results from a claim submitted on SUBCONTRACTOR**'**s behalf under the provision stated above, shall be final and binding upon SUBCONTRACTOR insofar as it relates to this Agreement; however, SPONSOR shall notify SUBCONTRACTOR immediately if it appears SUBCONTRACTOR is adversely affected by any such decision of the Contracting Officer, and if SPONSOR elects not to appeal such decision pursuant to the "Disputes" clause of the Prime Contract. If SPONSOR thereafter receives, no less than twenty (20) days before the expiration of the period of appeal under the "Disputes" clause of the Prime Contract, a written request by SUBCONTRACTOR to appeal such decision, and if SPONSOR has the right of such appeal under the Prime Contract, SPONSOR shall file an appeal from the decision on SUBCONTRACTOR**'**s behalf.

3.5 If SPONSOR appeals such a decision, whether at its election or at SUBCONTRACTOR**'**s request, any decision upon such appeal by the Board of Contract Appeals, the United States Court of Federal Claims, or any other board or agency having jurisdiction over the appeal shall be final and binding upon SUBCONTRACTOR insofar as it relates to this Agreement. If SUBCONTRACTOR timely (i.e., no less than twenty (20) days before the expiration of the relevant period of appeal) requests SPONSOR to bring a further appeal to obtain judicial review of such decision by a court of competent jurisdiction, SPONSOR shall do so, subject to the terms below. A final judgment in any such further appeal, if binding on SPONSOR under the Prime Contract, shall in turn be binding on SUBCONTRACTOR insofar as it relates to this Agreement.

3.6 In any appeal brought by SPONSOR on behalf of SUBCONTRACTOR, or at SUBCONTRACTOR**'**s request under the above provisions, SUBCONTRACTOR shall bear all costs and expenses incurred by SUBCONTRACTOR and SPONSOR in prosecuting such appeal, including but not limited to, any legal fees or costs incurred. In any appeal taken or brought by SPONSOR, whether at its election or at SUBCONTRACTOR request, SUBCONTRACTOR shall cooperate fully with SPONSOR in its prosecution thereof in every reasonable manner and SUBCONTRACTOR shall be afforded reasonable opportunity to participate in the prosecution thereof to the extent SUBCONTRACTOR**'**s interest may be affected. To the extent requested by SPONSOR, SUBCONTRACTOR shall prosecute for SPONSOR any appeal taken or brought at SUBCONTRACTOR request and, in such event, SPONSOR shall assist SUBCONTRACTOR in every reasonable manner.

3.7 If SPONSOR is required to certify any claim of SUBCONTRACTOR, SPONSOR shall not forward such claim unless it is satisfied the claim is in good faith, and SPONSOR can certify such claim to the Contracting Officer to the extent and manner required by the Contract Disputes Act. SUBCONTRACTOR agrees to provide SPONSOR with such information as SPONSOR may deem necessary to make this determination, including but not limited to, its own certification in the form prescribed by the Contract Disputes Act or its implementing regulations. Such certification shall be executed by a person duly authorized to bind SUBCONTRACTOR. SUBCONTRACTOR agrees that, with respect to any claim or dispute that arises under or relates to the Prime Contract which, if it were SPONSOR**'**s claim, can properly be submitted for a decision of the Government Contracting Officer under the "Disputes" clause, its right of claim or appeal is limited to the procedures set forth in this provision.

3.8 SUBCONTRACTOR's failure to comply with the terms of this provision shall entitle SPONSOR to terminate any such appeal on SUBCONTRACTOR**'**s behalf. The rights and obligations described herein shall survive completion of and final payment under this Disputes clause.

3.9 SUBCONTRACTOR shall proceed diligently with performance of this Agreement pending final resolution of any dispute.

4. STOP WORK

4.1 SUBCONTRACTOR shall stop work for up to ninety (90) days in accordance with any written notice received from SPONSOR, or for such longer period of time as the parties may agree and shall take all reasonable steps to minimize the incurrence of costs allocable to the Work during the period of Work stoppage.

4.2 Within such period, SPONSOR will either terminate in accordance with the provisions of the Agreement or continue the Work by written notice to SUBCONTRACTOR. In the event of a continuation, an equitable adjustment in accordance with the principles of the "Changes" clause of this Agreement shall be made to the price, performance schedule, or other provision(s) affected by the Work stoppage, if applicable, provided that the claim for equitable adjustment is made within thirty (30) days after date of notice to continue.

5. CHANGES

5.1 SPONSOR's Contract Manager may, at any time, by written notice make changes within the general scope of this Agreement in any one or more of the following: (i) description of services; (ii) drawings, designs, or specification; (iii) method of shipping or packing; (iv) place of inspection, acceptance, or point of delivery; (v) time of performance; and (vi) place of performance.

5.2 If any such change causes an increase or decrease in the cost of, or the time required for, performance of any part of this Agreement, SPONSOR shall make an equitable adjustment in the price and/or delivery schedule and modify this Agreement accordingly.

5.3 SUBCONTRACTOR must assert its right to an equitable adjustment under this clause within ten (10) days from the date of receipt of the written change order from SPONSOR.

5.4 Failure to agree to any adjustment shall be resolved in accordance with the "Disputes" clause of this Agreement. However, nothing in this Changes clause shall excuse the SUBCONTRACTOR from proceeding without delay in the performance of this Agreement as changed.

6. AMENDMENTS REQUIRED BY PRIME CONTRACT

SUBCONTRACTOR agrees that upon the request of SPONSOR it will negotiate in good faith with SPONSOR amendments to this Agreement to incorporate additional provisions herein or to change provisions hereof, as SPONSOR may reasonably deem necessary in order to comply with the provisions of the applicable Prime Contract or with the provisions of amendment to such Prime Contract. If any such amendment to this Agreement causes an increase or decrease in the cost of, or the time required for, performance of any part of the work under this Agreement, an equitable adjustment shall be made pursuant to the "Changes" clause of this Agreement.

7. TERMINATION FOR CONVENIENCE

7.1 SPONSOR may terminate part or all of this Agreement for its convenience by giving written notice to SUBCONTRACTOR.

7.2 Upon termination, in accordance with SPONSOR's written direction, SUBCONTRACTOR will immediately: (i) cease work; (ii) prepare and submit to SPONSOR an itemization of all completed and partially completed deliverables and services; (iii) deliver to SPONSOR any and all Work completed up to the date of termination at the agreed upon prices; and (iv) deliver upon request any Work in process. In the event SPONSOR terminates for its convenience, after performance has commenced, SPONSOR will compensate SUBCONTRACTOR for the actual, allowable, and reasonable expense incurred by SUBCONTRACTOR for Work in process up to and including the date of termination provided SUBCONTRACTOR uses reasonable efforts to mitigate SPONSOR's liability under this clause.

7.3 In no event shall SPONSOR be liable for lost or anticipated profits, unabsorbed indirect costs or overhead, or for any sum in excess of the total Agreement price. SUBCONTRACTOR's termination claim shall be submitted within ninety (90) days from the effective date of the termination.

7.4 SUBCONTRACTOR shall continue all Work not terminated.

8. FEDERAL ACQUISITION REGULATION ("FAR") AND HEALTH AND HUMAN SERVICES ACQUISITION REGULATION ("HHSAR") CLAUSES

The following clauses from the FAR and HHSAR are hereby incorporated by reference. As used in these clauses: (1) "commercial item" means a commercial item as defined in FAR 2.101; (2) "Contract" means this Agreement; (3) "Contracting Officer" shall mean the U.S. government Contracting Officer for SPONSOR's Prime Contract; (4) "Contractor" in these clauses shall be deemed to refer to SUBCONTRACTOR, acting as the immediate (first tier) subcontractor to SPONSOR; (5) "Prime Contract" means the contract between SPONSOR and the U.S Government specified above; and (6) "subcontract" means any contract placed by SUBCONTRACTOR or lower-tier subcontractors under this Agreement. The clauses are posted at http://farsite.hill.af.mil and http://www.knownet.hhs.gov/acquisition/hhsar/Default.htm.

Notes:

1. Substitute "SPONSOR" for "Government" or "United States" throughout this clause.

2. Substitute "SPONSOR Contract Manager" for "Contracting Officer" throughout this clause.

3. Insert "and SPONSOR" after "Government" throughout this clause.

4. Insert "or SPONSOR" after "Government" throughout this clause.

5. Communications/notification required under this clause from/to the Contractor to/from the Contracting Officer shall be through SPONSOR.

FAR SOURCE	TITLE AND DATE	NOTES
52.203-3	Gratuities (Apr 1984)	
52.203-6	Restrictions on Subcontractor Sales to the Government (Sep 2006)	Applicable if value of this Agreement exceeds $100,000.
52.203-7	Anti-Kickback Procedures (Oct 2010)	Applicable if value of this Agreement exceeds $150,000.
52.203-12	Limitation on Payments to Influence Certain Federal Transactions (Oct 2010)	Applicable if value of this Agreement equals or exceeds $150,000.
52.203-13	Contractor Code of Business Ethics and Conduct (Apr 2010)	Applicable to subcontracts that have a value in excess of $5,000,000 and a performance period of more than 120 days. Note 3 applies. Disclosures made under this clause shall be made directly to the government entities listed in the clause.
52.215-2	Audit and Records – Negotiation (October 2010)	This clause applies only if this Subcontract exceeds $150,000. Insert “and SPONSOR” after “Contracting Officer” and “Comptroller General of the United States”.
52.215-21	Requirements for Certified Cost or Pricing Data and Data Other Than Certified Cost or Pricing Data—Modifications (Oct 2010)	Note 2 applies.
52.219-8	Utilization of Small Business Concerns (May 2004)	
52.222-21	Prohibition of Segregated Facilities (Feb 1999)	Not applicable to work performed outside the U.S by employees recruited outside the U.S.
52.222-26	Equal Opportunity (Mar 2007)	Not applicable to work performed outside the U.S by employees recruited outside the U.S.
52.222-35	Equal Opportunity for Veterans (Sep 2010)	Applicable if value of this Agreement equals or exceeds $100,000. Applies only to “employment activities within the U.S.” as defined in 41 CFR 60-250.4(a)(3).
52.222-36	Affirmative Action for Workers with Disabilities (Oct 2010)	Applicable if value of this Agreement equals or exceeds $15,000. Applies only to “employment activities within the U.S.” as defined in 41 CFR 60-250.4(a)(4).
52.222-50	Combating Trafficking in Persons (Feb 2009)	Note 2 applies. In paragraph (e), Note 3 applies.
52.222-54	Employment Eligibility Verification (Jan 2009)	Applicable to services and construction subcontracts that: (1) exceed $3,000; and (2) include work performed in the United States. This clause does not apply to subcontracts for commercial services that are (a) part of the purchase of a Commercially Available Off the Shelf (COTS) item (or an item that would be a COTS item, but for minor modifications) (b) performed by the COTS provider, and (c) are normally provided for that COTS item.

FAR SOURCE	TITLE AND DATE	NOTES
52.225-13	Restrictions on Certain Foreign Purchases (Jun 2008)	
52.227-11	Patent Rights-Ownership by the Contractor (Dec 2007)	Insert “and SPONSOR” after “Federal agency” in subparagraph (c)(1), (c)(2) (after first use only) and in subparagraph (f)(3).
52.227-16	Additional Data Requirements (June 1987)	Note 2 applies.
52.232-7	Payments Under Time and Materials and Labor Hour Contracts	Applicable to time and materials and labor hour type subcontracts. Notes 1 and 2 apply. The third sentence of paragraph (a)(8) is deleted. In paragraph (f) “one year” is changed to “six months” and in paragraph (g)(2), “6 years” is changed to “five years”. Paragraphs (c) and (i) are deleted.
52.244-6	Subcontracts for Commercial Items (Oct 2010)	
52.245-1	Government Property (Aug 2010)	Applicable where government property involved in performance of subcontract; “Contracting Officer” means “SPONSOR” except in the definition of Property Administrator and in paragraph h(1)(iii) and where it is unchanged, and in paragraphs (c) and (h)(4) where it includes SPONSOR. “Government” is unchanged in the phrases “Government property” and “Government furnished property” and where elsewhere used except in paragraph (d)(1) where it means SPONSOR and except in paragraphs (d)(2) and (g) where the term includes SPONSOR.
52.246-9	Inspection of Research and Development (Apr 1984)	Note 3 applies to first sentence and Note 4 applies to second sentence.
HHSAR		
352.223-70	Safety and Health (Jan 2006)	Applies if this Agreement involves toxic substances, hazardous materials, or hazardous operations. Note 2 applies.
352.224-70	Privacy Act (Jan 2006)	Note 2 applies.
352.242-73	Withholding of Contract Payments (Jan 2006)	Note 1 applies.

9. REPRESENTATIONS AND CERTIFICATIONS

By executing this Agreement, SUBCONTRACTOR represents and certifies that:

(a) neither it, nor any of its principals, is presently debarred, suspended, proposed for debarment or otherwise declared ineligible for participating in any federal or state procurement action by any federal, state, or local government or agency:

(b) it has not, within the last three years, been convicted of, or had a civil judgment rendered against it, for any of the following: (1) the commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government contract or agreement; (2) a violation of federal or state antitrust statutes relating to the submission or offers; or (3) the commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property;

(c) it's performance pursuant to this Agreement will not breach any agreement that it has with another party and there is no other contract or duty on it's part now in existence inconsistent with the performance of its obligations pursuant to this Agreement;

(d) it will comply with all applicable Federal laws and regulations regarding ethics in public acquisitions and procurement and performance of contracts;

(e) the services provided under this Agreement constitute "commercial services" as defined by Federal Acquisition Regulation ("FAR") 2.101;

(f) it has not made or solicited and will not make or solicit kickbacks in violation of FAR 52.203-7 or the Anti-Kickback Act of 1986 (41 USC 51-58);

(g) that (1) no Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of this Agreement; (2) if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with this Agreement, the SUBCONTRACTOR shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer; and (3) he or she will include the language of this certification in all subcontract awards at any tier and require that all recipients of subcontract awards in excess of $100,000 shall certify and disclose accordingly (the definitions and prohibitions contained in the clause at FAR 52.203-12, Limitation on Payments to Influence Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in this paragraph of this certification); and

(h) that (i) if SUBCONTRACTOR has participated in a previous contract or subcontract subject to the Equal Opportunity clause (FAR 52.222-26) SUBCONTRACTOR has filed all required compliance reports, and (ii) that representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

10. ORDER OF PRECEDENCE

In the event of a conflict between the terms of this Exhibit and any other term of the Agreement or a Work Order issued thereunder, the terms of this Exhibit shall govern.

FIRST AMENDMENT DATED FEBRUARY 16, 2012
TO THE CONSULTING AGREEMENT BETWEEN CHIMERIX, INC.
AND EPD PHARMA SOLUTIONS, LLC

This Amendment to the Consulting Agreement between Chimerix and Consultant is dated effective as of February 16, 2012 ("Effective Date"), and is entered into by and between **Chimerix, Inc.** ("Chimerix"), a Delaware corporation and its successors and assignees, and **EPD Pharma Solutions, LLC,** ("Consultant").

WHEREAS, Chimerix and Consultant entered into that certain Consulting Agreement between Chimerix and Consultant first dated effective August 12, 2011 (the "Agreement"); and

WHEREAS, Chimerix and Consultant now wish to extend the term of the Agreement; and

WHEREAS, Chimerix and Consultant now desire to amend the terms of the Agreement as more particularly set forth below:

1. **TERM; TERMINATION:** The first sentence of Section 9 of the Agreement ("TERM; TERMINATION") is hereby deleted and replaced by the following:

   "The term of this Agreement, and Consultant's Services hereunder, shall commence on the Effective Date and, unless earlier terminated as provided below, shall expire December 31, 2012."

2. Except as provided in this Amendment, all terms used in this Amendment that are not otherwise defined shall have the respective meanings ascribed to such terms in the Agreement.

3. This Amendment embodies the entire agreement between Chimerix and Consultant with respect to the Agreement and any amendments thereto. In the event of any conflict or inconsistency between the provisions of the Agreement (including any amendments) and this Amendment, the provisions of this Amendment shall control and govern.

4. Except as specifically modified and amended herein, all of the terms, provisions, requirements and specifications contained in the Agreement remain in full force and effect. Except as otherwise expressly provided herein, the parties do not intend to, and the execution of this Amendment shall not, in any manner impair the Agreement, the purpose of this Amendment being simply to amend and ratify the Agreement, as hereby amended and ratified, and to confirm and carry forward the Agreement, as hereby amended, in full force and effect.

IN WITNESS WHEREOF, Chimerix and Consultant have executed and delivered this Amendment effective as of the Effective Date.

Chimerix, Inc.

By: /s/ Timothy W. Trost

Name: Timothy W. Trost

Title: SVP & CFO

Address:
2505 Meridian Parkway, Suite 340
Durham, NC 27713
Attention: Contract Coordinator
Email: atoler@chimerix.com

EPD Pharma Solutions, LLC

Signature: /s/ J. Michael Grindel, Ph.D.

Name: J. Michael Grindel, Ph.D.

Title: President

Address:
115 Otter Shaw Ct
Johns Creek, GA 30022
Phone: 678-778-4646
Email: mgrindel@epdps.com

SECOND AMENDMENT DATED DECEMBER 1, 2012
TO THE CONSULTING AGREEMENT BETWEEN CHIMERIX, INC.
AND EPD PHARMA SOLUTIONS, LLC,

This Second Amendment to the Consulting Agreement between Chimerix and Consultant is dated effective as of December 1, 2012 ("Effective Date"), and is entered into by and between **Chimerix, Inc.** ("Chimerix"), a Delaware corporation and its successors and assignees, and **EPD Pharma Solutions, LLC** ("Consultant").

WHEREAS, Chimerix and Consultant entered into that certain Consulting Agreement between Chimerix and Consultant first dated effective August 12, 2011 (the "Agreement"); and

WHEREAS, Chimerix and Consultant first amended the terms of the Agreement effective February 12, 2012 (the "Agreement"); and

WHEREAS, Chimerix and Consultant now wish to amend the scope of the Services such that Dr. Grindel shall no longer provide services with respect to the BARDA contract; and

WHEREAS, Chimerix and Consultant now desire to amend the terms of the Agreement as more particularly set forth below:

1. Appendix I attached to this Second Amendment is hereby added in its entirety to the Agreement and incorporated for all purposes and replaces the existing **Exhibit A.**

2. **Exhibit B** to the Agreement is hereby stricken in its entirety and shall have no application to the Services provided as of the date of this Second Amendment.

3. Except as provided in this Amendment, all terms used in this Amendment that are not otherwise defined shall have the respective meanings ascribed to such terms in the Agreement.

4. This Amendment embodies the entire agreement between Chimerix and Consultant with respect to the Agreement and any amendments thereto. In the event of any conflict or inconsistency between the provisions of the Agreement (including any amendments) and this Amendment, the provisions of this Amendment shall control and govern.

5. Except as specifically modified and amended herein, all of the terms, provisions, requirements and specifications contained in the Agreement remain in full force and effect. Except as otherwise expressly provided herein, the parties do not intend to, and the execution of this Amendment shall not, in any manner impair the Agreement, the purpose of this Amendment being simply to amend and ratify the Agreement, as hereby amended and ratified, and to confirm and carry forward the Agreement, as hereby amended, in full force and effect.

IN WITNESS WHEREOF, Chimerix and Consultant have executed and delivered this Amendment effective as of the Effective Date.

Chimerix, Inc.

By: /s/ Timothy W. Trost

Name: Timothy W. Trost

Title: SVP & CFO

Address:
2505 Meridian Parkway, Suite 340
Durham, NC 27713
Attention: Contract Coordinator
Email: atoler@chimerix.com

EPD Pharma Solutions, LLC

Signature: /s/ J. Michael Grindel, Ph.D.

Name: J. Michael Grindel, Ph.D.

Title: President

Address:
2070 Lake Ridge Drive
The Villages, FL 32162
Phone: 678-778-4646
Email: mgrindel@epdps.com

APPENDIX I

EXHIBIT A

Services and Compensation

Consultant shall provide one or more of the following services, as requested by the Company:

- Consultant is to perform the role as Head of Development and Program Management. He will work on non BARDA activities.

Compensation:

- Chimerix shall pay consultant at the rate of $250/hour (up to a maximum of $2,000.00) per day.

- **In no event shall total amount due under this agreement exceed fifteen thousand dollars ($15,000.00) without prior written approval from both parties**

- Chimerix shall reimburse Consultant, in accordance with Company's reimbursement policy, for the following expenses incurred in connection with the performance of Services under this Agreement, provided Consultant obtains Company's prior written approval thereof and submits verification of such expenses as Company may reasonably require:

    o Coach airfare to Raleigh/Durham, NC
    o Hotel accommodations at the Doubletree hotel in Durham
    o Meals
    o Car Rental

- At the end of each month during the term of this Agreement Consultant agrees to send Chimerix an invoice setting forth the work performed under this Agreement for such month. Within thirty (30 days) of receipt, Chimerix shall pay consulting fees due for such month.

- Invoices should be emailed to: accountspayable@chimerix.com
  OR Invoices may be mailed in duplicate to:
  Attn: Accounts Payable
  Chimerix, Inc.
  2505 Meridian Pkwy, Suite 340
  Durham, NC 27713

Exhibit 10.10

CONSULTING AGREEMENT

THIS CONSULTING AGREEMENT (the ***"Agreement"***) is made as of January 1, 2013 (the ***"Effective Date"***), by and between **CHIMERIX, INC.**, a Delaware corporation (the ***"Company"***), and EPD Pharma Solutions, LLC, (the ***"Consultant"***).

The Company desires to benefit from Consultant's expertise by retaining Consultant as a consultant, and Consultant wishes to perform consulting services for the Company, as provided below. In consideration of the mutual covenants set forth below, the parties hereby agree as follows:

1. Consulting Services. The Company hereby engages Consultant, and Consultant hereby agrees, to provide consulting services to the Company as described in **Exhibit A** hereto (the ***"Services"***) during the term of this Agreement, as requested by the Company. Consultant agrees to exercise the highest degree of professionalism and to utilize Consultant's expertise and creative talents in performing the Services.

2. Compensation. As full and complete compensation for performing the Services, the Company shall pay Consultant the compensation specified in **Exhibit A** hereto. Company shall reimburse Consultant, in accordance with Company's reimbursement policy, for any reasonable expenses incurred in connection with the performance of Services under this Agreement, provided Consultant obtains Company's prior written approval thereof and submits verification of such expenses as Company may reasonably require.

3. Independent Contractor. Consultant's relationship with Company is that of an independent contractor and nothing in this Agreement should be construed to create a partnership, joint venture, or employer-employee relationship. Consultant is not the agent of Company and is not authorized to make any representation, contract, or commitment on behalf of Company. Consultant will not be entitled to any of the benefits that Company may make available to its employees, such as group insurance, profit-sharing, or retirement benefits. Consultant shall be solely responsible for all tax returns and payments required to be filed with or made to any federal, state, or local tax authority with respect to Consultant's performance of services and receipt of fees under this Agreement. The Company will report amounts paid to Consultant by filing Form 1099-MISC with the Internal Revenue Service as required by law. Because Consultant is an independent contractor, the Company will not withhold or make payments for social security, make unemployment insurance or disability insurance contributions, or obtain worker's compensation insurance on Consultant's behalf. Consultant agrees to accept exclusive liability for complying with all applicable state and federal laws governing self-employed individuals, including obligations such as payment of taxes, social security, disability, and other contributions based on fees paid to Consultant, his agents, or employees under this Agreement. Consultant hereby agrees to indemnify and defend the Company against any and all such taxes or contributions, including penalties and interest.

4. Confidentiality.

(a) Confidential Information. The term ***"Confidential Information"*** shall mean any and all trade secrets, confidential knowledge, know-how, data or other proprietary information or materials, in whatever form, tangible or intangible, pertaining in any manner to the Company's business. By way of illustration but not limitation, Confidential Information may include inventions, ideas, discoveries, developments, designs, tecliniques, tangible and intangible information, chemical compounds, building blocks, chemical libraries, reaction protocols for chemical libraries, chemical structures, chemical design and model relationship data, chemical databases, assays, samples, media and other biological materials, procedures and formulations for producing any such materials, products, processes, drawings, improvements, formulas, equations, methods, developmental or experimental work, research or clinical data, instruments, devices, computer software and hardware, and information regarding research, development, current and proposed products and services, marketing and selling, business plans, business methods, budgets, finances, licensing, collaboration and development arrangements, prices and costs, buying habits and practices, contact and mailing lists and databases, vendors, customers and clients, and potential business opportunities.

(b) Exceptions. Information to which Consultant receives access pursuant to this Agreement will not be considered to be Confidential Information to the extent that Consultant can demonstrate by competent written evidence that such information: (i) is or becomes publicly known other than as a result of any breach of this Agreement by Consultant; (ii) is disclosed to Consultant on a non-confidential basis by a third party who rightfully possesses the information; or (iii) was known to Consultant prior to its first receipt from the Company (whether such first receipt occurred before or during the term of this Agreement), except in the case of the Company Inventions, which shall not be subject to the exception in this clause (iii).

(c) Non-Disclosure and Non-Use. At all times during the term of Consultant's association with the Company and thereafter, Consultant shall hold the Confidential Information in trust and confidence and shall not disclose or use any Confidential Information, except to the extent such disclosure or use is required in direct connection with Consultant's performance of requested Services for the Company or is expressly authorized in writing by the Company.

(d) Third Party Information. Consultant acknowledges that the Company has received and in the future will receive from third parties confidential or proprietary information (***"Third Party Information"***) subject to a duty on the Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. During the term of Consultant's association and thereafter, Consultant shall hold Third Patty Information in the strictest confidence and shall not disclose or use Third Party Information, except the extent such disclosure or use is required in direct connection with Consultant's performance of requested Services for the Company or is expressly authorized in writing by the Company.

5. Intellectual Property Rights.

(a) Ownership of Company Inventions. Consultant agrees that any and all ideas, inventions, discoveries, improvements, know-how and techniques that the Consultant conceives, reduces to practice or develops during the term of the Agreement, alone or in conjunction with others, during the performance of, or as a direct result of performing, the Services for the Company under this Agreement, including, without limitation, any and all intellectual property rights therein (collectively, ***"Company Inventions"*****),** shall be the sole and exclusive property of the Company. Consultant hereby irrevocably assigns to the Company all right, title and interest in and to all Company Inventions and agrees to execute, verity, and deliver assignments of Company Inventions to the Company or its designee promptly upon request. In addition, Consultant hereby designates the Company as his or her agent for, and grants to the Company a power of attorney with full power of substitution, which power of attorney shall be deemed coupled with an interest, solely for the purpose of effecting the assignment of Company Inventions from the Consultant to the Company.

(b) Company Inventions Not Capable of Assignment. If Consultant has any rights to Company Inventions that cannot, under applicable law, be assigned to the Company, Consultant unconditionally and irrevocably waives the enforcement of such rights and all claims and causes of action of any kind against the Company with respect to such rights. Consultant agrees, at the Company's request and expense, to consent to and join in any action to enforce such rights. If Consultant has any right to Company Inventions that can neither be assigned to the Company nor waived by Consultant, Consultant unconditionally and irrevocably grants to the Company during the term of such rights, an exclusive, irrevocable, perpetual, worldwide, fully-paid and royalty-free license, with rights to sublicense through multiple levels of sublicensees, to develop, make, have made, use, sell, have sold, offer for sale, import, reproduce, create derivative works of, distribute, publicly perform, and publicly display by all means now known or later developed, Company Inventions.

(c) Cooperation and Assistance. Consultant agrees to cooperate with the Company and its designee(s), both during and after the term of this Agreement, in the procurement and maintenance of the Company's rights in Company Inventions, and to execute, when requested, any other documents deemed necessary by the Company to carry out the purpose of this Section 5. Consultant shall assist the Company in every proper way to obtain, prosecute, maintain and enforce United States and foreign patent rights, copyrights and other intellectual property rights or protections claiming, covering or relating to Company Inventions in any and all countries. To that end, Consultant shall execute, verify and deliver such documents and perform such other acts (including appearances as a witness) as the Company may reasonably request for use in applying for, obtaining, perfecting, evidencing, sustaining, and enforcing such rights and the assignment thereof. Consultant's obligations under this Section 5(c) shall continue beyond the expiration or termination of this Agreement, but after expiration or termination of this Agreement, the Company shall compensate Consultant at a reasonable rate for the time actually spent by Consultant at the Company's request on such assistance.

6. No Conflicts. During the term of this Agreement, Consultant shall not, without the prior written consent of the Company, engage in any commercial business activity that competes with the Company's business or enter into any consulting or advisory relationship with any third party commercial entity that is engaged in any business activity that competes with the Company's business. If any restriction set forth above in this Section 6 is found by any court of competent jurisdiction to be unenforceable because it extends for too long a period of time or over too great a range of activities or in too broad a geographic area, it shall be interpreted to extend only over the maximum period of time, range of activities or geographic area as to which it may be enforceable.

7. Representations and Warranties. Consultant represents and warrants to the Company that Consultant's performance of the Services and of its obligations under this Agreement do not and will not breach or conflict with any agreement between Consultant and any third party (including, without limitation, Institution).

8. No Improper Use of Materials. Consultant agrees not to bring to the Company or to use in the performance of Services for the Company any materials or documents of a present or former employer of Consultant, or any materials or documents obtained by Consultant from a third party under an obligation of confidentiality, unless such materials or documents are generally available to the public or Consultant has written authorization from such present or former employer or third party for the possession and unrestricted use of such materials. Consultant understands that Consultant is not to breach any obligation of confidentiality that Consultant has to present or former employers or clients, and agrees to fulfill all such obligations during the term of this Agreement.

9. Term; Termination. The term of this Agreement, and Consultant's Services hereunder, shall commence on the Effective Date and, unless earlier terminated as provided below, shall expire 1 year after the Effective Date. The Company may terminate this Agreement in its sole discretion: (a) upon 15 days prior written notice to Consultant; or (b) immediately upon written notice to Consultant upon Consultant's material breach of Section 4, Section 6 and/or Section 10. Consultant may terminate the Agreement at any time upon 30 days' prior written notice to the Company. Upon expiration or any termination of this Agreement, or earlier as requested by the Company, Consultant shall deliver to the Company any and all drawings, notes, memoranda, specifications, devices, formulas, and documents, together with all copies thereof, and any other material containing or disclosing any Company Inventions, Third Party Information, or Confidential Information of the Company. Consultant further agrees that any property situated on the Company's premises and owned by the Company, including disks and other storage media, filing cabinets or other work areas, is subject to inspection by Company personnel at any time with or without notice. The provisions of Sections 4, 5, 9, 10 and 11 shall survive expiration or termination of this Agreement.

10. Non-interference with Business. During the term of this Agreement and for a period of two (2) years thereafter, Consultant agrees not to solicit or induce any employee or independent contractor of the Company to terminate or breach an employment, contractual, or other relationship with the Company.

11. General Provisions.

(a) Governing Law. This Agreement will be governed and construed in accordance with the laws of the State of North Carolina, without regard to its conflicts of laws principles.

(b) Severability. In case any one or more of the provisions contained in this Agreement shall, for any reason, be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect the other provisions of this Agreement, and this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein. If moreover, any one or more of the provisions contained in this Agreement shall for any reason be held to be excessively broad as to duration, geographical scope, activity, or subject, it shall be construed by limiting and reducing it, so as to be enforceable to the extent compatible with the applicable law as it shall then appear.

(c) **No Assignment.** Consultant may not assign or delegate Consultant's obligations under this Agreement either in whole or in part without the prior written consent of the Company. Any attempted assignment or delegation by Consultant without the Company's prior written consent shall be void and of no effect.

(d) **Injunctive Relief.** Consultant hereby acknowledges and agrees that in the event of any breach of this Agreement by Consultant, including, without limitation, the actual or threatened disclosure or unauthorized use of Confidential Information without the prior express written consent of the Company, the Company would suffer an irreparable injury such that no remedy at law would adequately protect or appropriately compensate the Company for such injury. Accordingly, Consultant agrees that the Company shall have the right to enforce this Agreement and any of its provisions by injunction, specific performance or other equitable relief, without bond and without prejudice to any other rights and remedies that the Company may have for a breach of this Agreement.

(e) **Notices.** All notices, requests, and other communications under this Agreement must be in writing and must be mailed by registered or certified mail, postage prepaid and return receipt requested, sent by overnight courier or delivered by hand to the party to whom such notice is required or permitted to be given. If mailed, any such notice will be considered to have been given five (5) business days after it was mailed, as evidenced by the postmark. If sent by overnight courier or delivered by hand, any such notice will be considered to have been given when received by the party to whom notice is given, as evidenced by written and dated receipt of such party. The mailing address for notice to either party will be the address shown on the signature page of this Agreement. Either party may change its mailing address by notice as provided by this section.

(f) **Legal Fees.** If any dispute arises between the parties with respect to the matters covered by this Agreement which leads to a proceeding to resolve such dispute, the prevailing party in such proceeding shall be entitled to receive its reasonable attorneys' fees, expert witness fees, and out-of-pocket costs incurred in connection with such proceeding, in addition to any other relief it may be awarded.

(g) **Export.** Consultant agrees not to export, directly or indirectly, any U.S. source technical data acquired from the Company or any products utilizing such data to countries outside the United States, which export may be in violation of the United States export laws or regulations.

(h) **Waiver.** No waiver by the Company of any breach of this Agreement shall be a waiver of any preceding or succeeding breach. No waiver by the Company of any right under this Agreement shall be construed as a waiver of any other right. The Company shall not be required to give notice to enforce strict adherence to all terms of this Agreement.

(i) Entire Agreement. This Agreement is the final, complete, and exclusive agreement of the parties with respect to the subject matter hereof. This Agreement supersedes all prior discussions between the parties. No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, will be effective unless in writing and signed by the party to be charged. The terms of this Agreement will govern all Services undertaken by Consultant for the Company.

(j) Headings. The headings preceding the text of the sections of this Agreement are inserted solely for convenience and ease of reference only and shall not constitute any part of this Agreement, or have any effect on its interpretation or construction.

(k) Counterparts. This Agreement may be executed in one or more counterparts each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

In Witness Whereof, the parties have, by duly authorized persons, executed this Agreement as of the Effective Date.

Chimerix, Inc.

By: /s/ Timothy W. Trost

Name: Timothy W. Trost

Title: SVP & CFO

Address:

2505 Meridian Parkway, Suite 340
Durham, NC 27713
USA
Attention: Contract Coordinator
Email: atoler@chimerix.com

EPD Pharma Solutions, LLC

By: /s/ J. Michael Grindel, Ph.D.

Name: J. Michael Grindel, Ph.D.

Title: President

Address:

2070 Lake Ridge Drive
The Villages, FL 32162
USA
Phone: 678-778-4646
Email: mgrindel@epdps.com

EXHIBIT A

Services and Compensation

Consultant shall provide one or more of the following services, as requested by the Company:

- Provide consultation and expertise regarding:
  - CMC development
  - Non-clinical development
  - Program management

Compensation:

- Chimerix shall pay consultant three hundred dollars ($300.00) per hour up to twenty four hundred dollars ($2,400.00) per day.

- **The total amount due under this Amendment shall not exceed One hundred Thousand dollars ($100,000.00) without the prior written agreement of the parties.**

- Chimerix shall pay consultant's travel time at half the billable rate.
- At the end of each month during the term of this Agreement Consultant agrees to send Chimerix an invoice setting forth the work performed under this Agreement for such month. Within thirty (30 days) of receipt, Chimerix shall pay consulting fees due for such month.
- Invoices should be emailed to: accountspayable@chimerix.com
  OR Invoices may be mailed in duplicate to:
  Attn: Accounts Payable
  Chimerix, Inc.
  2505 Meridian Pkwy, Suite 340
  Durham, NC 27713

Exhibit 10.11

CONSULTING AGREEMENT

THIS CONSULTING AGREEMENT (the ***"Agreement"***) is made as of February 7, 2012 (the ***"Effective Date"*****),** by and between **CHIMERIX, INC.**, a Delaware corporation (the ***"Company"*****),** and Synergee LLC, a limited liability corporation organized under the laws of New Jersey (the ***"Consultant"*****).**

The Company desires to benefit from Consultant's expertise by retaining Consultant as a consultant, and Consultant wishes to perform consulting services for the Company, as provided below. In consideration of the mutual covenants set forth below, the parties hereby agree as follows:

1. Consulting Services. The Company hereby engages Consultant, and Consultant hereby agrees, to provide consulting services to the Company as described in **Exhibit A** hereto (the ***"Services"***) during the term of this Agreement, as requested by the Company. Consultant agrees to exercise the highest degree of professionalism and to utilize Consultant's expertise and creative talents in performing the Services.

2. Compensation. As full and complete compensation for performing the Services, the Company shall pay Consultant the compensation specified in **Exhibit A** hereto. Company shall reimburse Consultant, in accordance with Company's reimbursement policy, for any reasonable expenses incurred in connection with the performance of Services under this Agreement, provided Consultant obtains Company's prior written approval thereof and submits verification of such expenses as Company may reasonably require.

3. Independent Contractor. Consultant's relationship with Company is that of an independent contractor and nothing in this Agreement should be construed to create a partnership, joint venture, or employer-employee relationship. Consultant is not the agent of Company and is not authorized to make any representation, contract, or commitment on behalf of Company. Consultant will not be entitled to any of the benefits that Company may make available to its employees, such as group insurance, profit-sharing, or retirement benefits. Consultant shall be solely responsible for all tax returns and payments required to be filed with or made to any federal, state, or local tax authority with respect to Consultant's performance of services and receipt of fees under this Agreement. The Company will report amounts paid to Consultant by filing Form 1099-MISC with the Internal Revenue Service as required by law. Because Consultant is an independent contractor, the Company will not withhold or make payments for social security, make unemployment insurance or disability insurance contributions, or obtain worker's compensation insurance on Consultant's behalf. Consultant agrees to accept exclusive liability for complying with all applicable state and federal laws governing self-employed individuals, including obligations such as payment of taxes, social security, disability, and other contributions based on fees paid to Consultant, his agents, or employees under this Agreement. Consultant hereby agrees to indemnity and defend the Company against any and all such taxes or contributions, including penalties and interest.

4. Confidentiality.

(a) Confidential Information. The term ***"Confidential Information"*** shall mean any and all trade secrets, confidential knowledge, know-how, data or other proprietary information or materials, in whatever form, tangible or intangible, pertaining in any manner to the Company's business. By way of illustration but not limitation, Confidential Information may include inventions, ideas, discoveries, developments, designs, techniques, tangible and intangible information, chemical compounds, building blocks, chemical libraries, reaction protocols for chemical libraries, chemical structures, chemical design and model relationship data, chemical databases, assays, samples, media and other biological materials, procedures and formulations for producing any such materials, products, processes, drawings, improvements, formulas, equations, methods, developmental or experimental work, research or clinical data, instruments, devices, computer software and hardware, and information regarding research, development, current and proposed products and services, marketing and selling, business plans, business methods, budgets, finances, licensing, collaboration and development arrangements, prices and costs, buying habits and practices, contact and mailing lists and databases, vendors, customers and clients, and potential business opportunities.

(b) Exceptions. Information to which Consultant receives access pursuant to this Agreement will not be considered to be Confidential Information to the extent that Consultant can demonstrate by competent written evidence that such information: (i) is or becomes publicly known other than as a result of any breach of this Agreement by Consultant; (ii) is disclosed to Consultant on a non-confidential basis by a third party who rightfully possesses the information; or (iii) was known to Consultant prior to its first receipt from the Company (whether such first receipt occurred before or during the term of this Agreement), except in the case of the Company Inventions, which shall not be subject to the exception in this clause (iii).

(c) Non-Disclosure and Non-Use. At all times during the term of Consultant's association with the Company and thereafter, Consultant shall hold the Confidential Information in trust and confidence and shall not disclose or use any Confidential Information, except to the extent such disclosure or use is required in direct connection with Consultant's performance of requested Services for the Company or is expressly authorized in writing by the Company.

(d) Third Party Information. Consultant acknowledges that the Company has received and in the future will receive from third parties confidential or proprietary information (***"Third Party Information"***) subject to a duty on the Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. During the term of Consultant's association and thereafter, Consultant shall hold Third Party Information in the strictest confidence and shall not disclose or use Third Party Information, except the extent such disclosure or use is required in direct connection with Consultant's performance of requested Services for the Company or is expressly authorized in writing by the Company.

5. Intellectual Property Rights.

(a) Ownership of Company Inventions. Consultant agrees that any and all ideas, inventions, discoveries, improvements, know-how and techniques that the Consultant conceives, reduces to practice or develops during the term of the Agreement, alone or in conjunction with others, during the performance of, or as a direct result of performing, the Services for the Company under this Agreement, including, without limitation, any and all intellectual property rights therein (collectively, ***"Company Inventions"***), shall be the sole and exclusive property of the Company. Consultant hereby irrevocably assigns to the Company all right, title and interest in and to all Company Inventions and agrees to execute, verify, and deliver assignments of Company Inventions to the Company or its designee promptly upon request. In addition, Consultant hereby designates the Company as his or her agent for, and grants to the Company a power of attorney with full power of substitution, which power of attorney shall be deemed coupled with an interest, solely for the purpose of effecting the assignment of Company Inventions from the Consultant to the Company.

(b) Company Inventions Not Capable of Assignment. If Consultant has any rights to Company Inventions that cannot, under applicable law, be assigned to the Company, Consultant unconditionally and irrevocably waives the enforcement of such rights and all claims and causes of action of any kind against the Company with respect to such rights. Consultant agrees, at the Company's request and expense, to consent to and join in any action to enforce such rights. If Consultant has any right to Company Inventions that can neither be assigned to the Company nor waived by Consultant, Consultant unconditionally and irrevocably grants to the Company during the term of such rights, an exclusive, irrevocable, perpetual, worldwide, fully-paid and royalty-free license, with rights to sublicense through multiple levels of sublicensees, to develop, make, have made, use, sell, have sold, offer for sale, import, reproduce, create derivative works of, distribute, publicly perform, and publicly display by all means now known or later developed, Company Inventions.

(c) Cooperation and Assistance. Consultant agrees to cooperate with the Company and its designee(s), both during and after the term of this Agreement, in the procurement and maintenance of the Company's rights in Company Inventions, and to execute, when requested, any other documents deemed necessary by the Company to carry out the purpose of this Section 5. Consultant shall assist the Company in every proper way to obtain, prosecute, maintain and enforce United States and foreign patent rights, copyrights and other intellectual property rights or protections claiming, covering or relating to Company Inventions in any and all countries. To that end, Consultant shall execute, verify and deliver such documents and perform such other acts (including appearances as a witness) as the Company may reasonably request for use in applying for, obtaining, perfecting, evidencing, sustaining, and enforcing such rights and the assignment thereof. Consultant's obligations under this Section 5(c) shall continue beyond the expiration or termination of this Agreement, but after expiration or termination of this Agreement, the Company shall compensate Consultant at a reasonable rate for the time actually spent by Consultant at the Company's request on such assistance.

6. No Conflicts. During the term of this Agreement, Consultant shall not, without the prior written consent of the Company, engage in any commercial business activity that competes with the Company's business or enter into any consulting or advisory relationship with any third party commercial entity that is engaged in any business activity that competes with the Company's business. If any restriction set forth above in this Section 6 is found by any court of competent jurisdiction to be unenforceable because it extends for too long a period of time or over too great a range of activities or in too broad a geographic area, it shall be interpreted to extend only over the maximum period of time, range of activities or geographic area as to which it may be enforceable.

7. Representations and Warranties. Consultant represents and warrants to the Company that Consultant's performance of the Services and of its obligations under this Agreement do not and will not breach or conflict with any agreement between Consultant and any third party (including, without limitation, Institution).

8. No Improper Use of Materials. Consultant agrees not to bring to the Company or to use in the performance of Services for the Company any materials or documents of a present or former employer of Consultant, or any materials or documents obtained by Consultant from a third party under an obligation of confidentiality, unless such materials or documents are generally available to the public or Consultant has written authorization from such present or former employer or third party for the possession and unrestricted use of such materials. Consultant understands that Consultant is not to breach any obligation of confidentiality that Consultant has to present or former employers or clients, and agrees to fulfill all such obligations during the term of this Agreement.

9. Term; Termination. The term of this Agreement, and Consultant's Services hereunder, shall commence on the Effective Date and, unless earlier terminated as provided below, shall expire 1 year after the Effective Date. The Company may terminate this Agreement in its sole discretion: (a) upon 30 days prior written notice to Consultant; or (b) immediately upon written notice to Consultant upon Consultant's material breach of Section 4, Section 6 and/or Section 10. Consultant may terminate the Agreement at any time upon 30 days' prior written notice to the Company. Upon expiration or any termination of this Agreement, or earlier as requested by the Company, Consultant shall deliver to the Company any and all drawings, notes, memoranda, specifications, devices, formulas, and documents, together with all copies thereof, and any other material containing or disclosing any Company Inventions, Third Party Information, or Confidential Information of the Company. Consultant further agrees that any property situated on the Company's premises and owned by the Company, including disks and other storage media, filing cabinets or other work areas, is subject to inspection by Company personnel at any time with or without notice. The provisions of Sections 4, 5, 9, 10 and 11 shall survive expiration or termination of this Agreement.

10. Non-Interference with Business. During the term of this Agreement and for a period of two (2) years thereafter, Consultant agrees not to solicit or induce any employee or independent contractor of the Company to terminate or breach an employment, contractual, or other relationship with the Company.

11. General Provisions.

(a) Governing Law. This Agreement will be governed and construed in accordance with the laws of the State of North Carolina, without regard to its conflicts of laws principles.

(b) Severability. In case any one or more of the provisions contained in this Agreement shall, for any reason, be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect the other provisions of this Agreement, and this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein. If moreover, any one or more of the provisions contained in this Agreement shall for any reason be held to be excessively broad as to duration, geographical scope, activity, or subject, it shall be construed by limiting and reducing it, so as to be enforceable to the extent compatible with the applicable law as it shall then appear.

(c) **No Assignment.** Consultant may not assign or delegate Consultant's obligations under this Agreement either in whole or in part without the prior written consent of the Company. Any attempted assignment or delegation by Consultant without the Company's prior written consent shall be void and of no effect.

(d) **Injunctive Relief.** Consultant hereby acknowledges and agrees that in the event of any breach of this Agreement by Consultant, including, without limitation, the actual or threatened disclosure or unauthorized use of Confidential Information without the prior express written consent of the Company, the Company would suffer an irreparable injury such that no remedy at law would adequately protect or appropriately compensate the Company for such injury. Accordingly, Consultant agrees that the Company shall have the right to enforce this Agreement and any of its provisions by injunction, specific performance or other equitable relief, without bond and without prejudice to any other rights and remedies that the Company may have for a breach of this Agreement.

(e) **Notices.** All notices, requests, and other communications under this Agreement must be in writing and must be mailed by registered or certified mail, postage prepaid and return receipt requested, sent by overnight courier or delivered by hand to the party to whom such notice is required or permitted to be given. If mailed, any such notice will be considered to have been given five (5) business days after it was mailed, as evidenced by the postmark. If sent by overnight courier or delivered by hand, any such notice will be considered to have been given when received by the party to whom notice is given, as evidenced by written and dated receipt of such party. The mailing address for notice to either party will be the address shown on the signature page of this Agreement. Either party may change its mailing address by notice as provided by this section.

(f) **Export.** Consultant agrees not to export, directly or indirectly, any U.S. source technical data acquired from the Company or any products utilizing such data to countries outside the United States, which export may be in violation of the United States export laws or regulations.

(g) **Waiver.** No waiver by the Company of any breach of this Agreement shall be a waiver of any preceding or succeeding breach. No waiver by the Company of any right under this Agreement shall be construed as a waiver of any other right. The Company shall not be required to give notice to enforce strict adherence to all terms of this Agreement.

(h) **Entire Agreement.** This Agreement is the final, complete, and exclusive agreement of the parties with respect to the subject matter hereof. This Agreement supersedes all prior discussions between the parties. No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, will be effective unless in writing and signed by the party to be charged. The terms of this Agreement will govern all Services undertaken by Consultant for the Company.

(i) **Headings.** The headings preceding the text of the sections of this Agreement are inserted solely for convenience and ease of reference only and shall not constitute any part of this Agreement, or have any effect on its interpretation or construction.

(j) **Counterparts.** This Agreement may be executed in one or more counterparts each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

In Witness Whereof, the parties have, by duly authorized persons, executed this Agreement as of the Effective Date.

Chimerix, Inc.

By: /s/ Kenneth Moch

Name: Kenneth Moch

Title: President & CEO

Address:

2505 Meridian Parkway, Suite 340
Durham, NC 27713
USA
Attention: Contract Coordinator
Email: rheath@chimerix.com

2/22/12

Synergee LLC

Signature: /s/ Dorothy J. Margolskee

Dorothy J. Margolskee
SYNERGEE FOUNDER & PRINCIPAL
Biotech Consultant

Address:

10 Fawnwood Drive
Voorhees, NJ 08043
USA
Phone: 856-767-7627
Email: dorothy@synergeeconsulting,com

EXHIBIT A

Services and Compensation

Consultant shall provide one or more of the following services, as requested by the Company:

- Medical and strategic support for CMX001 CMV end of phase 2 package
- -Strategic discussions based on data analysis, critical review and edit of End of phase 2 meeting package
- All work will be performed by Dorothy J. Margolskee

Compensation:

- ***Chimerix shall pay consultant four hundred dollars ($400.00) per hour.***
- ***The total number of hours performing the Services this Amendment shall not exceed one hundred (100)/per month without the prior written agreement of the parties.***
- ***Chimerix shall pay consultant's travel time at half the billable rate unless consultant is actively working on a project for Chimerix in which case consultant will bill at the full rate.***
- ***At the end of each month during the term of this Agreement Consultant agrees to send Chimerix an invoice setting forth the work performed under this Agreement for such month. Within thirty (30 days) of receipt, Chimerix shall pay consulting fees due for such month.***

FIRST AMENDMENT
TO THE CONSULTING AGREEMENT BETWEEN CHIMERIX, INC.
AND SYNERGEE LLC

This First Amendment to the Consulting Agreement between Chimerix and Consultant ("Amendment") is dated effective as of March 30, 2012 ("Effective Date"), and is entered into by and between **Chimerix, Inc.** ("Chimerix" or "Company") a Delaware corporation and its successors and assignees, and **Synergee LLC,** a limited liability corporation ("Consultant").

WHEREAS, Chimerix and Consultant entered into that certain Consulting Agreement between Chimerix and Consultant dated effective February 7, 2012 (the "Agreement"); and

WHEREAS, the parties wish to amend the Agreement to amend the scope of Services to be performed by Consultant; and

WHEREAS, the parties wish to amend the Agreement to provide for the grant of a stock option to Dorothy J. Margolskee (as an individual) as partial compensation for the Services; and

WHEREAS, Chimerix and Consultant now desire to amend the terms of the Agreement as more particularly set forth below:

1. Scope of Services: Exhibit A to the Agreement is hereby cancelled in its entirety. The scope of Services to be provided by Consultant shall be set forth on the new Exhibit A ("Services and Compensation") as attached hereto as **Appendix I.**

2. Compensation. Section 2 of the Agreement entitled "Compensation" shall be amended to included new Subsection 2.1 as follows:

   2.1 **Stock options.** Contingent and effective upon the execution of the Amendment, the Company has awarded to Dorothy J. Margolskee (as an individual) a stock option covering a total of Fifty Thousand (50,000) shares of the Company's Common Stock. Copies of the Company's 2012 Equity Incentive Plan and Consultant's Stock Option Agreement and Stock Option Grant Notice relating to this stock option grant will be provided to Consultant as soon as practicable following the date of the Amendment. The shares will vest as follows:

   (i) 10,000 shares will vest immediately upon execution of the Amendment; and

   (ii) 5,000 shares will vest at the end of each monthly period following the execution of the Amendment during which Dorothy J. Margolskee serves as Company's interim Chief Medical Officer as part of the Services; **or**

   (iii) 2,500 shares will vest at the end of each monthly period following the execution of the Amendment during which Consultant performs Services for the Company, but Dorothy J. Margolskee does not serve as Company's interim Chief Medical Officer.

3. Except as provided in this Amendment, all terms used in this Amendment that are not otherwise defined shall have the respective meanings ascribed to such terms in the Agreement.

4. This Amendment embodies the entire agreement between Consultant and Company with respect to the amendment of the Agreement. In the event of any conflict or inconsistency between the provisions of the Agreement and this Amendment, the provisions of this Amendment shall control and govern.

5. Except as specifically modified and amended herein, all of the terms, provisions, requirements and specifications contained in the Agreement remain in full force and effect. Except as otherwise expressly provided herein, the parties do not intend to, and the execution of this Amendment shall not, in any manner impair the Agreement, the purpose of this Amendment being simply to amend and ratify the Agreement, as hereby amended and ratified, and to confirm and carry forward the Agreement, as hereby amended, in full force and effect.

IN WITNESS WHEREOF, Consultant and Company have executed and delivered this Amendment effective as of the Effective Date.

Synergee LLC		**Chimerix, Inc.**	
By:	/s/ Dorothy J. Margolskee	By:	/s/ Kenneth Moch
Name:	Dorothy J. Margolskee	Name:	Kenneth Moch
Title:	Principal & Founder	Title:	President & CEO
Date:	4/4/12	Date:	4/4/12

5/25/12

APPENDIX I

EXHIBIT A

Services and Compensation

Consultant shall provide one or more of the following services, as requested by the Company:

- Serve in the role of interim Chief Medical Officer (until such time as Company appoints a replacement CMO)
- Other related matters as agreed upon by the Parties
- Consultant will report directly to Kenneth Moch, CEO
- All work will be performed by Dorothy J. Margolskee

Compensation:

- ***Chimerix shall pay consultant four hundred dollars ($400.00) per hour.***
- ***The total number of hours performing the Services this Amendment shall not exceed one hundred 120 per month without the prior written agreement of the parties.***
- ***Chimerix shall pay consultant's travel time at half the billable rate unless consultant is actively working on a project for Chimerix in which case consultant will bill at the full rate.***
- ***At the end of each month during the term of this Agreement Consultant agrees to send Chimerix an invoice setting forth the work performed under this Agreement for such month. Within thirty (30) days of receipt, Chimerix shall pay consulting fees due for such month.***

Exhibit 10.12

OFFICE LEASE

WITH

Chimerix, Inc.

SUITE: **340**

BUILDING: **2505 Meridian**

CITY: **Durham, North Carolina**

Table of Contents

Table of Contents
(continued)

Table of Contents
(continued)

Table of Contents
(continued)

OFFICE LEASE

THIS OFFICE LEASE ("**Lease**") is made and entered into as of the 1st day of September, 2007, by and between **ACP 2505 Meridian LLC** ("**Landlord**"), a Delaware limited liability company, and **Chimerix, Inc.** ("**Tenant**"), a Delaware corporation.

ARTICLE 1

BASIC PROVISIONS

This Article contains the basic lease provisions between Landlord and Tenant.

A. **Building:** 2505 Meridian, located at 2505 Meridian Parkway, Durham, North Carolina 27713 (the "**Property**", as further described in Article 30).

B. **Premises:** Suite 340 (consisting of the spaces currently known as Suites 325 and 340) located on the third (3rd) floor of the Building as outlined or hatched on Exhibit A hereto.

C. **Commencement Date:** September 1, 2007, subject to Articles 2 and 4.

D. **Expiration Date:** February 28, 2011, subject to Articles 2 and 4.

E. **Rentable Area:** The rentable area of the Premises shall be deemed to be 6,849 square feet, and the rentable area of the Property shall be deemed to be 42,264 square feet, for purposes of this Lease, subject to Article 30.

F. **Tenant's Share:** Sixteen and 21/100 percent (16.21%), subject to Articles 3 and 30.

G. **Base Rent:** Tenant shall pay monthly Base Rent pursuant to the following schedule and as described in Article 3:

Period	Monthly Base Rent
Commencement Date — August 31, 2008	$ 11,985.75
September 1, 2008 — August 31, 2009	$ 12,345.32
September 1, 2009 — August 31, 2010	$ 12,715.68
September 1, 2010 - Expiration Date	$ 13,097.15

Notwithstanding the foregoing, as a concession to enter this Lease, Base Rent shall initially be abated as further described in Article 3.J.

H. **Additional Rent:** Tenant shall pay Tenant's Share of Taxes and Expenses in excess of the amounts respectively for 2008 ("**Base Tax Year**") and 2008 ("**Base Expense Year**"), as further described in Article 3.

I. **Permitted Use:** General offices, subject to Article 7.

J. **Security Deposit:** $11,985.75, subject to Article 16.

K. **Broker (if any):** CB Richard Ellis (representing Landlord) and Colliers Pinkard (representing Tenant), subject to Article 26.

L. **Guarantor(s):** n/a

M. **Landlord's Notice Address (subject to Article 25):** ACP 2505 Meridian LLC, 2350 Corporate Park Drive, Suite 110, Herndon, Virginia 20171, Attn: Brian Katz

N. **Tenant's Notice Address (subject to Article 25):**

Until the Commencement Date: Chimerix, Inc., _____
_____
Attn.: _____

On the Commencement Date: Chimerix, Inc., 2505 Meridian Parkway, Suite 340, Durham, North Carolina 27713 Attn.: George Painter

O. **Rent Payments:** Rent shall be paid to Landlord c/o ACP Meridian Business Campus Properties LLC, P 0 Box 01-9663, or such other parties and addresses as to which Landlord shall provide advance notice.

P. **Exhibits:** This Lease includes, and incorporates by this reference:

Exhibit A	Premises
Exhibit B	Rules
Exhibit C	Work Letter
Exhibit D	Extension Option
Exhibit E	Right of Offer

The provisions above shall be interpreted and applied in accordance with the other provisions of this Lease. The terms of this Article, and the terms defined in Article 30 and other Articles, shall have the meanings specified therefor when used as capitalized terms in other provisions of this Lease or related documentation (except as expressly provided to the contrary therein).

ARTICLE 2

TERM AND COMMENCEMENT

A. **Term.** Landlord hereby leases to Tenant and Tenant hereby leases from Landlord the Premises for the Term, subject to the other provisions of this Lease. The term ("**Term**") of this Lease shall commence on the Commencement Date and end on the Expiration Date set forth in Article 1, unless sooner terminated as provided in this Lease, subject to adjustment as provided below and the other provisions of this Lease.

B. **Early Commencement.** The Commencement Date, Rent and Tenant's other obligations shall be advanced to such earlier date as Tenant, with Landlord's written permission, commences occupying the Premises for business purposes. If such event occurs with respect to a portion of the Premises, the Commencement Date, Rent and Tenant's other obligations shall be so advanced with respect to such portion (and fairly prorated based on the rentable square footage involved). During any period that Tenant shall be permitted to enter the Premises prior to the Commencement Date other than to occupy the same for business purposes (e.g., to perform alterations or improvements), Tenant shall comply with all terms and provisions of this Lease, except those provisions requiring the payment of Rent. Landlord shall permit early entry at least one (I) week prior to the Commencement Date, so long as the Premises are legally available, Landlord has completed any work required to be performed by Landlord under this Lease (or can reasonably accommodate the scheduling of minor work that Tenant desires to perform, such as cabling, without delaying any such Landlord work), and Tenant is in compliance with the other provisions of the Lease.

C. **Commencement Delays.** Subject to Article 4, the Commencement Date, Rent and Tenant's other obligations shall be postponed to the extent Tenant is not reasonably able to occupy the Premises because Landlord fails, by the Commencement Date set forth in Article I, to: (i) deliver possession of the Premises, and (ii) substantially complete any improvements to the Premises required to be performed by Landlord under this Lease, except to the extent that Tenant, its space planners, architects, contractors, agents or employees cause such failure. If such failure occurs with respect to a portion of the Premises, the Commencement Date, Rent and Tenant's other obligations shall be so postponed with respect to such portion (and fairly prorated based on the rentable square footage involved). If the Commencement Date is postponed pursuant to the foregoing provisions for a ninety (90) day initial grace period, Tenant shall have the right to terminate this Lease by notice to Landlord given within ten (10) days thereafter, subject to Landlord's right to cure as provided in Article 21. Any such delay in the Commencement Date shall not subject Landlord to liability for loss or damage resulting therefrom, and Tenant's sole recourse with respect thereto shall be the postponement of Rent and other obligations and right to terminate this Lease described herein,

D. **Adjustments and Confirmation.** If the Commencement Date is advanced to an earlier date as provided above, the Expiration Date shall not be changed. If the Commencement Date is postponed as provided above, the Expiration Date shall be extended by the same length of time if Landlord so elects by notice to Tenant. If the adjusted Expiration Date occurs other than on the last day of a calendar month, Landlord may further elect by such notice to extend the Term so that the Expiration Date is the last clay of such calendar month. Landlord and Tenant shall execute a confirmation of any dates as adjusted herein in such form as Landlord may reasonably request; any failure to respond within thirty (30) days after Landlord provides such written confirmation shall be deemed an acceptance of the dates set forth in Landlord's confirmation. If Tenant disagrees with Landlord's adjustment of such dates, Tenant shall pay Rent and perform all other obligations commencing and ending on the dates determined by Landlord, subject to refund or credit when the matter is resolved.

ARTICLE 3

BASE RENT AND ADDITIONAL RENT

A. **Base Rent.** Tenant shall pay Landlord the monthly Base Rent set forth in Article I in advance on or before the first day of each calendar month during the Term; provided, Tenant shall pay Base Rent for the first full calendar month for which Base Rent shall be due (and any initial partial month) when Tenant executes this Lease.

B. **Taxes and Expenses.** Tenant shall pay Landlord Tenant's Share of Taxes and Expenses in excess of the amounts of Taxes and Expenses respectively for the Base Tax Year and Base Expense Year in the manner described below. The foregoing capitalized terms shall have the meanings specified therefor in Articles 1 and 30.

C. **Payments.**

(i) Landlord may reasonably estimate in advance the amounts Tenant shall owe for Taxes and Expenses for any full or partial calendar year of the Term. Tenant shall pay such estimated amounts, on a monthly basis, on or before the first day of each calendar month, together with Tenant's payment of Base Rent. Landlord may reasonably adjust such estimate from time to time (but not more than twice in any calendar year).

(ii) Within 120 days after the end of each calendar year, or as soon thereafter as practicable, Landlord shall provide a statement (the "**Statement**") showing: (a) the amount of actual Taxes and Expenses for such calendar year, with a listing of amounts for major categories of Expenses, (b) any amount paid by Tenant towards Taxes and Expenses during such calendar year on an estimated basis, and (c) any revised estimate of Tenant's obligations for Taxes and Expenses for the current year.

(iii) If the Statement shows that Tenant's estimated payments were less than Tenant's actual obligations for Taxes and Expenses for such year, Tenant shall pay the difference within thirty (30) days after Landlord delivers the Statement, If the Statement shows that Tenant's estimated payments exceeded Tenant's actual obligations for Taxes and Expenses, Landlord shall credit the difference against the payment of Rent next due. However, if the Term shall have expired and no further Rent shall be due, Landlord shall provide a prompt refund of such difference with the final Statement for such year and Landlord's obligation to provide a prompt refund shall survive termination of the Lease.

(iv) If the Statement shows a further increase in Tenant's estimated payments for the current calendar year, Tenant shall: (a) thereafter pay the new estimated amount until Landlord further revises such estimated amount, and (b) pay the difference between the new and former estimates for the period from January 1 of the current calendar year through the month in which the Statement is sent within thirty (30) days after Landlord delivers the Statement.

(v) In lieu of providing one Statement covering both Taxes and Expenses, Landlord may provide separate statements. So long as Tenant's obligations hereunder are not materially adversely affected thereby, Landlord reserves the right upon sixty (60) days advance written notice to reasonably change, from time to time, the manner or timing of Tenant's payments for Taxes and Expenses.

D. **Tax Refunds, Protest Costs, Fiscal Years and Special Assessments.** Landlord shall each year: (i) credit against Taxes any refunds received during such year, whether or not for a prior year, (ii) include in Taxes any additional amount paid during such year involving an adjustment to Taxes for a prior year due to supplemental assessment or other reason, (iii) for Taxes payable in installments over more than one year, include only the minimum amounts payable each year and any interest thereon, and (iv) include, in either Taxes or Expenses, any reasonable fees for attorneys, consultants and experts, and other costs paid during such year in attempting to protest, appeal or otherwise seek to reduce or minimize Taxes, whether or not successful. Notwithstanding anything to the contrary contained in this Lease, if any taxing authority, at any time, uses a fiscal year other than a current calendar year, Landlord may elect to require payments by Tenant based on: (a) amounts paid or payable during each calendar year without regard to such fiscal years, or (b) amounts paid or payable for or during each fiscal tax year.

E. **Grossing Up and Tenant's Share Adjustments.** In order to allocate variable Expenses (i.e. those items that vary based on occupancy levels, such as janitorial and utility costs) among those parties who are leasing space when the Property is not fully occupied during all or a portion of any calendar year, Landlord shall reasonably determine the amount of such variable Expenses that would have been paid had the Property been fully occupied, and the amount so determined shall be deemed to have been the amount of variable Expenses for such year (rather than adjusting Tenant's Share by subtracting vacant space from the denominator). If Landlord does so in computing Expenses for any subsequent year, Landlord shall make a similar adjustment to Expenses for the Base Expense Year in such computation. Similarly, if Landlord is not furnishing any particular utility or service to a tenant during any period (the cost of which, if performed by Landlord, would be included in Expenses), Landlord shall for such period: (1) exclude the rentable area of such tenant from the rentable area of the Property in computing Tenant's Share of the component of Expenses for such utility or service, or (ii) adjust Expenses to reflect the additional amount that would reasonably have been incurred had Landlord furnished such utility or service to such tenant (rather than adjusting Tenant's Share). "Tenant's Share" shall be subject to other adjustments as provided in the definition thereof in Article 30 below.

F. **Prorations; Payments After Term Ends.** If the Term commences on a day other than the first day of a calendar month or ends on a day other than the last day of a calendar month, the Base Rent and any other amounts payable on a monthly basis shall be prorated on a per diem basis for such partial calendar months. If the Base Rent is scheduled to increase under Article 1 other than on the first day of a calendar month, the amount for such month shall be prorated on a per diem basis to reflect the number of days of such month at the then current and increased rates, respectively. If the Term commences other than on January 1, or ends other than on December 31, Tenant's obligations to pay amounts towards Taxes and Expenses for such first or final calendar years shall be prorated on a per diem basis to reflect the portion of such years included in the Term. Tenant's obligations to pay Taxes and Expenses (or any other amounts) accruing during, or relating to, the period prior to expiration or earlier termination of this Lease, shall survive such expiration or termination.

G. **Landlord's Accounting Practices and Records.** Landlord shall maintain records respecting Taxes and Expenses and determine the same in accordance with sound accounting and management practices consistently applied in accordance with this Lease. Tenant's employees (or any certified public accounting firm acting for Tenant on a non-contingent fee basis) shall have the right to review such records by sending notice to Landlord no later than sixty (60) days following the furnishing of the Statement specifying such records as Tenant reasonably desires to review. Such review shall be subject to the continuing condition that Tenant not be in Default beyond any applicable cure period, and subject to reasonable scheduling by Landlord during normal business hours at the place or places where such records are normally kept. No later than sixty (60) days after Landlord makes such records available for review, Tenant shall send Landlord notice specifying any exceptions that Tenant takes to matters included in such Statement, Tenant's detailed reasons for each exception which support a conclusion that such exception properly identifies an error in such Statement, and a complete copy of the review report. Such Statement shall be considered final and binding on Tenant, except as to matters to which exception is taken after review of Landlord's records in the foregoing manner and within the foregoing times. The foregoing times for sending Tenant's notices hereunder are critical to Landlord's budgeting process, and are therefore of the essence of this Paragraph. If Tenant takes timely exception as provided herein, Landlord may seek certification from an independent certified public accountant or financial consultant (who shall be subject to Tenant's reasonable approval) as to the proper amount of Taxes and Expenses or the items as to which Tenant has taken exception. In such case: (i) such certification shall be considered final and binding on both parties (except as to additional amounts not then known or omitted by error), and (ii) Tenant shall pay Landlord for the cost of such certification, unless it shows that Taxes and Expenses were overstated by a net amount of five percent (5%) or more (in which case, Landlord shall pay for such certification, and shall also reimburse Tenant's reasonable, direct, out-of-pocket costs for Tenant's review of Landlord's records hereunder up to a maximum of $2,000, within thirty (30) days after Tenant provides Landlord with reasonable evidence thereof). Pending review of such records and resolution of any exceptions, Tenant shall pay Tenant's Share of Taxes and Expenses in the amounts shown on such Statement, subject to credit, refund or additional payment after any such exceptions are resolved.

H. **Base Year Adjustments.** If Taxes for the Base Tax Year are reduced as a result of protest or otherwise, Landlord may use the final reduced amount of Taxes for the Base Tax Year to compute Tenant's obligations for increases in Taxes during the Term. In such case, Tenant shall pay Landlord, within thirty (30) days after notice, any additional amount of Taxes required by such computation for any period that has theretofore occurred during the Term following the Base Tax Year. Landlord may also use sound management and accounting practices to normalize Base Expense Year Expenses by reducing or excluding from Base Expense Year Expenses: (i) any unusual costs or cost increases, including any market-wide energy cost spikes or increases, surcharges, or energy taxes, due to war, terrorism, boycotts, brown-outs or hurricanes, and (ii) the amortization of capital expenditures otherwise permitted under Article 30 (provided amortization of capital expenditures shall only be included in subsequent year Expenses to the extent permitted under Article 30). If Landlord eliminates from any subsequent year Expenses a recurring category of Expenses previously included in Base Expense Year Expenses, Landlord may subtract such category from Base Expense Year Expenses commencing with such subsequent year.

I. **General Payment Matters.** Base Rent, Taxes, Expenses and any other amounts which Tenant is or becomes obligated to pay Landlord under this Lease Of other agreement entered in connection herewith are sometimes herein referred to collectively as "Rent," and all remedies applicable to the non-payment of rent shall be applicable thereto. Tenant shall pay Rent in good funds and legal tender of the United States of America, together with any applicable sales tax or other taxes on Rent as further described in Article 14. Tenant shall pay Rent without any deduction, recoupment, set-off or counterclaim, and without relief from any valuation or appraisement laws, except as may be expressly provided in this Lease. No delay by Landlord in providing the Statement (or separate statements) shall be deemed a default by Landlord or a waiver of Landlord's right to require payment of Tenant's obligations for actual or estimated Taxes or Expenses. In no event shall a decrease in Taxes or Expenses serve to decrease Base Rent. Landlord may apply payments received from Tenant to any obligations of Tenant then accrued, without regard to such obligations as may be designated by Tenant.

J. **Initial Abatement of Base Rent.** Notwithstanding anything to the contrary herein, as a concession to enter this Lease and provided Tenant is not then in Default, Tenant's obligations for Base Rent shall be abated for three (3) months commencing on the Commencement Date (except if the Commencement Date does not occur on the first day of a calendar month, the abatement period shall be ninety (90) days), subject to the following conditions. If Tenant shall Default under this Lease, Tenant shall immediately commence paying the full amount otherwise required under this Lease without regard to such period, if the foregoing period is still in effect. Tenant shall be permitted to apply all or part of the Base Rent abatement amount toward the payment of any Tenant's Cost under Exhibit C.

ARTICLE 4

CONDITION OF PREMISES

Tenant has inspected, or had an opportunity to inspect, the Premises (and portions of the Property, Systems and Equipment providing access to or serving the Premises), and agrees to accept the same "as is" without any agreements, representations, understandings or obligations on the part of Landlord to perform any alterations, repairs or improvements, except as may be expressly provided under this Lease, and except for latent defects reported to Landlord in writing no later than the first (1st) anniversary of the Commencement Date. With respect to the Work that Landlord shall perform under the Work Letter attached as Exhibit C hereto: (i) Landlord shall use diligent, good faith efforts to substantially complete such Work to an extent that Tenant can reasonably occupy the Premises by the Commencement Date set forth in Article 1, subject to Article 2 and the other provisions of this Lease, (ii) Tenant shall use diligent, good faith efforts to cooperate, and to cause its space planners, architects, contractors, agents and employees to cooperate, diligently and in good faith with Landlord and any space planners, architects, contractors or other parties designated by Landlord, so that such Work can be planned, permits can be obtained, and the Work can be substantially completed by the Commencement Date set forth in Article 1, and (iii) the Commencement Date, Rent and Tenant's other obligations shall be subject to adjustment as described in Article 2. In the event of any dispute as to whether such Work has been substantially completed, Landlord may refer the matter to a licensed architect (subject to Tenant's reasonable approval), whose professional good faith decision shall be final and binding on the parties.

ARTICLE 5

QUIET ENJOYMENT

Landlord agrees that, if Tenant timely pays the Rent and performs the terms and provisions hereunder, Tenant shall hold the Premises during the Term free of lawful claims by any party acting by or through Landlord, subject to all other terms and provisions of this Lease.

ARTICLE 6

UTILITIES AND SERVICES

A. **Standard Landlord Utilities and Services.** Landlord shall provide the following utilities and services (the cost of which shall be included in Expenses):

(i) Heat and air-conditioning to provide a temperature consistent with comparable office buildings in the vicinity, in Landlord's reasonable opinion and in accordance with applicable Law, for reasonable occupancy of the Premises as offices during Building Hours (as defined in Article 30).

(ii) Water from city mains for drinking, lavatory and toilet purposes, at those points of supply provided for nonexclusive general use of tenants at the Property, or points of supply in the Premises already existing or installed by or with Landlords written consent for such purposes.

(iii) Cleaning and trash removal in and about the Premises five (5) times per week, excluding weekends and Holidays.

(iv) Passenger elevator service at all times (if the Property has such equipment serving the Premises), and freight elevator service (if the Property has such equipment serving the Premises, and subject to reasonable scheduling by Landlord), in common with Landlord and other parties.

(v) Electricity for building-standard overhead office lighting fixtures, and equipment and accessories customary for offices, where: (a) Tenant uses an amount of electricity that is generally consistent with average office use at comparable office buildings in the vicinity, as reasonably determined by Landlord, (b) the Systems and Equipment are suitable, and the safe and lawful capacity thereof is not exceeded, and (c) sufficient capacity remains for other tenants, as reasonably determined by Landlord.

B. **Additional Utilities and Services.** Landlord shall seek to provide such extra utilities or services as Tenant may from time to time request, if the same are reasonable and feasible for Landlord to provide and do not involve modifications or additions to the Property or existing Systems and Equipment, and if Landlord shall receive Tenant's request within a reasonable period prior to the time such extra utilities or services are required, Landlord may comply with written or oral requests by any officer or employee of Tenant, unless Tenant shall notify Landlord of, or Landlord shall request, the names of authorized individuals (up to 3 for each floor on which the Premises are located) and procedures for written requests. Tenant shall pay, for any extra utilities or services, such standard charges as Landlord shall from time to time establish, Landlord's out-of-pocket costs for architects, engineers, consultants and other parties relating to such extra utilities or services, and a fee equal to fifteen percent (15%) of such costs (provided, Landlord's standard overtime HVAC charges shall not require any additional such percentage thereon, and are currently $10.00 per hour or portion thereof, per floor or portion thereof). All payments for such extra utilities or services shall be due at the same time as the installment of Base Rent with which the same are billed, or if billed separately, shall be due within thirty (30) days after such billing. Landlord shall not be responsible for inadequate air-conditioning or ventilation whenever the use or occupancy of the Premises exceeds the normal capacity or design loads of, affects the temperature or humidity otherwise maintained by, or otherwise adversely affects the operation of, the Systems and Equipment for the Property, whether due to items of equipment or machinery generating heat, above-normal concentrations of personnel or equipment, or alterations to the Premises made by or through Tenant without balancing the air or installing supplemental HVAC equipment. In any such case, with at least thirty (30) days advance notice to Tenant, Landlord may: (i) elect to balance the air and/or install, operate, maintain and replace such supplemental HVAC equipment during the Term, at Tenant's reasonable expense, as an extra utility or service, or (ii) require that Tenant arrange for the same as Work under Article 9. Notwithstanding the foregoing to the contrary, in lieu of charging separately for additional utilities and services, Landlord may reasonably elect from time to time to expand the amounts of services and utilities available without separate charge, in which case the costs thereof shall be included in Expenses.

C. **Monitoring.** Landlord may install and operate meters, submeters or any other reasonable system for monitoring or estimating any services or utilities used by Tenant in excess of those required to be provided by Landlord under this Article (including a system for Landlord's engineer to reasonably estimate any such excess usage). If such system indicates such excess services or utilities, Tenant shall pay Landlord's charges and fees as described in Paragraph B above for installing and operating such system and any supplementary air-conditioning, ventilation, heat, electrical or other systems or equipment (or adjustments or modifications to the existing Systems and Equipment) which Landlord may make, and Landlord's charges for such excess services or utilities used by Tenant.

D. **Interruptions and Changes.** Landlord shall have no liability for interruptions, variations, shortages, failures, changes in quality, quantity, character or availability of any utilities or services caused by repairs, maintenance, replacements, alterations (including any freon retrofit work), labor controversies, accidents, inability to obtain services, utilities or supplies, governmental or utility company acts or omissions, requirements, guidelines or requests, or other causes beyond Landlord's reasonable control (or under any circumstances with respect to utilities or services not required to be provided by Landlord hereunder). Under no circumstances whatsoever shall any of the foregoing be deemed an eviction or disturbance of Tenant's use and possession of the Premises or any part thereof, serve to abate Rent (except as set forth below), or relieve Tenant from performance of Tenant's obligations under this Lease. However, in any such event after receiving notice, Landlord shall use commercially reasonable efforts to restore such utilities or services required to be provided hereunder to reasonable levels.

E. **Abatement of Rent.** Notwithstanding Paragraph D above to the contrary, if: (a) any services or utilities required to be provided by Landlord hereunder are interrupted or discontinued as a result of Landlord's negligence (and not caused by Tenant or its employees, agents or contractors), and Tenant is unable to and does not use the Premises as a result of such interruption or discontinuance, and (b) Tenant shall have given written notice respecting such interruption or discontinuance to Landlord, and Landlord shall have failed to cure such interruption or discontinuance within five (5) consecutive business days after receiving such notice, Base Rent hereunder shall thereafter be abated until such time as such services or utilities are restored or Tenant begins using the Premises again, whichever shall first occur. Notwithstanding anything to the contrary contained herein, if Tenant, or its contractors, or their respective officers, employees, contractors, invitees or agents, delay Landlord in restoring the utilities or services, Landlord shall have additional time to complete the restoration equal to such delay and Tenant shall pay Landlord all Rent for the period of such delay.

ARTICLE 7

USE, COMPLIANCE WITH LAWS, AND RULES

A. **Use of Premises.** Tenant shall use the Premises only for the permitted use identified in Article 1, and no other purpose whatsoever, subject to the other provisions of this Article and this Lease. Unless expressly permitted in Article 1, Tenant shall not use or permit the Premises to be used as a: (i) medical, dental, psychology, psychiatry or science office or laboratory, (ii) telemarketing "boiler-room," or call center operation, (iii) "executive suite" or "legal suite" multi-party shared offices operation, (iv) travel agency or reservation center, (v) retail real estate brokerage, retail stock brokerage, or retail bank or financial institution, (vi) computerized vehicle sales, loan or "finder" service, (vii) social-welfare office or governmental, quasi-governmental, trade association or union office or activities, (viii) employment, placement, recruiting or clerical support agency, (ix) radio or television studio or broadcasting or recording facility, or (x) school, educational facility or training center (except for training that is minor and ancillary to general office use and does not require parking in excess of code requirements for general office use).

B. **Compliance With Laws.** Tenant shall comply with all Laws relating to the Premises and Tenant's use of the Premises and Property, and shall promptly reimburse Landlord for any expenses Landlord incurs for work or other matters relating to areas outside of the Premises in order to comply with Laws as a result of Tenant's use of the Premises or Property; provided, Tenant shall not be required by this provision to perform structural improvements to the Premises that involve a significant capital expenditure and will result in a benefit to Landlord extending beyond the Term, as it may be extended, unless required by a Law pertaining to: (i) Tenant's particular use of the Premises (as opposed to a Law that applies to office tenants in general), (ii) Work performed by or for Tenant or any Transferee (i.e. excluding any improvements or work that Landlord is required to perform under this Lease), or (iii) other acts or omissions of Tenant or any Transferee.

C. **Rules.** Tenant shall comply with the Rules set forth in Exhibit B attached hereto (the "**Rules**"). Landlord shall have the right, by written notice to Tenant, to reasonably amend such Rules and supplement the same with other reasonable Rules relating to the Property, or the promotion of safety, care, efficiency, cleanliness or good order therein. Although Landlord shall not discriminate against Tenant in the enforcement of the Rules, nothing herein shall be construed to give Tenant or any other Person any claim, demand or cause of action against Landlord arising out of the violation of Laws or the Rules by any other tenant or visitor of the Property, or out of the enforcement, modification or waiver of the Rules by Landlord in any particular instance (but this provision is not a waiver of Tenant's rights to make direct claims against Landlord for Landlord's violations of this Lease or as permitted by any applicable Laws).

D. **Other Requirements.** So long as Tenant receives written notification of the applicable requirements, Tenant shall not use or permit the Premises or Property to be used in a way that will: (i) violate the requirements of Landlord's insurers, the American Insurance Association, or any board of underwriters, (ii) cause a cancellation of Landlord's policies, impair the insurability of the Property, or increase Landlord's premiums (any such increase shall be paid by Tenant upon advance written notice and a reasonable opportunity to cure the same without such payment being deemed permission to continue such activity or a waiver of any other remedies of Landlord), or (iii) violate the requirements of any Lenders, the certificates of occupancy issued for the Premises or the Property, or any other requirements, covenants, conditions or restrictions affecting the Property at any time (provided none of the foregoing shall prohibit normal office use of the Premises in compliance with this Lease).

ARTICLE 8

MAINTENANCE AND REPAIRS

Except for customary cleaning and trash removal provided by Landlord under Article 6, casualty damage to be repaired by Landlord under Article 11 and condemnation under Article 12, Tenant shall keep and maintain (or cause to be kept and maintained) the Premises in good and sanitary condition, working order and repair (ordinary wear and tear excepted), in compliance with all applicable Laws as described in Article 7, and as required under other provisions of this Lease, including the Rules (including any carpet and other flooring material, paint and wall-coverings, doors, ceilings, interior surfaces of walls, any non-Building standard lighting fixtures, and any plumbing and other fixtures, alterations, improvements, systems and equipment within or exclusively serving the Premises, whether installed by Landlord or Tenant). In the event that any repairs, maintenance or replacements are required, Tenant shall promptly notify Landlord and arrange for the same either: (i) through Landlord for such reasonable charges as Landlord may establish from time to time, payable within thirty (30) days after billing, or (ii) by engaging such contractors as Landlord generally uses at the Property for such work, or such other contractors as Landlord shall first reasonably approve in writing to perform such work, all in a first class, workmanlike trimmer and otherwise in compliance with Article 9 respecting "Work". Tenant shall promptly notify Landlord concerning the necessity for any repairs or other work hereunder and upon completion thereof. Tenant shall pay Landlord for any repairs, maintenance and replacements to areas of the Property outside the Premises caused, in whole or in part, as a result of moving any furniture, fixtures, or other property to or from the Premises, or otherwise by Tenant or its employees, agents, contractors, or visitors (notwithstanding anything to the contrary contained in this Lease). Except as provided in the preceding sentence, or for damage covered under Article 11, Landlord shall keep the roof (and roof membrane), structure, exterior walls and windows, Systems and Equipment (including any Building-standard overhead lights), and any parking and other common areas of the Property, in good and sanitary condition, working order and repair (the cost of which shall be included in Expenses to the extent permitted in the definition thereof in Article 30).

ARTICLE 9

ALTERATIONS AND LIENS

A. **Alterations and Approval.** Tenant shall not attach any fixtures, equipment or other items to the Premises, or paint or make any other additions, changes, alterations or improvements to the Premises or the Systems and Equipment serving the Premises (all such work is referred to collectively herein as the "**Work**"), without the prior written consent of Landlord. Landlord shall not unreasonably withhold consent, except that Landlord reserves the right to withhold consent in Landlord's sole discretion for Work affecting the structure, safety, efficiency or security of the Property or Premises, the Systems and Equipment, or the appearance of the Premises from any common or public areas. Landlord may only require removal of Work installed by or for Tenant as provided under Article 23.

B. **Approval Conditions.** Landlord reserves the right to impose reasonable requirements as a condition of such consent or otherwise in connection with the Work, including requirements that Tenant: (i) use parties contained on Landlord's approved list (if reputable and available on commercially reasonable terms) or submit for Landlord's prior written approval the names, addresses and background information concerning all architects, engineers, contractors, subcontractors and suppliers Tenant proposes to use, (ii) submit for Landlord's written approval detailed plans and specifications prepared by licensed and competent architects and engineers, (iii) obtain and post permits, (iv) provide additional insurance, bonds and/or other reasonable security and/or documentation protecting against damages, liability and liens, (v) use union labor (if Landlord uses union labor), (vi) permit Landlord or its representatives to inspect the Work at reasonable times, and (vii) comply with such other reasonable requirements as Landlord may impose concerning the manner and times in which such Work shall be done. If Landlord consents, inspects, supervises, recommends or designates any architects, engineers, contractors, subcontractors or suppliers, the same shall not be deemed a warranty as to the adequacy of the design, workmanship or quality of materials, or compliance of the Work with the plans and specifications or any Laws.

C. **Performance of Work.** All Work shall be performed: (i) in a thoroughly first class, professional and workmanlike manner, (ii) only with materials that are new, high quality, and free of material defects, (iii) only by parties, and strictly in accordance with plans, specifications, and other matters, approved or designated by Landlord in advance in writing, (iv) so as not to adversely affect the Systems and Equipment or the structure of the Property, (v) diligently to completion and so as to avoid any disturbance, disruption or inconvenience to other tenants and the operation of the Property, and (vi) in compliance with all Laws, the Rules and other provisions of this Lease, and such other reasonable requirements as Landlord may impose concerning the manner and times in which such Work shall be done. Landlord may require that any floor, wall or ceiling coring work or penetrations or use of noisy or heavy equipment which may interfere with the conduct of business by other tenants be performed at times other than Building Hours (at Tenant's sole cost). If Tenant fails to perform the Work as required herein or the materials supplied fail to comply herewith or with the specifications approved by Landlord, Landlord shall have the right to temporarily stop the applicable portions of the Work pending Tenant's cure of such failure. Upon completion of any Work hereunder, Tenant shall provide Landlord with "as built" plans, copies of all construction contracts, and proof of payment for all labor and materials.

D. **Liens.** Tenant shall pay all costs for the Work when due. Tenant shall keep the Property, Premises and this Lease free from any mechanic's, materialman's, architect's, engineer's or similar liens or encumbrances, and any claims therefor, or stop or violation notices, in connection with any Work. If contemplated under applicable statutory procedures, Tenant shall post and record appropriate notices of non-responsibility on behalf of Landlord, and shall give Landlord notice at least ten (10) days prior to the commencement of any Work (or such additional time as may be necessary under applicable Laws), to afford Landlord the opportunity of posting and recording any other notices of non-responsibility. Tenant shall remove any such claim, lien or encumbrance, or stop or violation notices of record, by bond or otherwise within thirty (30) days after Landlord provides notice. If Tenant fails to do so, Landlord may pay the amount (or any portion thereof) or take such other action as Landlord deems reasonably necessary to remove such claim, lien or encumbrance, or stop or violation notices, without being responsible for investigating the validity thereof. The amount so paid and costs incurred by Landlord shall be deemed additional Rent under this Lease payable upon demand, without limitation as to other remedies available to Landlord. Nothing contained in this Lease shall authorize Tenant to do any act that subjects Landlord's title to, or any Lender's interest in, the Property or Premises to any such claims, liens or encumbrances, or stop or violation notices, whether claimed pursuant to statute or other Law or express or implied contract.

E. **Landlord's Fees and Costs.** Tenant shall pay Landlord a fee for reviewing, scheduling, monitoring, supervising, and providing access for or in connection with the Work, in an amount equal to five percent (5%) of the total cost of the Work (including costs of plans and permits therefor), and Landlord's reasonable out-of-pocket costs paid to third parties, including any costs for security, utilities, trash removal, temporary barricades, janitorial, engineering, architectural or consulting services, and other matters in connection with the Work, payable within thirty (30) days after billing; provided, such percentage fee under this Paragraph 9.E shall not apply to minor cosmetic Work costing less than $5,000, or to the Work under Exhibit C (which shall be governed by the provisions thereof).

ARTICLE 10

INSURANCE, SUBROGATION, AND WAIVER OF CLAIMS

A. **Required Insurance.** Tenant shall maintain during the Term: (i) commercial general liability ("**CGL**") insurance, with limits of not less than $1,000,000 for personal injury, bodily injury or death, and property damage or destruction (including loss of use thereof), combined single limit, for any one occurrence, and $2,000,000 in the aggregate per policy year, with endorsements: (a) for contractual liability covering Tenant's indemnity obligations under this Lease, and (b) adding Landlord, the management company for the Property, and other parties reasonably designated by Landlord, as additional insureds, and (ii) primary, noncontributory, extended coverage or "all-risk" property damage insurance (including installation floater insurance during any alterations or improvements that Tenant makes to the Premises) covering any alterations or improvements beyond any work or allowance provided by Landlord under this Lease, and Tenant's personal property, business records, fixtures and equipment, for damage or other loss caused by fire or other casualty or cause including, but not limited to, vandalism and malicious mischief, theft, water damage of any type, including sprinkler leakage, bursting or stoppage of pipes, explosion, business interruption (for at least nine (9) months), and other insurable risks in amounts not less than the full insurable replacement value of such property and full insurable value of such other interests of Tenant (subject to reasonable deductible amounts).

Landlord agrees to maintain, as part of Expenses, during the Term, commercial general liability insurance, and property damage insurance on the Property, covering such risks and in such amounts as Landlord shall deem commercially reasonable, and such other insurance as Landlord shall deem commercially reasonable (subject to such deductibles, self-insurance retention amounts, blanket and umbrella policy arrangements or other features as Landlord deems commercially reasonable); provided (i) such commercial general liability insurance shall be at least One Million Dollars ($1,000,000.00) per occurrence and Two Million Dollars ($2,000,000.00) general aggregate, and (ii) such property damage insurance shall cover the Building, and leasehold improvements to the extent provided or paid for by Landlord, and shall be in the amount of full replacement cost, excluding basements, footings and foundations (subject, in each case, to such deductibles, self-insurance retention amounts, blanket and umbrella policy arrangements or other features as Landlord deems commercially reasonable).

B. **Certificates and Other Matters.** Tenant shall provide Landlord with certificates evidencing the coverage required hereunder prior to the Commencement Date, or Tenant's entry to the Premises for delivery of materials or construction of improvements or any other purpose (whichever first occurs). Such certificates shall state that such insurance coverage may not be reduced, canceled or allowed to expire without at least thirty (30) days' prior written notice to Landlord, and shall include, as attachments, originals of the additional insured endorsements to Tenant's CGL policy required above. Tenant shall provide renewal certificates to Landlord at least thirty (30) days prior to expiration of such policies. Except as provided to the contrary herein, any insurance carried by Landlord or Tenant shall be for the sole benefit of the party carrying such insurance. Tenant's insurance policies shall be primary to all policies of Landlord and any other additional insureds (whose policies shall be deemed excess and non-contributory). All insurance required hereunder shall be provided by responsible insurers licensed in the State in which the Property is located, and shall have a general policy holder's rating of at least A- and a financial rating of at least X in the then current edition of Best's Insurance Reports. Landlord disclaims any representation as to whether the foregoing coverages will be adequate to protect Tenant.

C. **Mutual Waiver of Claims and Subrogation.** The parties hereby mutually waive all claims against each other for all losses covered or required to be covered hereunder by their respective insurance policies, and waive all rights of subrogation of their respective insurers; for purposes hereof, any deductible amount shall be treated as though it were recoverable under such policies. SUCH MUTUAL WAIVER OF CLAIMS SHALL APPLY REGARDLESS OF THE NEGLIGENCE OF THE OTHER PARTY OR ITS AFFILIATES, AGENTS OR EMPLOYEES. The parties agree that their respective insurance policies are now, or shall be, endorsed such that said waiver of subrogation shall not affect the right of the insured to recover thereunder.

ARTICLE 11

CASUALTY DAMAGE

A. **Restoration.** Tenant shall promptly notify Landlord of any damage to the Premises by fire or other casualty. If the Premises or any common areas of the Property providing access thereto shall be damaged by fire or other casualty, Landlord shall use available insurance proceeds to restore the same. Such restoration shall be to substantially the same condition as prior to the casualty, except for modifications required by zoning and building codes and other Laws or by any Lender, any other modifications to the common areas deemed desirable by Landlord (provided access to the Premises is not materially impaired), and except that Landlord shall not be required to repair or replace any of Tenant's furniture, furnishings, fixtures, systems or equipment, or any alterations or improvements in excess of any work or allowance provided by Landlord under this Lease. Tenant shall reasonably cooperate in approving any plans for repairs to the Premises hereunder, and in vacating the Premises to the extent reasonably required to avoid any interference or delay in Landlord's repair work. Promptly following completion of Landlord's work, Tenant shall repair and replace Tenant's furniture, furnishings, fixtures, systems or equipment, and any alterations or improvements made by Tenant in excess of those provided by Landlord, subject to and in compliance with the other provisions of this Lease.

B. **Abatement of Rent.** Landlord shall not be liable for any inconvenience or annoyance to Tenant or its visitors, or injury to Tenant's business resulting in any way from such damage or the repair thereof. However, Landlord shall allow Tenant a proportionate abatement of Rent from the date of the casualty through the date that Landlord substantially completes Landlord's repair obligations hereunder (or the date that Landlord would have substantially completed such repairs, but for delays by Tenant or any other occupant of the Premises, or any of their agents, employees, invitees, Transferees and contractors), provided such abatement shall apply only to the extent the Premises are untenantable for the purposes permitted under this Lease and not used by Tenant as a result thereof, based proportionately on the square footage of the Premises so affected and not used.

C. **Termination of Lease by Landlord.** Notwithstanding the foregoing to the contrary, in lieu of performing the restoration work, Landlord may elect to terminate this Lease by notifying Tenant in writing of such termination within ninety (90) days after the date of damage (such termination notice to include a termination date providing at least thirty (30) days for Tenant to vacate the Premises), if the Property shall be materially damaged by the intentional misconduct of Tenant or its Transferees or their respective agents, employees or contractors, or if the Property shall be damaged by fire or other casualty or cause such that: (i) repairs to the Premises and access thereto cannot reasonably be completed within 180 days after the casualty without the payment of overtime or other premiums, (ii) more than twenty-five percent (25%) of the Premises is affected by the damage and fewer than twenty-four (24) months remain in the Term, or any material damage occurs to the Premises during the last twelve (12) months of the Term, (iii) any Lender shall require that the insurance proceeds or any material portion thereof be used to retire the Mortgage debt (or shall terminate the ground lease, as the case may be), or the damage is not fully covered, except for reasonable deductible amounts, by Landlord's insurance policies, or (iv) the cost of the repairs, alterations, restoration or improvement work would exceed thirty-five percent (35%) of the replacement value of the Building (whether or not the Premises are affected by the damage). Tenant agrees that the abatement of Rent provided herein shall be Tenant's sole recourse in the event of such damage, and waives any other rights Tenant may have under any applicable Law to perform repairs or terminate the Lease by reason of damage to the Premises or Property except as set forth in Section D below.

D. **Termination of Lease By Tenant.** Notwithstanding Paragraph C above to the contrary, but subject to the provisions set forth below, Tenant may terminate this Lease if Tenant is unable to use all or a substantial portion of the Premises as a result of fire or other casualty not caused by Tenant or its employees or agents, and any one or more of the following conditions (each referred to herein as a "**Termination Condition**") occurs: (i) Landlord fails to commence the restoration work within sixty (60) days after the damage occurs, or (ii) such work is estimated (which estimate Landlord shall provide within sixty (60) days following the casualty), to take more than one hundred and eighty (180) days to substantially complete after being commenced, or (iii) Landlord fails to substantially complete such work within one hundred and eighty (180) days after commencing the same, or (iv) more than 25% of the Premises is affected by the damage and fewer than twelve (12) months remain in the Term. In order to exercise any of the foregoing four separate termination rights, Tenant shall send Landlord a written notice ("Termination Notice") of termination hereunder within ten (10) days following the occurrence of the applicable Termination Condition. Termination Notice shall set forth and reasonably describe the applicable Termination Condition, and set forth an effective termination date ("**Termination Date**") selected by Tenant that is between sixty (60) days and one hundred twenty (120) days after the date of Termination Notice. Any Termination Notice properly given hereunder shall be effective to terminate this lease as though this Lease had expired on the Termination Date, unless Landlord substantially cures the applicable "Termination Condition" within thirty (30) days after the Termination Notice is delivered to Landlord in accordance with the notice provisions of this Lease. Notwithstanding anything to the contrary contained herein, if Tenant, or its officers, employees, contractors, invitees or agents delay Landlord in performing the repairs, Landlord shall have additional time to complete the work equal to such delay and Tenant shall pay Landlord all Rent for the period of such delay.

ARTICLE 12

CONDEMNATION

If at least twenty-five percent (25%) of the rentable area of the Premises shall be taken by power of eminent domain or condemned by a competent authority or by conveyance in lieu thereof for public or quasi-public use ("**Condemnation**"), including any temporary taking for a period of one year or longer, then either Landlord or Tenant may elect to terminate this Lease effective on the date possession for such use is so taken, by giving notice to the other party no later than ninety (90) days after receiving notice of the filing of the Condemnation. If: (i) less than the foregoing amount of the Premises is taken, but the taking includes or affects a material portion of the Building or Property, or Landlord's economical operation thereof, or (ii) the taking is temporary and will be in effect for less than the foregoing period but more than thirty (30) days, then in either such event, Landlord may elect to terminate this Lease upon at least thirty (30) days' prior notice to Tenant. The parties further agree that: (a) if this Lease is terminated, all Rent shall be apportioned as of the date of such termination or the date of such taking, whichever shall first occur, (b) if the taking is temporary, Rent shall be abated for the period of the taking, and Landlord may seek a condemnation award therefor (and the Term shall not be extended thereby), and (c) if this Lease is not terminated but any part of the Premises is permanently taken, the Rent shall be proportionately abated based on the square footage of the Premises so taken. Landlord shall be entitled to receive the entire award or payment in connection with such Condemnation and Tenant hereby assigns to Landlord any interest therein for the value of Tenant's unexpired leasehold estate or any other claim and waives any right to participate therein, except that Tenant shall have the right to file any separate claim available to Tenant for moving expenses and any taking of Tenant's personal property, provided such award is separately payable to Tenant and does not diminish the award available to Landlord or any Lender.

ARTICLE 13

ASSIGNMENT AND SUBLETTING

A. **Transfers.** Tenant shall not, without the prior written consent of Landlord, which consent shall not be unreasonably withheld as further described below: (i) assign, mortgage, pledge, hypothecate, encumber, or permit any lien to attach to, or otherwise transfer, this Lease or any interest hereunder, by operation of Law or otherwise, (ii) sublet the Premises or any part thereof, or (iii) permit the use of the Premises by any Persons other than Tenant and its employees (all of the foregoing are hereinafter sometimes referred to collectively as "**Transfers**" and any Person to whom any Transfer is made or sought to be made is hereinafter sometimes referred to as a "**Transferee**"). If Tenant shall desire Landlord's consent to any Transfer, Tenant shall notify Landlord in writing, which notice shall include: (a) the proposed effective date (which shall not be less than thirty (30) nor more than 180 days after Tenant's notice), (b) the portion of the Premises to be Transferred (herein called the "**Subject Space**"), (c) the terms of the proposed Transfer and the consideration therefor, the name, address and background information concerning the proposed Transferee, and a true and complete copy of all proposed Transfer documentation, (d) financial statements (balance sheets and income/expense statements for the current and prior year) of the proposed Transferee, in form and detail reasonably satisfactory to Landlord, certified by an officer, partner or owner of the Transferee, and (e) any other reasonable information to enable Landlord to determine the financial responsibility, character, and reputation of the proposed Transferee, nature of such Transferee's business and proposed use of the Subject Space or as Landlord may reasonably request. Any Transfer made without complying with this Article shall, at Landlord's option, be null, void and of no effect, or shall constitute a Default under this Lease. Whether or not Landlord shall grant consent, Tenant shall pay $500 towards Landlord's review and processing expenses, as well as any reasonable legal fees incurred by Landlord (which legal fees shall be subject to Tenant's reasonable approval as to the reasonableness of the number of hours billed and hourly rates used, in relation to the scope, complexity and other matters involved with the Transfer), within thirty (30) days after Landlord's written request, which shall include a detailed legal counsel bill.

B. **Approval.** Landlord will not unreasonably withhold its consent to any proposed Transfer of the Subject Space to the Transferee on the terms specified in Tenant's notice. The parties hereby agree that it shall be reasonable under this Lease and under any applicable Law for Landlord to withhold consent to any proposed Transfer where one or more of the following applies (without limitation as to other reasonable grounds for withholding consent): (i) the Transferee is of a character or reputation or engaged in a business which is not consistent with the quality or nature of the Property or other tenants of the Property, (ii) the Transferee intends to use the Subject Space for purposes which are not permitted under this Lease, would result in more than a reasonable number of occupants, or would require increased services by Landlord, (iii) the Subject Space is not regular in shape with appropriate means of ingress and egress suitable for normal renting purposes in compliance with Laws, (iv) the Transferee is a government, or agency or instrumentality thereof, (v) the Transferee or any affiliate thereof is an occupant of the Property (or of any complex in which the Property is located) or has negotiated to lease space in the Property (or in such complex) from Landlord during the prior four (4) months (unless Landlord is unable to provide office space of the approximate number of square feet of rentable area (plus or minus ten percent) required by such party at the Property (or in such complex), and Tenant can provide such size space within the Premises), (vi) the Transferee does not have, in Landlord's good faith determination, satisfactory references or a reasonable financial condition in relation to the obligations to be assumed in connection with the Transfer, (vii) the Transfer involves a partial or collateral assignment, mortgage or other encumbrance on this Lease, a sub-sublease or assignment of a sublease, (viii) the Transfer would cause Landlord to be in violation of any Laws or any other lease, Mortgage or agreement to which Landlord is a party, or would give a tenant of the Property a right to cancel its lease, or (ix) Tenant has committed and failed to cure a Default. If Tenant disagrees with Landlord's decision to deny approval, Tenant's sole remedy shall be to seek immediate declaratory and injunctive relief, and to recover attorneys' fees and costs as a prevailing party under Article 17.

C. **Transfer Premiums.** If Landlord consents to a Transfer, and as a condition thereto which the parties hereby agree is reasonable, Tenant shall retain fifty percent (50%) of any Transfer Premium, and shall pay Landlord fifty percent (50%) of any Transfer Premium, derived by Tenant from such Transfer. "**Transfer Premium**" shall mean: (i) for a lease assignment, all consideration paid or payable therefor, and (ii) for a sublease, all rent, additional rent or other consideration paid by such Transferee in excess of the Rent payable by Tenant under this Lease (on a monthly basis during the Term, and on a per rentable square foot basis, if less than all of the Premises is transferred). In any such computation, Tenant: (a) may subtract any reasonable direct out-of-pocket costs incurred in connection with such Transfer, such as advertising costs, brokerage commissions, attorneys' fees and leasehold improvements for the Subject Space, and (b) shall include in the "Transfer Premium" any so-called "key money" or other bonus amount paid by Transferee to Tenant, and any payments in excess of fair market value for services rendered by Tenant to Transferee or in excess of fair market value for assets, fixtures, inventory, equipment or furniture transferred by Tenant to Transferee. Tenant shall pay the percentage of the Transfer Premium due Landlord within thirty (30) days after Tenant receives any Transfer Premium.

D. **Recapture.** Notwithstanding anything to the contrary contained in this Article, Landlord shall have the option, by giving notice to Tenant within thirty (30) days after receipt of Tenant's notice of any proposed Transfer, to recapture the Subject Space. Such recapture notice shall cancel and terminate this Lease with respect to the Subject Space, as of the date stated in Tenant's notice as the effective date of the proposed Transfer. If this Lease shall be canceled with respect to less than the entire Premises, the Rent herein shall be prorated on the basis of the number of rentable square feet retained by Tenant in proportion to the number of rentable square feet contained in the Premises, this Lease as so amended shall continue thereafter in full force and effect, and upon request of either party the parties shall execute written confirmation of the same. Tenant shall surrender and vacate the Subject Space, as the case may be, when required hereunder in accordance with Article 23, and any failure to do so shall be subject to Article 24.

E. **Terms of Consent.** If Landlord consents to a Transfer: (i) the terms and conditions of this Lease, including Tenant's liability for the Subject Space, shall in no way be deemed to have been waived or modified, (ii) such consent shall not be deemed consent to any further Transfer by either Tenant or a Transferee, (iii) unless otherwise agreed by Landlord, no Transferee shall succeed to any rights provided in this Lease or any amendment hereto to extend the Term of this Lease, expand the Premises, or lease other space, any such rights being deemed personal to the initial Tenant, (iv) Tenant shall deliver to Landlord, promptly after execution, an original executed copy of all documentation pertaining to the Transfer in form reasonably acceptable to Landlord, and (v) Tenant shall furnish a statement setting forth in detail the computation of any Transfer Premium that Tenant has derived and shall derive from such Transfer. Landlord or its representatives shall have the right at reasonable times to audit the books, records and papers of Tenant and any Transferee relating to any Transfer, and to make copies thereof. If a Transfer Premium is found understated, Tenant shall pay the deficiency within thirty (30) days after billing (and if understated by more than five percent (5%), Tenant shall include with such payment Landlord's reasonable costs of such audit). Any sublease hereunder shall be subordinate and subject to the provisions of this Lease, and if this Lease shall be terminated during the term of any sublease, whether based on Default or mutual agreement, Landlord shall have the right to: (a) deem such sublease as merged and canceled and repossess the Subject Space by any lawful means, or (b) require that such subtenant attorn to and recognize Landlord as its landlord under such sublease with respect to obligations arising thereafter, subject to the terms of Landlord's standard form of attornment documentation. If Tenant shall commit a Default beyond any applicable cure period under this Lease, Landlord is hereby irrevocably authorized to direct any Transferee to make all payments under or in connection with the Transfer directly to Landlord (which Landlord shall apply toward Tenant's obligations under this Lease).

F. **Certain Transfers.** For purposes of this Lease, the term "**Transfer**" shall also include, and all of the foregoing provisions shall apply to: (i) the conversion, merger or consolidation of Tenant into a limited liability company or limited liability partnership, (ii) if Tenant is a partnership or limited liability company, the withdrawal or change, voluntary, involuntary or by operation of law, of a majority of the partners or members, or a transfer of a majority of partnership or membership interests, within a twelve month period, or the dissolution of the partnership or company, and (iii) if Tenant is a closely held corporation (i.e., whose stock is not publicly held and not traded through an exchange or over the counter), the dissolution, merger, consolidation or other reorganization of Tenant, or within a twelve month period: (a) the sale or other transfer of more than an aggregate of 50% of the voting shares of Tenant (other than to immediate family members by reason of gift or death or in connection with any debt or equity financing of Tenant) or (b) the sale, mortgage, hypothecation or pledge of more than an aggregate of 50% of Tenant's net assets.

ARTICLE 14

PERSONAL PROPERTY, RENT AND OTHER TAXES

Tenant shall pay, prior to delinquency, all taxes, charges or other governmental impositions assessed against or levied upon all fixtures, furnishings, personal property, built-in and modular furniture, and systems and equipment located in or exclusively serving the Premises, notwithstanding that certain such items may become Landlord's property under Article 23 upon termination of the Lease. Whenever possible, Tenant shall cause all such items to be assessed and billed separately from the other property of Landlord. In the event any such items shall be assessed and billed with the other property of Landlord, Tenant shall pay Landlord Tenant's share of such taxes, charges or other governmental impositions within thirty (30) days after Landlord delivers a statement and a copy of the assessment or other documentation showing the amount of impositions applicable to Tenant's property. Tenant shall pay any rent tax, sales tax, service tax, transfer tax, value added tax, or any other applicable tax on the Rent, utilities or services herein, the privilege of renting, using or occupying the Premises or collecting Rent therefrom, or otherwise respecting this Lease or any other document entered in connection herewith, but shall not be required to pay any income tax of Landlord.

ARTICLE 15

LANDLORD'S REMEDIES

A. **Default.** The occurrence of any one or more of the following events shall constitute a "Default" by Tenant and shall give rise to Landlord's remedies set forth in Paragraph B below: (i) failure to make when due any payment of Rent, unless such failure is cured within ten (10) days after notice; (ii) failure to observe or perform any term or condition of this Lease other than the payment of Rent (or the other matters expressly described herein), unless such failure is cured within any period of time following notice expressly provided with respect thereto in other Articles hereof, or otherwise within a reasonable time, but in no event more than thirty (30) days following notice (provided, if the nature of Tenant's failure is such that more time is reasonably required in order to cure, Tenant shall not be in Default if Tenant commences to cure promptly within such period, and diligently seeks and keeps Landlord reasonably advised of efforts to cure such failure to completion); (iii) failure to cure immediately upon notice thereof any condition which is hazardous, interferes with another tenant or the operation or leasing of the Property, or may cause the imposition of a fine, penalty or other remedy on Landlord or its agents or affiliates, (iv) violating Article 13 respecting Transfers, or abandoning the Premises ("abandonment" under this Lease shall mean vacating or failing to occupy the Premises for more than thirty {30) days while Tenant is delinquent in paying Rent), or (v) (a) making by Tenant or any guarantor of this Lease ("**Guarantor**") of any general assignment for the benefit of creditors, (b) filing by or for reorganization or arrangement under any Law relating to bankruptcy or insolvency (unless, in the case of a petition filed against Tenant or such Guarantor, the same is dismissed within thirty (30) days), (c) appointment of a trustee or receiver to take possession of substantially all of Tenant's assets located in the Premises or of Tenant's interest in this Lease, where possession is not restored to Tenant within thirty (30) days, (d) attachment, execution or other judicial seizure of substantially all of Tenant's assets located in the Premises or of Tenant's interest in this Lease, (e) Tenant's or any Guarantor's convening of a meeting of its creditors or any class thereof for the purpose of effecting a moratorium upon or composition of its debts, (f) Tenant's or any Guarantor's insolvency or failure, or admission of an inability, to pay debts as they mature, or (g) a violation by Tenant or any affiliate of Tenant under any other lease or agreement with Landlord or any affiliate thereof which is not cured within the time permitted for cure thereunder. If Tenant violates the same term or condition of this Lease on three (3) occasions during any twelve (12) month period, and Landlord has provided notice to Tenant thereof within thirty (30) days following each such violation, then Landlord shall have the right to exercise all remedies for any further violations of the same term or condition during the next twelve (12) months without providing further notice or an opportunity to cure such violation. The notice and cure periods herein are intended to satisfy and run concurrently with any notice and cure periods provided by Law, and shall not be in addition thereto.

B. **Remedies.** If a Default occurs, Landlord shall have the rights and remedies hereinafter set forth to the extent permitted by Law:

(1) Landlord may terminate Tenant's right of possession, lawfully reenter and repossess the Premises by detainer suit, summary proceedings or other lawful means, with or without terminating this Lease (except as required by Law), and recover from Tenant: (i) any unpaid Rent as of the termination date, (ii) the amount by which: (a) any unpaid Rent which would have accrued after the termination date during the balance of the Term exceeds (b) the reasonable rental value of the Premises under a lease substantially similar to this Lease, taking into account, among other things, the condition of the Premises, market conditions, the period of time the Premises may reasonably remain vacant before Landlord is able to re-lease the same to a suitable replacement tenant, and Costs of Reletting (as defined in Paragraph G below) that Landlord may incur in order to enter such replacement lease, and (iii) any other amounts necessary to compensate Landlord for all damages proximately caused by Tenant's failure to perform its obligations under this Lease. For purposes of computing the amount of Rent that would have accrued after the termination date, Tenant's obligations for Taxes and Expenses shall be projected based upon the average rate of increase in such items from the Commencement Date through the termination date. The amounts computed in accordance with the foregoing subclauses (a) and (b) shall be discounted in accordance with accepted financial practice at five percent (5%) per annum to the then present value.

(2) Landlord may terminate Tenant's right of possession, lawfully reenter and repossess the Premises by detainer suit, summary proceedings or other lawful means, with or without terminating this Lease (except as required by Law), and recover from Tenant: (i) any unpaid Rent as of the date possession is terminated, (ii) any unpaid Rent which thereafter accrues during the Term from the date possession is terminated through the time of judgment (or which may have accrued from the time of any earlier judgment obtained by Landlord), less any consideration received from replacement tenants as further described and applied pursuant to Paragraph G, below, and (iii) any other amounts necessary to compensate Landlord for all damages proximately caused by Tenant's failure to perform its obligations under this Lease, including all Costs of Reletting (as defined in Paragraph G below). Tenant shall pay any such amounts to Landlord as the same accrue or after the same have accrued from time to time upon demand. At any time after terminating Tenant's right to possession as provided herein, Landlord may terminate this Lease as provided in clause (1) above by notice to Tenant and may pursue such other remedies as may be available to Landlord under this Lease or Law.

C. **Mitigation of Damages.** If Landlord terminates this Lease or Tenant's right to possession, Landlord shall use reasonable efforts to mitigate Landlord's damages, and Tenant may submit proof of such failure to mitigate as a defense to Landlord's claims for Rent, subject to the following clarifications: (i) Landlord shall not be required to use greater efforts or lower standards than Landlord generally uses to lease other space at the Property, (ii) Landlord will not have failed to mitigate if Landlord or its affiliates lease other portions of the Property or other projects in the vicinity before reletting the Premises, (iii) any failure to mitigate during any period shall reduce the Rent and other amounts to which Landlord is entitled by the reasonable rental value of the Premises during such period taking into account the factors described in clause B(1) above, (iv) in recognition that the value of the Property depends on the rental rates and terms of leases therein, Landlord's rejection of a prospective replacement tenant based on an offer of rentals below Landlord's published rates for new leases of comparable space at the Property at the time in question, or at Landlord's option, below the rates provided in this Lease, or containing terms less favorable than those contained herein, shall not constitute a failure to mitigate, and (v) until Landlord terminates this Lease or Tenant's right to possession, Landlord shall have no obligation to mitigate and may permit the Premises to remain vacant or abandoned; in such case, Tenant may seek to mitigate damages by attempting to sublease the Premises or assign this Lease pursuant to Article 13.

D. **Reletting.** If this Lease or Tenant's right to possession is terminated, or Tenant abandons the Premises (as defined in Article 15.A (iv)), Landlord may: (i) lawfully enter and secure the Premises, change the locks, install barricades, remove any improvements, fixtures or other property of Tenant therein, perform any decorating, remodeling, repairs, alterations, improvements or additions and take such other actions as Landlord shall determine in Landlord's sole but reasonable discretion to prevent damage or deterioration to the Premises or prepare the same for reletting, and (ii) relet all or any portion of the Premises (separately or as part of a larger space), for any rent, use or period of time (which may extend beyond the Term hereof), and upon any other terms as Landlord shall determine in Landlord's sole but reasonable discretion, directly or as Tenant's agent (if permitted or required by applicable Law). The consideration received from such reletting shall be applied pursuant to the terms of Paragraph G hereof, and if such consideration, as so applied, is not sufficient to cover all Rent and damages to which Landlord may be entitled hereunder, Tenant shall pay any deficiency to Landlord as the same accrues or after the same has accrued from time to time upon demand, subject to Paragraph C and the other provisions hereof.

E. **Late Charges, Interest, and Returned Checks.** Tenant shall pay, as additional Rent, a service charge of Two Hundred Fifty Dollars ($250.00) or five percent (5%) of the delinquent amount, whichever is greater, if any portion of Rent is not received within ten (10) days after due; provided however, Tenant shall not be required to pay such amount the first time in any twelve (12) month period that Tenant pays rent late. Any Rent not paid within thirty (30) days after clue shall also accrue interest from the due date at the Default Rate until paid. Such service charges and interest payments shall not be consent by Landlord to late payments, nor a waiver of Landlord's right to insist upon timely payments at any time, nor a waiver of any remedies to which Landlord is entitled as a result of the late payment of Rent. If Landlord receives two (2) or more checks that are returned by Tenant's bank for insufficient funds, Landlord may require that all checks thereafter be bank certified or cashier's checks (without limiting Landlord's other remedies). All bank service charges resulting from any returned checks shall be borne by Tenant.

F. **Other Remedies.** If Tenant fails to perform any obligation within the time required under this Lease (including any applicable notice and cure period hereunder except in emergencies), Landlord shall have the right (but not the duty), to perform such obligation on behalf and for the account of Tenant. In such event, Tenant shall reimburse Landlord upon demand, as additional Rent, for all expenses incurred by Landlord in performing such obligation together with an amount equal to ten percent (10%) thereof for Landlord's overhead, and interest thereon at the Default Rate from the date such expenses were incurred. Landlord's performance of Tenant's obligations hereunder shall not be deemed a waiver or release of Tenant therefrom. Landlord's remedies set forth above are distinct, separate and cumulative with and in addition to any other right or remedy allowed under any Law or other provision of this Lease. Without limiting the generality of the foregoing, Landlord shall at all times have the right without prior demand or notice except as required by applicable Law to: (i) seek any declaratory, injunctive or other equitable relief, and specifically enforce this Lease or restrain or enjoin a violation of any provision hereof, (ii) sue for and collect any unpaid Rent which has accrued, and (iii) invoke any statutory possessory remedies available at Law.

G. **Other Matters.** No re-entry or repossession, repairs, changes, alterations and additions, reletting, or any other action or omission by Landlord shall be construed as an election by Landlord to terminate this Lease or Tenant's right to possession, nor shall the same operate to release Tenant in whole or in part from any of Tenant's obligations hereunder, unless express notice of such intention is sent by Landlord to Tenant (and if applicable Law permits, and Landlord shall not have expressly terminated this Lease in writing, then any termination shall be deemed a termination of Tenant's right of possession only). Landlord may bring suits for amounts owed by Tenant hereunder or any portions thereof, as the same accrue or after the same have accrued, and no suit or recovery of any portion due hereunder shall be deemed a waiver of Landlord's right to collect all amounts to which Landlord is entitled hereunder, nor shall the same serve as any defense to any subsequent suit brought for any amount not theretofore reduced to judgment. Landlord may pursue one or more remedies against Tenant and need not make an election of remedies until findings of fact are made by a court of competent jurisdiction. All rent and other consideration paid by any replacement tenants shall be applied at Landlord's option: (i) first, to the Costs of Reletting, (ii) second, to the payment of all costs of enforcing this Lease against Tenant or any Guarantor, (iii) third, to the payment of all interest and service charges accruing hereunder, (iv) fourth, to the payment of Rent theretofore accrued, and (v) with the residue, if ally, to be held by Landlord and applied to the payment of Rent and other obligations of Tenant as the same become due (and with any remaining residue to be retained by Landlord). "Costs of Reletting" shall include all costs and expenses incurred by Landlord for any repairs or other matters described in Paragraph D above, brokerage commissions, advertising costs, reasonable attorneys' fees, and any other reasonable costs and incentives incurred in order to enter into leases with replacement tenants. Landlord shall be under no obligation to observe or perform any provision of this Lease on its part to be observed or performed which accrues while Tenant is in Default hereunder. The times set forth herein for the curing of Defaults by Tenant are of the essence of this Lease. Tenant agrees that the notice and cure rights set forth herein contain the entire agreement of the parties respecting such matters, and hereby waives any right otherwise available under any Law to redeem or reinstate this Lease or Tenant's right to possession after this Lease or Tenant's right to possession is properly terminated hereunder.

ARTICLE 16

SECURITY DEPOSIT

Tenant shall deposit with Landlord the amount set forth in Article 1 ("**Security Deposit**"), upon Tenant's execution and submission of this Lease. The Security Deposit shall serve as security for the prompt, full and faithful performance by Tenant of the provisions of this Lease. If Tenant commits a Default, or owes any amounts to Landlord upon the expiration or earlier termination of this Lease (including estimated amounts under Article 3, which shall remain subject to reconciliation against actual amounts as further provided therein), Landlord may use or apply the whole or any part of the Security Deposit for the payment of Tenant's obligations hereunder. The use or application of the Security Deposit or any portion thereof shall not prevent Landlord from exercising any other right or remedy provided hereunder or under any Law and shall not be construed as liquidated damages. In the event the Security Deposit is reduced by such use or application, Tenant shall deposit with Landlord within ten (10) days after notice, an amount sufficient to restore the full amount of the Security Deposit. Landlord shall not be required to keep the Security Deposit separate from Landlord's general funds or pay interest on the Security Deposit. Any remaining portion of the Security Deposit not used or applied hereunder shall be returned to Tenant (or, at Landlord's option, to the last assignee of Tenant's interest in this Lease) within thirty (30) days after Tenant (or such assignee) has vacated the Premises in accordance with Article 23 and this obligation shall survive termination of the Lease. If the Premises shall be expanded at any time, or if the Term shall be extended at an increased rate of Rent, the Security Deposit shall thereupon be proportionately increased. Tenant shall not assign, pledge or otherwise transfer any interest in the Security Deposit except as part of an assignment of this Lease approved by Landlord under Article 13, and any attempt to do so shall be null and void. Landlord shall provide Tenant with written notice of the transfer of the Security Deposit to any other party.

ARTICLE 17

ATTORNEYS' FEES AND VENUE

In the event of any litigation or arbitration between the parties relating to this Lease, the Premises or Property (including pretrial, trial, appellate, administrative, bankruptcy or insolvency proceedings), the prevailing party shall be entitled to recover its reasonable attorneys' fees and costs as part of the judgment, award or settlement therein. If either party or any of its officers, directors, trustees, beneficiaries, partners, agents, affiliates or employees shall be made a party to any litigation or arbitration commenced by or against the other party and is not at fault, the other party shall pay all reasonable attorneys' fees and costs incurred by such parties in connection with such litigation. Any action or proceeding brought by either party against the other for any matter arising out of or in any way relating to this Lease, the Premises or the Property in the court having jurisdiction located closest to the Property.

ARTICLE 18

SUBORDINATION, ATTORNMENT AND LENDER PROTECTION

This Lease is subject and subordinate to all Mortgages now or hereafter placed upon the Property, and all other encumbrances and matters of public record applicable to the Property. Whether before or after any foreclosure or power of sale proceedings are initiated or completed by any Lender or a deed in lieu is granted (or any ground lease is terminated), Tenant agrees, upon written request of any such Lender or any purchaser at such sale, to attorn and pay Rent to such party, and recognize such party as Landlord (provided such Lender or purchaser shall agree not to disturb Tenant's occupancy so long as Tenant does not Default beyond any applicable cure period hereunder, on a form of agreement customarily used by, or otherwise reasonably acceptable to, such party). However, in the event of attornment, no Lender shall be: (i) liable for any act or omission of Landlord, or subject to any offsets or defenses which Tenant might have against Landlord (arising prior to such Lender becoming Landlord under such attornment), (ii) liable for any security deposit or bound by any prepaid Rent not actually received by such Lender, or (iii) bound by any modification of this Lease not consented to by such Lender. Any Lender may elect to make this Lease prior to the lien of its Mortgage by written notice to Tenant, and if the Lender of any prior Mortgage shall require, this Lease shall be prior to any subordinate Mortgage; such elections shall be effective upon written notice to Tenant, or shall be effective as of such earlier or later date set forth in such notice. Tenant agrees to give any Lender by certified mail, return receipt requested, a copy of any notice of default served by Tenant upon Landlord, provided that prior to such notice Tenant has been notified in writing (by way of service on Tenant of a copy of an assignment of leases, or otherwise) of the address of such Lender. Tenant further agrees that if Landlord shall have failed to cure such default within the time permitted Landlord for cure under this Lease, any such Lender whose address has been provided to Tenant shall have an additional period of thirty (30) days in which to cure (or such additional time as may be required due to causes beyond such Lender's reasonable control, including time to obtain possession of the Property by appointment of receiver, power of sale or judicial action). Except as expressly provided to the contrary herein, the provisions of this Article shall be self-operative; however Tenant shall execute and deliver, within ten (10) business days after request therefor, such documentation as Landlord or any Lender may request from time to time, whether prior to or after a foreclosure or power of sale proceeding is initiated or completed, a deed in lieu is delivered, or a ground lease is terminated, in order to further confirm or effectuate the matters set forth in this Article in recordable form.

ARTICLE 19

ESTOPPEL CERTIFICATES

Tenant shall from time to time, within ten (10) business days after written request from Landlord, execute, acknowledge and deliver a statement certifying (subject to such exceptions or claims as Tenant may properly make and describe therein) the following: (i) this Lease is unmodified, and is valid and in full force and effect, (ii) the Commencement Date, Expiration Date, and rentable area of the Premises, (iii) no Rent has been paid more than one month in advance, and the annual and monthly Base Rent, Tenant's Share of Taxes and Expenses (and the Base Years) and current payments thereof, and Security Deposit, (iv) Tenant is in possession of the Premises, and paying Rent on a current basis with no offsets, defenses or claims, (v) there are no uncured defaults on the part of Landlord or Tenant, and no events or conditions which, with the giving of notice or lapse of time or both, would constitute a default by Tenant or Landlord, (vi) Tenant has no options to purchase the Property or terminate this Lease, nor any expansion, reduction or extension rights, (vii) Landlord has satisfied any obligations to perform or reimburse Tenant for any leasehold improvements, and Tenant is not entitled to any Rent abatement period after the date of the certificate, and (viii) certifying such other matters, and including such current financial statements, as Landlord may reasonably request, or as may be requested by Landlord's current or prospective Lenders, insurance carriers, auditors, and prospective purchasers (and including a comparable certification statement from any subtenant respecting its sublease). Any such statement may be relied upon by any such parties. If Tenant shall fail to execute and return such statement within the time required herein, and shall fail to do so within five (5) additional days following a second written request, Tenant shall be in Default, and shall be deemed to have agreed with the matters set forth therein (without limiting Landlord's other remedies).

ARTICLE 20

RIGHTS RESERVED BY LANDLORD

Except to the extent expressly limited herein, including the limitations requiring that Landlord's actions do not prevent Tenant from reasonably accessing and using the Premises for the use permitted under this Lease further described at the end of Paragraphs B and C below, Landlord reserves normal ownership rights respecting the Property (which rights may be exercised without subjecting Landlord to claims for constructive eviction, abatement of Rent, damages or other claims of any kind), including more particularly, but without limitation, the following rights:

A. **General Matters.** To: (i) change the name or street address of the Property or designation of the Premises (provided Landlord reimburses Tenant for reasonable costs for reasonable supplies of Tenant's stationery and business cards that can no longer be used as a result of such change upon reasonable evidence thereof), (ii) install and maintain signs on and about the Property, and grant any other Person the right to do so, (iii) retain at all times, and use in appropriate instances, keys to all doors within and into the Premises, (iv) grant to any Person the right to conduct any business or render any service at the Property, whether or not the same are similar to the use permitted Tenant by this Lease, (v) have access for Landlord and other tenants of the Property to any snail chutes located on the Premises according to the rules of the United States Postal Set-vice (and to install or remove such chutes), and (vi) in case of fire, invasion, insurrection, riot, civil disorder, public excitement or other dangerous condition, or threat thereof: (a) limit or prevent access to the Property, (b) shut down elevator service, (e) activate elevator emergency controls, and (d) otherwise take such action or preventative measures deemed necessary by Landlord for the safety of tenants of the Property or the protection of the Property and other property located thereon or therein (but this provision shall impose no duty on Landlord to take such actions, and no liability for actions taken in good faith).

B. **Access To Premises.** Subject to the following provisions, to enter the Premises in order to: (i) inspect, (ii) supply cleaning service or other services to be provided Tenant hereunder, (iii) show the Premises to current and prospective Lenders, insurers, purchasers, governmental authorities, and their representatives, and during the last nine (9) months of Tenant's occupancy, show the Premises to prospective tenants and leasing brokers, and (iv) decorate, remodel or alter the Premises if Tenant abandons the Premises [as defined in Article 15.A(iv)] at any time or vacates the same during the last 120 days of the Term (without thereby terminating this Lease), and (v) perform any work or take any other actions under Paragraph C below, or exercise other rights of Landlord under this Lease or applicable Laws. If Tenant requests that any such access occur before or after Building Hours, and Landlord schedules the work accordingly, Tenant shall pay all overtime and other additional costs in connection therewith. In connection with any such access to the Premises, except in emergencies or for cleaning or other routine services to be provided to Tenant under this Lease, Landlord shall: (a) provide reasonable advance written notice to Tenant's on-site manager or other appropriate person, and (b) take reasonable steps to minimize any disruption to Tenant's business.

C. **Changes To The Property.** Subject to the last sentence of this Paragraph, to: (i) paint and decorate, (ii) perform repairs or maintenance, and (iii) make replacements, restorations, renovations, alterations, additions and improvements, structural or otherwise (including freon retrofit work), in and to the Property or any part thereof, including any adjacent building, structure, facility, land, street or alley, or change the uses thereof (other than Tenant's permitted use under this Lease), including changes, reductions or additions of corridors, entrances, doors, lobbies, parking facilities and other areas, structural support columns and shear walls, elevators, stairs, escalators, mezzanines, solar tint windows or film, kiosks, planters, sculptures, displays, and other amenities and features therein, and changes relating to the connection with or entrance into or use of the Property or any other adjoining or adjacent building or buildings, now existing or hereafter constructed. In connection with such matters, Landlord may erect scaffolding, barricades and other structures, open ceilings, close entry ways, restrooms, elevators, stairways, corridors, parking and other areas and facilities, and take such other actions as Landlord deems appropriate. However, Landlord shall: (a) maintain reasonable access to the Premises, and (b) in connection with entering the Premises, comply with the last sentence of Paragraph B above.

ARTICLE 21

LANDLORD'S RIGHT TO CURE

If Landlord shall fail to perform any obligation under this Lease required to be performed by Landlord, Landlord shall not be deemed to be in default hereunder nor subject to any claims for damages of any kind, unless such failure shall have continued for a period of thirty (30) days (in non-emergency situations) or ten (10) days (in emergency situations), as applicable, after notice thereof by Tenant (provided, if the nature of Landlord's failure is such that more time is reasonably required in order to cure, Landlord shall not be in default if Landlord commences to cure within such applicable period and thereafter diligently seeks to cure such failure to completion). If Landlord shall default and fail to cure as provided herein, Tenant shall have such rights and remedies as may be available to Tenant under applicable Laws, subject to the other provisions of this Lease; provided, Tenant shall have no right of self-help to perform repairs or any other obligation of Landlord, and shall have no right to withhold, set-off, or abate Rent, or terminate this Lease, except as may be expressly provided in this Lease (including Tenant's rights to abate Rent and terminate this Lease under Articles 6.E, 11.B, 11.D and 12.

ARTICLE 22

INDEMNIFICATION

Subject to the provisions of Articles 10 and 11, Tenant shall defend, indemnify and hold Landlord harmless from and against any and all claims, demands, losses, penalties, fines, fees, charges, assessments, liabilities, damages, judgments, orders, decrees, actions, administrative or other proceedings, costs and expenses (including reasonable attorneys' and expert witness fees, and court costs), arising or alleged to arise from: (i) any violation or breach of this Lease or applicable Law by any Tenant Parties (as defined below), (ii) damage, loss or injury to persons, property or business directly or indirectly arising out of any Tenant Party's use of the Premises or Property, or out of any other act or omission of any Tenant Parties, and (iii) any other damage, loss or injury to persons, property or business occurring in, about or from the Premises, except to the extent that such other damage, loss or injury to persons, property or business is caused by the negligence or intentional misconduct of Landlord. For purposes of this provision, "Tenant Parties" shall mean Tenant, any other occupant of the Premises and any of their respective agents, employees, invitees, Transferees and contractors. Subject to Articles 10 and 11 and the other provisions of this Lease, and excluding matters covered by Tenant's foregoing indemnity obligations, Landlord shall defend, indemnify and hold harmless Tenant from and against claims, demands, losses, penalties, fines, fees, charges, assessments, liabilities, damages, judgments, orders, decrees, actions, administrative or other proceedings, costs and expenses (including reasonable attorneys' and expert witness fees, and court costs) arising in the common areas of the Property from or relating to any loss of life, damage or injury to persons, property or business to the extent caused by any violation or breach of this Lease or any other negligence, intentional misconduct, or any other act or omission of Landlord or Landlord's agents or employees.

ARTICLE 23

RETURN OF POSSESSION

A. **General Provisions.** At the expiration or earlier termination of this Lease or Tenant's right of possession, Tenant shall vacate and surrender possession of the entire Premises in the condition required under Article 8 and the Rules, ordinary wear and tear, casualty and condemnation excepted, shall surrender all keys and key cards, and any parking transmitters, stickers or cards to Landlord, and shall remove all personal property and office trade fixtures that may be readily removed without damage to the Premises or Property, subject to the following provisions.

B. **Landlord's Property.** All improvements, fixtures and other hems, including ceiling light fixtures, HVAC equipment, plumbing fixtures, hot water heaters, fire suppression and sprinkler systems, Lines under Article 28, built-in shelves and cabinets, interior partitioning, interior stairs, wall coverings, carpeting and other flooring, blinds, drapes and window treatments, in or serving the Premises, whether installed by Tenant or Landlord, and any other items installed or provided by Landlord or at Landlord's expense (including any modular furniture provided or paid for by Landlord), shall be Landlord's property and shall remain upon the Premises, all without compensation, allowance or credit to Tenant, unless Landlord elects otherwise as provided in Paragraph C below.

C. **Removal of Items by Tenant.** Notwithstanding the foregoing to the contrary, if prior to expiration or earlier termination of this Lease Landlord so directs by notice, Tenant shall promptly remove such items described in Paragraph B above as are designated in such notice and restore the Premises to the condition prior to the installation of such items in a good and workmanlike manner, subject to normal wear and tear; subject to the following provisions: (i) Landlord shall not require removal of any such items that already existed in the Premises before this Lease and Tenant's occupancy of the Premises, and (ii) Landlord may only require that Tenant remove any other improvements installed by or for Tenant if Landlord expressly reserves such right in writing in connection with Landlord's approval of the plans for such improvements. Notwithstanding anything contained herein to the contrary, Tenant shall remove all Lines installed by or for Tenant.

D. **Tenant's Failure to Remove Items.** If Tenant shall fail to remove any items from the Premises as required hereunder, Landlord may do so and Tenant shall pay Landlord's reasonable charges therefor upon demand. All such property removed from the Premises by Landlord pursuant to any provisions of this Lease or any Law may be handled or stored by Landlord at Tenant's expense, and Landlord shall in no event be responsible for the value, preservation or safekeeping thereof. All such property not removed from the Premises or retaken from storage by Tenant within thirty (30) days after expiration or earlier termination of this Lease or Tenant's right to possession shall, at Landlord's option, be conclusively deemed to have been conveyed by Tenant to Landlord as if by bill of sale without payment by Landlord. Unless prohibited by applicable Law, Landlord shall have a lien against such property for the costs incurred in removing and storing the same.

ARTICLE 24

HOLDING OVER

Unless Landlord expressly agrees otherwise in writing, Tenant shall pay Landlord 150% for the first thirty (30) days, and thereafter 200%, of the amount of Rent then applicable prorated on a per diem basis for each day that Tenant shall fail to vacate or surrender possession of the Premises or any part thereof after expiration or earlier termination of this Lease as required under Article 23, together with all damages (direct and consequential) sustained by Landlord on account thereof. Tenant shall pay such amount of Rent monthly in advance (subject to refund of any partial month occupancy prorated on a per diem basis), and such other amounts on demand. The foregoing provisions, and Landlord's acceptance of any such amounts, shall not serve as permission for Tenant to hold-over, nor serve to extend the Term (although Tenant shall remain a tenant-at-sufferance bound to comply with all other provisions of this Lease until Tenant properly vacates the Premises, including Article 23), and Landlord shall have such other remedies to recover possession of the Premises as may be available to Landlord under applicable Laws. Notwithstanding the foregoing, before or after termination, Landlord may provide notice advising Tenant of the Rent and other terms on which Tenant may hold over on a month-to-month basis; if Tenant holds over more than one full calendar month after delivery of such notice, Tenant shall thereafter be a month-to-month tenant on the terms of this Lease prior to termination as modified by Landlord's notice.

ARTICLE 25

NOTICES

Except as expressly provided to the contrary in this Lease, every notice or other communication to be given by either party to the other with respect hereto or to the Premises or Property, shall be in writing and shall not be effective unless served personally or by national air courier service, or United States certified mail, return receipt requested, postage prepaid, to the parties at the addresses set forth in Article 1, or such other address or addresses as Tenant or Landlord may from time to time designate by notice given as above provided. Every notice or other communication hereunder shall be deemed to have been given as of the third business day following the date of such mailing (or as of any earlier date evidenced by a receipt from such national air courier service or the United States Postal Service) or immediately if personally delivered. Notices not sent in accordance with the foregoing shall be effective when received by the parties at the addresses required herein.

ARTICLE 26

REAL ESTATE BROKERS

Landlord and Tenant hereby mutually: (i) represent and warrant to each other that they have dealt only with the broker, if any, designated in Article 1 (whose commission, if any, shall be paid pursuant to separate written agreement by the party signing such agreement) as broker, agent or finder in connection with this Lease, and (ii) agree to defend, indemnify and hold each other harmless from and against any and all claims, demands, losses, liabilities, damages, judgments, costs and expenses (including reasonable attorneys' and expert witness fees, and court costs), arising or alleged to arise from any breach of their respective foregoing representation and warranty under this Article.

ARTICLE 27

NO WAIVER

No provision of this Lease will be deemed waived by either party unless expressly waived in writing and signed by the waiving party. No waiver shall be implied by delay or any other act or omission of either party. No waiver by either party of any provision of this Lease shall be deemed a waiver of such provision with respect to any subsequent matter relating to such provision, and Landlord's consent or approval respecting any action by Tenant shall not constitute a waiver of the requirement for obtaining Landlord's consent or approval respecting any subsequent action. Acceptance of Rent by Landlord directly or through any agent or lock-box arrangement shall not constitute a waiver of any breach by Tenant of any term or provision of this Lease (and Landlord reserves the right to return or refund any untimely payments if necessary to preserve Landlord's remedies). No acceptance of a lesser amount of Rent shall be deemed a waiver of Landlord's right to receive the full amount due, nor shall any endorsement or statement on any check or payment or any letter accompanying such check or-payment be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the full amount due. The acceptance of Rent or of the performance of any other term or provision from, or providing directory listings or services for, any Person other than Tenant shall not constitute a waiver of Landlord's right to approve any Transfer. No delivery to, or acceptance by, Landlord or its agents or employees of keys, nor any other act or omission of Tenant or Landlord or their agents or employees, shall be deemed a surrender, or acceptance of a surrender, of the Premises or a termination of this Lease, unless stated expressly in writing by Landlord.

ARTICLE 28

TELECOMMUNICATION LINES

A. **Telecommunication Lines.** Subject to Landlord's continuing right of supervision and reasonable approval, and the other provisions hereof, Tenant may: (i) install telecommunication lines ("**Lines**") connecting the Premises to any Property terminal block already serving or available to serve the Premises, or (ii) use such Lines as may currently exist and already connect the Premises to such terminal block. Such terminal block may comprise, or be connected through riser or other Lines with, a main distribution frame ("**MDF**") for the Property. Landlord disclaims any representations, warranties or understandings concerning the capacity, design or suitability of any such terminal or MDF, Property riser Lines, or related equipment. If there is, or will be, more than one tenant in the Property, at any time, Landlord may allocate, and periodically reallocate, connections to the terminal blocks and MDF based on the proportion of rentable area each tenant leases, or the type of business operations or requirements of such tenants, in Landlord's reasonable discretion. Landlord may arrange for an independent contractor to review Tenant's requests for approval hereunder, monitor or supervise Tenant's installation, connection and disconnection of Lines, and provide other such services, or Landlord may provide the same, and Tenant shall pay Landlord's reasonable charges therefor as provided in Article 9.

B. **Installation.** Tenant may install and use Tenant's Lines and make connections and disconnections at the terminal blocks as described above, provided Tenant shall: (i) obtain Landlord's prior written reasonable approval of all aspects thereof, (ii) use an experienced and qualified contractor reasonably designated or approved in writing in advance by Landlord (whom Landlord may require to enter an access and indemnity agreement on Landlord's then-standard form of agreement therefor), (iii) comply with such reasonable inside wire standards as Landlord may adopt from time to time, and all other provisions of this Lease, including Article 9 respecting Work, and the Rules respecting access to the wire closets, (iv) not install Lines in the same sleeve, chaseway or other enclosure in close proximity with electrical wire, and not install PVC-coated Lines under any circumstances, (v) thoroughly test any riser Lines to which Tenant intends to connect any Lines to ensure that such riser Lines are available and are not then connected to or used for telephone, data transmission or any other purpose by any other party (whether or not Landlord has previously approved such connections), and not connect to any such unavailable or connected riser Lines, and (vi) not connect any equipment to the Lines which may create an electromagnetic field exceeding the normal insulation ratings of ordinary twisted pair riser cable or cause radiation higher than normal background radiation, unless the Lines therefor (including riser Lines) are appropriately insulated to prevent such excessive electromagnetic fields or radiation (and such insulation shall not be provided by the use of additional unused twisted pair Lines). As a condition to permitting installation of new Lines, Landlord may require that Tenant remove any existing Lines located in or serving the Premises previously installed or utilized by Tenant.

C. **Limitation of Liability.** Except to the extent due to Landlord's intentional misconduct or grossly negligent acts, Landlord shall have no liability for damages arising, and Landlord does not warrant that the Tenant's use of the Lines will be free, from the following (collectively called "**Line Problems**"): (i) any eavesdropping, wire-tapping or theft of long distance access codes by unauthorized parties, (ii) any failure of the Lines to satisfy Tenant's requirements, or (iii) any capacitance, attenuation, cross-talk or other problems with the Lines, any misdesignation of the Lines in the MDF room or wire closets, or any shortages, failures, variations, interruptions, disconnections, loss or damage caused by or in connection with the installation, maintenance, replacement, use or removal of any other Lines or equipment at the Property by or for other tenants at the Property, by any failure of the environmental conditions at or the power supply for the Property to conform to any requirements of the Lines or any other problems associated with any Lines or by any other cause. Under no circumstances shall any Line Problems be deemed an actual or constructive eviction of Tenant, render Landlord liable to Tenant for abatement of any Rent or other charges under the Lease, or relieve Tenant from performance of Tenant's obligations under the Lease. Landlord in no event shall be liable for damages by reason of loss of profits, business interruption or other consequential damage arising from any Line Problems.

ARTICLE 29

HAZARDOUS MATERIALS

A. **Hazardous Materials Generally Prohibited.** Landlord represents that, to the actual knowledge of the Landlord's Asset Manager for the Property, as of the date of this Lease, there are no Hazardous Materials on or affecting the Premises or common areas of the Property serving the Premises in violation of any environmental Laws. Except as provided herein, Tenant and Landlord shall not transport, use, store, maintain, generate, manufacture, handle, dispose, release, discharge, spill or leak any "Hazardous Material" (as defined in Article 30), or permit their respective employees, agents, contractors, or other occupants of the Premises to engage in such activities on or about the Property. However, the foregoing provisions shall not prohibit the transportation to and from, and use, storage, maintenance and handling within, the Property by Landlord, or the Premises by Tenant, of substances customarily and lawfully used by Landlord in operating the Property, or by Tenant in the business which Tenant is permitted to conduct in the Premises under this Lease, as an incidental and minor part of such business, and provided: (i) such substances shall be properly labeled, contained, used and stored only in small quantities reasonably necessary for such permitted use and the ordinary course of such business operations, in accordance with applicable Laws, prevailing standards, and the manufacturers' instructions therefor, and as Landlord shall reasonably require (but no warning notices or symbols shall be placed, or required to be placed, on or near any door to or within the Premises or Property), (ii) such substances shall not be disposed of, released, discharged or permitted to spill or leak in or about the Premises or the Property (and under no circumstances shall any Hazardous Material be disposed of within the drains or plumbing facilities in or serving the Premises or Property or in any other public or private drain or sewer, regardless of quantity or concentration), (iii) if any applicable Law or Landlord's trash removal contractor requires that any such substances be disposed of from the Premises separately from ordinary trash, Tenant shall make arrangements at Tenant's expense for such disposal in approved containers directly with a qualified and licensed disposal company at a lawful disposal site, (iv) any remaining such substances shall be completely, properly and lawfully removed from the Property upon expiration or earlier termination of this Lease, and (v) for purposes of removal and disposal of any such substances for which Tenant is responsible hereunder, Tenant shall be named as the owner, operator and generator, shall obtain a waste generator identification number, and shall execute all permit applications, manifests, waste characterization documents and any other required forms.

B. **Clean Up Responsibilities.** If any Hazardous Material is released, discharged or disposed of, or permitted to spill or leak, by Tenant or its Transferees or their respective agents, employees or contractors, in violation of the foregoing provisions of Article 29.A, Tenant shall immediately and properly clean up and remove the Hazardous Materials from the Premises, Property and any other affected property and clean or replace any affected personal property (whether or not owned by Landlord) in compliance with applicable Laws and then prevailing industry practices and standards, at Tenant's expense (without limiting Landlord's other remedies therefor). Such clean up and removal work ("**Tenant Remedial Work**") shall be considered Work under Article 9 and subject to the provisions thereof, including Landlord's prior written approval (except in emergencies), and any testing, investigation, feasibility and impact studies, and the preparation and implementation of any remedial action plan required by any court or regulatory authority having jurisdiction or reasonably required by Landlord. In connection therewith, Tenant shall provide documentation evidencing that all Tenant Remedial Work or other action required hereunder has been properly and lawfully completed (including a certificate addressed to Landlord from an environmental consultant reasonably acceptable to Landlord, in such detail and form as Landlord may reasonably require). If any Hazardous Material is released, discharged, disposed of, or permitted to spill or leak on or about the Property and is not caused by Tenant or its Transferees or their respective agents, employees or contractors, such release, discharge, disposal, spill or leak shall be deemed casualty damage under Article 11 to the extent that the Premises and Tenant's use thereof is affected thereby; in such case, Landlord and Tenant shall have the obligations and rights respecting such casualty damage provided under this Lease (including Landlord's obligations to restore under Article 11.A by lawfully abating the Hazardous Material, and Tenant's rights to abate Rent under Article 11.B).

C. **Miscellaneous.** Tenant shall immediately upon written request provide Landlord with copies of all material safety data sheets, permits, approvals, memos, reports, correspondence, complaints, demands, claims, subpoenas, requests, remediation and cleanup plans, and all papers of any kind filed with or by any regulatory authority and any other books, records or items pertaining to Hazardous Materials that are subject to this Article (collectively referred to herein as "**Tenant's Hazardous Materials Records**"). Tenant shall pay, prior to delinquency, any and all fees, taxes (including excise taxes), penalties and fines arising from or based on Tenant's activities involving Hazardous Material on or about the Premises or Property, and shall not allow such obligations to become a lien or charge against the Property or Landlord. If Tenant violates any provision of this Article with respect to any Hazardous Materials, Landlord may: (i) require that Tenant immediately remove all Hazardous Materials from the Premises and discontinue using, storing and handling Hazardous Materials in the Premises, and/or (ii) pursue such other remedies as may be available to Landlord under this Lease or applicable Law.

ARTICLE 30

DEFINITIONS

(A) **Building**" shall mean the structure (or portion owned by Landlord) identified in Article 1.

(B) "**Building Hours**" shall mean 8:00 A.M. to 6:00 P.M. Monday through Friday, and 9:00 A.M. to 1:00 P.M. on Saturday, except Holidays. "**Holidays**" means all federal and state holidays, including New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

(C) "**Default Rate**" shall mean one and one half percent (1.5%) per month, or the highest rate permitted by applicable Law, whichever shall be less.

(D) "**Expenses**" shall mean all expenses, costs and amounts (other than Taxes) of every kind and nature relating to the ownership, management, repair, maintenance, replacement, insurance and operation of the Property, including, without limitation (except as expressly set forth herein): (i) Utility Costs, (ii) complying with Laws, subject to the exclusions below, (iii) insurance, including property damage and liability, and which may include, boiler, rent loss, workers' compensation, builders' risk, automobile, flood, earthquake and other coverages, including a reasonable allocation of costs under any blanket policies and self-retention funds, (iv) supplies, materials, tools and equipment, including rental, installment purchase and financing agreements therefor, (v) accounting, security, janitorial, property management and other services, (vi) compensation and benefits for personnel providing services at or below the level of senior property manager (but if personnel handle other properties or functions, the foregoing expenses shall be allocated appropriately between the Property and such other properties or functions), (vii) payments under any reciprocal easement, declaration or other agreement for sharing common area costs or other matters in any development or complex in which the Property is located, (viii) sales or other taxes on supplies or services for the Property, (ix) operating and maintaining a property management office, including the fair rental value, appropriately allocated between the Property and any other property served by such office, and (x) operation, maintenance, repair, installation, replacement, painting, decorating and cleaning of the Property and off-site items that benefit the Property, including signs, traffic signals, drainage and irrigation systems, sidewalks, driveways, parking facilities, loading and service areas, landscaping, common area fixtures, trash compactors, doors, windows, roofs, Systems and Equipment, and any other features of and services for the Property. The foregoing provision is for definitional purposes and shall not impose any obligation upon Landlord to incur such expenses, nor limit other Expenses that Landlord may incur for the Property. Landlord may retain independent contractors (or affiliated contractors at market rates) to provide any services or perform any work, in which case the costs thereof shall be deemed Expenses. Expenses shall, however, exclude:

(1) the following items: (a) interest and amortization on Mortgages, and other debt costs or ground lease payments, if any, except as provided herein, (b) depreciation of buildings and other improvements (except permitted amortization of certain capital expenditures as provided below), (c) legal fees in connection with leasing, tenant disputes or enforcement of leases, (d) real estate brokers' commissions or marketing costs, (e) improvements or alterations to tenant spaces, (f) the cost of providing any service directly to, and paid directly by, any tenant, (g) costs of any items to the extent Landlord receives reimbursement from insurance proceeds or from a warranty or other such third party (such proceeds to be deducted from Expenses in the year in which received), (h) costs of Landlord's general overhead and general administrative expenses (at Landlord's off-site corporate or partnership ownership level, as opposed to typical property management general overhead and general administrative expenses that are billed to tenants under similar provisions in office leases in comparable buildings in the vicinity), (i) costs arising from Landlord's charitable or political contributions, (i) salaries, wages or other compensation paid to officers or executives of Landlord above the level of property manager in their respective capacities, (k) any compensation paid to clerks, attendants or other persons in commercial concessions operated by Landlord, (1) costs of acquiring, leasing or restoring any items in the nature of "fine art" (rather than decorative art work and seasonal decorations), (m) electrical power costs and other services for which any tenant directly contracts with the local service company, (n) all items and services for which Tenant has reimbursed Landlord, (o) legal and other costs associated with the mortgaging, refinancing or sale of the Building or Property or any interest therein, (p) tax penalties incurred as a result of Landlord's gross negligence, willful misconduct or inability to make payments when due; and

(2) capital expenditures, except those: (a) made primarily to reduce Expenses or increases therein, or to comply with Laws or insurance requirements (excluding capital expenditures to cure violations of Laws or insurance requirements that existed prior to the date of this Lease), or (b) for replacements (as opposed to additions or new improvements) of roofs and parking areas, and other nonstructural items located in the common areas of the Property required to keep such areas in good condition; provided, any such permitted capital expenditure shall be amortized (with interest at the prevailing loan rate available to Landlord when the cost was incurred) over: (x) the period during which the reasonably estimated savings in Expenses equals the expenditure, if applicable, or (y) the useful life of the item as reasonably determined by Landlord.

(E) "**Hazardous Material**" shall include, but not be limited to: (i) any flammable, explosive, toxic, radioactive, biological, corrosive or otherwise hazardous chemical, substance, liquid, gas, device, form of energy, material or waste or component thereof, (ii) petroleum-based products, diesel fuel, paints, solvents, lead, radioactive materials, cyanide, biohazards, infectious or medical waste and "sharps", printing inks, acids, DDT, pesticides, ammonia compounds, and any other items which now or subsequently are found to have an adverse effect on the environment or the health and safety of persons or animals or the presence of which require investigation or remediation under any Law or governmental policy, and (iii) any item defined as a "hazardous substance", "hazardous material", "hazardous waste", "regulated substance" or "toxic substance" under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C. §9601, et seq., Hazardous Materials Transportation Act, 49 U.S.C. §1801, et seq., Resource Conservation and Recovery Act of 1976, 42 U.S.C. §6901 et seq., Clean Water Act, 33 U.S.C. §1251, et seq., Safe Drinking Water Act, 14 U.S.C. §300f, et seq., Toxic Substances Control Act, 15 U.S.C. §2601, et seq., Atomic Energy Act of 1954, 42 U.S.C. §2014 et seq., and any similar federal, state or local Laws, and all regulations, guidelines, directives and other requirements thereunder, all as may be amended or supplemented from time to time.

(F) "**Landlord**" shall mean only the landlord from time to time.

(G) "**Law**" or "**Laws**" shall mean all federal, state, county and local governmental and municipal laws, statutes, ordinances, rules, regulations, codes, decrees, orders and other such requirements, applicable equitable remedies and decisions by courts in cases where such decisions are considered binding precedents in the State in which the Property is located, and decisions of federal courts applying the Laws of such State, at the time in question. This Lease shall be interpreted and governed by the Laws of the State in which the Property is located.

(H) "**Lender**" shall mean the holder of any Mortgage at the time in question, and where such Mortgage is a ground lease, such term shall refer to the ground lessor (and the term "**ground lease**" although not capitalized is intended throughout this Lease to include any superior or master lease).

(I) "**Mortgage**" shall mean all mortgages, deeds of trust, ground leases and other such encumbrances now or hereafter placed upon the Property or Building, or any part thereof, and all renewals, modifications, consolidations, replacements or extensions thereof, and all indebtedness now or hereafter secured thereby and all interest thereon.

(J) "**Person**" shall mean an individual, trust, partnership, limited liability company, joint venture, association, corporation and any other entity.

(K) "**Premises**" shall mean the area within the Building identified in Article 1 and Exhibit A. Possession of areas necessary for utilities, services, safety and operation of the Property, including the Systems and Equipment, fire stairways, perimeter walls, space between the finished ceiling of the Premises and the slab of the floor or roof of the Property thereabove, and the use thereof together with the right to install, maintain, operate, repair and replace the Systems and Equipment, including any of the same in, through, under or above the Premises in locations that will not materially interfere with Tenant's use of the Premises, are hereby excepted and reserved by Landlord, and not demised to Tenant.

(L) "**Property**" shall mean the Building, and any common or public areas or facilities, easements, corridors, lobbies, sidewalks, loading areas, driveways, landscaped areas, skywalks, parking rights, garages and lots, and any and all other rights, structures or facilities operated or maintained in connection with or for the benefit of the Building, and all parcels or tracts of land on which all or any portion of the Building or any of the other foregoing items are located, and any fixtures, machinery, apparatus, Systems and Equipment, furniture and other personal property located thereon or therein and used in connection with the operation thereof. Landlord reserves the right to add land, buildings, easements or other interests to, or sell or eliminate the same from, the Property, and grant interests and rights in the Property to other parties. If the Building shall now or hereafter be part of a development or complex of buildings or structures collectively owned by Landlord or its affiliates, the Property shall, at Landlord's option, also be deemed to include such other of those buildings or structures as Landlord shall from time to time designate, and shall initially include such buildings and structures (and related facilities and parcels on which the same are located) as Landlord shall have incorporated by reference to the total rentable area of the Property in Article 1.

(M) "**Rent**" shall have the meaning specified therefor in Article 3.

(N) "**Systems and Equipment**" shall mean any plant, machinery, transformers, duct work, cable, wires, and other equipment, facilities, and systems designed to supply light, heat, ventilation, air conditioning and humidity or any other services or utilities, or comprising or serving as any component or portion of the electrical, gas, steam, plumbing, sprinkler, communications, alarm, security, or fire/life/safety systems or equipment, or any elevators, escalators or other mechanical, electrical, electronic, computer or other systems or equipment for the Property, except to the extent that any of the same serves particular tenants exclusively (and "systems and equipment" without capitalization shall refer to such of the foregoing items serving particular tenants exclusively).

(O) "**Taxes**" shall mean all amounts (unless required by Landlord to be paid under Article 14 or as Expenses) for federal, state, county, or local governmental, special district, improvement district, municipal or other political subdivision taxes, fees, levies, assessments, charges or other impositions of every kind and nature in connection with the ownership, leasing and operation of the Property, whether foreseen or unforeseen, general, special, ordinary or extraordinary (including real estate and ad valorem taxes, general and special assessments, transit taxes, water and sewer rents, license and business license fees, use or occupancy taxes, gross receipts or sales taxes, taxes on personal property and property management services, and taxes or charges for fire protection, streets, sidewalks, road maintenance, refuse or other services). If the method of taxation of real estate prevailing at the time of execution hereof shall be, or has been, altered so as to cause the whole or any part of the Taxes now, hereafter or heretofore levied, assessed or imposed on real estate to be levied, assessed or imposed on Landlord, wholly or partially, as a capital stock levy or otherwise, or on or measured by the rents, income or gross receipts received therefrom, then such new or altered taxes shall be included within the term "Taxes," except that the same shall not include any portion of such tax attributable to other income of Landlord not relating to the Property. Tenant shall pay increased Taxes whether Taxes are increased as a result of increases in the assessment or valuation of the Property (whether based on a sale, change in ownership or refinancing of the Property or otherwise), increases in tax rates, reduction or elimination of any rollbacks or other deductions available under current law, scheduled reductions of any tax abatement, as a result of the elimination, invalidity or withdrawal of any tax abatement, or for any other cause whatsoever. Notwithstanding the foregoing, there shall be excluded from Taxes all excess profits taxes, franchise taxes, gift taxes, capital stock taxes, inheritance and succession taxes, estate taxes, federal and state income taxes, and other taxes to the extent applicable to Landlord's general or net income (as opposed to rents, receipts or income attributable to operations at the Property).

(P) "**Tenant**" shall be applicable to one or more Persons as the case may be, the singular shall include the plural, and if there be more than one Tenant, the obligations thereof shall be joint and several. When used in the lower case, "tenant" shall mean any other tenant or occupant of the Property.

(Q) "**Tenant's Share**" of Taxes and Expenses shall be the percentage set forth in Article 1, but if the rentable area of the Premises changes due to the addition or subtraction of space under this Lease or by amendment, Landlord shall reasonably adjust Tenant's Share to be based on the rentable area of the Premises as a percentage of the rentable area of the Property, subject to further adjustment hereunder and under Article 3. If the Property shall now or hereafter be part of or shall include a development or complex of two or more buildings or structures collectively owned by Landlord or its affiliates, Landlord may allocate Expenses and Taxes (or components thereof) within such complex or development, and between such buildings and structures and the parcels on which they are located, in accordance with sound accounting and management practices consistently applied. In the alternative, Landlord may determine Tenant's Share of Expenses and Taxes (or components thereof) for all or any such buildings and structures, and any common areas and facilities operated or maintained in connection therewith and all parcels or tracts of land on which all or any portion of any of the other foregoing items are located, in accordance with sound accounting and management practices; provided, Landlord shall reasonably reduce Tenant's Share to be based on the ratio of the rentable area of the Premises to the rentable area of all such buildings as to which such Expenses and Taxes (or components thereof) are included. In addition, if the Property, or any development or complex of which it is a part, shall contain non-office uses during any period, Landlord may determine, in accordance with sound accounting and management practices, Tenant's Share of Taxes and Expenses for only the office portion of the Property or of such development or complex; in such event, Landlord shall reasonably adjust Tenant's Share to be based on the ratio of the rentable area of the Premises to the rentable area of such office portion for such period. Tenant acknowledges that the "rentable area of the Premises" under this Lease includes the so-called "usable area," without deduction for columns or projections, multiplied by one or more load or conversion factors to reflect a share of certain areas, which may include lobbies, corridors, mechanical, utility, janitorial, boiler and service rooms and closets, restrooms, and other public, common and service areas. Except as provided expressly to the contrary herein, the "rentable area of the Property" shall include all rentable area of all space leased or available for lease at the Property (excluding any parking facilities). Landlord may reasonably re-determine the rentable area of the Property from time to time to reflect remeasurements, re-configurations, additions or modifications to the Property, and may reasonably adjust Tenant's Share prospectively based thereon.

(R) "**Utility Costs**" shall include costs for electricity, power, gas, steam, oil or other fuel, water, sewer and other such services for the Property, including sales or other taxes thereon.

ARTICLE 31

OFFER

The submission and negotiation of this Lease shall not be deemed an offer to enter the same by Landlord (nor an option or reservation for the Premises), but the solicitation of such an offer by Tenant. Tenant agrees that its execution of this Lease constitutes a firm offer to enter the same which may not be withdrawn for a period of twenty (20) business days after delivery to Landlord. During such period and in reliance on the foregoing, Landlord may, at Landlord's option, deposit any Security Deposit and Rent, proceed with any plans, specifications, alterations or improvements, and permit Tenant to enter the Premises, but such acts shall not be deemed an acceptance of Tenant's offer to enter this Lease, and such acceptance shall be evidenced only by Landlord signing and delivering this Lease to Tenant.

ARTICLE 32

MISCELLANEOUS

A. **Captions and Interpretation.** The captions of the Articles and Paragraphs of this Lease, and any computer highlighting of changes from earlier drafts, are for convenience of reference only and shall not be considered or referred to in resolving questions of interpretation. Tenant acknowledges that it has read this Lease and that it has had the opportunity to confer with counsel in negotiating this Lease; accordingly, this Lease shall be construed neither for nor against Landlord or Tenant, but shall be given a fair and reasonable interpretation in accordance with the meaning of its terms. The neuter shall include the masculine and feminine, and the singular shall include the plural. The term "including" shall be interpreted to mean "including, but not limited to."

B. **Survival of Provisions.** All obligations (including indemnity, Rent and other payment obligations) or rights of either party arising during or attributable to the period prior to expiration or earlier termination of this Lease shall survive such expiration or earlier termination.

C. **Severability.** If any term or provision of this Lease or portion thereof shall be found invalid, void, illegal, or unenforceable generally, or with respect to any particular party, by a court of competent jurisdiction, it shall not affect, impair or invalidate any other terms or provisions or the remaining portion thereof or enforceability with respect to any other party.

D. **Perpetuities.** If the Commencement Date is delayed in accordance with Article 2 for more than nine (9) months, Landlord may declare this Lease terminated by notice to Tenant, and if the Commencement Date is so delayed for more than three years, this Lease shall thereupon be deemed terminated without further action by either party.

E. **Short Form Lease.** Neither this Lease nor any memorandum of lease or short form lease shall be recorded by Tenant, but Landlord or any Lender may elect to record a short form of this Lease, in which case Tenant shall promptly execute, acknowledge and deliver the same on a form prepared by Landlord or such Lender.

F. **Light, Air and Other Interests.** This Lease does not grant any legal rights to "light and air" outside the Premises nor any particular view visible from the Premises, nor any easements, licenses or other interests unless expressly contained in this Lease.

G. **Authority.** Tenant and all Persons signing for Tenant below, and Landlord and all Persons signing for Landlord below, hereby represent that this Lease has been fully authorized and no further approvals are required, and that Landlord and Tenant are duly organized, in good standing and legally qualified to do business in the Property and Premises (and have any required certificates, licenses, permits and other such items).

H. **Partnership Tenant.** If Tenant is a partnership, all current and new general partners shall be jointly and severally liable for all obligations of Tenant hereunder and as this Lease may hereafter be modified, whether such obligations accrue before or after admission of future partners or after any partners die or leave the partnership. Tenant shall cause each new partner to sign and deliver to Landlord written confirmation of such liability, in form and content satisfactory to Landlord, but failure to do so shall not avoid such liability.

I. **Successors and Assigns; Transfer of Property and Security Deposit.** Each of the terms and provisions of this Lease shall be binding upon and inure to the benefit of the parties' respective heirs, executors, administrators, guardians, custodians, successors and assigns, subject to Article 13 respecting Transfers and Article 18 respecting rights of Lenders. Subject to Article 18, if Landlord shall convey or transfer the Property or any portion thereof in which the Premises are contained to another party, such party shall thereupon be and become landlord hereunder, shall be deemed to have fully assumed all of Landlord's obligations under this Lease accruing during such party's ownership, including the return of any Security Deposit, and Landlord shall be free of all such obligations accruing from and after the date of conveyance or transfer.

J. **Limitation of Liability.** Tenant agrees to look solely to Landlord's interest in the Property for the enforcement of any judgment, award, order or other remedy under or in connection with this Lease or any related agreement, instrument or document or for any other matter whatsoever relating thereto or to the Property or Premises. Under no circumstances shall any present or future, direct or indirect, principals or investors, general or limited partners, officers, directors, shareholders, trustees, beneficiaries, participants, advisors, managers, employees, agents or affiliates of Landlord, or of any of the other foregoing parties, or any of their heirs, successors or assigns have any liability for any of the foregoing matters. In no event shall Landlord or Tenant be liable to the other party for any consequential damages.

K. **Confidentiality.** Landlord and Tenant shall use commercially reasonable efforts to keep confidential the content and all copies of this Lease, related documents or amendments now or hereafter entered, and all proposals, materials, information and matters relating thereto, including the results of any review of Landlord's records under Article 3, and any financial statements provided by Tenant, and not to disclose, disseminate or distribute any of the same, or permit the same to occur, except on an "as needed" basis to the extent reasonably required for proper business purposes by Landlord's and Tenant's respective current and prospective employees, attorneys, insurers, auditors, lenders, brokers and Transferees, successors-in-interest, partners, or other such parties, and except as may be required by Law or court proceedings.

ARTICLE 33

ENTIRE AGREEMENT

This Lease, together with the Exhibits and other documents listed in Article 1 (WHICH ARE HEREBY COLLECTIVELY INCORPORATED HEREIN AND MADE A PART HEREOF AS THOUGH FULLY SET FORTH), contains all the terms and provisions between Landlord and Tenant relating to the matters set forth herein and no prior or contemporaneous agreement or understanding pertaining to the same shall be of any force or effect, except for any such contemporaneous agreement specifically referring to and modifying this Lease and signed by both parties. Without limitation as to the generality of the foregoing, Tenant hereby acknowledges and agrees that Landlord's leasing agents and field personnel are only authorized to show the Premises and negotiate terms and conditions for leases subject to Landlord's final approval, and are not authorized to make any agreements, representations, understandings or obligations binding upon Landlord respecting the condition of the Premises or Property, suitability of the same for Tenant's business, the current or future amount of Taxes or Expenses or any component thereof, the amount of rent or other terms applicable under other leases at the Property, whether Landlord is furnishing the same utilities or services to other tenants at all, on the same level or on the same basis, or any other matter, and no such agreements, representations, understandings or obligations not expressly contained herein or in such contemporaneous agreement shall be of any force or effect. TENANT HAS RELIED ON TENANT'S INSPECTIONS AND DUE DILIGENCE IN ENTERING THIS LEASE, AND NOT ON ANY REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE HABITABILITY, CONDITION OR SUITABILITY OF THE PREMISES OR PROPERTY FOR ANY PARTICULAR PURPOSE OR ANY OTHER MATTER NOT EXPRESSLY CONTAINED HEREIN. This Lease, including the Exhibits referred to above, may not be modified, except in writing signed by both parties.

IN WITNESS WHEREOF, the parties have executed this Lease as of the date first set forth above.

WITNESSES; ATTESTATION:

LANDLORD:

[**SEAL**]

ACP 2505 Meridian LLC,
a Delaware limited liability company

By: /s/ Douglas Fleit
Name: Douglas Fleit
Its: President

TENANT:

[**SEAL**]

Chimerix, Inc.,
a Delaware corporation

By: /s/ George R. Painter
Name: George R. Painter
Its:

CERTIFICATE

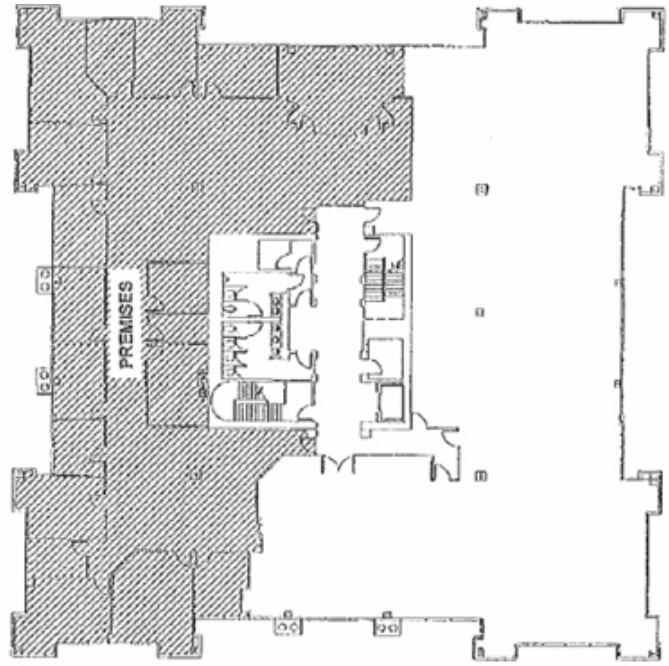
I, _____, as _____ of the aforesaid Tenant, hereby certify that the individual(s) executing the foregoing Lease on behalf of Tenant was/were duly authorized to act in his/their capacities as set forth above, and his/their action(s) are the action of Tenant.

(Corporate Seal)

EXHIBIT A

PREMISES

(Floor Plate(s) Showing Premises Cross-Hatched)



THIRD FLOOR
2505 MERIDIAN PARKWAY

EXHIBIT B

RULES

(1) **Access to Property.** Before or after Building Hours, or such other hours as Landlord shall determine from time to time, access to and within the Property and/or to the lobbies, entrances, exits, elevators and other areas in and about the Property may be restricted to the use of a key or keycard to the outside doors of the Property, or pursuant to such other reasonable security procedures as Landlord may from time to time impose. Landlord shall in all cases retain the right to control and prevent access to such areas by Persons engaged in activities which are illegal or violate these Rules, or whose presence in the judgment of Landlord shall be prejudicial to the safety, character, reputation and interests of the Property and its tenants (and Landlord shall have no liability in damages for such actions taken in good faith). No Tenant and no employee or invitee of Tenant shall enter areas reserved for the exclusive use of Landlord, its employees or invitees or other Persons. Tenant shall keep doors to corridors and lobbies closed except when persons are entering or leaving.

(2) **Signs.** Landlord shall prescribe the suite number for the Premises and cause building standard suite identification signage to be placed on or adjacent to the main entrance door of the Premises, and shall provide directory strips for any Property directory consistent with Landlord's standard practices at the Property. Landlord shall bear the expense of initial building standard signage and directory strips, and Tenant shall pay Landlord's standard charges for changes requested by Tenant and approved by Landlord thereafter promptly after billing thereof. Tenant shall not paint, display, inscribe, maintain or affix any sign, placard, picture, advertisement, name, notice, lettering or direction on any part of the outside or inside of the Property, or on any part of the inside of the Premises which can be seen from the outside of the Premises, without the prior consent of Landlord, which consent shall not be unreasonably withheld, and then only such name or names or matter and in such color, size, style, character and material, and with professional designers, fabricators and installers as may be first approved or designated by Landlord in writing in its reasonable discretion. Landlord reserves the right, without notice to Tenant, to remove at Tenant's expense all matter not so installed or approved.

(3) **Window and Door Treatments.** Tenant shall not place anything or allow anything to be placed in the Premises near the glass of any door, partition, wall or window which may be unsightly from outside the Premises, and Tenant shall not place or permit to be placed any article of any kind on any window ledge or on the exterior walls. Blinds, shades, awnings or other forms of inside or outside window devices shall not be placed in or about the outside windows or doors in the Premises except to the extent, if any, that the design, character, shape, color, material and make thereof is first approved or designated by Landlord in its reasonable discretion. Tenant shall not install or remove any solar tint film from the windows,

(4) **Balconies and Patios.** If the Premises has access to a patio or balcony, Tenant shall have a license to enter such area, subject to the following provisions: (i) Tenant's access to such area shall be limited to the area immediately adjoining the Premises (and bounded by an extension of the demising lines of the Premises), and Landlord reserves the right to install materials separating Tenant's area from the area adjoining other tenants' premises, (ii) Tenant shall use such area only in a manner that is quiet and compatible with the nature of the Building as an office building, which only involves the use of benches or outdoor furniture approved by Landlord in writing, and which will not bother, disturb or annoy any other occupants of the Property, and (iii) Tenant's use thereof shall be subject to the other provisions of this Lease, including the other Rules.

(5) **Lighting and General Appearance of Premises.** Landlord reserves the right to designate and/or approve in writing all internal lighting that may be visible from the public, common or exterior areas. The design, arrangement, style, color, character, quality and general appearance of the portion of the Premises visible from public, common and exterior areas, and contents of such portion of the Premises, including furniture, fixtures, signs, art work, wall coverings, carpet and decorations, and all changes, additions and replacements thereto shall at all times have a neat, professional, attractive, first class office appearance.

(6) **Property Tradename, Likeness, Trademarks.** Tenant shall not in any manner use the name of the Property for any purpose other than as Tenant's business address, or use any tradenames or trademarks of Landlord, any other tenant, or their affiliates, or any picture or likeness of the Property, for any purpose, in any letterheads, circulars, notices, advertisements or other material whatsoever.

(7) **Deliveries and Removals.** Furniture, freight and other large or heavy articles, and all other deliveries may be brought into the Property only at times and in the manner designated by Landlord, and always at the Tenant's sole responsibility and risk. Landlord may inspect items brought into the Property or Premises with respect to weight or dangerous nature or compliance with this Lease or Laws. For security purposes, Landlord may (but shall have no obligation to) require that all furniture, equipment, cartons and other articles removed from the Premises or the Property first be listed in a removal authorization signed by a Tenant representative and delivered to Landlord. Tenant shall not take or permit to be taken in or out of other entrances or elevators of the Property any item normally taken, or which Landlord otherwise reasonably requires to be taken, in or out through service doors or on freight elevators. Landlord may impose reasonable requirements for the use of freight elevators and loading areas, and reserves the right to alter schedules, if necessary, without notice (but freight elevators and loading areas will normally be available for use on a first come-first served basis, and shall not require extra charges for standard use). Any hand-carts shall have rubber wheels and sideguards, and no other material-handling equipment may be used without Landlord's prior written approval, not to be unreasonably withheld.

(8) **Outside Vendors.** Tenant shall not obtain for use upon the Premises janitor or other services, except from Persons designated or approved by Landlord in its reasonable discretion. Any Person engaged by Tenant to provide any other services shall be subject to scheduling and direction by the manager or security personnel of the Property. Vendors must use freight elevators and service entrances.

(9) **Overloading Floors; Vaults.** Tenant shall not overload any floor or part thereof in the Premises or Property, including any public corridors or elevators therein, by bringing in or removing any large or heavy articles, and Landlord may prohibit, or direct and control the location and size of, safes and all other heavy articles and require at Tenant's expense supplementary supports of such material and dimensions as Landlord may deem necessary to properly distribute the weight.

(10) **Locks and Keys.** Tenant shall use such standard key system designated by Landlord on all keyed doors to and within the Premises, excluding any permitted vaults or safes (but Landlord's designation shall not be deemed a representation of adequacy to prevent unlawful entry or criminal acts, and Tenant shall maintain such additional insurance as Tenant deems advisable for such events). Tenant shall not attach or permit to be attached additional locks or similar devices to any door or window, change existing locks or the mechanism thereof, or make or permit to be made any keys for any door other than those provided by Landlord. If more than two keys for one lock are desired, Landlord will provide them upon payment of Landlord's reasonable charges. In the event of loss of any keys furnished by Landlord, Tenant shall pay Landlord's reasonable charges therefor. The term "key" shall include mechanical, electronic or other keys, cards and passes.

(11) **Safety And Security Devices, Services And Programs.** Safety and security devices, services and programs provided by Landlord, if any, while intended to deter crime and ensure safety, may not in given instances prevent theft or other criminal acts, or ensure safety of persons or property. The risk that any safety or security device, service or program may not be effective, or may malfunction, or be circumvented by a criminal, is assumed by Tenant with respect to Tenant's property, and Tenant shall obtain insurance coverage to the extent Tenant desires protection against such criminal acts and other losses, as further described in Article 10. Tenant agrees to cooperate in any reasonable safety or security program developed by Landlord or required by Law.

(12) **Utility Closets and Connections.** Landlord reserves the right to control access to and use of, and monitor and supervise any work in or affecting, the "wire" or telephone, electrical, plumbing or other utility closets, the Systems and Equipment, and any changes, connections, new installations, and wiring work relating thereto (or Landlord may engage or designate an independent contractor to provide such services). Tenant shall obtain Landlord's prior written reasonable consent for any such access, use and work in each instance, and shall comply with such requirements as Landlord may reasonably impose, and the other provisions of Article 6 respecting electric installations and connections, Article 28 respecting telephone Lines and connections, and Article 9 respecting Work in general. Tenant shall have no right to use any broom closets, storage closets, janitorial closets, or other such closets, rooms and areas whatsoever. Tenant shall not install in or for the Premises any equipment which requires more electric current than Landlord is required to provide under this Lease, without Landlord's prior written approval, not to be unreasonably withheld, and Tenant shall ascertain from Landlord the maximum amount of load or demand for or use of electrical current which can safely be permitted in and for the Premises, taking into account the capacity of electric wiring in the Property and the Premises and the needs of tenants of the Property, and shall not in any event connect a greater load than such safe capacity.

(13) **Plumbing Equipment.** The toilet rooms, urinals, wash bowls, drains, sewers and other plumbing fixtures, equipment and lines shall not be misused or used for any purpose other than that for which they were constructed and no foreign substance of any kind whatsoever shall be thrown therein.

(14) **Trash.** All garbage, refuse, trash and other waste shall be kept in the kind of container, placed in the areas, and prepared for collection in the manner and at the times and places reasonably specified by Landlord, subject to Article 29 respecting Hazardous Materials. Landlord reserves the right to require that Tenant participate in any recycling program designated by Landlord.

(15) **Alcohol, Drugs, Food and Smoking.** Landlord reserves the right to exclude or expel from the Property any person who, in the judgment of Landlord, is intoxicated or under the influence of liquor or drugs, or who shall in any manner do any act in violation of any of these Rules. Tenant shall not at any time manufacture, sell, use or give away, any spirituous, fermented, intoxicating or alcoholic liquors on the Premises, nor permit any of the same to occur. Tenant shall not at any time cook, sell, purchase or give away, food in any form by or to any of Tenant's agents or employees or any other parties on the Premises, nor permit any of the same to occur (other than in microwave ovens and coffee makers properly maintained in good and safe working order and repair in lunch rooms or kitchens for employees as may be permitted or installed by Landlord, and which do not violate any Laws or bother or annoy any other tenant). Tenant and its employees shall not smoke tobacco on any part of the Property (including exterior areas) except those areas, if any, that are designated or approved as smoking areas by Landlord.

(16) **Use of Common Areas; No Soliciting.** Tenant shall not use the common areas, including areas adjacent to the Premises, for any purpose other than ingress and egress, and any such use thereof shall be subject to the other provisions of this Lease, including these Rules. Without limiting the generality of the foregoing, Tenant shall not allow anything to remain in any passageway, sidewalk, court, corridor, stairway, entrance, exit, elevator, parking or shipping area, or other area outside the Premises. Tenant shall not use the common areas to canvass, solicit business or information from, or distribute any Article or material to, other tenants or invitees of the Property. Tenant shall not make any room-to-room canvass to solicit business or information or to distribute any Article or material to or from other tenants of the Property and shall not exhibit, sell or offer to sell, use, rent or exchange any products or services in or from the Premise unless ordinarily embraced within the Tenant's use of the Premises expressly permitted in the Lease.

(17) **Energy and Utility Conservation.** Tenant shall not waste electricity, water, heat or air conditioning or other utilities or services, and agrees to cooperate fully with Landlord to assure the most effective and energy efficient operation of the Property and shall not allow the adjustment (except by Landlord's authorized Property personnel) of any controls. Tenant shall not obstruct, alter or impair the efficient operation of the Systems and Equipment, and shall not place any item so as to interfere with air flow. Tenant shall keep corridor doors closed and shall not open any windows, except that if the air circulation shall not be in operation, windows which are operable may be opened with Landlord's consent (not to be unreasonably withheld). If reasonably requested by Landlord (and as a condition to claiming any deficiency in the air-conditioning or ventilation services provided by Landlord), Tenant shall close any blinds or drapes in the Premises to prevent or minimize direct sunlight.

(18) **Landlord Access to Systems and Equipment.** Tenant shall not place partitions, furniture or other obstructions in the Premises which may prevent or impair Landlord's access to the Systems and Equipment for the Property or the systems and equipment for the Premises.

(19) **Unattended Premises.** Before leaving the Premises unattended, Tenant shall close and securely lock all doors or other means of entry to the Premises and shut off all lights and water faucets in the Premises (except heat to the extent necessary to prevent the freezing or bursting of pipes).

(20) **Going-Out-Of-Business Sales and Auctions.** Tenant shall not use, or permit any other party to use, the Premises for any distress, fire, bankruptcy, close-out, "lost our lease" or going-out-of-business sale or auction. Tenant shall not display any signs advertising the foregoing anywhere in or about the Premises. This prohibition shall also apply to Tenant's creditors.

(21) **Labor Harmony.** Tenant shall not use (and upon notice from Landlord shall cease using) contractors, services, workmen, labor, materials or equipment, or labor and employment practices that, in Landlord's good faith judgment, may cause strikes, picketing or boycotts or disturb labor harmony with the workforce or trades engaged in performing other work, labor or services in or about the Property.

(22) **Prohibited Activities.** Tenant shall not: (i) use strobe or flashing lights in or on the Premises, (ii) install or operate any internal combustion engine, boiler, machinery, refrigerating, heating or air conditioning equipment in or about the Premises, (iii) use the Premises for housing, lodging or sleeping purposes or for the washing of clothes, (iv) place any radio or television antennae other than inside of the Premises, (v) operate or permit to be operated any musical or sound producing instrument or device which may be heard outside the Premises, (vi) use any source of power other than electricity, (vii) operate any electrical or other device from which may emanate electrical, electromagnetic, x-ray, magnetic resonance, energy, microwave, radiation or other waves or fields which may interfere with or impair radio, television, microwave, or other broadcasting or reception from or in the Property or elsewhere, or impair or interfere with computers, faxes or telecommunication lines or equipment at the Property or elsewhere, or create a health hazard, (viii) bring or permit any bicycle or other vehicle, or dog (except in the company of a blind person or except where specifically permitted) or other animal or bird in the Property, (ix) make or permit objectionable noise, vibration or odor to emanate from the Premises, (x) do anything in or about the Premises or Property that is illegal, immoral, obscene, pornographic, or anything that may in Landlord's good faith opinion create or maintain a nuisance, cause physical damage to the Premises or Property, interfere with the normal operation of the Systems and Equipment, impair the appearance, character or reputation of the Premises or Property, create waste to the Premises or Property, cause demonstrations, protests, loitering, bomb threats or other events that may require evacuation of the Building, (xi) advertise or engage in any activities which violate the spirit or letter of any code of ethics or licensing requirements of any professional or business organization, (xii) throw or permit to be thrown or dropped any Article from any window or other opening in the Property, (xiii) use the Premises for any purpose, or permit upon the Premises or Property anything, that may be dangerous to persons or property (including firearms or other weapons (whether or not licensed or used by security guards) or any explosive or combustible articles or materials), (xiv) place vending or game machines in the Premises, except vending machines for employees, (xv) adversely affect the indoor air quality of the Premises or Property, or (xvi) do or permit anything to be done upon the Premises or Property in any way tending to disturb, bother, annoy or interfere with Landlord or any other tenant at the Property or the tenants of neighboring property, or otherwise disrupt orderly, quiet use and occupancy of the Property.

(23) **Transportation Management.** Tenant shall comply with all present or future programs intended to manage parking, transportation or traffic in and around the Property, and in connection therewith, Tenant shall take responsible action for the transportation planning and management of all employees located at the Premises by working directly with Landlord, any governmental transportation management organization or any other transportation-related committees or entities. Such programs may include, without limitation: (i) restrictions on the number of peak-hour vehicle trips generated by Tenant; (ii) increased vehicle occupancy; (iii) implementation of an in-house ridesharing program and an employee transportation coordinator; (iv) working with employees and any Property or area-wide ridesharing program manager; (v) instituting employer-sponsored incentives (financial or ill-kind) to encourage employees to rideshare; and (vi) utilizing flexible work shifts for employees.

(24) **Parking.** If the Property contains, or Landlord has the right to use for the Property, a parking garage, structure, facility or area ("**Parking Facility**"), the following Rules shall apply therein:

(i) Except as may be expressly provided to the contrary in any other Exhibit to this Lease: (a) Tenant and Tenant's employees and visitors shall not use more parking spaces than the number derived by applying the parking ratio of 3.88 spaces for every 1,000 square feet of rentable area (which equals a total of 27 spaces for the Premises), in the area or areas designated by Landlord from time to time to serve the Premises, and (b) parking for Tenant and its employees and visitors shall be in areas designated by Landlord from time to time, on a "first come, first served," unassigned, unreserved basis, in common with Landlord and other tenants at the Property, and their employees and visitors, and other Persons to whom Landlord shall grant the right or who shall otherwise have the right to use the same. In addition, Landlord reserves the right to: (x) adopt additional requirements or procedures pertaining to parking, including systems with charges favoring carpooling, and validation systems, (y) assign specific spaces, and reserve spaces for small and other size cars, disabled persons, and other tenants, customers of tenants or other parties, and (z) restrict or prohibit full size vans and other large vehicles.

(ii) Parking stickers, key cards or any other devices or forms of identification or entry shall remain the property of Landlord. Such devices must be displayed as requested and may not be mutilated in any manner. Devices are not transferable and any device in the possession of an unauthorized holder will be void. Loss or theft of such devices must be reported to Landlord or any garage manager immediately. Any parking devices reported lost or stolen which are found on any unauthorized car will be confiscated and the illegal holder will be subject to prosecution. Lost or stolen devices found by Tenant or its employees must be reported to Landlord or the office of the garage immediately. Cars must be parked entirely within the stall lines, and only small or other qualifying cars may be parked in areas reserved for such cars; all directional signs, arrows and speed limits must be observed; spaces reserved for disabled persons must be used only by vehicles properly designated; washing, waxing, cleaning or servicing of any vehicle is prohibited; every parker is required to park and lock his own car, except to the extent that Landlord adopts a valet parking system; in areas requiring an attendant or security personnel, hours shall be reasonably established by Landlord or its parking operator from time to time; parking is prohibited in areas: (a) not striped or designated for parking, (b) aisles, (c) where "no parking" signs are posted, (d) on ramps, and (e) loading areas and other specially designated areas. Delivery trucks and vehicles shall use only those areas designated therefor.

(iii) Except for any general unassigned, uncovered surface lot spaces for which charges no charges shall be made during the initial Term, or as may be provided in any other Exhibit to this Lease, Landlord reserves the right to impose such daily or monthly parking charges as Landlord may establish from time to time. Any such monthly fees shall be paid in advance prior to the first of each month. Failure to do so will automatically cancel such parking privileges, and incur a charge at the posted daily parking rate. In case of any violation of these rules, Landlord may also refuse to permit the violator to park, and may remove the vehicle owned or driven by the violator from the Property without liability whatsoever, at such violator's risk and expense. Landlord reserves the right to close all or a portion of the Parking Facility in order to make repairs or perform maintenance services, or to alter, modify, re-stripe or renovate the same, or if required by casualty, strike, condemnation, act of God, Law or governmental requirement or guideline, termination or modification of any lease or other agreement by which Landlord obtained parking rights, or any other reason beyond Landlord's reasonable control. No deductions from the monthly rate will be made for days on which the Parking Facility is not used by Tenant or its designees. In the event access is denied for any reason, any monthly parking charges shall be abated to the extent access is denied, as Tenant's sole recourse,

(25) **Responsibility for Compliance.** Tenant shall be responsible for ensuring compliance with these Rules, as they may be amended [provided that Tenant has received a written copy of any such amended Rule(s)], by Tenant's employees and as applicable, by Tenant's agents, invitees, contractors, subcontractors, and suppliers. Tenant shall cooperate with any reasonable program or requests by Landlord to monitor and enforce the Rules, including providing vehicle numbers and taking appropriate action against such of the foregoing parties who violate these provisions.

EXHIBIT C

Space Plan Done **WORK LETTER**

This Work Letter is an Exhibit to the foregoing document (referred to herein for convenience as the "**Lease Document**").

I. Basic Terms; Landlord and Tenant Representatives. The basic terms of this Work Letter (which shall have the meanings set forth below when used elsewhere herein), and Landlord's and Tenant's construction representatives for coordination of planning, construction, approval of change orders, substantial and final completion, and other such matters (unless either party changes its representative upon written notice to the other), are:

Allowance:	$68,490.00 as further described in Section VI
Administrative Fee:	Five percent (5%) as further described in Section VI
Plans:	Space Plan prepared by Centrepoint Architecture, beating the caption "Chimerix Layout" dated 7/19/07, and consisting of one (1) page, a copy of which is attached hereto as Schedule 1, as the same may be superseded by any "Construction Drawings" prepared and approved pursuant to Section III, by governmental requirements pursuant to Section IV, or by Change Orders under Section V.
Landlord's Representative:	John Golston, Property Manager
Address:	c/o ACP Meridian Business Campus Properties LLC, 2500 Meridian Parkway, Durham, North Carolina 27713
Telephone:	(919) 544-8805
Fax:	(919) 544-6409
Tenant's Representative:	Darcey Moore, Chimerix, Inc.
Address:	5007 Southpark Dr. Suite 200, Durham, NC 27713
Telephone:	919-806-1074
Fax:	919-806-1146

II. The Work.

(a) The Work. The "**Work**" means: (i) the improvements and items of work in the Premises shown on the Plans, and (ii) any demolition, preparation or other work required in connection therewith, including without limitation, structural or mechanical work, additional HVAC equipment or sprinkler heads, or modifications to any building mechanical, electrical, plumbing or other systems and equipment or relocation of any existing sprinkler heads, either within or outside the Premises required as a result of the layout, design, or construction of the Work or in order to extend any mechanical distribution, fire protection or other systems from existing points of distribution or connection, or in order to obtain building permits for the work to be performed in the Premises (unless Landlord requires that the Plans be revised to eliminate such work).

(b) General Scope of Work. Tenant has met and worked with the Architect concerning Tenant's requirements for the Premises, has approved of the Space Plans, and agrees that the Space Plans reflect and satisfy Tenant's requirements for the Work to be performed by Landlord. The parties agree that the Space Plans consist of and include, to the extent applicable or required by the nature of the Work, fully dimensioned plans, drawn to scale, showing: (i) demising walls, interior walls and other partitions, including type of wall or partition and height, and any demolition or relocation of walls, (ii) doors and other openings in such walls or partitions, (iii) any floor or ceiling openings, and any variations to building standard floor or ceiling heights or lighting, (iv) wall outlet locations for electrical and computer/communication outlets (for installation of box/string and ring), (v) any kitchens, lunch rooms, file rooms, libraries, computer rooms, communications or security equipment rooms, print rooms, and other special purpose rooms, including the locations of sinks or other plumbing facilities, file cabinets, print machines or other heavy items, and any special Tenant equipment or systems (including the location, weight and other details of any items or concentrations of items, and location and details of any special purpose rooms, that may require special weight loading, or special electrical or HVAC requirements or considerations), (vi) details of space occupancy, density, and usage, and any other matters which require special consideration relative to HVAC, mechanical, electrical, plumbing, fire protection, life-fire-safety system, or structural systems, (vii) finish selections, and (viii) any other details, features or information required in order for Landlord to have obtained a reasonable cost estimate and in order for the Space Plans to serve as a basis for preparing any required Construction Drawings. In the event of any inconsistency between Space Plan and Construction Drawings, or revisions thereto, as modified to obtain permits, the latest such item approved by Landlord shall control.

(c) Limitations on Scope of Work. Notwithstanding the foregoing to the contrary: (i) the Work shall consist of such materials and finishes that Landlord currently uses as "building standard", unless otherwise expressly specified in the Plans and approval is evidenced by Landlord's initials adjacent to such specification, (ii) Landlord reserves the right to substitute comparable or better materials and items for those shown in the Plans, so long as they do not materially and adversely affect the appearance of the Premises, and (iii) any personal property, trade fixtures or business equipment, including, but not limited to, modular or other furniture, and cabling or conduit for communications or computer systems, whether or not shown on the Plans, shall be provided by Tenant, at Tenant's sole cost.

III. Construction Drawings.

(a) Landlord to Arrange for Construction Drawings. To the extent reasonably required by the nature of the Work as shown in the Space Plans, Landlord shall arrange for preparation of detailed construction drawings, specifications and engineering drawings, including mechanical, electrical, plumbing, air-conditioning, ventilation and heating drawings (collectively referred to herein as the "**Construction Drawings**"), within fifteen (15) working days after the Lease Document is signed and delivered by both parties (or such longer time as may be reasonably required in order to obtain any engineering or HVAC report or due to other special or unusual features of the Work or Space Plans). The Construction Drawings shall be based on the Space Plans, subject to modifications as Landlord's architect or engineer may require or recommend.

(b) Tenant's Approval of Construction Drawings. To the extent that the Construction Drawings or revisions thereto materially deviate from the Space Plans, Tenant shall have the right to reasonably approve the Construction Drawings or revisions thereto for consistency with the Space Plans. Tenant shall either provide Landlord with written approval (which Landlord may require to be signed or initialed on the Construction Drawings) or a detailed written request for any corrections in order to provide for consistency with the Space Plans ("**Plan Corrections**"), within five (5) (lays after Landlord provides any Construction Drawings or revisions thereto to Tenant. Tenant shall be deemed to have approved the same if Tenant fails to respond to such request within such five (5) days. If Tenant desires to make changes to the Construction Drawings that involve any changes beyond Plan Corrections, i.e. changes or additional items of work not shown on the Space Plans, Tenant shall submit a request for a "Change Order" under Section V, shall bear any additional costs as further described therein, and shall be responsible for any resulting Construction Delays as further described in Section VI.

IV. Governmental Approval of Plans. Landlord shall apply for any normal building permits required for the Work which are issued pursuant to a local building code as a ministerial matter. If the Plans must be revised in order to obtain such building permits, Landlord shall promptly notify Tenant. In such case, Landlord shall promptly arrange for the Plans to be revised to satisfy the building permit requirements (and, if Landlord shall so request, Tenant shall not unreasonably withhold or delay approval of the revisions, and shall be deemed to have approved the same if Tenant fails to respond to such request within five (5) days after requested). Landlord shall have no obligation to apply for any zoning, parking or sign code amendments, approvals, permits or variances, or any other governmental approval, permit or action (except normal building permits as described above). If any such other matters are required, Tenant shall promptly seek to satisfy such requirements or revise the Plans to eliminate such requirements.

V. Changes To Plans or Work. If Tenant shall desire any changes, alterations, or additions to the Space Plans referenced above, or to any Construction Drawings submitted by Landlord (beyond Plan Corrections as described in Section IV), or otherwise to the Work, Tenant shall submit a detailed written request (the "**Change Order**") to Landlord for approval. If reasonable and practicable and generally consistent with the Space Plans or Construction Drawings theretofore approved, Landlord shall not unreasonably withhold approval, but all additional costs in connection therewith, including without limitation additional construction costs, permit fees, and any additional drawings, engineering reports or opinions, or other studies or tests, or revisions of such existing items, shall be paid for by Tenant as a Tenant's Cost under Section VI, or as Landlord shall otherwise reasonably require. Tenant shall bear the cost of any changes or corrections for errors or omissions made by any space planner, architect, engineer or contractor recommended or engaged by Tenant.

VI. Cost of Plans and Work; Allowance and Tenant's Cost.

(a) Cost of Plans and Work; Allowance. Landlord shall bear the Cost of Plans and Work up to the amount of the Allowance set forth in Section I above (provided the portion of the Allowance available for the Plans shall be limited to five percent (5%), and shall exclude planning for furniture, fixtures and equipment). The "Cost of Plans and Work" hereunder includes, without limitation, all costs for or relating to: (i) the Plans, including all revisions thereto, and related engineering reports, or other studies, reports or tests, (ii) the Work, including costs of labor, hardware, equipment and materials, contractors' charges for overhead and fees, and so-called "general conditions" (including rubbish removal, utilities, hoisting, field supervision, building permits, inspection fees, utility connections, bonds, insurance, sales taxes, and the like), and any air balancing or other such work in connection therewith, and (iii) Landlord's Administrative Fee in the amount set forth in Section I (which, if stated as a percentage, shall be applied to the other amounts included in the Cost of Plans and Work herein). If all or any portion of the Allowance shall not be used for the items permitted hereunder by the Commencement Date set forth in the Lease Document (except to the extent that such Commencement Date is delayed due to Construction Delays, other than Tenant Construction Delays), Landlord shall be entitled to the savings and Tenant shall receive no credit therefor.

(b) Tenant's Cost; Estimates and Payments. Any portion of the Cost of Plans and Work exceeding the Allowance is referred to herein as "**Tenant's Cost**." Tenant may submit a written request for Landlord to obtain an estimate of the Work component of the Cost of the Plans and Work concurrently with submitting or approving a Space Plan and/or Construction Drawings; in such case Landlord shall promptly obtain a reasonable estimate of the same. Whether or not Tenant requests such an estimate, Landlord may reasonably estimate such Work component, the Cost of Plans and Work, and/or Tenant's Cost, and reasonably revise any such estimate from time to time (subject to clause (c) below). Within three (3) business days after Landlord so requests Tenant shall either deposit any such estimated amount of Tenant's Cost (or the increase reflected in any such revised estimate) with Landlord or, at Tenant's option, Tenant may direct Landlord to deduct such amount from the amount of the Base Rent abatement specified in Article 3.J. Landlord shall have no obligation to proceed with the Work (or proceed to seek permits or proceed with any demolition or other preliminary Work) until Landlord shall have received such deposit from Tenant or Tenant's direction to deduct such amount from the Base Rent abatement. If the Work involves progress payments, Landlord shall apply the amounts deposited by Tenant first. If, after final completion and payment for the Cost of Plans and Work, the actual amount of Tenant's Cost exceeds any amount paid by Tenant as an estimate of Tenant's Cost, within three (3) business days after Landlord so requests, Tenant shall either pay the difference to Landlord or, at Tenant's option, Tenant may direct Landlord to deduct such amount from the amount of the Base Rent abatement specified in Article 3.J. If any such estimated amount exceeds the actual amount of Tenant's Cost, Landlord shall promptly provide a credit or refund of the difference. Tenant's Cost shall be deemed "Rent" under the Lease Document (and all remedies for the non-payment of Rent shall be available to Landlord therefor).

(c) Tenant's Approval and Nature of Cost Estimates. If Tenant timely requests cost estimates as described in clause (b) above, or if Landlord otherwise so requires, Landlord shall request Tenant's written approval of any such cost estimate hereunder. Tenant shall not unreasonably withhold such approval, and shall approve or disapprove the same in writing within three (3) business days after Landlord so requests. If Tenant reasonably disapproves of any such estimate, Tenant shall meet with the Architect and eliminate or substitute items in order to reduce Tenant's Cost in connection with preparing a revised version of the Plans as a Change Order pursuant to Section V above, but the Commencement Date for purposes of commencing Rent shall not be extended thereby. Any cost estimates based on a Space Plan (including a so-called "pricing plan") will be preliminary in nature, and may not be relied on by Tenant. However, Landlord agrees that any written estimate of Tenant's Cost prepared by Landlord's contractor based on the approved Construction Drawings shall not be exceeded by more than fifteen percent (15%), except to the extent that: (a) Tenant makes changes in the Construction Drawings or the Work, (b) overtime labor required in order to substantially complete the Work by the Commencement Date or due to Tenant's occupancy during the Work (if permitted by Landlord), (c) concealed conditions are encountered on the job site, (d) new legal requirements become effective following preparation of the estimate, or (e) there are strikes, acts of God, shortages of materials or labor, or other causes beyond Landlord's reasonable control.

VII. Construction.

(a) Landlord to Arrange Work. Provided Tenant furnishes Landlord's estimate of Tenant's Cost as provided above, and is not then in violation of the Lease Document (including this Exhibit), Landlord shall use reasonable efforts to cause Landlord's contractor to substantially complete the Work by the Commencement Date set forth in the Lease Document, subject to the other provisions hereof.

(b) Substantial Completion, Walk-Through, and Punchlist Items. Landlord shall be deemed to have "substantially completed" the Work for purposes hereof if Landlord has caused all of the Work to be sufficiently completed that Tenant can reasonably occupy the Premises or complete any improvements or changes to the Premises to be made by Tenant hereunder. When Landlord notifies Tenant that the Work has been substantially completed, either party may request a joint walk-through inspection in order for Tenant to identify any necessary final completion or other "punchlist" items. Neither party shall unreasonably withhold or delay approval concerning the identification of punchlist items. If Tenant fails to participate in a walk-through as provided above, or otherwise fails to object to Landlord's notice of substantial completion in writing within five (5) days thereafter specifying in reasonable detail the items of work needed to be performed in order for substantial completion, Tenant shall be deemed conclusively to have agreed that the Work is substantially completed. If there is any disagreement concerning whether Landlord has substantially completed the Work, Landlord may request a good faith decision by a third party mutually and reasonably agreeable to both parties which shall be final and binding on the parties.

(c) Final Completion, Suite Identification Signage, and Other Matters. Landlord shall use commercially reasonable efforts to complete any punchlist items within thirty (30) days after substantial completion has occurred. If Landlord notifies Tenant in writing that the Work is fully completed, and Tenant fails to object thereto in writing within ten (10) business days thereafter specifying in reasonable detail the remaining punchlist items of work needed to be completed, Tenant shall be deemed conclusively to have accepted the Work as fully completed (or such portions as to which Tenant has not so objected). In connection with the Work, Landlord: (i) to the extent not already existing, shall install or cause a contractor to install building standard suite identification signage for the main entrance to the Premises (unless the Premises comprises a full floor, in which case, Tenant shall install such signage, at Tenant's expense, using a professional sign contractor/designer, and a design and materials, and in a location in the Premises, all of which are first approved by Landlord in writing in its reasonable discretion), and (ii) may cause a contractor to perform air balancing tests on the Premises and adjust the HVAC system as a result thereof, and install, to the extent not already existing, building standard window blinds. Tenant shall promptly advise Landlord of the name Tenant wishes for said signage; the content of all signage shall be subject to Landlord's prior written approval, not to be unreasonably withheld. No other signage may be installed or placed outside the Premises by Tenant.

(d) Construction Delays. If the Work has not been substantially completed by the Commencement Date set forth in the Lease Document due to casualty damage, acts of God, strikes, shortages of labor or materials, or any other reason ("**Construction Delays**"), then Landlord's delivery of possession of the Premises (if applicable) shall be postponed as a result. In such case, subject to any contrary provisions in the Lease Document, the Commencement Date set forth in the Lease Document for all other purposes, including commencement of Rent, shall be postponed until the Work is substantially completed, except to the extent that substantial completion is delayed as a result of one or more of the following events (collectively called "**Tenant Construction Delays**"): (i) Tenant's delays in approving the Construction Drawings under Section III, (ii) Tenant's requests for changes to the Work or Change Orders under Section V, or otherwise, (iii) Tenant's failure to furnish an amount equal to Landlord's reasonable estimate of Tenant's Cost (if any) within the time required under Section VI (which shall give Landlord the absolute right to postpone the Work until such amount is furnished to Landlord, without limiting Landlord's other remedies), (iv) any upgrades, special work or other non-building standard items, or items not customarily provided by Landlord to office tenants, to the extent that the same involve longer lead times, installation times, delays or difficulties in obtaining building permits, requirements for any governmental approval, permit or action beyond the issuance of normal building permits (as described in Section IV), or other delays not typically encountered in connection with Landlord's standard office improvements, (v) the performance by Tenant or Tenant's Contractors (as defined in Section VIII) of any work at or about the Premises or Property, (vi) any act or omission of Tenant or Tenant's Contractors, any breach by the Tenant of any provisions contained in this Exhibit or in the Lease Document, or any failure of Tenant to cooperate with Landlord or otherwise act with diligence and in good faith in order to cause the Work to be designed and performed in a timely manner.

(e) Landlord's Role. The parties acknowledge that neither Landlord nor its managing agent is an architect or engineer, and that the Work will be designed and performed by independent architects, engineers and contractors. Landlord and its managing agent shall have no responsibility for construction means, methods, techniques or safety precautions in connection with the Work. Landlord's arrangement for, or submission or approval of, the Space Plans or any Construction Drawings shall not be deemed a warranty as to the adequacy or legality of the design, and Landlord does not guarantee that the Work will be free from errors, omissions or defects. Tenant, in having reviewed the Space Plans, and in reviewing any Construction Drawings and the Work, shall have the opportunity to check for any errors, omissions or defects. In the event of material errors, omissions or defects caused by contractors engaged by Landlord which are identified in the punchlist described in Section V (b) above, Landlord shall use reasonable efforts to cause such contractors to reasonably cure such items as described therein (except to the extent caused by Tenant or Tenant's Contractors), and Landlord shall cooperate in any action Tenant brings against such contractors.

VIII. **Work Performed by Tenant.** Landlord, at Landlord's discretion, may permit Tenant and any of Tenant's space planners, architects, engineers, contractors, suppliers, employees, agents and other such parties (collectively, "**Tenant's Contractors**") to enter the Premises prior to completion of the Work in order to make the Premises ready for Tenant's use and occupancy. If Landlord permits such entry prior to completion of the Work, then such permission is conditioned upon Tenant and Tenant's Contractors working in harmony and not interfering with Landlord and Landlord's space planners, architects, engineers, contractors, suppliers, employees, agents and other such parties (collectively, "**Landlord's Contractors**") in doing the Work or with other tenants and occupants of the Building. If at any time such entry shall, in Landlord's sole opinion, cause or threaten to cause such disharmony or interference, Landlord shall have the right to withdraw such permission immediately upon oral or written notice to Tenant. Tenant agrees that any such entry into the Premises shall be deemed to be under all of the terms, covenants, conditions and provisions of the Lease Document (including, without limitation, all insurance requirements under any Original Lease, if the Lease Document is an amendment thereto, as further described in Section X), and further agrees that Landlord shall not be liable in any way for any injury, loss or damage which may occur to any decorations, fixtures, personal property, installations or other improvements or items of work installed, constructed or brought upon the Premises by or for Tenant or Tenant's Contractors prior to completion of the Work, unless caused by the negligence or willful misconduct of Landlord. Without limitation as to other provisions, Tenant hereby expressly acknowledges that Tenant's indemnity and related obligations under the Lease Document shall apply to all claims and matters arising from early entry to the Premises pursuant hereto.

IX. **Taxes.** Tenant shall pay, prior to delinquency, all taxes, charges or other governmental impositions assessed against or levied upon all fixtures, furnishings, personal property, modular furniture, and systems and equipment located in or exclusively serving the Premises. If the Premises consists of "raw space" which has not previously been improved, and Landlord does not allocate taxes or other such amounts on such initial improvements between the tenants of the Property in general, then Tenant shall also pay all taxes, charges or other governmental impositions assessed against or levied upon the Work under this Exhibit. Whenever possible, Tenant shall cause all such items for which Tenant is responsible hereunder to be assessed and billed separately from the property of Landlord. In the event any such items shall be assessed and billed with the property of Landlord, Tenant shall pay its share of such taxes, charges or other governmental impositions to Landlord within fifteen (15) days after Landlord delivers a statement and a copy of the assessment or documentation showing the amount of such impositions applicable to Tenant.

X. **Miscellaneous.** If this Work Letter is attached as an Exhibit to an amendment to an existing lease ("**Original Lease**"), whether such amendment adds space, relocates the Premises or makes any other modifications, the term "**Lease Document**" herein shall refer to such amendment, or the Original Lease as amended, as the context implies. By way of example, in such case, references to the "Premises" and "Commencement Date" herein shall refer, respectively, to such additional or relocated space and the effective date for delivery thereof under such amendment, unless expressly provided to the contrary herein. Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Lease Document. This Exhibit is intended to supplement and be subject to the provisions of the Lease Document, including, without limitation, those provisions requiring that any modification or amendment be in writing and signed by authorized representatives of both parties. This Exhibit shall not apply to any additional space added to the Premises at any time, whether by any options or rights under the Lease Document or otherwise, or to any portion of the Premises in the event of a renewal or extension of the Term of the Lease Document, whether by any options or rights under the Lease Document or otherwise, unless expressly so provided in the Lease Document or any amendment or supplement thereto. The rights granted in this Exhibit arc personal to Tenant as named in the Lease Document, and arc intended to be performed for such Tenant's occupancy of the Premises. Under no circumstance whatsoever shall any assignee or subtenant have any rights under this Exhibit. Any remaining obligations of Landlord under this Exhibit not theretofore performed shall concurrently terminate and become null and void if Tenant subleases or assigns the Lease Document with respect to all or any portion of the Premises, or seeks or proposes to do so (or requests Landlord's consent to do so), or if Tenant or any current or proposed affiliate thereof issues any written statement indicating that Tenant will no longer move its business into, or that Tenant will vacate and discontinue its business from, the Premises or any material portion thereof. Any termination of Landlord's obligations under this Exhibit pursuant to the foregoing provisions shall not serve to terminate or modify any of Tenant's obligations under the Lease Document.

SCHEDULE 1

PLAN

(REFER TO AND/OR ATTACH COPY OF PLAN, IF ANY)

Prepared By:	Centrepoint Architecture
Dated:	7/19/07
Sheets:	one (1)

(attached)

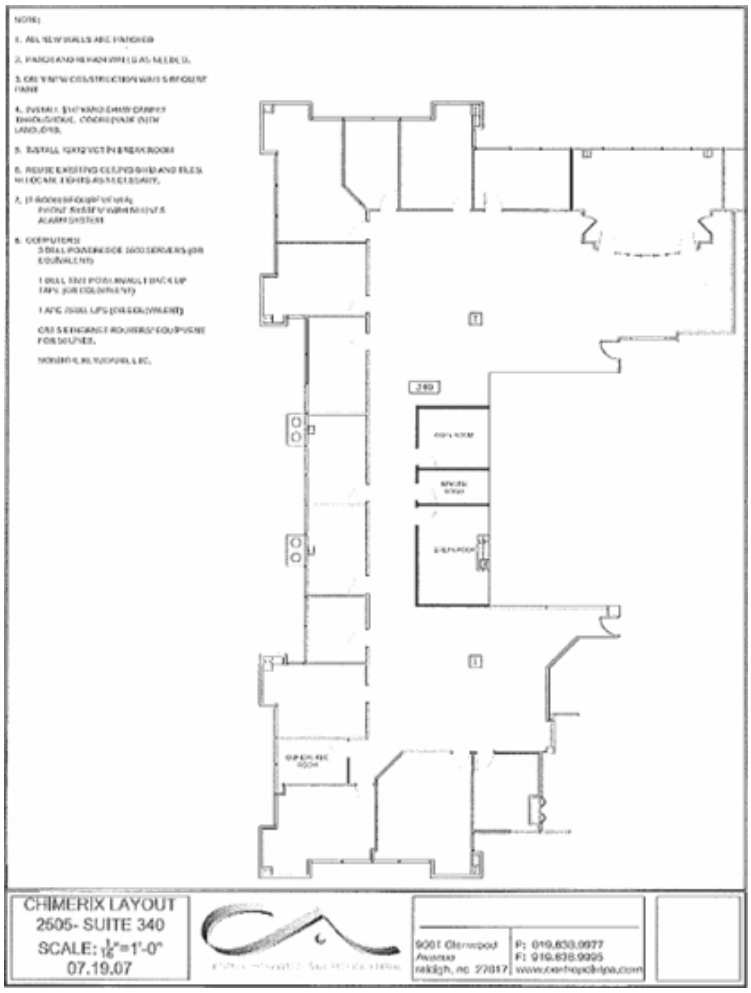

NOTE:
1. ALL NEW WALLS ARE PAINTED
2. PAINT AND NEW VINYL (LAS MEDIO).
3. ON NEW CONSTRUCTION WALLS BEHIND PAINT
4. INSTALL STRUCTURED CABLE COMPLY EIA/TIA/CODE, COORDINATE WITH LANDLORD.
5. INSTALL TELEVISION IN BREAKROOM
6. REPLACE EXISTING CEILING BOARD AND TILES WHERE NEEDED AS NECESSARY.
7. (1) ACCESS EQUIPMENT
PHONE SYSTEM W/ HANDSETS
ALARM SYSTEM
8. COMPUTERS:
3 DELL POWEREDGE 2600 SERVERS (OR EQUIVALENT)
1 DELL 1500 POWERVAULT BACK UP UNITS (OR EQUIVALENT)
1 APC 3500 UPS (OR EQUIVALENT)
CISCO EMERGENCY ROUTERS/ EQUIPMENT FOR SOUNDS.
MONITOR, KEYBOARD, ETC.
340
CHIMERIX LAYOUT
2505- SUITE 340
SCALE: 1/16"=1'-0"
07.19.07
9001 Glenwood Avenue
raleigh, nc 27617
P: 919.833.0977
F: 919.838.9995
www.overholtdrpa.com

EXHIBIT D

EXTENSION OPTIONS

1. **Option to Extend.** Subject to the other provisions hereof, Landlord hereby grants Tenant two (2) options (each, an "**Extension Option**") to extend the current Term of the Lease, each Extension Option to be for an additional period of three (3) consecutive years from the expiration of the prior period ("**Extension Period**"), on the same terms and conditions then in effect under this Lease immediately prior to the applicable Extension Period, except as modified by the "Market Rates, Terms and Conditions" further described below, and Tenant shall have no further option to extend after exercise of the second Extension Option. Tenant may exercise the Extension Option only by giving Landlord written notice thereof ("**Tenant's Exercise Notice**") no earlier than twelve (12) and no later than nine (9) full calendar months prior to commencement of the subject Extension Period. Tenant's Exercise Notice shall be unconditional and irrevocable (except as expressly provided herein), The exercise of each Extension Option shall be governed by the terms and conditions set forth below and all references below to Extension Option or Extension Period shall mean either the first or second Extension Option or the first Extension Period or second Extension Period, as applicable.

Landlord's Notice of Market Rates, Terms and Conditions; Disagreement. Within thirty (30) days after receiving Tenant's Exercise Notice, Landlord shall provide Tenant with notice ("**Landlord's Notice**") of the Market Rates, Terms and Conditions, subject to the other provisions hereof, The term "Market Rates, Terms and Conditions" herein shall mean Landlord's good faith determination of fair market Base Rent and other terms and conditions (including, but not limited to any scheduled increases in Base Rent, any base years or stops for taxes or expenses, and any improvements or an allowance therefor) for renewing the Lease for the Premises during the Extension Period, taking into account comparable renewals of comparable tenants of comparable financial condition in comparable non-sublease space in comparable buildings in the same market area. If the Market Rates, Terms and Conditions determined by Landlord are acceptable to Tenant, then Tenant shall confirm its exercise of the Extension Option by notice ("**Tenant Confirmation Notice**") to Landlord confirming such acceptance given no later than thirty (30) days after Landlord's Notice, and Tenant shall then execute an amendment ("**Extension Amendment**") to confirm the extension of the Term within fifteen (15) days after Landlord reasonably prepares and provides the same to Tenant. However, if the Market Rates, Terms and Conditions determined by Landlord are not acceptable to Tenant, then Tenant may, no later than thirty (30) days after Landlord's Notice, deliver to Landlord a notice ("**Tenant's Market Notice**") of Tenant's good faith determination of the Market Rates, Terms and Conditions and reasons therefor. If Tenant provides a timely Tenant's Market Notice, the parties shall seek in good faith to agree on the Market Rates, Terms and Conditions in the form of a mutually acceptable Extension Amendment setting forth the Market Rates, Terms and Conditions and other mutually acceptable provisions during the period ending forty-five (45) days after Landlord's Notice ("**Negotiation Period**"). Tenant shall be deemed to have revoked its exercise of the Extension Option, and the Extension Option and Tenant's exercise thereof shall be null and void if: (a) Tenant fails to provide a timely Tenant Confirmation Notice or Tenant's Market Notice, or (b) Tenant provides a timely Tenant's Market Notice, and the parties fail to agree on the Market Rates, Terms and Conditions in the form of an Extension Amendment that the parties mutually sign and deliver within the Negotiation Period.

2. **General Matters.** The Extension Option herein shall, at Landlord's election, be conditioned on the Lease being in full force and effect, and Tenant not then being in default beyond any applicable cure period under the Lease, at the time. Tenant seeks to exercise the Extension Option, or at any time thereafter and prior to commencement of the Extension Period. If Tenant shall fail to properly and timely exercise the Extension Option, then the Extension Option shall thereupon terminate. STRICT COMPLIANCE AND TIMELINESS IN GIVING TENANT'S NOTICES AND SIGNING THE EXTENSION AMENDMENT HEREUNDER IS OF THE ESSENCE OF THIS PROVISION. The rights granted in this Exhibit are personal to Tenant as named in this Lease document. Under no circumstance whatsoever shall the assignee under a complete or partial assignment of the Lease document, or a subtenant under a sublease of the Premises, have any right to exercise the rights of Tenant under this Exhibit. If Tenant shall sublease or assign the Lease with respect to all or any portion of the Premises, then immediately upon such sublease or assignment Tenant's rights under this Exhibit shall concurrently terminate and become null and void. The Extension Option shall be subordinate to, and limited by, any rights of any other parties to expand into or lease the Premises granted prior to full execution and delivery of this Lease document. Notwithstanding the foregoing, under no circumstances shall Base Rent and other amounts payable by Tenant during the Extension Period ever be less than the Base Rent and other amounts payable by Tenant under the Lease immediately prior to the Extension Period.

EXHIBIT E

RIGHT OF OFFER

1. **Right Of Offer.** Landlord hereby grants Tenant a Right Of Offer ("**Right Of Offer**") to lease the space shown on Exhibit A, currently known as Suites 300 and 350 (each and collectively, the "**Expansion Space**"), which shall be deemed to contain 2,988 square feet of rentable area and 4,652 square feet of rentable area, respectively, for current purposes hereof, all on and subject to the following provisions; provided, this Right Of Offer and Landlord's obligation to provide a "Landlord Notice" shall be in effect commencing on the Commencement Date.

2. **Landlord's Notice of Expansion Terms.** While this Right Of Offer is in effect, Landlord shall notify Tenant in writing ("**Landlord's Notice**"): (i) within thirty (30) days after the Expansion Space becomes legally available to lease, or (ii) at such earlier time as Landlord shall be in a position to project when the Expansion Space will be legally available to lease, advising Tenant of such projected date, or (iii) at any time thereafter but prior to leasing the Expansion Space to another party. Landlord's Notice shall set forth the terms ("**Expansion Terms**") on which Landlord proposes to lease the Expansion Space to Tenant, including, but not limited to, a date for the commencement of the lease thereof ("**Expansion Space Commencement Date**"), an expiration date therefor or whether the term therefor will be co-terminous with the Term of this Lease, rentable area, monthly base rent and any scheduled increases therein, Tenant's share of taxes, expenses and other such items (and any base year or stop level therefor), any tenant improvements or allowance therefor, and any other terms and conditions, as determined in Landlord's good faith discretion, taking into account comparable expansion terms generally being provided for 'comparable tenants of comparable financial condition for comparable non-sublease space in comparable buildings in the vicinity for time periods that are substantially the same as the period of time during which the Expansion Space will be leased to Tenant. Except as set forth in Landlord's Notice, the Expansion Terms shall be deemed to include the same terms then in effect on the Expansion Space Commencement Date, and thereafter scheduled to be in effect, under the Lease (with any matters in the Lease based on square footage adjusted proportionately to reflect the rentable area of the Expansion Space and Landlord's then current Building-standard ratios and policies).

3. **Tenant's Notice.** If Tenant desires to lease the Expansion Space on the Expansion Terms set forth in Landlord's Notice, Tenant shall so notify Landlord in writing ("**Tenant's Notice**") exercising Tenant's right to lease the Expansion Space on such Expansion Terms within five (5) business days after Landlord sends Landlord's Notice. Tenant's Notice shall be unconditional and irrevocable.

4. **Expansion Documentation; Failure to Exercise Right Of Offer or to Sign Expansion Documentation.** If Tenant validly exercises Tenant's Right Of Offer herein, Landlord shall prepare an amendment ("**Expansion Documentation**") on Landlord's then standard form which shall set forth the final and definitive terms and conditions upon which Landlord proposes to lease the Expansion Space to Tenant, and which shall be generally consistent with Landlord's Notice. If Tenant desires to lease the Expansion Space on the basis of such Expansion Documentation, Tenant shall execute and deliver the Expansion Documentation to Landlord within five (5) business days after Landlord provides the Expansion Documentation to Tenant. Once Tenant provides Tenant's Notice exercising Tenant's Right Of Offer, Landlord shall have no further obligation to provide a Landlord's Notice respecting the Expansion Space included in Landlord's Notice (provided, this Right Of Offer shall continue to apply to any portions of the Expansion Space that were not included in Landlord's Notice as further provided below). If Tenant fails to validly exercise such Right Of Offer, or fails to sign and deliver the Expansion Documentation to Landlord, strictly in accordance with the terms hereof, such Right Of Offer shall be deemed to have lapsed and expired as to the Expansion Space that was included in Landlord's Notice, and Landlord may thereafter freely lease all or a portion of the Expansion Space that was included in Landlord's Notice to any other party, at any time, on any terms, in Landlord's sole discretion; provided, despite Tenant's waiver, this Right of Offer shall: (a) continue to apply to any portions of the Expansion Space that were not included in Landlord's Notice as further provided below, and (b) apply again to the Expansion Space (or such portion thereof as may have been included in Landlord's Notice) if Landlord fails to enter into a lease document for the Expansion Space (or such portion thereof, as the case may be) within nine (9) months after Tenant waives this Right of Offer as to such area. Time periods and strict compliance in giving Tenant's Notice, and in Tenant's signing and delivering the expansion Documentation, are of the essence of this Right Of Offer.

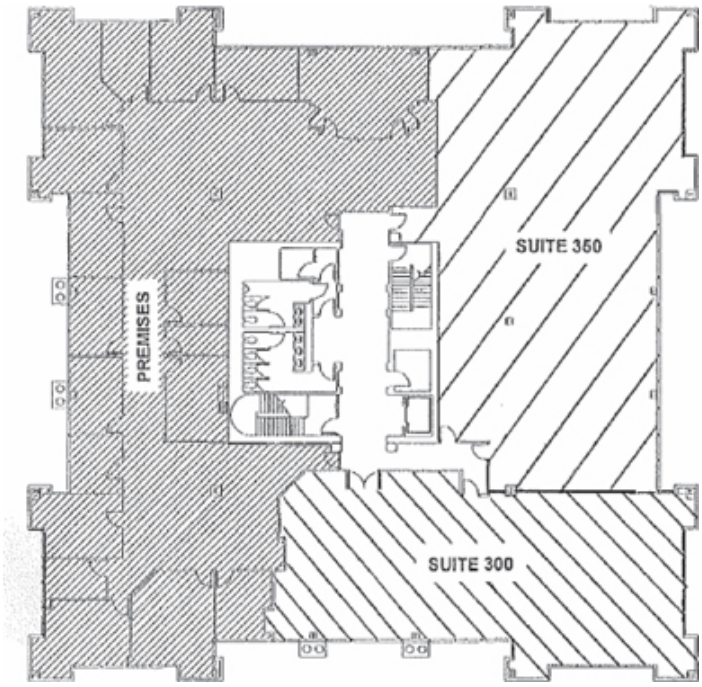
5. **Offering Portions of Expansion Space; Adjustments to Expansion Space; Prior Rights.** This Right Of Offer shall apply only with respect to the entire Expansion Space, and may not be exercised with respect to only a portion thereof (unless only a portion of the Expansion Space shall be included in Landlord's Notice). If only a portion of the Expansion Space shall be included in Landlord's Notice, this Right Of Offer shall apply to such portion, and shall thereafter apply to such other portions of the Expansion Space as they become the subject of Landlord's Notices, subject to good faith adjustments by Landlord in the size, configuration and location of such remaining portions. If the Expansion Space is part of a larger space that Landlord desires to lease as a unit, then Landlord's Notice shall, at Landlord's option, identify the entire such space and the Expansion Terms therefor, and in such case, this Right Of Offer shall apply only to such entire space. This Right Of Offer shall be subject to the then existing tenants or occupants of the Expansion Space renewing their leases or entering into new leases whether pursuant to options to extend previously granted or otherwise, and such Right Of Offer, and any rights of Tenant to extend the Term of the Lease with respect to the Expansion Space, are subordinate to, and limited by, any rights of any other parties to lease the Expansion Space granted prior to full execution and delivery of this document.

6. **Miscellaneous.** This Right Of Offer is subject to the condition that the Lease be in full force and effect, and that Tenant not then be in default beyond any applicable cure period under the Lease on the date when Landlord provides or would otherwise provide Landlord's Notice, or at any time thereafter and prior to the Expansion Space Commencement Date. The rights granted in this Exhibit are personal to Tenant as named in this Lease document. Under no circumstance whatsoever shall the assignee under a complete or partial assignment of the Lease document, or a subtenant under a sublease of the Premises, have any right to exercise the rights of Tenant under this Exhibit. If Tenant shall sublease or assign the Lease with respect to all or any portion of the Premises, then immediately upon such sublease or assignment Tenant's rights under this Exhibit shall concurrently terminate and become null and void. If Tenant shall exercise the Right Of Offer herein, Landlord does not guarantee to deliver possession of the Expansion Space on the Expansion Space Commencement Date due to continued possession by the then existing occupants or any other reason beyond Landlord's reasonable control. In such event, rent and other charges with respect to the Expansion Space shall be abated until Landlord delivers the same to Tenant (except to the extent that Tenant or its affiliates, agents, employees or contractors cause the delay), as Tenant's sole recourse. Tenant's exercise of this Right Of Offer is intended to supersede any rights of Tenant under the Lease to reduce or relocate the Premises, or terminate the Lease early, and all such provisions shall thereupon be automatically deleted.

EXHIBIT E-1

Expansion Space

(Floor plate showing Expansion Space Cross-hatched)



3110 Edwards Mill Road
Suite 210 Raleigh, NC 27612
Ph: 919-789-4255
www.collierspinkard.com

TENANT LEASE ABSTRACT

FOR

CHIMERIX, INC.

Premises Address:	2505 Meridian Parkway, Suite 340 Durham, NC 27713
Building / Park Name:	2505 Meridian / Meridian Business Campus
Lease Date:	9/1/07
Tenant:	Chimerix, Inc.
Landlord:	ACP 2505 Meridian LLC
Rent Payee:	ACP 2505 Meridian LLC c/o ACP Meridian Business Campus Properties, LLC PO Box 01-9663 Durham, NC 27713
Commencement Date:	10/1/07
Lease Expiration Date:	2/28/11
Term:	3 years, 6 months
Square Feet Leased:	6,849
Building Square Feet:	42,264
Tenant’s Proportionate share of Bldg./Project:	16.21%

FIRST AMENDMENT TO OFFICE LEASE

THIS FIRST AMENDMENT TO OFFICE LEASE (this "First Amendment") is made this 19th day of December, 2008 (the "Effective Date"), by and between **ACP 2505 MERIDIAN LLC**, a Delaware limited liability company ("Landlord"), and **CHIMERIX, INC.**, a Delaware corporation ("Tenant").

WITNESSETH:

WHEREAS, pursuant to that certain Office Lease dated March 24, 2003 (the "Original Lease"), Landlord leased to Tenant, and Tenant leased from Landlord, approximately 6,849 rentable square feet of office space (the "Original Premises") known as Suite 340 on the third (3rd) floor of the building located at 2505 Meridian Parkway, Durham, North Carolina 27713 (the "Building"); and

WHEREAS, Landlord and Tenant desire to amend the Original Lease to provide for the demise to Tenant of the Additional Premises (hereinafter defined), upon and subject to the terms and conditions set forth in this First Amendment.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration and of the mutual agreements hereinafter set forth, it is hereby mutually agreed as follows:

1. Incorporation of Recitals. The foregoing recitals are hereby incorporated in this First Amendment and made a part hereof by this reference.

2. Definitions. All capitalized terms not defined in this First Amendment shall have the meanings ascribed thereto in the Original Lease. As used herein and in the Original Lease: (a) the term "Lease" shall mean the Original Lease, as amended by this First Amendment; and (b) from and after the Additional Premises Commencement Date (hereinafter defined), the term "Premises" shall mean the Original Premises together with the Additional Premises.

3. Additional Premises. Subject to the terms and conditions set forth herein, Landlord hereby leases to Tenant, and Tenant hereby leases from Landlord, for a term beginning on the Additional Premises Commencement Date and ending on February 28, 2011, approximately 4,207 rentable square feet of office space (the "Additional Premises") on the third (3rd) floor of the Building, as shown on the attached hereto Exhibit A. As of the Additional Premises Commencement Date, the aggregate number of rentable square feet demised to Tenant under the Lease (consisting of the Original Premises and the Additional Premises) shall be 11,056.

4. **Improvements to the Additional Premises.** Landlord shall deliver the Additional Premises to Tenant on the Additional Premises Commencement Date in its then "as-is" condition without (a) any obligation on Landlord's part to undertake, except as expressly set forth in this Paragraph 4, or pay for, any improvements or alterations therein; or (b) any representations or warranties regarding the condition thereof. Notwithstanding the foregoing, Landlord shall, at Landlord's sole cost and expense, complete the following work (the "Landlord Work"): (i) demising the Premises by securing existing doors with locksets in the location shown on the attached hereto Exhibit B; (ii) construct a cased opening connecting into the Additional Premises using Building standard materials and finishes in the location shown on Exhibit B; (iii) touch-up paint on an as-needed basis the painted surfaces of the Additional Premises with Building-standard paint in a Building-standard color to match existing color; and (iv) re-carpet the carpeted surfaces of the Additional Premises with Building-standard carpet which matches the existing carpet in the Premises. Tenant, at Tenant's sole cost and expense, shall be responsible (A) for the deconstruction of furniture systems and the moving of furniture from the Additional Premises for Landlord to perform Landlord Work within thirty (30) days of Landlord's request therefor, and (B) the re-installation of furniture and furniture systems after completion of the Landlord Work. Notwithstanding any provision to the contrary contained in the Lease: (1) Landlord represents and warrants to Tenant that, to the best of Landlord's actual knowledge (without any obligation on Landlord's part to investigate the facts underlying such representation and warranty), as of the Effective Date, the Additional Premises does not violate any Laws, and (2) provided that Tenant notifies Landlord in writing, within six (6) months after the Additional Premises Commencement Date, of the existence of any Latent Defects (hereinafter defined) in the Additional Premises, Landlord (or, at Landlord's sole option, Landlord's contractor) shall remedy such Latent Defects promptly thereafter. As used herein, the term "Latent Defects" means defects in materials and workmanship comprising the Landlord Work that would not be apparent during a reasonable, non-invasive inspection of the Premises on the Additional Premises Commencement Date by a qualified architect or engineer.

5. Additional Premises Term.

A. The Term with respect to the demise of the Additional Premises to Tenant (the "Additional Premises Term") shall (a) commence on the date (the "Additional Premises Commencement Date") which is the later to occur of: (i) the date on which Landlord substantially completes the Landlord Work (or, if there occurs any Tenant Delay (hereinafter defined), the date by which Landlord would have substantially completed the Landlord Work but for such Tenant Delay), or (ii) March 1, 2009, and (b) expire on February 28, 2011, unless earlier terminated in accordance with the terms and conditions of the Lease. The parties acknowledge and agree that the Additional Premises Term ends on the Expiration Date of the Original Lease.

B. If Landlord shall be delayed in substantially completing the Landlord Work, as a result of any act, neglect, failure or omission of Tenant, its employees or agents, including any of the following, such delay shall be deemed a "Tenant Delay": (i) Tenant's failure, within three (3) business days after Landlord request therefor, to provide Landlord with any other information reasonably requested by Landlord for the purpose of completing the Landlord Work; or (ii) Tenants failure, within thirty (30) days after Landlord's request therefor, to deconstruct furniture systems and to move the furniture from the Additional Premises. In any such event, such delay or delays shall not postpone or defer the Additional Premises Commencement Date, or Tenant's obligation to pay Additional Premises Monthly Base Rent (hereinafter defined) as of the Additional Premises Commencement Date, but the Additional Premises Commencement Date shall occur on the day when it would otherwise have occurred if such delay or delays had not occurred.

6. **Additional Premises Base Rent.** Commencing on the Additional Premises Commencement Date (referred to as "APCD" in the chart set forth immediately below), and thereafter on the first day of each and every calendar month during the Additional Premises Term, Tenant shall pay Landlord Base Rent for the Additional Premises only ("Additional Premises Annual Base Rent") in the following amounts, in equal monthly installments ("Additional Premises Monthly Base Rent"), in advance, as follows:

Period	Additional Premises Annual Base Rent / Rentable Square Foot	Additional Premises Annual Base Rent	Additional Premises Monthly Base Rent
APCD – 8/31/09	$ 21.63	$ 90,997.41*	$ 7,583.12
9/1/09 – 8/31/10	$ 22.28	$ 93,731.96	$ 7,811.00
9/1/10 – 2/28/11	$ 22.95	$ 96.550.65*	$ 8,045.89

(* on an annualized basis)

Tenant shall pay Landlord Additional Premises Monthly Base Rent in accordance with the terms and provisions of Article 3 of the Original Lease.

7. **Tenant's Share of Taxes and Expenses.** As of the Additional Premises Commencement Date, Tenant's Share shall be increased from 16.21% to 26.16% to reflect the inclusion of the Additional Premises into the Premises.

8. **Tenant's Continuing Obligations with Respect to the Original Premises.** Between the Effective Date and the Expiration Date, Tenant shall continue to pay to Landlord all Base Rent for the Original Premises in accordance with the terms and conditions of Article 3 of the Original Lease.

9. **Contingency.**

A. Landlord and Tenant acknowledge and agree that this First Amendment is expressly contingent upon the execution and unconditional delivery, on or before the Outside Date (hereinafter defined), by Landlord and OncoMethylome Sciences, Inc. ("OncoMethylome") of the OncoMethylome Expansion Amendment (hereinafter defined). As used herein, the term "Outside Date" means the date which occurs thirty (30) days following the Effective Date, as such date may be extended by Landlord in its sole discretion. In the event that, on or before the Outside Date, Landlord and OncoMethylome do not enter into the OncoMethylome Expansion Amendment, then Landlord shall have the right, but not the obligation, to terminate this First Amendment upon ten (10) days prior written notice to Tenant, in which event this First Amendment shall be null and void. As used herein, the term "OncoMethylome Expansion Amendment" means that certain Second Amendment to Office Lease by and between Landlord and OncoMethylome, in form and substance satisfactory to Landlord in its sole discretion, pursuant to which Landlord shall lease to OncoMethylome, and OncoMethylome shall lease from Landlord, approximately 455 rentable square feet of office space on the third (3rd) floor of the Building, as shown on the attached hereto Exhibit C (the "OncoMethylome Space"), for a term and on terms and conditions acceptable to Landlord in its sole discretion.

B. In the event that Landlord and OncoMethylome do not execute the OncoMethylome Expansion Amendment on or before March 1, 2009, then Tenant shall have the right, but not the obligation, to terminate this First Amendment upon ten (10) days prior written notice to Landlord; provided, however, if Landlord and OncoMethylome execute the OncoMethylome Expansion Amendment on or before the expiration of such ten (10) day notice period, then Tenant shall no longer have the right to terminate this First Amendment pursuant to this Section 9.B. In the event terminates this First Amendment in accordance with the provisions of this Section 9.B., this First Amendment shall be null and void and of no further force or effect.

10. **Broker.** Landlord and Tenant recognize ACP Mid-Atlantic LLC ("Landlord's Broker"), as Landlord's agent and Colliers Pinkard ("Tenant's Broker), as Tenant's agent, with respect to this First Amendment. Landlord agrees to be responsible for the payment of any leasing commission or any other costs or fees owed to the Tenant Broker and Landlord Broker in accordance with the terms of a separate commission agreement entered into between Landlord and the Landlord Broker and Tenant Broker. Landlord and Tenant each represent and warrant to the other that no other broker has been employed in carrying on any negotiations relating to this First Amendment and shall each indemnify and hold harmless the other from any claim for brokerage or other commission arising out of (a) any breach of the foregoing representation and warranty; or (b) the actions of Landlord or Tenant with respect to the broker making any claim for a commission.

11. Landlord's Notice Address. Article 1(M) of the Original Lease (captioned, "Landlord's Notice Address") is amended by inserting the following as Landlord's address for notices under the Lease:

"Landlord's Notice Address (subject to Article 25):

ACP 2505 Meridian LLC
444 Brickell Avenue
Suite 900
Miami, Florida 33131
Attn: Chief Operating Officer

With copies to:

ACP 2505 Meridian LLC
c/o ACP Mid-Atlantic LLC, as Agent
2350 Corporate Park Drive
Suite 110
Herndon, Virginia 20171
Attn: Asset Manager

And

Holland & Knight LLP
2099 Pennsylvania Avenue, NW
Suite 100
Washington, DC 20006
Attn: David S. Kahn, Esq."

12. **Counterpart Copies.** This First Amendment may be executed in two (2) or more counterpart copies, all of which counterparts shall have the same force and effect as if all parties hereto had executed a single copy of this First Amendment.

13. **Miscellaneous.** This First Amendment (a) shall be binding upon and inure to the benefit of the parties hereto and their respective representatives, transferees, successors and assigns and (b) shall be governed by and construed in accordance with the laws of the State of North Carolina.

14. **Ratification.** Except as expressly amended by this First Amendment, all other terms, conditions and provisions of the Lease are hereby ratified and confirmed and shall continue in full force and effect.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties hereto have executed this First Amendment to Office Lease under seal as of the day and year first hereinabove written.

LANDLORD:

ACP 2505 Meridian LLC,
a Delaware limited liability company

By: /s/ Douglas Fleit
Name: Douglas Fleit
Title: President

TENANT:

Chimerix, Inc.,
a Delaware corporation

By: /s/ George R. Painter
Name: George R. Painter
Title: President and Chief Executive Officer

EXHIBIT A

FLOOR PLAN OF THE ADDITIONAL PREMISES

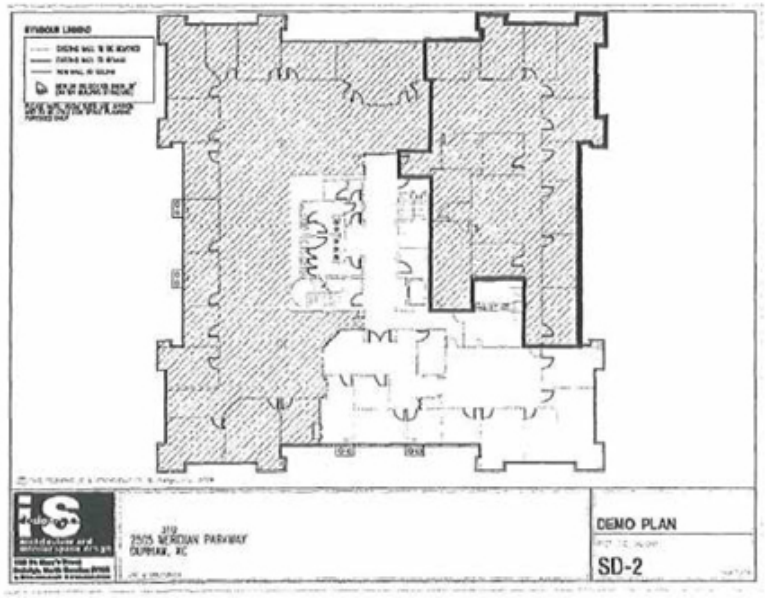


EXHIBIT B

LOCATION OF CERTAIN LANDLORD WORK

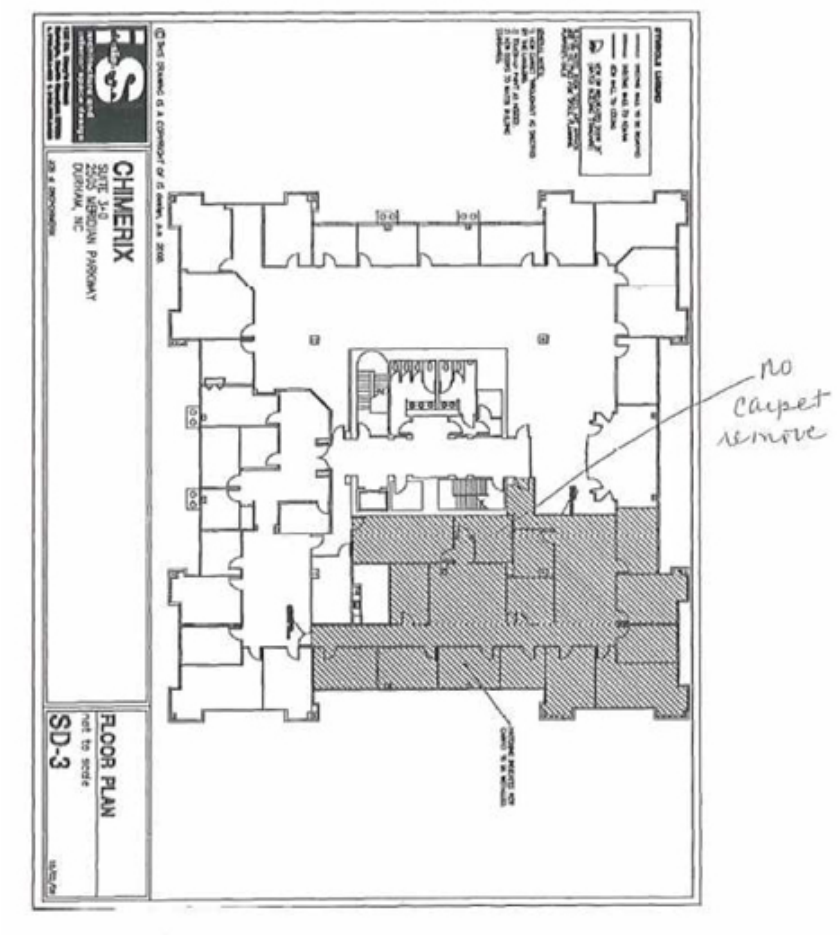
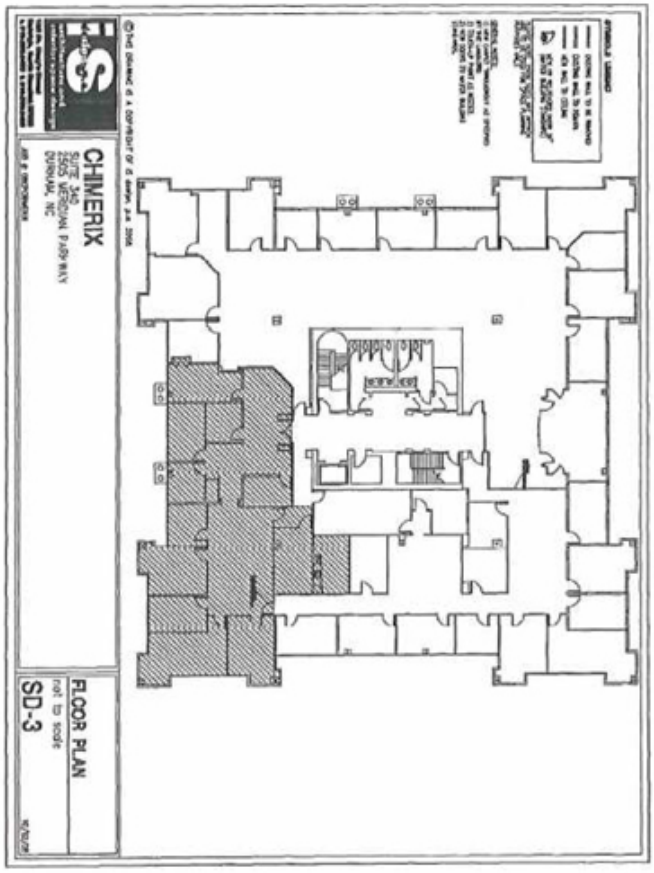


EXHIBIT C

ONCOMETHYLOME SPACE



SECOND AMENDMENT TO OFFICE LEASE

THIS SECOND AMENDMENT TO OFFICE LEASE (this "Second Amendment") is made this 21st day of January, 2011 (the "Effective Date"), by and between **ACP 2505 MERIDIAN LLC**, a Delaware limited liability company ("Landlord"), and **CHIMERIX, INC.**, a Delaware corporation ("Tenant").

WITNESSETH:

WHEREAS, pursuant to that certain Office Lease dated September 1, 2007 (the "Original Lease"), Landlord leased to Tenant, and Tenant leased from Landlord, approximately 6,849 rentable square feel of office space (the "Original Premises") known as Suite 340 on the third (3rd) floor of the building located at 2505 Meridian Parkway, Durham, North Carolina 27713 (the "Building");

WHEREAS, pursuant to that certain First Amendment to Office Lease dated December 19, 2008 (the "First Amendment"), Landlord and Tenant amended the Original Lease to provide for the demise to Tenant of the Additional Premises (as more particularly described in the First Amendment), upon the terms and conditions set forth in the First Amendment; and

WHEREAS, Tenant desires to extend the Term for a period of one (1) year, commencing on March 1, 2011 and expiring on February 29, 2012, and Landlord is willing to do so, subject to the terms and conditions set forth in this Second Amendment.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration and of the mutual agreements hereinafter set forth, it is hereby mutually agreed as follows:

1. Incorporation of Recitals. The foregoing recitals are hereby incorporated in this Second Amendment and are made a part hereof by this reference.

2. Definitions. All capitalized terms not defined in this Second Amendment shall have the meanings ascribed thereto in the Original Lease. As used herein and in the Original Lease, the term "Lease" shall mean the Original Lease, as amended by the First Amendment and this Second Amendment.

3. Term. The Term is hereby extended for a period (the "Extension Period") of one (1) year, commencing on March 1, 2011 (the "Extension Commencement Date") and expiring on February 29, 2012, unless earlier terminated in accordance with the terms of the Lease. Accordingly, as used herein and in the Original Lease, the term "Expiration Date" shall mean and refer to February 29, 2012.

4. "As-Is" Condition. Tenant shall remain in possession of the Premises from and after the Extension Commencement Date in its then "as-is" condition, and Landlord shall have no obligation to perform or pay for any work, improvements or alterations in or to the Premises in connection with this Second Amendment or otherwise.

5. Base Rent. Commencing on the Extension Commencement Date, and thereafter on the first day of each and every calendar month during the Extension Period, Tenant shall pay Landlord Base Rent in the following amounts, in equal monthly installments, in advance, as follows:

Period	Base Rent Per Square Foot	Base Rent	Monthly Base Rent
3/1/11 – 2/29/12	$ 21.95	$ 242,679.24	$ 20,223.27

Tenant shall pay Landlord Base Rent due pursuant to this Paragraph 5 in accordance with the terms and conditions of Section 3 of the Original Lease (captioned, "Base Rent and Additional Rent").

6. Tenant's Share of Increases In Taxes and Expenses. Notwithstanding anything to the contrary contained in the Lease, during the Extension Period, Tenant shall have no obligation to pay Tenant's Share of increases in Taxes or Tenant's Share of increases in Expenses.

7. Brokers. Landlord and Tenant recognize CB Richard Ellis ("Landlord Broker"), as Landlord's agent and Cassidy Turley ("Tenant Broker"), as Tenant's agent, with respect to this Second Amendment. Landlord agrees to be responsible for the payment of any leasing commission or any other costs or fees owed to Tenant Broker and Landlord Broker in accordance with the terms of a separate commission agreement entered into between Landlord and each of Landlord Broker and Tenant Broker. Landlord and Tenant each represent and warrant to the other that no other broker has been employed in carrying on any negotiations relating to this Second Amendment and shall each indemnify and hold harmless the other from any claim for brokerage or other commission arising out of (a) any breach of the foregoing representation and warranty; or (b) the actions of Landlord or Tenant with respect to the broker making any claim for a commission.

8. Landlord's Notice Address. Article 1(M) of the Original Lease (captioned, "Landlord's Notice Address"), as amended by Paragraph 11 of the First Amendment (captioned, "Landlord's Notice Address"), is amended by inserting the following as Landlord's address for notices under the Lease:

"Landlord's Notice Address (subject to Article 25):

ACP 2505 Meridian LLC
c/o American Real Estate Partners Management LLC, as Agent
2350 Corporate Park Drive
Suite 110
Herndon, Virginia 20171
Attn: Asset Manager

With a copy to: Holland & Knight LLP
2099 Pennsylvania Avenue, NW
Suite 100
Washington, DC 20006
Attn: David S. Kahn, Esq."

9. Tenant's Termination Option.

A. During the Extension Period only, Tenant shall have a one (1)-time right to terminate the Lease, subject to the terms and conditions set forth in this Paragraph 9. Tenant may exercise such option to terminate the Lease by delivering to Landlord, no later than sixty (60) days prior to the Termination Date (hereinafter defined), an irrevocable written notice of termination (the "Termination Notice"), time being of the essence. In the event that Tenant timely delivers the Termination Notice to Landlord, and provided Tenant is not in default of the Lease, either at the time it delivers the Termination Notice to Landlord or at any time between such date and the Termination Date, this Lease shall terminate as of the Termination Date. As used herein, the term "Termination Date" shall mean the date set forth in the Termination Notice as the date on which the Lease shall terminate, provided, however, that in no event shall the Termination Date occur prior to the date which is sixty (60) days after the date on which Landlord receives the Termination Notice.

B. If this Lease is terminated pursuant to and in accordance with the provisions of this Paragraph 9, then, as of the Termination Date, neither Landlord nor Tenant shall have any rights or obligations under the Lease and Landlord shall be free to lease the Premises to any persons or entities for a term beginning after the Termination Date; provided that Tenant shall vacate the Premises in accordance with the terms and conditions of this Lease on or before the Termination Date; and provided further, however, that Tenant shall remain obligated for any liabilities or obligations under the Lease (including without limitation the obligation to pay Base Rent and all other amounts payable under this Lease) accruing prior to the Termination Date, which obligation shall survive indefinitely the termination of this Lease.

C. Should Tenant fail to surrender the Premises to Landlord on or before the Termination Date, time being of the essence, then, at Landlord's sole option: (i) Landlord shall be entitled to immediately exercise all of the rights and remedies available to Landlord under the Lease upon a default by Tenant thereunder (and such other rights and remedies as may be available to Landlord at law or in equity); (ii) Tenant shall be liable to Landlord as a hold-over tenant under the Lease and shall be subject to the terms and conditions of Article 24 of the Original Lease (captioned, "Holding Over"); and (iii) if Tenant fails to surrender the Premises to Landlord within ten (10) days after notice by Landlord, the Termination Notice may be deemed void and of no further force or effect and the Lease shall continue in full force and effect, in which event and all rights of Tenant under this Paragraph 9 shall immediately lapse and be of no further force or effect. Tenant shall indemnify and hold harmless Landlord from and against any and all costs, expenses, liabilities and damages (including attorneys' fees) resulting from such holding over, including but not limited to any costs, expenses, liabilities or damages resulting from (1) Landlord's failure to deliver the Premises to a prospective tenant; and (2) Landlord's removal from the Premises of any of Tenant's equipment, furniture or personal property in order to deliver possession of the Premises to a prospective tenant.

D. Tenant's rights under this Paragraph 9 are personal to Chimerix, Inc. and can not be exercised by any assignee, subtenant or any other person or entity.

10. Counterpart Copies. This Second Amendment may be executed in two (2) or more counterpart copies, all of which counterparts shall have the same force and effect as if all parties hereto had executed a single copy of this Second Amendment.

11. Miscellaneous. This Second Amendment (a) shall be binding upon and inure to the benefit of the parties hereto and their respective representatives, transferees, successors and assigns and (b) shall be governed by and construed in accordance with the laws of the State of North Carolina.

12. Ratification. Except as expressly amended by this Second Amendment, all other terms, conditions and provisions of the Lease are hereby ratified and confirmed and shall continue in full force and effect.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties hereto have executed this Second Amendment to Office Lease under seal as of the day and year first hereinabove written.

LANDLORD:

ACP 2505 Meridan LLC,
a Delaware limited liability company

By:	/s/ Brian Katz
Name:	Brian Katz
Title:	Vice President

TENANT:

Chimerix, Inc.,
a Delaware corporation

By:	/s/ Kenneth I. Moch
Name:	Kenneth I. Moch
Title:	President and Chief Executive Officer

THIRD AMENDMENT TO OFFICE LEASE

THIS THIRD AMENDMENT TO OFFICE LEASE (this "Third Amendment") is made as of this 1st day of March, 2012 (the "Effective Date"), by and between **AREP MERIDIAN I LLC**, a Delaware limited liability company ("Landlord"), and **CHIMERIX, INC.**, a Delaware corporation ("Tenant").

WITNESSETH:

WHEREAS, pursuant to that certain Office Lease dated September 1, 2007 (the "Original Lease"), ACP 2505 Meridian LLC ("Original Landlord") leased to Tenant, and Tenant leased from Original Landlord, approximately 6,849 rentable square feet of office space (the "Original Premises") known as Suite 340 on the third (3rd) floor of the building located at 2505 Meridian Parkway, Durham, North Carolina 27713 (the "Building");

WHEREAS, pursuant to that certain First Amendment to Office Lease dated December 19, 2008 (the "First Amendment"), Original Landlord and Tenant amended the Original Lease to provide for the demise to Tenant of the Additional Premises (as more particularly described in the First Amendment), upon the terms and conditions set forth in the First Amendment;

WHEREAS, pursuant to that certain Second Amendment to Office Lease dated January 21, 2011 (the "Second Amendment"), Original Landlord and Tenant amended the Original Lease, as amended, to provide for the extension of the Term until February 29, 2012;

WHEREAS, Landlord has succeeded to the interest of Original Landlord under the Original Lease, as amended; and

WHEREAS, Tenant desires to extend the Term for a period commencing on March 1, 2012 and expiring on February 28, 2013, and Landlord is willing to do so, subject to the terms and conditions set forth in this Third Amendment.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration and of the mutual agreements hereinafter set forth, it is hereby mutually agreed as follows:

1. Incorporation of Recitals. The foregoing recitals are hereby incorporated in this Third Amendment and are made a part hereof by this reference.

2. Definitions. All capitalized terms not defined in this Third Amendment shall have the meanings ascribed thereto in the Original Lease, as amended. As used herein and in the Original Lease, as amended, the term "Lease" shall mean the Original Lease, as amended by the First Amendment, the Second Amendment and this Third Amendment.

3. Term. The Term is hereby extended for a period (the "Second Extension Period") of one (1) year, commencing on March 1, 2012 (the "Second Extension Commencement Date") and expiring on February 28, 2013, unless earlier terminated hi accordance with the terms of the Lease. Accordingly, as used herein and in the Original Lease, as amended, the term "Expiration Date" shall mean and refer to February 28, 2013.

4. "As-Is" Condition. Tenant shall remain in possession of the Premises from and after the Second Extension Commencement Date in its then "as-is" condition, and Landlord shall have no obligation to perform or pay for any work, improvements or alterations in or to the Premises in connection with this Third Amendment or otherwise.

5. Base Rent. Commencing on the Second Extension Commencement Date, and thereafter on the first day of each and every calendar month during the Second Extension Period, Tenant shall pay Landlord Base Rent in the following amounts, in equal monthly installments, in advance, as follows:

Period	Base Rent Per Square Foot	Base Rent	Monthly Base Rent
3/1/12 – 2/28/13	$ 22.49	$ 248,649.48	$ 20,720.79

Tenant shall pay Landlord Base Rent due pursuant to this Paragraph 5 in accordance with the terms and conditions of Section 3 of the Original Lease (captioned, "Base Rent and Additional Rent").

6. Tenant's Share of Increases in Taxes and Expenses. Tenant hereby expressly acknowledges and agrees that commencing on the Second Extension Commencement Date, and continuing thereafter during the entirety of the Second Extension Period, Tenant shall pay Landlord, in accordance with the terms Section 3 of the Original Lease, as amended by the terms of this Paragraph 6 (i) Tenant's Share of Taxes in excess of the Taxes incurred during the New Base Tax Year (hereinafter defined) and (ii) Tenant's Share of Expenses in excess of the Expenses incurred during the New Base Expense Year (hereinafter defined). As used herein (a) the term "New Base Tax Year" means calendar year 2011 and (b) the term "New Base Expense Year" means calendar year 2011.

7. Brokers. Landlord and Tenant recognize CB Richard Ellis ("Landlord Broker"), as Landlord's agent and Cassidy Turley ("Tenant Broker"), as Tenant's agent, with respect to this Third Amendment. Landlord agrees to be responsible for the payment of any leasing commission or any other costs or fees owed to Tenant Broker and Landlord Broker in accordance with the terms of a separate commission agreement entered into between Landlord and each of Landlord Broker and Tenant Broker. Landlord and Tenant each represent and warrant to the other that no other broker has been employed in carrying on any negotiations relating to this Third Amendment and shall each indemnify and hold harmless the other from any claim for brokerage or other commission arising out of (a) any breach of the foregoing representation and warranty; or (b) the actions of Landlord or Tenant with respect to the broker making any claim for a commission.

8. Additional Modification. From and after the date of this Third Amendment, Paragraph 9 of the Second Amendment (captioned, "Tenant's Termination Option") is hereby deleted in its entirety and is of no further force and effect.

9. Counterpart Copies. This Third Amendment may be executed in two (2) or more counterpart copies, all of which counterparts shall have the same force and effect as if all parties hereto had executed a single copy of this Third Amendment.

10. **Miscellaneous.** This Third Amendment (a) shall be binding upon and inure to the benefit of the parties hereto and their respective representatives, transferees, successors and assigns and (b) shall be governed by and construed in accordance with the laws of the State of North Carolina.

11. **Ratification.** Except as expressly amended by this Third Amendment, all other terms, conditions and provisions of the Lease are hereby ratified and confirmed and shall continue in full force and effect.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties hereto have executed this Third Amendment to Office Lease under seal as of the day and year first hereinabove written.

LANDLORD:

AREP MERIDIAN LLC,
a Delaware limited liability company

By:	/s/ Brian Katz
Name:	Brian Katz
Title:	Vice President

TENANT:

Chimerix, Inc.,
a Delaware corporation

By:	/s/ Timothy W. Trost
Name:	Timothy W. Trost
Title:	Senior Vice President and Chief Financial Officer

Exhibit 10.13

LEASE AGREEMENT

THIS LEASE (this "Lease") is made as of this 1st day of September 2008, between Biopharm Properties, LLC ("Landlord") and Chimerix, Inc. ("Tenant"). In consideration of the mutual promises and representations in this Lease, the Landlord and Tenant agree as follows:

ARTICLE 1. -BASIC LEASE INFORMATION`

1.1 Basic Lease Information.
In addition to the terms that are defined elsewhere in this Lease, the following definitions and provisions apply to this Lease:

(a) Building: The building located on the Land and of which the Premises are a part and located at 4134 S. Alston Avenue, Durham, NC 27713, Labs 103 and 104.

(b) Premises: That portion of the Building, containing approximately 2,300 rentable square feet, as determined by Landlord in its reasonable discretion and in accordance with BOMA standards, as shown on Exhibit A attached hereto and incorporated herein by reference.

(c) Land: The land on which the Project is located and which is described on Exhibit B.

(d) Project: The development consisting of the Land and all improvements built on the Land, including without limitation the Building, parking lot (and parking structure, if any), walkways, driveways and landscaping.

(e) Term: The term of this Lease shall be for three (3) years, plus the remainder of any partial calendar month in which the term commences beginning on the Commencement Date and ending at 6:00 P.M. (local time at the Premises) on the Expiration Date. Tenant shall have option of renewing the original term of this Lease for an additional period of three (3) years with sixty (60) days prior written notice.

(f) Commencement Date: September 1, 2008, or as adjusted pursuant to the terms of this Lease. If the Commencement Date is not on the first calendar day of the month, the first Lease Year shall additionally include any partial month running from the Commencement Date through the last day of such partial month.

(g) Expiration Date: August 31, 2011, unless adjusted or otherwise sooner terminated pursuant to the terms and provisions of this Lease.

(h) Lease Year: The twelve month period beginning on the first day of the first full month on or after the Commencement Date ("Lease Year 1") or any twelve month period beginning on an anniversary date of the Commencement Date.

(i) Security Deposit: $2,000.00.

(j) Base Rent: The minimum base rent for the Term is as set forth in the following Base Rent Schedule payable in monthly installments on the 1st day of each month in accordance with the following Base Rent Schedule:

Years	Monthly Base Rent	Annual Base Rent
Initial Term: 1 - 3	$4,216.67	$50,600.00
Option Term: 4 - 6	$4,532.92	$54,395.00

(k) Tenant's Share: 33%. Tenant's Share is calculated as the same proportion which the rentable square footage of the Premises bears in relation to the rentable square footage of the Building.

(l) Permitted Use: Laboratory, related office and other related uses consistent with the character of the Building and otherwise in compliance with the provisions of Article 4 hereof.

(m) Address for Rent Payment:
Biopharm Properties, LLC
PO Box 1928
Mount Airy, NC 27030

(n) Landlord's Notice Address:
Biopharm Properties, LLC
PO Box 1928
Mount Airy, NC 27030

(o) Tenant's Notice Address:
Bernhard Lampert
Chimerix, Inc.
5007 Southpark Drive, Suite 200
Durham, NC 27713

1.2 Exhibits.
The following exhibits are attached to this Lease and made part of this Lease:

Exhibit A: Description of Premises
Exhibit B: Description of the Land
Exhibit C: Rules and Regulations

ARTICLE 2. -LEASE OF PREMISES

2.1 Lease of Premises.
Upon and subject to all the terms and conditions hereof; Landlord hereby leases to Tenant and Tenant hereby leases from Landlord the Premises. The duration of this Lease shall be the Term.

2.2 Common Areas.
Tenant shall have the right together with other tenants and occupants and invitees to the non-exclusive use of the portions of the Project that are for the non-exclusive use of tenants, occupants and invitees, including but not limited to sidewalks, driveways, stairways, public restrooms, and common halls, lobbies, elevators and passages, in the Building and on the Land (collectively the "Common Areas") for reasonable ingress to and egress from the Premises or the normal use thereof; subject to the other provisions of this Lease including, without limitation, the Rules and Regulations in Exhibit C.

ARTICLE 3. -DELIVERY OF THE PREMISES

3.1 Possession / Satisfactory Condition.
Effective as of the Commencement Date, Tenant shall accept the Premises in their condition as of such date, subject to all applicable Legal Requirements (as defined in Article 4 hereof). Tenant's taking possession of the Premises shall be conclusive evidence as against Tenant that the Premises were in good order and satisfactory condition when Tenant took possession except for a list of items agreed to (such agreement not to be unreasonably withheld) and signed by Landlord and Tenant and latent defects. No promise of Landlord to alter, remodel, decorate, clean or improve the Premises, the Building or the Land and no representation respecting the condition of the Premises, the Building or the Land have been made by Landlord to Tenant, unless the same is contained herein, or made a part hereto, or in a written document signed by Landlord.

3.2 Failure to Give Possession / Adjustment of Commencement Date.
If Landlord shall be unable to give possession of the Premises on the Commencement Date by reason of any of the following: (i) labor disputes and/or material shortages (ii) Force Majeure or Acts of God (iii) the hold over or retention of possession of any tenant, tenants, or occupants; (iv) the acts or omissions of Tenant, whether or not negligent or intentional; or (v) for any other reason, beyond Landlord's reasonable control, Landlord shall not be subject to any liability for the failure to give possession on said date. Under such circumstances the Commencement Date, Expiration Date, and all other dates that may be affected by their change, shall be revised to conform to Landlord's delivery of possession of the Premises to Tenant. No such failure to give possession on the date of commencement of the term hereof shall affect the validity of this Lease or the obligation of Tenant hereunder, and neither Landlord nor Landlord's agents shall be liable to Tenant for any loss or damage resulting from the delay in delivery of possession.

3.3 Early Occupancy / Adjustment of Commencement Date.
If the Premises are ready for occupancy prior to the Commencement Date and Tenant occupies the Premises prior to said date, or if Tenant occupies all or any part of the Premises prior to the Commencement Date set out in Article 1, then the Commencement Date shall be the date of Tenant's early occupancy.

3.4 Items Not Delaying Possession or Occupancy.

The Premises shall not be deemed to be unready for Tenant's occupancy or incomplete if only minor or insubstantial details of construction, decoration or mechanical adjustment remain to be done in the Premises or any part thereof, or if the delay in the availability of the Premises for occupancy shall be due to special work, changes, alterations or additions required or made by Tenant in the layout or finish of the Premises or any part thereof or shall be caused in whole or in part by Tenant through the delay of Tenant in submitting plans, supplying information, approving plans, specifications or estimates, giving authorizations or otherwise or shall be caused in whole or in part by delay and/or default on the part of Tenant. In the event of any dispute as to whether the Premises are ready for Tenant's occupancy, the decision of Landlord's architect shall be final and binding on the parties.

3.5 No Representation.

Tenant agrees and acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of all or any portion of the Premises or the Project, and/or the suitability of the Premises or the Project for the conduct of Tenant's business.

ARTICLE 4. -USE OF PREMISES

4.1 Permitted Uses.

Tenant shall occupy and use the Premises during the Term solely for the Permitted Use set out in Article 1, and in compliance with all laws, orders, judgments, ordinances, regulations, codes, directives, permits, licenses, covenants and restrictions now or hereafter applicable to the Premises, and the use and occupancy thereof (collectively the "Legal Requirements"). Tenant will use the Premises in a careful, safe and lawful manner. Tenant shall not commit waste, overload the floor or structure of the Premises, subject the Premises to use that would damage the Premises or obstruct or interfere with the rights of Landlord or other tenants or occupants of the Building, or make or permit to be made any use of the Premises which may be dangerous to persons or property, or which may invalidate or increase the premium cost of any policy of insurance carried on the Building, the Land or covering Landlord's operations. Landlord acknowledges and agrees that the Permitted Use specified in Section 1.1(1) shall not violate the terms of this Section 4.1.

ARTICLE 5. -RENT

5.1 Payment of Rent.

Tenant shall pay the monthly installment of Base Rent and pay the Additional Rent due under Article 6 below (collectively "Monthly Rent") in advance on or before the first day of each calendar month of the Term. If the Commencement Date is not the first day of a calendar month, Tenant shall pay on the Commencement Date a pro rata portion of the Monthly Rent for the first partial month of the Term.

5.2 Additional Rent / Rent.
Any amount required to be paid by Tenant hereunder in addition to Base Rent shall be "Additional Rent." Base Rent and Additional Rent are sometimes collectively referred to herein as "Rent"

5.3 Payment Terms.
Monthly Rent shall be paid without demand or notice and without any right of setoff or deduction except as specifically provided herein, as Tenant's obligation to pay Rent is separate and independent of Landlord's obligations under this Lease. Rent payments shall be sent to the Address for Rent Payment set out in Article 1, or such other address as Landlord instructs Tenant in writing to send Rent payments.

ARTICLE 6. -OPERATING EXPENSES

6.1 Expense Payment Obligation.
In addition to Base Rent, commencing on the Commencement Date, Tenant agrees to pay to Landlord as Additional Rent Tenant's Share of "Expenses" (as defined below). On the first day of each month of year one of the Term, Tenant shall pay Landlord an amount equal to $569.25 which amount shall be deemed to be Tenant's share of "Expenses", subject to adjustment as provided in Section 6.4 below. Payments for any fractional calendar month shall be prorated.

6.2 Definition of "Expenses."
The term "Expenses" shall mean and include those expenses paid or incurred by Landlord for managing, maintaining, operating and repairing the Project, and any personal property used in conjunction therewith.

(a) Expenses shall include, without limitation:

(i) the cost of all insurance coverage related to the Project,

(ii) Taxes (as defined below) assessed against the Land and/or Building, and

(iii) the cost of utilities (including water and sewer services for the Building), labor, materials, supplies, equipment, tools, permits licenses, inspection fees, management fees and common area expenses attributable to the Project.

(b) Expenses shall not include:

(i) costs of alterations of tenants' space in the Building,

(ii) depreciation charges,

(iii) interest and principal payments on mortgages,

(iv) ground rental payments, or

(v) real estate brokerage and leasing commissions.

6.3 Definition of "Taxes."

The term "Taxes" shall mean ad valorem real estate taxes, assessments, sewer rents, rates and charges, transit taxes, taxes based upon the receipt of rent, and any other federal, state or local governmental charge, general, special, ordinary or extraordinary (but not including income or franchise taxes or many other taxes imposed upon or measured by Landlord's income or profits, unless the same shall be imposed in lieu of real estate taxes and other ad valorem taxes), which may now or hereinafter be levied or assessed upon the Land and/or upon the Building. Taxes shall also include any personal property taxes (attributable to the calendar year in which paid) imposed upon the Landlord's fixtures, machinery, equipment, apparatus, systems and appurtenances used in connection with the operation of said Building and Land.

6.4 Annual Statement and Reconciliation.

Within 120 days after the end of each calendar year during the Term (or such longer period as may reasonably be required), Landlord will furnish to Tenant a statement (the "Annual Statement") showing the following:

(a) the total and Tenant's Share of Expenses for said calendar year;

(b) the amount of retroactive rent adjustment for Expenses to be paid promptly by Tenant to Landlord upon receipt of said statement or to be credited to Tenant for said calendar year; and

(c) Landlord's estimate of the amount of additional rent to be paid on account of Expenses for the then current calendar year and thereafter until receipt of a new statement containing a revised Landlord's Estimate.

Any amount due to Landlord as shown on any such Annual Statement shall be paid by Tenant within thirty (30) days after Landlord shall have submitted the Annual Statement. If pursuant to the Annual Statement Landlord owes Tenant a credit, then, Landlord may credit Tenant's payments next coming due or refund such credit amount to Tenant within thirty days after the date of the Annual Statement. If this Lease expires or terminates on a day other than December 31, then Tenant's Share of Expenses shall be prorated. The provisions of this Section 6.5 shall survive the expiration or termination of the Lease.

6.5 Books and Records.

Tenant shall have the right to examine Landlord's books and records with respect to the items in the Annual Statement for the year in question during normal business hours at any time within ten (10) days following the furnishing of such Annual Statement by Landlord to Tenant. Unless Tenant shall take written exception to any item within thirty (30) days after the furnishing of the foregoing Annual Statement, such Annual Statement shall be considered as final and accepted by Tenant. Tenant shall pay to Landlord any amount shown as owing on such Annual Statement as set forth above, regardless of whether or not Tenant takes written exception thereto.

ARTICLE 7. -SECURITY DEPOSIT

7.1 Delivery of Security Deposit.
Tenant agrees to deposit with Landlord, upon execution of this Lease, a security deposit in the amount of $2,000.00 for the full and faithful performance by Tenant of each and every term, provision, covenant, and condition of this Lease.

7.2 Application and Restoration of Security Deposit.
If Tenant defaults beyond any applicable cure period in respect to any of the terms, provisions, covenants and conditions of the Lease including, but not limited to, payment of Rent and/or additional rent and any other monies payable by Tenant hereunder, Landlord may use, apply, or retain the whole or any part of the security so deposited for the payment of any such Rent or other payment in default, or for any other sum which Landlord may expend or be required to expend by reason of Tenant's default including, without limitation, any damages or deficiency in the reletting of the Premises, whether such damages or deficiency shall have occurred before or after any re-entry by Landlord. If any of the security shall be so used, applied or retained by Landlord at any time or from time to time, Tenant shall promptly, in each such instance, on written demand therefore by Landlord, pay to Landlord such additional sum as may be necessary to restore the security to the original amount required to be deposited.

7.3 Remittance of Security Deposit.
If Tenant shall fully and faithfully comply with all terms, provisions, covenants, and conditions of this Lease, the security, or any balance thereof, shall be returned to Tenant within thirty (30) days after the last of the following to occur:

(a) the time fixed as the expiration of the term of this Lease;

(b) the removal of Tenant from the Premises;

(c) the surrender of the Premises by Tenant to Landlord in accordance with this Lease; and

(d) the time required for the rent adjustments and other amounts due pursuant to the Lease to have been computed by Landlord and paid by Tenant.

Except as otherwise required by law, Tenant shall not be entitled to any interest in the aforesaid security. In the absence of evidence satisfactory to Landlord of an assignment of the right to receive the security or the remaining balance thereof, Landlord may return the security to the original Tenant, regardless of one or more assignments of this Lease. Landlord's obligation to return the Security Deposit shall survive the termination of this Lease.

ARTICLE 8. -PAYMENTS UNDER LEASE

8.1 Late Charge / Default Interest.
If any payment of Rent due from Tenant is not received by Landlord within ten (10) days after the date such payment is due, in addition to any other remedies available to Landlord, Tenant shall pay to Landlord an additional sum equal to five percent (5%) of the overdue rent or twenty-five dollars, whichever is greater, as a late charge. Such late charge shall be paid promptly upon demand. In addition to the late charge, Rent not paid within ten (10) days of when due shall bear interest at the annual rate equal to eighteen percent (18%) per annum (the "Default Rate") from the 10^{th} day after the due date until paid. Notwithstanding the foregoing, Tenant shall not be obligated to pay any late charge or interest the first time in any twelve (12) month period that Tenant pays rent late.

8.2 Returned Checks.
If Landlord presents Tenant's check to any bank and Tenant has insufficient funds to pay for such check, then Landlord shall be entitled to all default remedies provided under the terms of this Lease and the maximum lawful bad check fee.

8.3 No Accord and Satisfaction.
No payment by Tenant or receipt by Landlord of a lesser amount than the Rent and/or additional rents and/or any other monies payable hereunder shall be deemed to be other than on account of the earliest of such due and payable hereunder; nor shall any notice or statement of conditions accompanying any check or payment due hereunder be deemed an accord and satisfaction and Landlord may accept any such payment without prejudice to Landlord's right to recover the balance of all amounts due and owing hereunder or to pursue any other remedy provided for in this Lease and/or at law or in equity.

ARTICLE 9. -SERVICES

9.1 Services Provided to Premises.
Subject to the terms of this Article 9, Landlord shall provide the following to the Premises:

(a) heat and air conditioning, at such temperatures as are provided in comparable facilities in the Research Triangle Park, North Carolina area, each Premises shall have separate HVAC connections;

(b) normal electrical connections;

(c) water and sewer connections in common with other tenants of the Building;

(d) voice and data line connection providing access to the local public telephone company;

(e) fire alarm service;

(f) connection for hook up to security system; and

(g) an emergency generator, subject to the terms herein,

9.2 No Liability for Interruption of Services.
Landlord reserves the right to stop building system services when necessary. Landlord shall have no liability or responsibility for failure to supply building services during any such period of interruption unless such interruption unreasonably interferes with Tenant's use or occupancy of the Premises; provided however, Landlord shall give Tenant advance written notice of any planned stoppage of building system services for routine maintenance, repairs, alterations or improvements. Tenant understands and agrees that Landlord shall not be liable in any way for any damage or inconvenience caused by the cessation or interruption of such heating, air conditioning, electricity, water, sewer or other utility or service occasioned by fire, accident, strikes, break-down, necessary maintenance, alterations, or repairs, replacements, conduct of other tenants, requirements of a public authority or causes beyond Landlord's control unless caused by the gross negligence or willful misconduct of Landlord.

9.3 Payments for Services.
Tenant shall pay directly to the utility service provider, prior to delinquency, any separately metered utilities (for example, electricity and telephone) and services which may be furnished to Tenant or the Premises during the Term. If such utilities or services are not separately metered for Tenant (for example water and sewer servicing the entire Building), Tenant shall pay Tenant's Share of such utilities and services as an Expense, subject to adjustment as set out herein. If the meter providing such utility does not cover the entire Building, an equitable adjustment shall be made based on the premises served by such meter.

9.4 Emergency Generator(s).
Landlord's sole obligation for either providing an emergency generator(s) or providing emergency back-up power to Tenant shall be: (i) to provide an emergency generator(s) with not less than the capacity of the emergency generators located in the Building as of the Commencement Date, and (ii) to contract with a third party to maintain the emergency generator(s) as per the manufacturer's standard maintenance guidelines. Landlord shall have no obligation to provide Tenant with operational emergency generators of back-up power or to supervise, oversee or confirm that the third party maintaining the emergency generators is maintaining the generators as per the manufacturer's standard guidelines or otherwise. During any period of replacement; repair or maintenance of the emergency generators when the emergency generators are not operational, including any delays thereto due to the inability to obtain parts or replacement equipment, Landlord shall have no obligation to provide Tenant with an alternative back-up generator or generators or alternative sources of back-up power.

ARTICLE 10. -RULES AND REGULATIONS

10.1 Rules and Regulations.
Tenant shall at all times during the Term (including any extension or renewal thereof), comply with all reasonable rules and regulations at any time or from time to time established by Landlord covering the use of the Premises and the Project. The current rules and regulations are attached hereto and made a part hereof as Exhibit C. If there is a conflict between said rules and regulations and other provisions of this Lease, the terms and provisions of this Lease shall control. Landlord shall not have any liability or obligation for the breach of any rules and regulations by other tenants in the Project, their employees, agents, contractors, visitors, or invitees but Landlord shall enforce all the rules and regulations.

ARTICLE 11. -COMMON AREAS

11.1 No Rights In General Public.
The Common Areas and roof are not for the use of the general public and Landlord shall in all cases retain the right to control and prevent access thereto by all persons whose presence, in the judgment of Landlord shall be prejudicial to the safety, character, reputation and interests of the Building and Land and the tenants.

11.2 Landlord Rights in Common Area.
Landlord reserves the right to use any portion of the Common Areas from time to time and/or to deny access to the same temporarily in order to repair, maintain or restore such facilities or to construct improvements under, over, along, across and upon the same and to relocate such Common Areas, for the benefit of the Building, the Land, and other tenants, so long as reasonable access to the Premises and reasonable alternative parking is provided and such actions do not unreasonably interfere with Tenant's use or occupancy of the Premises.

11.3 Landlord's Right to Alter Common Areas.
Landlord shall have the right at any time without the same constituting an actual or constructive eviction and without incurring any liability to Tenant therefore, to change the arrangement and/or locations of the Common Areas, including entrances, driveways, and parking areas so long as reasonable access to the Premises and reasonable alternative parking is provided and such actions do not unreasonably interfere with Tenant's use or occupancy of the Premises.

ARTICLE 12. -PARKING

12.1 Easement for Parking Area.
Subject to the other provisions of this Lease, Tenant shall have the right to park in those areas designated for non-reserved parking. Such areas for non-exclusive parking spaces shall serve all tenants, their employees, business invitees and agents; provided, however, that at no time during any day of the original or extended Term of this Lease shall the aggregate number of non-exclusive parking spaces actually occupied by Tenant, Tenant's employees, business invitees and agents exceed Tenant's Share of the parking spaces on the Land (which figure is a maximum number of spaces to be utilized by or for Tenant at any one time, but Landlord in no respect guarantees that such number of spaces will in fact be available at any one time for Tenant).

12.2 Landlord's Rights in Parking Area.
Landlord shall have the right, but not the obligation: (a) to police said parking facilities, (b) to use any portion of the parking facilities from time to time and/or to deny access to the same temporarily in order to repair, maintain or restore such facilities or to construct improvements under, over, along, across and upon the same for the benefit of the Land and to grant easements therein to public and quasi public authorities, (c) to cause unauthorized motor vehicles to be towed away at the sole risk and expense of the owner of such motor vehicles, (d) to provide for such exclusive use as Landlord may determine from time to time, for the exclusive use of the handicapped, and (e) to adopt and modify from time to time Rules and Regulations for parking and vehicular ingress, egress, speed, and for times and places for move-in, move-out and deliveries.

ARTICLE 13. -CARE AND MAINTENANCE

13.1 Landlord's Maintenance Obligations.
Landlord, as an Expense, shall keep and maintain the exterior portion of the Building and the Building systems, including the plumbing, mechanical and electrical systems to the point they enter the Premises, the roof, foundation, exterior walls of the Building and interior structural walls of the Building, and the exterior ground and parking lot in good repair, reasonable wear and tear and losses and damages caused by Tenant, or by any of Tenant's agents, employees, invitees and contractors (collectively, "Tenant Parties") excluded. Landlord shall provide for routine HVAC maintenance for the HVAC units on the roof of the Building (such as regular filter changing). Landlord shall repair damages covered by this paragraph caused by Tenant or any of the Tenant Parties at Tenant's sole cost and expense. Landlord shall not be liable for failure to make any repairs or to perform any maintenance unless such failure persists for more than five (5) days after Tenant's written notice of the need for such repairs or maintenance, in which case Landlord shall grant Tenant a day-for-day rent abatement until such services are restored. Landlord shall not be liable for reasonable delays beyond control of Landlord, including, but not limited to, adverse weather conditions and acts of God.

13.2 Tenant's Obligations.
Tenant shall keep and maintain the Premises in a neat, clean condition and in good repair and order and shall keep all fixtures, plumbing, mechanical, and electrical systems, all windows, doors, toilets and sinks in the Premises, and Tenant's personal property, including its equipment located on the Premises in good working order; provided however, as to all plumbing, mechanical, and electrical system maintenance. Tenant shall use the services of contractors chosen or approved by Landlord. Tenant shall provide for any janitorial services required for all necessary cleaning of the Premises and shall replace all inoperative light bulbs, ballasts and broken glass. All of Tenant's storage shall be within the Premises; no outside storage is permitted. Tenant shall appropriately separate all materials to be recycled.

ARTICLE 14. -ASSIGNMENT-SUBLETTING

14.1 Assignment/Subletting Prohibited.
Tenant shall not, without Landlord's prior written consent which may not be unreasonably withheld: (i) assign, hypothecate, mortgage, encumber, or convey this Lease or any interest under it; (ii) allow any transfer thereof of any lien upon Tenant's interest by operation of law; or (iii) sublet the Premises in whole or in part. Any attempt to do any of the foregoing shall be void and of no effect. A transfer of a controlling interest in Tenant shall be deemed an assignment of this Lease unless such transfer is in connection with a debt or equity financing of the Tenant.

ARTICLE 15. -ALTERATIONS

15.1 No Alterations.
Tenant shall not make any alterations, additions or improvements to the Premises or Project of any kind whatsoever, without the prior written approval of Landlord, which approval will not be unreasonably withheld.

15.2 Discharge of Liens.
Any mechanic's lien filed against the Premises, the Building or the Land, for work or materials claimed to have been furnished to Tenant shall be discharged of record by Tenant or bonded around within ten (10) days thereafter, at Tenant's expense.

15.3 Tenant's Furniture and Fixtures.

Furniture and movable trade fixtures, which are installed by Tenant at its expense, unless otherwise agreed, shall remain Tenant's property and may be removed at any time, prior to the termination of the Term provided that Tenant promptly repairs any damage caused by such removal and that in Landlord's reasonable determination such removal will not adversely impair the structural integrity of the Building. Any such trade fixtures which Tenant has the right to remove under the foregoing provisions, or personal property belonging to Tenant or to any invitee, assignee or subtenant, if not removed within three days of such termination, shall be deemed abandoned and if Landlord so elects become the property of Landlord without any payment or offset therefore. If Landlord shall not so elect, Landlord may remove any fixtures or property from the Premises and store them at Tenant's sole risk and expense or dispose of them in any manner including the sale, scrapping or destruction thereof and to the extent permitted by law. Tenant waives all claims against Landlord therefore. Tenant shall repair and restore, and save Landlord forever harmless from any and all damage to the Premises caused by such removal by Tenant.

ARTICLE 16. -ACCESS TO PREMISES

16.1 Landlord's Access To Premises.

Landlord, and its agents, representatives, employees and contractors may enter the Premises at any reasonable time to inspect the Premises and to make such repairs as may be required or permitted pursuant to this Lease, to perform such environmental tests as my be reasonably required to confirm Tenant's compliance with the terms hereof and for any other business purpose. Landlord and Landlord's employees and representatives may enter the Premises during business hours on not less than 48 hours advance written notice (except in the case of emergencies in which case no such notice shall be required and such entry may be at any time) for the purpose of effecting any such repairs, inspecting the Premises, showing the Premises to prospective purchasers or lenders and during the last year of the Term, to prospective tenants or for any other business purpose. If Tenant shall not be personally present to open and permit an entry into said Premises during an emergency, Landlord or Landlord's agents may enter the same by a master key, or may forcibly enter the same, without rendering Landlord or such agents liable therefore (if during such entry Landlord or Landlord's agents shall accord reasonable care to Tenant's property) and without in any manner affecting the obligations and covenants of this Lease. Nothing herein contained, however, shall be deemed or construed to impose upon Landlord any obligations, responsibility or liability whatsoever, for the care, supervision or repair of the Building or any part thereof, other than as herein provided. Except in an emergency, Landlord shall be accompanied by a representative of Tenant at all times while on the Premises.

ARTICLE 17. -INSURANCE

17.1 Landlord's Insurance.

Landlord shall, as an Expense, maintain such insurance covering the Project as Landlord shall determine and Landlord's mortgagee shall require.

17.2 Tenant's Insurance.
At all times during the Term of this Lease, Tenant, at Tenant's sole cost and expense shall maintain on the Premises:

(a) commercial general liability insurance with a minimum limit of not less than $81,000,000 per occurrence for bodily injury and property damage with respect to the Premises.

(b) insurance against fire, sprinkler leakage, vandalism, and the extended coverage perils for the full insurable value of all of Tenant's property of every kind and character in the Premises, Building and on the Land including without limitation all additions, improvements and alterations to the Premises and of all furniture, trade fixtures, and equipment in the Premises.

(c) worker's compensation insurance with no less than the minimum limits required by law.

17.3 Insurance Requirements.
The commercial general liability insurance policies maintained by Tenant shall name Landlord, its officers, directors, employees, managers, agents, invitees and contractors (collectively "Landlord Parties") as additional insureds. The commercial general liability insurance and the pollution legal liability insurance shall insure on an occurrence and not on a claims made basis; be issued by insurance companies which have a rating of not less than policyholder rating of A and financial category rating of at least Class X in "Best's Insurance Guide"; shall not be cancelable for nonpayment of premium unless 30 days prior written notice shall have been given to Landlord from the insurer; contain a hostile fire endorsement and a contractual liability endorsement; and provide primary coverage to Landlord (any policy issued to Landlord providing duplicate or similar coverage shall be deemed excess over Tenant's policies). Copies of such policies (if requested by Landlord), or certificates of insurance showing the limits of coverage required hereunder and showing Landlord as an additional insured, along with reasonable evidence of the payment of premiums for the applicable period, shall be delivered to Landlord by Tenant upon the commencement of the Term and with respect to any renewal of insurance policy, no later than 5 days prior to the expiration of such policy.

ARTICLE 18. -SUBROGATION/WAIVER OF CLAIMS

18.1 Mutual Waiver of Claims.
Landlord and Tenant each hereby waive all rights of recovery from the other and against the officers, employees, agents and representatives of the other, on account of loss or damage arising from any cause covered by any insurance required to be carried by such waiving party pursuant to this Lease or any other insurance actually carried by such waiving party.

18.2 Waiver of Subrogation.
Tenant and Landlord shall cause their respective insurer(s) to issue appropriate waiver of subrogation rights endorsements to all policies of insurance carried in connection with the Premises or the contents thereof. Tenant will cause all other occupants of the Premises (or any portion thereof), whether by sublease or assignment, claiming by, under or through Tenant to execute and deliver to Landlord a waiver of claims similar to the waiver in this Article 18 and to obtain such waiver of subrogation rights endorsements; provided however this requirement shall not be deemed a consent to any sublease or assignment.

ARTICLE 19. -INDEMNITY

19.1 Tenant's Indemnity.

Tenant hereby indemnifies and agrees to defend, save and hold Landlord harmless from and against any and all claims, demands, costs and expenses, including reasonable attorney's fees "Claim" for the defense thereof, for injury or death or damage to property occurring within or about the Premises, arising, directly or indirectly, out of Tenant's use or occupancy of the Premises or from any breach or default on the part of Tenant in the performance of any covenant or agreement on the part of Tenant to be performed pursuant to the terms of this Lease, or from any gross act or negligence of Tenant, its agents, servants, employees or invitees, in or about the Premises, unless caused solely by the gross negligence or willful misconduct of Landlord. Tenant's obligation of indemnity under this paragraph and elsewhere in this Lease, including but not limited to section 30.1, is conditioned upon: (a) Landlord providing Tenant with prompt written notice of the Claim for which indemnification is sought; (b) Landlord providing Tenant with sole control over the defense of such Claim, including but not limited to the retention of counsel; (c) Landlord cooperating with Tenant in the defense of such Claim; and (d) Landlord's agreement not to settle any Claim with prior written consent of Tenant which agreement shall not be unreasonably withheld.

19.2 Landlord's Indemnity

Landlord hereby indemnifies and agrees to defend, save and hold Tenant harmless from and against any and all claims, demands, costs and expenses, including reasonable attorney's fees "Claim" for the defense thereof, for injury or death or damage to property occurring within or about the Premises, arising from any breach or default on the part of Landlord in the performance of any covenant or agreement on the part of Landlord to be performed pursuant to the terms of this Lease, or from any gross act or negligence of Landlord, its agents, servants, employees or invitees, in or about the Premises, unless caused solely by the gross negligence or willful misconduct of Tenant. Landlord's obligation of indemnity under this paragraph and elsewhere in this Lease, is conditioned upon: (a) Tenant providing Landlord with prompt written notice of the Claim for which indemnification is sought; (b) Tenant providing Landlord with sole control over the defense of such Claim, including but not limited to the retention of counsel; (c) Tenant cooperating with Landlord in the defense of such Claim; and (d) Tenant's agreement not to settle any Claim with the prior written consent of Landlord, which agreement shall not be unreasonably withheld.

19.2 Waiver of Claims.

Landlord shall not be liable to Tenant for, and Tenant assumes all risk of damage to, personal property (including without limitation, loss of records kept within the Premises). Tenant further waives any and all claims for injury to Tenant's business or loss of income relating to such damage or destruction of personal property (including, without limitation, any loss of records). Landlord shall not be liable for any damages arising from any act, omission, or neglect of any tenant in the Project or of any other third party, unless caused by Landlord's gross negligence or willful misconduct.

19.3 Defense of Claims.
In case of any action or proceeding brought against Landlord by reason of any such Claim, upon notice from Landlord, Landlord, at Landlord's sole cost as expense, may retain its own counsel if Tenant's counsel is not reasonably acceptable to Landlord

ARTICLE 20. -LOSS OF PREMISES BY CASUALTY

20.1 Total Destruction.
If the Premises is totally destroyed by fire or other casualty; Landlord may, and if the destruction does not result from the intentionally wrongful or grossly negligent act of Tenant, Tenant may by written notice given not later than thirty (30) days after the date of such destruction, terminate this Lease, in which event Rent paid for the period beyond the date of destruction shall be refunded to Tenant. In the event the Lease is not terminated pursuant to this provision, rent shall abate on a per diem basis during the period of untenantability.

20.2 Partial Destruction.
If the Premises are partially damaged by fire other casualty but not totally destroyed yet (i) the damages are such that Landlord, in its sole judgment, concludes that restoration cannot be completed within one hundred fifty (150) days; (ii) less than one year of the Term remains; or (iii) insurance carried by Landlord in a sufficient amount to restore the Premises is not made available to Landlord, then Landlord may, at its option, terminate this Lease by written notice given not later than sixty (60) days after the date of such destruction, in which event Rent paid for the period beyond the date of destruction shall be refunded to Tenant. Within a reasonable time after the casualty, Landlord shall furnish Tenant with Landlord's estimate of the time required to complete restoration and whether or not sufficient insurance proceeds are available to Landlord to pay for the required restoration.

20.3 Repair/Restoration.
If this Lease is not terminated pursuant to Section 20.1 or 20.2 above, Landlord shall repair and/or restore the Premises and any other portions of the Building reasonably required for Tenant's use of the Premises as provided in this Lease. If Tenant is reasonably required to close all or a portion of its operations during the period of repair/restoration, Monthly Rent shall abate on a proportional basis (based on the rentable square footage of the unusable portion of the Premises) from the time all required Hazardous Material Clearances, if any, are obtained, until the Premises (or applicable portion thereof) are repaired and restored. Landlord's obligation to restore the Premises shall be subject to delays arising from the collection of insurance proceeds, from force majeure events or as needed to obtain any license, clearance or other authorization of any kind required to enter into and restore the Premises issued by any governmental authority having jurisdiction over the use, storage, handling, treatment, generation, release, disposal, removal or remediation of Hazardous Materials (as defined in Article 30) in, on or about the Premises (collectively referred to herein as "Hazardous Materials Clearances"); provided however, that if repair or restoration of the Premises is not substantially complete as of the end of the restoration period reasonably estimated by Landlord above, Landlord or Tenant may elect to terminate this Lease, in which event Landlord shall be relieved of its obligation to make such repairs or restoration and this Lease shall terminate as of the date of discovery. Notwithstanding anything herein to the contrary, Tenant shall not have the right to terminate this Lease based on the restoration not being substantially complete by the estimated date until Tenant has given Landlord written notice of the intention to terminate. If Landlord shall substantially complete the restoration within thirty (30) days after receipt of the notice, Tenant's notice shall be nullified and this Lease shall remain in full force and effect.

20.4 Tenant's Fault.
Notwithstanding anything contained herein to the contrary, if the Premises are damaged by cause due to the gross negligence of Tenant, its employees, agents, customers, or invitees, Landlord may repair such damage and there shall be no apportionment or abatement of Monthly Rent. Landlord shall not be required to restore fixtures or improvements made or owned by Tenant after the Commencement Date.

ARTICLE 21. -EMINENT DOMAIN

21.1 Taking.
If the Building, or a substantial part of the Premises which makes the Premises unusable for the Permitted Use, shall be taken or condemned for any public or quasi-public use or purpose, or conveyed under threat of such condemnation, the term of this Lease shall end upon, and not before, the date of the taking of possession by the condemning authority. If only a portion of the Premises is taken and Tenant can continue use of the remainder, then this Lease shall not terminate, but Monthly Rent shall abate in a just and proportionate amount to the loss of use occasioned by the taking

21.2 Right to Condemnation Award.
Landlord shall be entitled to receive and retain the entire condemnation award for taking of the Building and/or the Premises. Tenant shall have not right or claim against Landlord for any alleged value of the unexpired portion of this Lease, or its leasehold estate, of for costs of removal, relocation, business interruption expense or any other damage arising out of such taking. Tenant, however, may make a claim against the condemning authority (but not against Landlord) for any moving expense, loss of profits, or taking of Tenant's personal property (other than its leasehold estate) to which Tenant may be entitled; provided that any such award shall not reduce the amount of the award otherwise payable to Landlord for the taking of the Building and Premises.

ARTICLE 22. -SUBORDINATION

22.1 Lease Subordinate.
At anytime prior to or during the Lease term Landlord may execute and deliver a mortgage or trust deed in the nature of a mortgage (including any and all amendments, restatements, renewals, modifications, consolidations, refinancing, assignment and extensions thereof, the "Mortgage") constituting a lien against the Building, the Land or any interest therein, and may sell and lease back the Land. This Lease shall, at the option of any such mortgagee, be subject and subordinate at all times to the lien of any such Mortgage, without the necessity of any further instrument or act on the part of Tenant.

22.2 Delivery of Subordination and Attornment.
Tenant shall execute and deliver such further instrument or instruments subordinating this Lease to the lien of any such Mortgage of the party secured or proposed mortgagee or party proposed to be secured, provided such mortgagee promises that in the event it should succeed to Landlord's interest in the Premises, it shall not disturb Tenant's possession under this Lease so long as Tenant is not in default hereunder.

22.3 Subsequent Landlord Liable Only During Ownership.
Should any Mortgage affecting the Building or the Land be foreclosed or if any ground or underlying lease be terminated, the liability of the mortgagee, trustee or purchaser at such foreclosure sale or the liability of a subsequent owner designated as Landlord under this Lease shall exist only so long as such trustee, mortgagee, purchaser or owner is the owner of the Building or Land and such liability shall not continue or survive after further transfer of ownership.

ARTICLE 23. -ESTOPPEL CERTIFICATE

23.1 Tenant's Delivery of Estoppel Certificate.
Tenant agrees at any time and from time to time upon not less than ten (10) business days prior written request by Landlord to execute, acknowledge and deliver to Landlord a statement in writing, in form and substance as Landlord reasonably requests, certifying that (a) this Lease is unmodified and in full force and effect (or if there have been modifications that the same is in full force and effect as modified and stating the modifications), (b) the dates to which the basic rent and other charges have been paid in advance, if any, and (c) all of the defaults of Landlord hereunder known by Tenant, if any, (and if there are no defaults of Landlord known by Tenant, then a statement to that effect) it being intended that any such statement delivered pursuant to this Article 23 may be relied upon by any prospective purchaser of the fee or mortgagee or assignee of any mortgage upon the fee of the Land and/or by party interested in the Land or any part thereof. Specifically, Tenant upon notice as aforesaid from Landlord agrees to execute and deliver to Landlord a document setting forth the information described in the preceding paragraph and any other information reasonably required by Landlord to effectuate the purpose of selling, financing, the Land or otherwise dealing with the same in a commercially reasonable manner.

ARTICLE 24. -CERTAIN RIGHTS RESERVED TO LANDLORD

24.1 Rights Reserved.
Landlord reserves and may exercise the following rights without affecting Tenant's obligations hereunder as long as the exercise of such rights does not unreasonably interfere with Tenant's use or enjoyment of the Premises:

(a) to change the name or street address of the Building;

(b) to approve the weight, size and location of safes or other heavy equipment or articles, which articles may be moved in, about, or out of the Building or Premises only at such times and in such manner as Landlord shall direct and in all events however, at Tenant's sole risk and responsibility;

(c) to take any and all measures, including inspection, repairs, alterations, decorations, additions and improvements to the Premises or to the Building, as may be necessary or desirable for the safety, protection or preservation of the Premises, the Building, the Land or Landlord's interests, or as may be reasonably necessary or desirable in the operation of the Building.

24.2 Landlord's Access to Exercise Reserved Rights.
Landlord may enter upon the Premises and may exercise any or all of the foregoing rights hereby reserved without being deemed guilty of an eviction or disturbance of Tenant's use or possession and without being liable in any manner to Tenant and without abatement of rent or affecting any of Tenant's obligations hereunder as long as the exercise of such rights does not unreasonably interfere with Tenant's use or enjoyment of the Premises.

ARTICLE 25. -HOLDING OVER

25.1 Effects of Holdover.
In the event Tenant remains in possession of the Premises after the expiration of the Term, or any extensions hereof without the express written consent of Landlord, (a) Tenant shall become a tenant at sufferance upon the terms of this Lease except that Tenant shall then be obligated to pay Monthly Rent at one and one-half times the rate of the Monthly Rent due for the last 30 days of the Term for so long as Landlord is kept out of possession of the Premises and (b) Tenant shall be responsible for all damages suffered by Landlord resulting from or occasioned by Tenant's holding over, including consequential damages.

25.2 Landlord's Rights and Remedies in Event of Holdover.
No such payment, nor the acceptance thereof after expiration of the Term or earlier termination of the Lease shall result in a renewal, extension or reinstatement of this Lease, or shall in any way constitute a waiver of the rights of Landlord to re-enter the Premises or to dispossess Tenant and recover possession of the Premises and the just and former estate of Landlord and to bring any action for damages suffered by Landlord on account of Tenant's failure to vacate the Premises.

ARTICLE 26. -DEFAULT

26.1 Tenant's Default.
If Tenant defaults in the payment of rent, or if Tenant defaults in the prompt and full performance of any other provisions of this Lease, and Tenant does not cure the default within 30 days after written demand by Landlord that the default be cured (unless the default involves a hazardous condition, which shall be cured forthwith) or if the leasehold interest of Tenant be levied upon under execution or be attached by process of law, or if any petition shall be filed by or against Tenant to declare Tenant bankrupt or to delay, reduce or modify Tenant's capital structure (and if filed against Tenant such petition shall not be dismissed within 60 days) or if Tenant be declared insolvent according to law, or if Tenant makes an assignment for the benefit of creditors or admits its inability to pay its debts, or if a receiver be appointed for any property of Tenant, then and in any such event Landlord may, if Landlord so elects but not otherwise, treat the occurrence of anyone or more of the foregoing events as a default hereunder and with or without notice of such election, and with or without any demand whatsoever, either forthwith terminate this Lease and Tenant's rights to possession of the Premises or, without terminating this Lease, forthwith terminate Tenant's right to possession of the Premises,

26.2 Landlord's Default / Notice and Opportunity to Cure.
Tenant will not avail itself of any remedy provided at law or in equity until Landlord fails to cure any default on the part of Landlord within 30 days after its receipt of written notice of such default from Tenant; and Landlord and Tenant agree that in no event shall Landlord be liable to Tenant for any special, consequential or incidental damages.

ARTICLE 27. -LANDLORD'S REMEDIES

27.1 Delivery of Possession Upon Termination.
Upon any termination of this Lease, whether by lapse of time or otherwise, or upon any termination of Tenant's right to possession without termination of the Lease, Tenant shall surrender possession and vacate the Premises immediately, and deliver possession thereof to Landlord, and Tenant to the fullest extent permitted by law thereby grants to Landlord full and free license to enter into and upon the Premises in such event with or without process of law and to repossess Landlord of the Premises as of Landlord's former estate and to expel or remove Tenant and any others who may be occupying or be within the Premises and to remove any and all property therefrom without being deemed in any manner guilty of trespass, eviction or forcible entry or detainer, and without relinquishing Landlord's rights to rent or any other right given to Landlord hereunder or by operation of law.

27.2 Termination of Right to Possession Only.
If Landlord elects to terminate Tenant's right to possession only, without terminating the Lease, Landlord may, at Landlord's option, lawfully enter into the Premises; remove Tenant's signs and other evidences of tenancy, and take and hold possession thereof as in this Article 27.2 provided, without such entry and possession terminating the Lease or releasing Tenant, in whole or in part, from Tenant's obligation to pay the rent hereunder for the full term. Upon and after entry into possession without termination of the Lease, Landlord shall use its best efforts to relet Premises or any part thereof for the account of Tenant to any person, firm or corporation other than Tenant for such rent, for such time and upon such terms as Landlord in Landlord's reasonable discretion shall determine. In any such case, Landlord may make repairs, alterations and additions in or to the Premises and redecorate the same to the extent deemed by Landlord necessary or desirable, and Tenant shall, upon demand, pay the cost thereof, together with Landlord's expenses of the reletting. If the consideration collected by Landlord upon any such reletting for Tenant's account is not sufficient to pay monthly the full amount of the rent and additional rent reserved in this Lease, all other monies to be paid by Tenant, together with the costs of repairs, alterations, additions, redecorating and Landlord's expenses, Tenant shall pay to Landlord the amount of each monthly deficiency upon demand. If the consideration collected by Landlord upon any such reletting for Tenant's account exceeds the amount necessary to pay monthly the full amount of the rent and additional rent reserved in this Lease, such excess shall belong to Landlord.

27.3 Payment by Landlord.
Upon a default by Tenant hereunder, Landlord (or any mortgagee or ground lessor) may, without waiving or releasing any obligation of Tenant hereunder, make such payment or perform such act. All sums so paid or incurred by Landlord, together with interest thereon, from the date such sums were paid or incurred, at the Default Rate shall be payable to Landlord on demand as Additional Rent.

27.4 Payment Reimbursement of Costs.
Tenant shall pay upon demand all Landlord's costs, charges and expenses, including the fees of counsel, agents and other retained by Landlord, incurred by enforcing Tenant's obligations hereunder or incurred by Landlord in any litigation, negotiation or transaction in which Tenant causes Landlord, without Landlord's fault, to become involved or concerned.

27.5 Other Rights and Remedies.
None of the rights and remedies of Landlord herein enumerated shall exclude any other right or remedy allowed by law or equity or provided elsewhere in this Lease.

ARTICLE 28. -SURRENDER OF POSSESSION

28.1 Surrender of Premises.
Upon the expiration of the Term or earlier termination of Tenant's right of possession, Tenant shall surrender the Premises to Landlord in the same condition as received, free of Hazardous Materials brought upon, kept, used, stored, handled, treated, generated in, or released or disposed of from, the Premises by Tenant (collectively, "Tenant HazMat Operations") and released of all Hazardous Materials Clearances, broom clean, ordinary wear and tear and casualty loss and condemnation covered by Article 20 or Article 21, respectively, excepted.

28.2 Surrender Plan.
At least two (2) months prior to the surrender of the Premises, Tenant shall deliver to Landlord a narrative description of the actions proposed (or required by any governmental authority) to be taken by Tenant in order to surrender the Premises at the expiration of the Term, free from any residual impact from the Tenant HazMat Operations and otherwise released for unrestricted use and occupancy (the "Surrender Plan"). Such Surrender Plan shall be accompanied by a listing of (i) all Hazardous Materials licenses and permits held by or on behalf of any Tenant Party with respect to the Premises, and (ii) all Hazardous Materials used, stored, handled, treated, generated, released or disposed of from the Premises, and shall be subject to the review and approval of Landlord's environmental consultant in its reasonable discretion. In connection with the review and approval of the Surrender Plan, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such additional non-proprietary information concerning Tenant HazMat Operations as Landlord shall request. On or before such surrender, Tenant shall deliver to Landlord evidence that the approved Surrender Plan shall have been satisfactorily completed and Landlord shall have the right, subject to reimbursement at Tenant's expense as set forth below, to cause Landlord's environmental consultant to inspect the Premises and perform such additional procedures as may be deemed reasonably necessary to confirm that the Premises are, as of the effective date of such surrender or early termination of the Lease, free from any residual impact from Tenant HazMat Operations. Tenant shall reimburse Landlord, as Additional Rent, for the actual out-of pocket expense incurred by Landlord for Landlord's environmental consultant to review and approve the Surrender Plan and to visit the Premises and verify satisfactory completion of the same, which cost shall not exceed $1,500.

28.3 Failure to Submit or Follow Surrender Plan.
If Tenant shall fail to prepare or submit a Surrender Plan approved by Landlord, or if Tenant shall fail to complete the approved Surrender Plan, or if such Surrender Plan, whether or not approved by Landlord, shall fail to adequately address any residual effect of Tenant HazMat Operations in, on or about the Premises. Landlord shall have the right to take such actions as Landlord may deem reasonable or appropriate to assure that the Premises and the Project are surrendered free from any residual impact from Tenant HazMat Operations, the reasonable cost of which actions shall be reimbursed by Tenant as Additional Rent, without regard to the limitation set forth in Section 28.1.

28.4 Return of Keys.
Tenant shall immediately return to Landlord all keys and/or access cards to all or any portion of the Project or Premises furnished to or otherwise procured by Tenant. If any such access card or key is lost, Tenant shall pay to Landlord, at Landlord's election, either the cost of replacing such lost access card or key or the cost of reprogramming the access security system in which such access card was used or changing the lock or locks opened by such lost key.

ARTICLE 29. -NOTICES

29.1 Notice Requirements.
Except as otherwise provided herein, all notices or communications between the parties shall be in writing and shall be deemed duly given upon delivery or refusal to accept delivery by the addressee thereof if delivered in person, by recognized overnight carrier, or by certified mail, return receipt requested, addressed to the party at the Notice Address set out in Article 1 hereof.

29.2 Change of Address.
Landlord and Tenant may from time to time by written notice to the other designate another address for receipt of future notices.

ARTICLE 30. -ENVIRONMENTAL COMPLIANCE

30.1 Prohibition/Compliance/Indemnity.
Tenant shall not cause or permit any Hazardous Materials (as hereinafter defined) to be brought upon, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Premises or the Project in violation of applicable Environmental Requirements (as hereinafter defined) by Tenant. Without limiting the generality of the foregoing, Tenant specifically acknowledges that the Building is "Type II-B" construction per the North Carolina Building Code and all storage and use of flammable materials and Hazardous Materials shall be within any limits and in compliance with any requirements set for such buildings. If Tenant breaches the obligation stated in the preceding sentence, or if contamination of the Premises, the Project or any adjacent property by Hazardous Materials brought into, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Premises by Tenant occurs during the Term or any holding over, and provided Landlord satisfies the conditions in Section 19.1 Tenant hereby indemnifies and shall defend and hold Landlord, its officers, directors, employees, agents and contractors harmless from any and all actions (including, without limitation, remedial or enforcement actions of any kind, administrative or judicial proceedings, and orders or judgments arising out of or resulting therefrom), costs, claims, damages (including, without limitation, punitive damages and damages based upon diminution in value of the Premises or the Project, or the loss of, or restriction on, use of the Premises or any portion of the Project), expenses (including, without limitation, attorneys', consultants' and experts' fees, court costs and amounts paid in settlement of any claims or actions), fines, forfeitures or other civil, administrative or criminal penalties, injunctive or other relief (whether or not based upon personal injury, property damage, or contamination of, or adverse effects upon, the environment, water tables or natural resources), liabilities or losses (collectively, "Environmental Claims") which arise during or after the Term as a result of such contamination. This indemnification of Landlord by Tenant includes, without limitation, costs incurred in connection with any investigation of site conditions or any cleanup, treatment, remedial, removal, or restoration work required by any federal, state or local governmental authority because of Hazardous Materials present in the air, soil or ground water above, on, or under the Premises as a result of Tenant's actions. Without limiting the foregoing, if the presence of any Hazardous Materials on the Premises, the Project or any adjacent property caused or permitted by Tenant results in any contamination of the Premises, the Project or any adjacent property, Tenant shall promptly take all actions at its sole expense and in accordance with applicable Environmental Requirements as are necessary to return the Premises, the Project or any adjacent property to the condition existing prior to the time of such contamination, provided that Landlord's approval of such action shall first be obtained, which approval shall not unreasonably be withheld so long as such actions would not potentially have any material adverse long-term or short-term effect on the Premises or the Project.

30.2 Pre-existing Conditions.

Based on the Phase I environmental assessment that Landlord obtained in 2004 and having received no actual notice to the contrary subsequent to such assessment, Landlord represents and warrants that there are no Hazardous Materials on the Premises as of the Commencement Date.

30.3 Business.

As a material inducement to Landlord to allow Tenant to use Hazardous Materials in connection with its business, Tenant agrees (i) to deliver to Landlord prior to the Commencement Date a list identifying each type of Hazardous Materials to be brought upon, kept, used, stored, handled, treated, generated on, or released or disposed of from, the Premises and setting forth any and all governmental approvals or permits required in connection with the presence, use, storage, handling, treatment, generation, release or disposal of such Hazardous Materials on or from the Premises ("Hazardous Materials List") and (ii) to put in place and deliver to Landlord prior to the Commencement Date a program and plan as to its procedures for dealing with an unauthorized release, discharge, generation, storage or disposal of Hazardous Materials, including but not limited to the naming of a designated "safety officer" responsible for implementing the plan, and (iii) to keep Landlord informed of the identity of Tenant's designated safety officer. Tenant shall deliver to Landlord true and correct copies of the following documents (the "HazMat Documents") relating to the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials prior to the Commencement Date, or if unavailable at that time, concurrent with the receipt from or submission to a governmental authority: permits; approvals; reports and correspondence; storage and management plans; safety program and plan; and notices of violations of any Legal Requirements. Tenant shall provide Landlord with updated Haz Mat Documents in a timely manner during the Lease term; provided however nothing herein shall be deemed to constitute Landlord's consent to any chance in the Hazardous Materials used on the Premises as shown on the original Hazardous Materials List.

30.4 Tenant's Obligations.

Tenant's obligations under this Article 30 shall survive the expiration or earlier termination of the Lease. During any period of time after the expiration or earlier termination of this Lease required by Tenant or Landlord to complete the removal from the Premises of any Hazardous Materials (including, without limitation, the release and termination of any licenses or permits restricting the use of the Premises and the completion of the approved Surrender Plan brought onto the Premises by Tenant), Tenant shall continue to pay the full Rent in accordance with this Lease for any portion of the Premises not relet by Landlord in Landlord's reasonable discretion, which Rent shall be prorated daily.

30.5 Definitions.

As used herein, the term "Environmental Requirements" means all applicable present and future statutes, regulations, ordinances, rules, codes, judgments, orders or other similar enactments of any governmental authority regulating or relating to health, safety, or environmental conditions on, under, or about the Premises or the Project, or the environment, including without limitation, the following: the Comprehensive Environmental Response, Compensation and Liability Act; the Resource Conservation and Recovery Act; and all state and local counterparts thereto, and any regulations or policies promulgated or issued thereunder. As used herein, the term "Hazardous Materials" means and includes any substance, material, waste, pollutant, or contaminant listed or defined as hazardous or toxic, or regulated by reason of its impact or potential impact on humans, animals and/or the environment under any Environmental Requirements, asbestos and petroleum, including crude oil or any fraction thereof; natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). As defined in Environmental Requirements, Tenant is and shall be deemed to be the "operator" of Tenant's "facility" and the "owner" of all Hazardous Materials brought on the Premises by Tenant or any Tenant Party, and the wastes, by-products, or residues generated, resulting, or produced therefrom.

ARTICLE 31. -SECURITY

31.1 Security System.

Tenant may choose to hook up to the security system installed upon the Premises by Landlord, in which event Tenant shall be responsible for the cost of monitoring directly to the monitoring service provider. Tenant acknowledges and agrees that security devices and services, if any, while intended to deter crime may not in given instances prevent theft or other criminal acts and that Landlord, while allowing hook up to a security system, is not providing any security services with respect to the Premises. Tenant agrees that Landlord shall not be liable to Tenant for, and Tenant waives any claim against Landlord with respect to, any loss by theft or any other damage suffered or incurred by Tenant in connection with any unauthorized entry into the Premises or any other breach of security with respect to the Premises unless caused by the gross negligence or willful misconduct of Landlord. Tenant shall at Tenant's cost obtain insurance coverage to the extent Tenant desires protection against such criminal acts.

ARTICLE 32. -RELOCATION OF TENANT

32.1 Landlord's Right to Relocate Tenant.

At any time during the Lease term Landlord shall have the right, only with Tenant's written consent upon 90 days advance written notice, to relocate the Tenant to another location in the Building designated by Landlord (the "Relocation Premises"), provided that: (a) the size of the Relocation Premises is at least equal to the size of the Premises; and (b) Landlord pays the reasonable cost of moving Tenant and improving the Relocation Premises to a substantially similar standard as that of the Premises, and reimburses Tenant for all reasonable costs directly incurred by Tenant as a result of the relocation, including the cost of moving and reinstalling Tenant's equipment (including utilities), furniture, trade fixtures, stationery and address changes and other personal property from the Premises to the Relocation Premises,

ARTICLE 33. -EXCULPATION

33.1 Limitation of Landlord's Liability.

Neither the partners, if Landlord is a partnership, or if Landlord is a trustee of a trust, the beneficiaries of such trust, nor the members or managers if Landlord is a limited liability company, nor the shareholders (nor any of the partners comprising same) directors or officers of any of the foregoing shall be liable for the performance of Landlord's obligations under this Lease. Tenant shall look solely to Landlord to enforce Landlord's obligations hereunder and shall not seek any damages against the rest of the parties set out in the preceding sentence. The liability of Landlord for Landlord's obligations under this Lease shall not exceed and shall be limited to the value of Landlord's interest in the Building and Land and Tenant shall not look to the property or assets of any partners, if Landlord is a partnership, or if Landlord is a trustee of a trust, the beneficiaries of such trust, nor the managers or members if Landlord is a limited liability company, nor the shareholders (nor any of the partners comprising same) directors or officers of any of the foregoing in seeking either to enforce Landlord's obligations under this Lease or to satisfy a judgment for Landlord's failure to perform as such obligation.

ARTICLE 34. -MISCELLANEOUS

34.1 No Waiver.

No waiver of any default by Tenant hereunder shall be implied from any omission by Landlord to take any action on account of such default if such default persists or be repeated, and no express waiver shall affect any default other than the default specified in the express waiver and that only for the time and to the extent therein stated.

34.2 Construction.

The words "Landlord" and "Tenant" wherever used in the Lease shall be construed to mean plural where necessary and the necessary grammatical changes required to make the provisions hereof apply either to corporations or individuals, men or women, shall in all cases be assumed as though in each case fully expressed. The normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Lease or any exhibits or amendments hereto.

34.3 Successors and Assigns.
Each provision hereof shall extend to and shall bind and inure to the benefit of Landlord and Tenant and their respective heirs, legal representatives, successors and assigns.

34.4 Memorandum of Lease.
This Lease shall not be recorded, but at the request of either party and at such requesting party's expense, a memorandum hereof, containing such information as is necessary to provide adequate record notice of the existence of this Lease and the terms hereof including whether options to renew or purchase exist, shall be prepared and recorded in the county where the Premises are located.

34.5 Exhibits and Schedules.
All Exhibits and Schedules attached to this Lease are hereby made a part of this Lease as though inserted in this Lease.

34.6 Headings.
The headings of Articles are for convenience only and do not limit or construe the contents of the Articles.

34.7 Survival.
If any term, covenant or condition of this Lease or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this Lease, or the application of such term, covenant or condition to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby and each term, covenant or condition of this Lease shall be valid and be enforced to the fullest extent permitted by law.

34.8 Entire Agreement.
This Lease contains the entire agreement of the parties in regard to the premises. There are no oral agreements existing between them, and there shall be no oral changes. Neither Landlord nor any agent of Landlord has made any representations, warranties or promises with respect to the Premises, or the Building of which the premises is a part, or the Land on which the Building is located, or the use of any amenities or facilities, except as herein expressly set forth. Any agreement hereinafter made shall be ineffective to change, waive, modify, discharge or terminate it in whole or in part unless such agreement is in writing and signed by the party against whom enforcement of the change, waiver, modification, discharge or termination is sought.

34.9 Brokers.
Tenant and Landlord each represents to the other that it has dealt directly with and only with the Broker(s) identified in Article 1 in connection with this Lease, and that no other broker procured this Lease or is entitled to any commission in connection therewith and in the event either party has so hired another broker such hiring party shall indemnify, defend and hold forever harmless the other party from and against any claim by such hired broker and from and against any and all costs directly or indirectly arising out of any such hiring.

34.10 Governing Law.
The laws of the State of North Carolina shall govern the validity, performance and enforcement of this Lease.

34.11 Force Majeure.
Notwithstanding anything contained in this Lease to the contrary, Landlord's and Tenant's obligations hereunder shall be excused to the extent that and during such time as Landlord or Tenant, as the case may be, is prevented from discharging such obligations by Acts of God, strikes, material shortages or any other reason beyond Landlord's control.

34.12 Time.
Time is of the essence as to the performance of Tenant's obligations under this Lease.

34.13 Not Binding Until Executed.
The submission by Landlord to Tenant of this Lease shall have no binding force or effect, shall not constitute an option for leasing of the Premises; nor confer any right or impose any obligations upon either party until execution of this Lease by both parties.

34.14 Effect of Landlord's Receipt of Money.
No receipt of money by Landlord from Tenant after the termination of this Lease or after the service of any notice or after the commencement of any suit, or after final judgment for possession of the Premises shall reinstate, continue or extend the term of this Lease or affect any such notice, demand or suit.

34.15 Landlord's Liability Upon Transfer.
The obligation of Landlord under this Lease shall not be binding upon Landlord named herein after the sale, conveyance, assignment or transfer by such Landlord (or upon any subsequent landlord after the sale, conveyance, assignment or transfer by such subsequent landlord) of its interest in the Building or the Land, as the case may be, and in the event of any such sale, conveyance, assignment or transfer, Landlord shall be and hereby is entirely freed and relieved of all covenants and obligations of Landlord hereunder, and it shall be deemed and construed without further agreement between the parties or their successors in interest, or between the parties and the purchaser, grantee, assignee or other transferee that such purchaser, grantee, assignee or other transferee has assumed and agreed to carry out any and all covenants and obligations of Landlord hereunder; provided however, that Landlord shall continue to be responsible for the return of Tenant's Security Deposit unless Landlord notifies Tenant in writing of the transfer of such Security Deposit.

34.16 Early Termination Option.
Tenant shall have the right to terminate this Lease at the end of twenty-four (24) months after the Commencement Date by providing written notice to the Landlord by the end of the twenty-first (21st) month after the Commencement Date along with payment of a fixed termination fee of twenty thousand dollars ($20,000).

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties hereto have executed this Lease the date first above written.

LANDLORD: BIOPHARM PROPERTIES, LLC

By: /s/ W.J. Spires, Jr. (SEAL)
Name: W.J. Spires, Jr.
Title: Member/Manager

TENANT: CHIMERIX, INC.

By: /s/ Merrick Almond
Its: VP, Research

(SEAL)

Attest:

Its:

EXHIBIT A

EXHIBIT B

EXHIBIT C

Rules and Regulations

1. The sidewalk, entries, and driveways of the Project shall not be obstructed by Tenant, or any Tenant Party, or used by them for any purpose other than ingress and egress to and from the Premises.

2. Tenant shall not place any objects, including antennas, outdoor furniture, etc., in the parking areas, landscaped areas or other areas outside of its Premises, or on the roof of the Project.

3. Except for animals assisting the disabled and laboratory mice (or other animals consented to by Landlord, which consent may be withheld in Landlord's sole discretion) used in connection with the Permitted Use, no animals shall be allowed in the offices, halls, or corridors in the Project. The use of any animals in connection with the Permitted Use shall comply with all applicable laws, including but not limited to health regulations.

4. Tenant shall not disturb the occupants of the Project or adjoining buildings by the use of any radio or musical instrument or by the making of loud or improper noises.

5. If Tenant desires telegraphic, telephonic or other electric connections in the Premises, Landlord or its agent will direct the electrician as to where and how the wires may be introduced; and, without such direction, no boring or cutting of wires will be permitted. Any such installation or connection shall be made at Tenant's expense.

6. Tenant shall not install or operate any steam or gas engine or boiler, or other mechanical apparatus in the Premises, except as specifically approved in the Lease. The use of oil, gas or inflammable liquids for heating, lighting or any other purpose is expressly prohibited. Explosives or other articles deemed extra hazardous shall not be brought into the Project.

7. Parking any type of recreational vehicles is specifically prohibited on or about the Project. Except for the overnight parking of operative vehicles, no vehicle of any type shall be stored in the parking areas at any time. In the event that a vehicle is disabled, it shall be removed within 48 hours. There shall be no "For Sale" or other advertising signs on or about any parked vehicle. All vehicles shall be parked in the designated parking areas in conformity with all signs and other markings. All parking will be open parking, and no reserved parking, numbering or lettering of individual spaces will be permitted except as specified by Landlord.

8. Tenant shall maintain the Premises free from rodents, insects and other pests.

9. Landlord reserves the right to exclude or expel from the Project any person who, in the judgment of the Landlord, is intoxicated or under the influence of liquor or drugs or who shall in any manner do any act in violation of the Rules and Regulations of the Project.

10. Tenant shall not cause any unnecessary labor by reason of Tenant's carelessness or indifference in the preservation of good order and cleanliness. Landlord shall not be responsible to Tenant for any loss of property on the Premises, however occurring, or for any damage done to the effects of Tenant by any employee or person.

11. Tenant shall give Landlord prompt notice of any defects in the water, sewage, utility pipes, electrical lights and fixtures, heating apparatus, or any other service equipment affecting the Premises.

12. Tenant shall not permit storage outside the Premises, including without limitation, outside storage of trucks and other vehicles, or dumping of waste or refuse or permit any harmful materials to be placed in any drainage system or sanitary system in or about the Premises.

13. All moveable trash receptacles provided by the trash disposal firm for the Premises must be kept in the trash enclosure areas, if any, provided for that purpose.

14. No auction, public or private, will be permitted on the Premises or the Project.

15. No awnings shall be placed over the windows in the Premises except with the prior written consent of Landlord.

16. The Premises shall not be used for lodging, sleeping or cooking or for any immoral or illegal purposes or for any purpose other than that specified in the Lease. No gaming devices shall be operated in the Premises.

17. Tenant shall ascertain from Landlord the maximum amount of electrical current which can safely be used in the Premises, taking into account the capacity of the electrical wiring in the Project and the Premises and the needs of other tenants, and shall not use more than such safe capacity. Landlord’s consent to the installation of electric equipment shall not relieve Tenant from the obligation not to use more electricity than such safe capacity.

18. Tenant assumes full responsibility for protecting the Premises from theft, robbery and pilferage.

19. Tenant shall not install or operate on the Premises any machinery or mechanical devices of a nature not directly related to Tenant’s ordinary use of the Premises and shall keep all such machinery free of vibration, noise and air waves which may be transmitted beyond the Premises.

STATE OF NORTH CAROLINA

COUNTY OF DURHAM

FIRST AMENDMENT TO LEASE AGREEMENT

THIS FIRST AMENDMENT TO LEASE, is made and entered into this the 1st day of February, 2009, by and between Biopharm Properties, LLC ("Landlord") and Chimerix, Inc. ("Tenant").

WITNESSETH:

WHEREAS, Landlord and Tenant entered into a Lease Agreement dated September 1, 2008 (known as the "Lease"), under the terms of which Landlord leases to Tenant certain premises in or near the City of Durham, North Carolina, and

WHEREAS, the parties hereto desire to further revise and clarify certain provisions of the Lease in order to more accurately reflect the terms of their business arrangement.

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein and other good and valuable consideration, the receipt of which is hereby acknowledged by each of the parties hereto, the parties hereto do agree that the Lease shall be amended and modified as follows:

1. Tenant shall lease additional space within the Building, Lab 105, consisting of approximately 1,150 square feet. The Premises shall now consist of Labs 103, 104 and 105 (3,450 square feet).

2. The Base Rent shall be modified in accordance with the below:

Initial Term (Years 1 - 3)		
Years	**Monthly Base Rent**	**Annual Base Rent**
09/01/08 - 01/31/09	$4,216.67	$50,600.00
02/01/09 - 08/31/11	$6,900.00	$82,800.00
Option Term (Years 4 - 6)		
Years	**Monthly Base Rent**	**Annual Base Rent**
09/01/11 - 08/31/14	$7,374.38	$88,492.50

3. Tenant's Share of proportionate expenses shall be 33%.

4. In addition to Base Rent, Tenant agrees to pay to Landlord as Additional Rent, Tenant's Share of "Expenses" (as defined in the Lease). On the first day of each month beginning on the date set forth in this First Amendment to Lease Agreement, Tenant shall pay to Landlord an amount equal to $853.88, Payments for any fractional calendar month shall be prorated.

5. All other terms and conditions will remain the same.

6. All capitalized terms used herein, but not otherwise defined, shall have the meaning ascribed to them in the Lease. Unless otherwise amended, modified, or supplemented herein, all the other terms, covenants, and conditions of the Lease shall remain in full force and effect.

SIGNATURES ON FOLLOWING PAGE

IN WITNESS WHEREOF, the parties hereto have caused this First Amendment to Lease Agreement to be executed as of the date first set forth above.

LANDLORD: BIOPHARM PROPERTIES, LLC

By: /s/ W. J. Spires, Jr.
Its: Member/Manager

TENANT: CHIMERIX, INC,

By: /s/ Merrick Almond
Its: VP, Research

By: /s/ Pamela Goss
Its: Controller/CAO

STATE OF NORTH CAROLINA

COUNTY OF DURHAM

SECOND AMENDMENT TO LEASE AGREEMENT

THIS SECOND AMENDMENT TO LEASE, is made and entered into this the 9th day of June, 2009, by and between Biopharm Properties, LLC ("Landlord") and Chimerix, Inc. ("Tenant").

WITNESSETH:

WHEREAS, Landlord and Tenant entered into a Lease Agreement dated September 1, 2008 and amended February 9, 2009 (collectively known as the "Lease"), under the terms of which Landlord leases to Tenant certain premises in or near the City of Durham, North Carolina, and

WHEREAS, the parties hereto desire to further revise and clarify certain provisions of the Lease in order to more accurately reflect the terms of their business arrangement.

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein and other good and valuable consideration, the receipt of which is hereby acknowledged by each of the parties hereto, the parties hereto do agree that the Lease shall be amended and modified as follows:

1. Tenant shall lease additional space within the Building, Lab 106, consisting of approximately 1,150 square feet. The Premises shall now consist of Labs 103, 104, 105, and 106 (4,600 square feet).

2. The Base Rent shall be modified in accordance with the below:

Initial Term (Years 1 - 3)		
Years	**Monthly Base Rent**	**Annual Base Rent**
07/01/09 - 08/31/11	$8,529.17	$102,350.00
Option Term (Years 4 – 6)		
Years	**Monthly Base Rent**	**Annual Base Rent**
09/01/11 - 08/31/14	$9,168.85	$110,026.25

~~3. Tenant's Share of proportionate expenses shall be 45%~~

4. In addition to Base Rent, Tenant agrees to pay to Landlord as Additional Rent, Tenant's Share of "Expenses" (as defined in the Lease). On the first day of each month beginning on the date set forth in this First Amendment to Lease Agreement, Tenant shall pay to Landlord an amount equal to $1,406.84. Payments for any fractional calendar month shall be prorated.

5. Section 34.16 under the Lease, Early Termination Option, shall be amended to include a fixed termination fee in the amount of $32,000.00.

6. All other terms and conditions will remain the same,

7. All capitalized terms used herein, but not otherwise defined, shall have the meaning ascribed to them in the Lease. Unless otherwise amended, modified, or supplemented herein, all the other terms, covenants, and conditions of the Lease shall remain in full force and effect.

SIGNATURES ON FOLLOWING PAGE

IN WITNESS WHEREOF, the parties hereto have caused this First Amendment to Lease Agreement to be executed as of the date first set forth above.

LANDLORD: BIOPHARM PROPERTIES, LLC

By: /s/ W. J. Spires, Jr.
Its: Member/Manager

TENANT: CHIMERIX, INC.

By: /s/ Merrick Almond
Its: VP, Research

STATE OF NORTH CAROLINA
COUNTY OF DURHAM

THIRD AMENDMENT TO LEASE

THIRD AMENDMENT TO LEASE, is made and entered into this the 17th day of May, 2011, by and between Biopharm Properties, LLC ("Landlord") and Chimerix, Inc. ("Tenant").

W1TNESSETH:

WHEREAS, Landlord and Tenant entered into a Lease Agreement dated September 1, 2008 and Amended February 9, 2009 and again June 9, 2009 (collectively known as the "Lease"), under the terms of which Landlord leases to Tenant certain premises In or near the City of Durham, North Carolina, and

WHEREAS, the parties hereto desire to further revise and clarify certain provisions of the Lease in order to more accurately reflect the terms of their business arrangement.

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein and other good and valuable consideration, the receipt of which is hereby acknowledged by each of the parties hereto, the parties hereto do agree that the Lease shall be amended and modified as follows:

1. Tenant elects to exercise its option to extend the original Lease which shall commence September 1, 2011 but shall expire February, 29, 2012.

2. According to Paragraph 2 of the Second Amendment to Lease Agreement executed on June 9, 2009, the Monthly Base Rent during the Option Period shall be $9,168.65. The Additional Rent shall remain the same at $1,406.84.

3. All other terms and conditions will remain the sane.

4. All capitalized terms used herein, but not otherwise defined, shall have the meaning ascribed to them in the Lease. Unless otherwise amended, modified, or supplemented herein, all the other terms, covenants, and conditions of the Lease shall remain In full force and effect.

SIGNATURES ON FOLLOWING PAGE

IN WITNESS WHEREOF, the parties hereto have caused this Third Amendment to Lease to be executed as of the date first set forth above.

LANDLORD; BIOPHARM PROPERTIES, LLC

Granite Investments, LLC Manager

By: /s/ ILLEGIBLE
Its: Manager

TENANT: CHIMERIX, INC.

By: /s/ Kenneth I. Moch
Its: President and CEO

STATE OF NORTH CAROLINA
COUNTY OF DURHAM

FOURTH AMENDMENT TO LEASE

THIS FOURTH AMENDMENT TO LEASE, is made and entered into this the 29th day of February, 2012, by and between Biopharm Properties, LLC ("Landlord") and Chimerix, Inc. ("Tenant").

W1TNESSETH:

WHEREAS, Landlord and Tenant entered into a Lease Agreement dated September 1, 2008 and Amended February 9, 2009, June 9, 2009, and again May 17, 2011 (collectively known as the "Lease"), under the terms of which Landlord leases to Tenant certain premises in or near the City of Durham, North Carolina, and

WHEREAS, the parties hereto desire to further revise and clarify certain provisions of the Lease in order to more accurately reflect the terms of their business arrangement.

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein and other good and valuable consideration, the receipt of which is hereby acknowledged by each of the parties hereto, the parties hereto do agree that the Lease shall be amended and modified as follows:

1. Tenant elects to extend the original Lease which shall commence March 1, 2012 but shall expire February 28, 2013.

2. According to Paragraph 2 of the Third Amendment to Lease Agreement executed on May 17, 2011, the Monthly Base Rent shall be $9,168.65. The Additional Rent during this renewal period shall be $1,832.33.

3. All other terms and conditions will remain the same.

4. All capitalized terms used herein, but not otherwise defined, shall have the meaning ascribed to them in the Lease. Unless otherwise amended, modified, or supplemented herein, all the other terms, covenants, and conditions of the Lease shall remain in full force and effect.

SIGNATURES ON FOLLOWING PAGE

IN WITNESS WHEREOF, the parties hereto have caused this FOURTH Amendment to Lease to be executed as of the date first set forth above.

LANDLORD: BIOPHARM PROPERTIES, LLC

Granite Investments, LLC, Manager

By: /s/ ILLEGIBLE
Its: Manager

TENANT: CHIMERIX, INC.

By: /s/ Timothy W. Trost
Its: Sr. Vice President and CFO

STATE OF NORTH CAROLINA
COUNTY OF DURHAM

FIFTH AMENDMENT TO LEASE

THIS FIFTH AMENDMENT TO LEASE, is made and entered into this the 30th day of November, 2012, by and between Biopharm Properties, LLC ("Landlord") and Chimerix, Inc. ("Tenant").

W1TNESSETH:

WHEREAS, Landlord and Tenant entered into a Lease Agreement dated September 1, 2008 and Amended February 9, 2009, June 9, 2009, May 17, 2011, and again February 29, 2012 (collectively known as the "Lease"), under the terms of which Landlord leases to Tenant certain premises in or near the City of Durham, North Carolina, and

WHEREAS, the parties hereto desire to further revise and clarify certain provisions of the Lease in order to more accurately reflect the terms of their business arrangement.

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein and other good and valuable consideration, the receipt of which is hereby acknowledged by each of the parties hereto, the parties hereto do agree that the Lease shall be amended and modified as follows:

1. Tenant elects to extend the original Lease which shall commence March 1, 2013 but shall expire February 28, 2014.

2. According to Paragraph 2 of the Fourth Amendment to Lease Agreement executed on February 29, 2012, the Monthly Base Rent shall be $9,168.65. The Additional Rent during this renewal period shall be $1,832.33.

3. All other terms and conditions will remain the same.

4. All capitalized terms used herein, but not otherwise defined, shall have the meaning ascribed to them in the Lease. Unless otherwise amended, modified, or supplemented herein, all the other terms, covenants, and conditions of the Lease shall remain in full force and effect.

SIGNATURES ON FOLLOWING PAGE

IN WITNESS WHEREOF, the parties hereto have caused this Fifth Amendment to Lease to be executed as of the date first set forth above.

LANDLORD: BIOPHARM PROPERTIES, LLC

Granite Investments, LLC, Manager

By: /s/ ILLEGIBLE
Its: Manager

TENANT: CHIMERIX, INC.

By: /s/ Timothy W. Trost
Its: SVP and CFO

Exhibit 10.15

EXECUTION COPY

*****Text Omitted and Filed Separately with the Securities and Exchange Commission. Confidential Treatment Requested Under 17 C.F.R. Sections 200.80(b)(4) and 230.406**

COLLABORATION AND EXCLUSIVE LICENSE AGREEMENT

by and between

MERCK SHARP & DOHME CORP.

and

CHIMERIX, INC.

TABLE OF CONTENTS

TABLE OF CONTENTS
(continued)

TABLE OF CONTENTS
(continued)

COLLABORATION AND EXCLUSIVE LICENSE AGREEMENT

THIS COLLABORATION AND EXCLUSIVE LICENSE AGREEMENT ("**Agreement**"), effective as of July 23, 2012 (the "**Effective Date**"), is made by and between MERCK SHARP & DOHME CORP., a corporation organized and existing under the laws of New Jersey, ("**Merck**") and CHIMERIX, INC., a corporation organized and existing under the laws of the State of Delaware ("**Chimerix**").

RECITALS:

WHEREAS, Chimerix owns or otherwise controls patents, patent applications, know-how and other information relating to the compound known as CMX157;

WHEREAS, Merck has experience in the development and commercialization of pharmaceutical products; and

WHEREAS, Merck desires to obtain an exclusive license under the Chimerix Patent Rights (as hereinafter defined) and Chimerix Know-How (as hereinafter defined) upon the terms and conditions set forth herein, and Chimerix desires to grant such a license, in order to Research (as hereinafter defined), and to develop, make, have made, use, sell, offer for sale, export and import Compounds (as hereinafter defined) and Products (as hereinafter defined) for use in the Field (as hereinafter defined) in the Territory (as hereinafter defined);

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants contained herein, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

ARTICLE 1
DEFINITIONS

Unless specifically set forth to the contrary herein, the following terms shall have the respective meanings set forth below:

1.1 "**Act**" shall mean, as applicable, the United States Federal Food, Drug and Cosmetic Act, 21 U.S.C. §§ 301 et seq., and/or the Public Health Service Act, 42 U.S.C. §§ 262 et seq., as such may be amended from time to time.

1.2 "**Affiliate**" shall mean, with respect to any Person, any other Person that directly or indirectly controls, is controlled by or is under common control with such Person. A Person shall be deemed to control another Person if such Person possesses the power to direct or cause the direction of the management, business and policies of such Person, whether through the ownership of fifty percent (50%) or more of the voting securities of such Person, by contract or otherwise.

1.3 "**Agreement**" shall have the meaning set forth in the introductory paragraph to this Agreement.

1.4 "**Applicable Laws**" shall mean the applicable laws of any jurisdiction which are applicable to any of the Parties or their respective Affiliates in carrying out activities hereunder or to which any of the Parties or their respective Affiliates in carrying out the activities hereunder is subject, and shall include all statutes, enactments, acts of legislature, laws, ordinances, rules, regulations, notifications, guidelines, policies, directions, directives and orders of any statutory authority, tribunal, board, or court or any central or state government or local authority or other governmental entity in such jurisdictions.

1.5 "**Calendar Quarter**" shall mean the respective periods of three (3) consecutive calendar months ending on March 31, June 30, September 30 and December 31.

1.6 "**Calendar Year**" shall mean each successive period of twelve (12) months commencing on January 1 and ending on December 31.

1.7 "**Change of Control**" shall mean with respect to a Party: (i) the sale of all or substantially all of such Party's assets or business relating to this Agreement; (ii) a merger, reorganization or consolidation involving such Party in which the voting securities of such Party outstanding immediately prior thereto cease to represent at least fifty percent (50%) of the combined voting power of the surviving entity immediately after such merger, reorganization or consolidation; or (iii) a person or entity, or group of persons or entities, acting in concert (other than financial investment groups that do not have as a primary business the development and/or commercialization of pharmaceutical products or companion diagnostics) acquire more than fifty percent (50%) of the voting equity securities or management control of such Party.

1.8 "**Chimerix**" shall have the meaning set forth in the introductory paragraph to this Agreement.

1.9 "**Chimerix Collaboration Inventions**" shall mean all Collaboration Inventions, patentable or otherwise, that are conceived, discovered, developed, invented, reduced to practice and/or otherwise made in the course of conducting activities under this Agreement during the Initial Development Period, solely by employees of Chimerix (or any of its Affiliates) or other persons (not employed by Merck (or any of its Affiliates)) acting on behalf of Chimerix (or any of its Affiliates). Chimerix Collaboration Inventions shall not include Chimerix's interest in any Joint Collaboration Inventions.

1.10 "**Chimerix Know-How**" shall mean all Know-How which is Controlled by Chimerix or any of its Affiliates as of the Effective Date or at any time during the Initial Development Period, including (i) the Lipid-Antiviral-Conjugate Technology but only to the extent the same is incorporated in the Compound or Product, and (ii) any Know-How within the Chimerix Collaboration Inventions and Chimerix's (and its Affiliates') rights to Know-How within the Joint Collaboration Inventions. For purposes of this definition of "Chimerix Know-How", "Affiliates" shall exclude a Third Party that becomes an Affiliate of Chimerix after the Effective Date as a result of a Change of Control of

Chimerix in which Chimerix is acquired by such Third Party; provided that in all cases, all Know-How within the "Chimerix Know-How" prior to the time that such Change of Control occurs shall continue to be included in "Chimerix Know-How" following such Change of Control. Notwithstanding the foregoing, to the extent any employee of an Affiliate having control (as defined in Section 1.2) over Chimerix after a Change of Control of Chimerix (i) participates in the Committee (to the extent it continues in existence after such Change of Control), or (ii) serves as an Alliance Manager, all Know-How provided by such employee(s) of such controlling Affiliate during the Initial Development Period shall be included in "Chimerix Know-How", subject in all cases to Article 7 (including Section 7.1.1).

1.11 "**Chimerix Patent Rights**" shall mean any and all Patent Rights which are Controlled by Chimerix or any of its Affiliates as of the Effective Date or at any time during the Term and which (i) claim or cover any Compound and/or Product (but excluding claims solely and specifically claiming an Other Active in a given Combination Product as an individual separate component), or the development, manufacture, commercialization, use or sale thereof or the Research, or (ii) claim or cover any Chimerix Know-How. The Chimerix Patent Rights shall include Chimerix's (and its Affiliates') rights in Joint Patent Rights. The Chimerix Patent Rights shall include those listed on Schedule 1.11. For purposes of this definition of "Chimerix Patent Rights", "Affiliates" shall exclude a Third Party that becomes an Affiliate of Chimerix after the Effective Date as a result of a Change of Control of Chimerix in which Chimerix is acquired by such Third Party; provided that in all cases, all Patent Rights within the "Chimerix Patent Rights" prior to the time that such Change of Control occurs shall continue to be included in "Chimerix Patent Rights" following such Change of Control. Notwithstanding the foregoing, to the extent any employee of an Affiliate having control (as defined in Section 1.2) over Chimerix after a Change of Control of Chimerix (i) participates in the Committee (to the extent it continues in existence after such Change of Control), or (ii) serves as an Alliance Manager, all Patent Rights Controlled by such Affiliate which cover or claim inventions provided by such employee(s) of such controlling Affiliate shall be included in "Chimerix Patent Rights", subject in all cases to Article 7 (including Section 7.1.1).

1.12 "**Chimerix Third Party License Agreements**" shall mean the UC License.

1.13 "**Clinical Trial**" shall mean a Phase I Clinical Trial, Phase II Clinical Trial, or Phase III Clinical Trial, as applicable.

1.14 "**Collaboration Invention**" shall mean any protocol, formula, data, know-how, information, trade secret, process, method, composition of matter, compound, material, article of manufacture, discovery, invention or finding, patentable or otherwise, that is conceived, discovered, developed, invented, reduced to practice and/or otherwise made (as would be necessary to establish inventorship under United States patent law (regardless of where the applicable activities occurred)) in the course of performing activities under this Agreement during the Initial Development Period. For clarity, "Collaboration Invention" shall exclude Patent Rights.

1.15 "**Combination Product**" shall mean a Product which includes any Other Actives in combination with a Compound, including a fixed-dose combination product. All references to Product in this Agreement shall be deemed to include Combination Product. For clarity, the definition of "Combination Product" shall not be interpreted as a grant of a license by Chimerix to Merck to any proprietary Other Actives of Chimerix for use in a Combination Product as an individual separate component.

1.16 "**Commercially Reasonable Efforts**" shall mean, with respect to the efforts to be expended by a Party with respect to any objective, reasonable, diligent, good faith efforts to accomplish such objective as such Party would normally use to accomplish a similar objective under similar circumstances, it being understood and agreed that with respect to the Research, or the development, seeking Marketing Authorization for or commercialization of any Product (or Compound, as applicable), such efforts shall be [...***...].Commercially Reasonable Efforts shall be determined on a market-by-market, indication-by-indication and product-by-product basis, and it is anticipated that the level of effort will be different for different markets, and will change over time, reflecting changes in the status of the Product and the market(s) involved.

1.17 "**Committee**" shall mean the joint steering committee established to facilitate the collaboration hereunder, as more fully described in Section 2.6.1.

1.18 "**Compound**" shall mean:

(i) the (3-(hexadecyloxy)propyl hydrogen ((R)-1-(6-amino-9H-purin 9-yl)propan-2-yloxy) methyl phosphonate, known as "CMX157";

(ii) any and all Tenofovir Diphosphate Converting Compounds (other than CMX157) Controlled by Chimerix or any of its Affiliates existing as of the Effective Date, including those set forth on Schedule 1.18;

(iii) any and all Tenofovir Diphosphate Converting Compounds Controlled by Chimerix or any of its Affiliates and synthesized or generated after the Effective Date and during the Term; but excluding those Tenofovir Diphosphate Converting Compounds owned or otherwise controlled by a Third Party that becomes an Affiliate of Chimerix as a result of a Change of Control of Chimerix in which Chimerix is acquired by such Third Party, which Tenofovir Diphosphate Converting Compounds are (x)

owned or otherwise controlled by such Third Party immediately prior to such Change of Control, or (y) owned or controlled by such Third Party following such Change of Control, provided that such Tenofovir Diphosphate Converting Compounds were invented or reduced to practice without use of any Chimerix Know-How Controlled by Chimerix as of the time of such Change of Control and are not claimed by any of the Chimerix Patent Rights set forth in Schedule 1.11. For clarity, in all cases, all Tenofovir Diphosphate Converting Compounds described in the first sentence of this clause (iii) or within clauses (i) and (ii) prior to the time that such Change of Control occurs shall continue to be included in "Compounds" following such Change of Control;

(iv) any and all metabolites of any of the compounds described in the foregoing clauses (i), (ii) or (iii);

(v) any and all prodrugs of any of the compounds described in the foregoing clause (i), (ii), (iii) or (iv), as well as conjugates and complexes of the compounds described in the foregoing clauses (i), (ii), (iii) or (iv); and/or

(vi) any and all analogs, salts, free acids/bases, solvates, enantiomers, isomers, hydrates, esters, racemates, poylmorphic forms and/or other derivatives of any of the compounds described in the foregoing clauses (i), (ii), (iii), (iv) or (v).

1.19 "**Confidential Information**" shall mean any and all proprietary and/or confidential information and data, including all scientific, pre-clinical, clinical, regulatory, manufacturing, marketing, financial and commercial information or data, whether communicated in writing or orally or by any other method, which is provided by or on behalf of one Party to the other Party in connection with this Agreement.

1.20 "**Control**", "**Controls**" or "**Controlled by**" shall mean with respect to any Patent Rights, Know-How or other intellectual property assets or rights, as applicable, the possession of (whether by ownership or license or other right, other than pursuant to a license under this Agreement) or the ability of a Party to grant access to, or a license or sublicense of, such item or right as provided for herein without violating the terms of any agreement or other arrangement with any Third Party existing at the time such Party would be required hereunder to grant the other Party such access or license or sublicense.

1.21 "**Development Plan**" shall have the meaning set forth in Section 3.3.2, as such plan may be amended or updated from time to time in accordance with this Agreement.

1.22 "**Excepted Licensor**" means any licensor under any of the Chimerix Third Party License Agreements.

1.23 "**Field**" shall mean the use of Compound and/or Product for any and all purposes in humans, including all therapeutic and prophylactic uses.

1.24 "**Filing**" of an NDA shall mean the acceptance by the applicable Regulatory Authority of an NDA for filing; provided that such Regulatory Authority has not issued a refusal to file letter or a letter identifying deficiencies for which the Regulatory Authority will suspend its review following submission of the filing.

1.25 "**First Commercial Sale**" shall mean, with respect to a given Product in a given country in the Territory, the first shipment to a Third Party of commercial quantities of such Product sold in such country to a Third Party on arm's length terms by Merck (or its Affiliate or sublicensee) for end use or consumption of such Product in the Field in such country in the Territory (following, in all cases, receipt of Marketing Authorization for such Product in such country), excluding, however, any sale or other distribution for use in a Clinical Trial or for compassionate or similar use, or for test marketing, sampling or promotional uses. For clarity, First Commercial Sale shall be determined on a Product-by-Product and country-by-country basis.

1.26 "**Generic Product**" shall mean with respect to a Product, any pharmaceutical product (other than those Products commercialized by Merck or its Related Parties hereunder under the trademark designated by Merck or such Related Party), including any combination product, that contains an active ingredient which is a Compound.

1.27 "**Good Clinical Practices**" or "**GCPs**" shall mean, as applicable, the then current Good Clinical Practices as such term is defined from time to time by the United States Food and Drug Administration ("**FDA**") or other relevant governmental authority having jurisdiction over the development, manufacture or sale of Product in the Territory pursuant to its regulations, guidelines or otherwise, as applicable.

1.28 "**Good Laboratory Practices**" or "**GLPs**" shall mean, as applicable, the then current good laboratory practice regulations of the FDA as described in the United States Code of Federal Regulations ("**CFR**") or any comparable corresponding foreign regulations or their respective successor regulations, as applicable.

1.29 "**Good Manufacturing Practices**" or "**GMPs**" shall mean, as applicable, the then current Good Manufacturing Practices as such term is defined from time to time by the FDA or other relevant governmental authority having jurisdiction over the development, manufacture or sale of Product in the Territory pursuant to its regulations, guidelines or otherwise, as applicable.

1.30 "**HBV Indication**" shall mean an Indication for the treatment of HBV (hepatitis B virus).

1.31 "**HIV Indication**" shall mean an Indication for the treatment of HIV (human immunodeficiency virus).

1.32 "**IND**" shall mean an Investigational New Drug application, Clinical Study Application, Clinical Trial Exemption, or similar application or submission for approval to conduct human clinical investigations filed with or submitted to the applicable Regulatory Authority in conformance with the requirements of such Regulatory Authority.

1.33 "**Indication**" shall mean a separate and distinct disease or medical condition in humans for which (i) a Product that is in Clinical Trials is intended to treat, prevent and/or diagnose and/or (ii) a Product has received Marketing Authorization (as indicated on the approved labeling for such Product), as applicable.

1.34 "**Initiates**" or "**Initiation**" shall mean, with respect to a Clinical Trial, the administration of the first dose to a properly enrolled patient in such Clinical Trial.

1.35 "**Initial Development Period**" shall mean the period commencing on the Effective Date and ending on the Initiation of the first Phase II Clinical Trial for the first Product.

1.36 "**Joint Collaboration Inventions**" shall mean all Collaboration Inventions, patentable or otherwise, that are conceived, discovered, developed, invented, reduced to practice and/or otherwise made in the course of conducting activities under this Agreement during the Initial Development Period, jointly by employee(s) of Merck and/or its Affiliate and/or a Third Party acting on behalf of Merck or its Affiliate, on the one hand, and employee(s) of Chimerix and/or its Affiliate and/or a Third Party acting on behalf of Chimerix or its Affiliate, on the other hand.

1.37 "**Joint Patent Rights**" shall mean all Patent Rights to the extent claiming patentable Joint Collaboration Inventions.

1.38 "**Know-How**" shall mean any and all proprietary data, information, materials and know-how (whether patentable or not) necessary, useful or otherwise related to a Compound and/or Product (including any Combination Product), or any formulation, product improvement and/or indication thereof, or the research, discovery, development, manufacture, commercialization or use of any of the foregoing, that are not in the public domain, including, (a) ideas, discoveries, inventions, improvements, technology or trade secrets, (b) pharmaceutical, chemical and biological materials, products, components or compositions, (c) methods, procedures, formulas, processes, tests, assays, techniques, regulatory requirements and strategies, (d) biological, chemical, pharmacological, toxicological, pharmaceutical, physical and analytical, clinical, safety, manufacturing and quality control data and information related thereto, (e) technical and non-technical data and other information related to the foregoing, and (f) drawings, plans, designs, diagrams, sketches, specifications or other documents containing or relating to such information or materials. "Know-How" shall exclude proprietary data, information, materials and know-how solely and specifically related to an Other Active in a given Combination Product as an individual separate component.

1.39 "**Lipid-Antiviral-Conjugate Technology**" shall mean all Chimerix proprietary technology, data, information, and know-how related generally to the lipid modification of anti-viral compounds, but not specifically related to a Compound or Product, and all Patent Rights and other intellectual property in connection therewith, but expressly excluding inventions claimed in the Chimerix Patent Rights.

1.40 "**Major Markets in the EU**" shall mean any one of the following countries: the United Kingdom, France, Germany, Italy or Spain.

1.41 "**Marketing Authorization**" shall mean all approvals from the relevant Regulatory Authority necessary to market and sell a Product in a given country in the Territory (including all applicable pricing and governmental reimbursement approvals even if not legally required to sell Product in a country).

1.42 "**Merck**" shall have the meaning set forth in the introductory paragraph to this Agreement.

1.43 "**Merck Collaboration Invention**" shall mean all Collaboration Inventions, patentable or otherwise, that are conceived, discovered, developed, invented, reduced to practice and/or otherwise made in the course of conducting activities under this Agreement during the Initial Development Term, by employees of Merck (or any of its Affiliates) or other persons (not employed by Chimerix (or any of its Affiliates)) acting on behalf of Merck (or any of its Affiliates). Merck Collaboration Inventions shall not include Merck's interest in any Joint Collaboration Inventions.

1.44 "**NDA**" shall mean a New Drug Application, Worldwide Marketing Application, Marketing Authorization Application, or similar application or submission for Marketing Authorization of a Product filed with a Regulatory Authority to obtain marketing approval for a biological, pharmaceutical or diagnostic product in a given country or group of countries.

1.45 "**Net Sales**" shall mean:

1.45.1 the gross invoice price (not including value added taxes, sales taxes, or similar taxes) of Product in the Territory for use in the Field sold by Merck or its Related Parties to the first Third Party after deducting, if not previously deducted, from the amount invoiced or received:

(a) trade and quantity discounts other than early payment cash discounts;

(b) returns, rebates, chargebacks and other allowances;

(c) retroactive price reductions that are actually allowed or granted;

(d) deductions to gross invoice price of Product imposed by Regulatory Authorities or other governmental entities;

(e) sales commissions, distribution fees and other similar fees paid to Third Party distributors and/or selling agents;

(f) a fixed amount equal to [...***...] of the amount invoiced to cover bad debt, early payment cash discounts, transportation and insurance and custom duties; and

(g) the standard inventory cost of devices or delivery systems used for dispensing or administering or delivering Product.

1.45.2 With respect to sales of Combination Products (including fixed-dose combination products), Net Sales for any such Combination Product in a particular country in the applicable Calendar Quarter shall be calculated as follows:

(a) Where all active ingredients in such Combination Product are sold separately in such country, Net Sales shall be calculated by multiplying [...***...] by [...***...], and [...***...].

(b) If the Compound component of the Combination Product is sold separately in such country, but none of the Other Actives is sold separately in such country, Net Sales for the purpose of determining royalties due hereunder for the Combination Product will be calculated by multiplying [...***...] by [...***...], and [...***...].

(c) If the Compound component of the Combination Product is not sold separately in such country, but the Other Active(s) are sold separately in such country, Net Sales for the purpose of determining royalties due hereunder for the Combination Product will be calculated by multiplying [...***...] by [...***...], and [...***...].

(d) If neither the Compound component nor the Other Actives are sold separately in such country, Net Sales for the purposes of determining royalties due hereunder for the Combination Product will be [...***...], and [...***...],

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and [...***...].

In applying the foregoing formulas for purposes of Section 1.45.2, Merck shall act in good faith and make determinations in accordance with Merck's regular accounting methods, consistently applied. In the event either Party reasonably believes that the calculation set forth in Section 1.45.2 does not fairly reflect the value of the Compound relative to the Other Actives in the Combination Product, the Parties shall negotiate, in good faith, other means of calculating Net Sales with respect to Combination Products to so reflect such value.

1.46 "**Other Actives**" shall mean, with respect to a given Combination Product, one or more active pharmaceutical ingredients contained in such Combination Product, other than a Compound.

1.47 "**Party**" shall mean Merck and Chimerix, individually, and "**Parties**" shall mean Merck and Chimerix, collectively.

1.48 "**Patent Rights**" shall mean (i) patents and patent applications in the Territory (which for the purposes of this Agreement shall be deemed to include certificates of invention and applications for certificates of invention) and (ii) any and all divisionals, continuations, continuations-in-part, reissues, renewals, substitutions, registrations, re-examinations, revalidations, extensions, supplementary protection certificates and the like of any such patents and patent applications, and (iii) any and all foreign equivalents of the foregoing in the Territory.

1.49 "**Person**" means any individual, partnership, joint venture, limited liability company, corporation, firm, trust, association, unincorporated organization, governmental authority or agency, or any other entity not specifically listed herein.

1.50 "**Phase I Clinical Trial**" shall mean a human clinical trial in any country that would satisfy the requirements of 21 CFR 312.21(a).

1.51 "**Phase II Clinical Trial**" shall mean a human clinical trial in any country that would satisfy the requirements of 21 CFR 312.21(b).

1.52 "**Phase III Clinical Trial**" shall mean a human clinical trial in any country that would satisfy the requirements of 21 CFR 312.21(c).

1.53 "**Proof of Concept**" shall mean that a given Compound has completed the [...***...] with respect to the Compound, as defined in and in accordance with the Development Plan, and has met the success criteria set forth in Schedule 1.53 in connection therewith (as such success criteria may be updated in accordance with Section 3.3.3), as reasonably determined by Merck.

1.54 "**Product**" shall mean any pharmaceutical composition or preparation (in any and all dosage forms) in final form containing a Compound, including any Combination Product. For clarity, different formulations or dosage strengths of a given Product shall be considered the same Product for purposes of this Agreement.

1.55 "**Region**" means the group of countries in the Territory as set forth in one of the following clauses: [...***...].

1.56 "**Regulatory Authority**" shall mean any applicable government regulatory authority involved in granting approvals for the manufacturing, marketing, reimbursement and/or pricing of a Product in the Territory, including, in the United States, the United States Food and Drug Administration and any successor governmental authority having substantially the same function.

1.57 "**Regulatory Documentation**" shall mean all regulatory applications, registrations, licenses, authorizations and approvals (including all Marketing Authorizations), all correspondence submitted to or received from Regulatory Authorities (including minutes and official contact reports relating to any communications with any Regulatory Authority), and all reports and documentation in connection with clinical studies and tests (including study reports and study protocols, and copies of all interim study analysis), and all data contained in any of the foregoing, including all INDs, NDAs, advertising and promotion documents, manufacturing data, drug master files, clinical data, adverse event files and complaint files, in each case related to a Compound and/or Product.

1.58 "**Related Party**" shall mean each of Merck, its Affiliates, and their respective sublicensees hereunder (which term does not include distributors), as applicable.

1.59 "**Research**" shall mean to conduct research and discovery, including *in vitro* and *in vivo* experiments, necessary or useful for the development of, or otherwise in connection with, a Compound or Product. For clarity, Research expressly excludes any making of, or discovery of, compounds that are other than Compounds and/or Products.

1.60 "**Tenofovir Diphosphate Converting Compound**" shall mean a pharmaceutically active compound that is converted *in vivo* into the active moiety tenofovir diphosphate. It is understood that CMX157 is a Tenofovir Diphosphate Converting Compound.

1.61 "**Territory**" shall mean all of the countries in the world, and their territories and possessions.

1.62 "**Third Party**" shall mean an entity other than Merck and its Affiliates, and Chimerix and its Affiliates.

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1.63 "**UC License**" shall mean that certain License Agreement dated as of May 13, 2002, by and between Chimerix and the Regents of the University of California ("**UC**") as amended on September 11, 2002, December 17, 2010, September 14, 2011 and July 19, 2012.

1.64 "**Valid Patent Claim**" shall mean, with respect to a given Compound, a claim of an issued and unexpired patent included within the Chimerix Patent Rights that [...***...].

1.65 "**Violation**" shall mean that Chimerix or any of its officers or directors or any other Chimerix personnel (or other permitted agents of Chimerix performing activities hereunder) has been: (1) convicted of any of the felonies identified among the exclusion authorities listed on the U.S. Department of Health and Human Services, Office of Inspector General (OIG) website, including 42 U.S.C. 1320a-7(a) (http://oig.hhs.gov/exclusions/authorities.asp); (2) identified in the OIG List of Excluded Individuals/Entities (LEIE) database (http://exclusions.oig.hhs.gov/) or the U.S. General Services Administration's list of Parties Excluded from Federal Programs (http://www.epls.gov); or (3) listed by any US Federal agency as being suspended, debarred, excluded or otherwise ineligible to participate in Federal procurement or non-procurement programs, including under 21 U.S.C. 335a (http://www.fda.gov/ora/compliance_ref/debar/) (each of (1), (2) and (3) collectively the "**Exclusions Lists**").

1.66 **Additional Definitions.** The following terms have the meanings set forth in the corresponding Sections of this Agreement:

Term	**Section**
"**AAA**"	10.6.1
"**Additional Tax**"	5.7
"**Additional Third Party Licenses**"	5.3.7
"**Alliance Manager**"	2.7
"**Approval Milestones**"	5.2.1
"**Chimerix Indemnified Parties**"	9.1
"**Chimerix/UC Patent Rights**"	7.3
"**Code**"	8.4(d)

*****Confidential Treatment Requested**

"**EU Approval Milestone**"	5.2.1
"**Excluded Claim**"	10.6.6
"**Exclusion List**"	1.65
"**Executives**"	2.6.1
"**Indemnified Party**"	9.3
"**Indemnifying Party**"	9.3
"**Inventory**"	3.2.1
"**License Payments**"	5.7
"**Manufacturing Consultants**"	3.2.2
"**Merck Indemnified Parties**"	9.2
"**Merck Patent Rights**"	7.2.4
"**Merck Withholding Tax Action**"	5.7
"**Product Infringement Action**"	7.5.2
"**Relevant Chimerix Patent Claims**"	7.5.2
"**Royalty Period**"	5.3.4
"**Safety Termination**"	8.2
"**Sensitive Information**"	10.2
"**Taxes**"	5.7
"**Term**"	8.1
"**Transfer Period**"	3.1
"**US Approval Milestone**"	5.2.1

ARTICLE 2
LICENSE GRANTS; GOVERNANCE

2.1 Exclusive License Grant

Subject to the terms and conditions of this Agreement, Chimerix hereby grants to Merck an exclusive (even as to Chimerix and its Affiliates) royalty bearing license under the Chimerix Patent Rights and the Chimerix Know-How, with the right to sublicense (subject to the restriction set forth below), to conduct Research, and to develop, make, have made, use, offer to sell, sell, export and/or import Compounds and Products, in the Territory for use in the Field. Merck may grant sublicenses (through multiple tiers of sublicenses) of the rights granted to it under this Section 2.1 without Chimerix's consent; provided, however, that promptly following the execution of any such sublicense with a Third Party, Merck shall provide written notice to Chimerix of the name of the sublicensee.

2.2 Non-Exclusive License Grant

In the event that conduct of the Research, or the development, making, having made, use, offer for sale, sale, export or import by Merck, or Merck's Related Parties, of Compound(s) or Product(s), infringes a claim of issued letters patent which Chimerix (or

any of its Affiliates) owns or otherwise has the right to license and which patents are not included in the Chimerix Patent Rights licensed in Section 2.1, Chimerix (and its Affiliates) hereby grants to Merck, to the extent Chimerix is legally able to do so, a non-exclusive, sublicensable, royalty-free license in the Territory under such issued letters patent for Merck and Merck's Related Parties to conduct such Research, and to develop, make, have made, use, sell, offer for sale, export and/or import Compound(s) and Product(s), in the Territory. Nothing in this Section 2.2 shall obligate Chimerix in any way to obtain or procure, for Merck's benefit, licenses or rights under any Third Party intellectual property. For purposes of this Section 2.2, "Affiliates" shall exclude a Third Party that becomes an Affiliate of Chimerix after the Effective Date as a result of a Change of Control of Chimerix in which Chimerix is acquired by such Third Party; provided that in all cases, all letters patent owned or controlled by Chimerix or its Affiliates and licensed to Merck pursuant to this Section 2.2 prior to the time that such Change of Control occurs shall continue to be included in the licenses granted to Merck pursuant to this Section 2.2 following such Change of Control.

2.3 No Implied Licenses

Except as specifically set forth in this Agreement, neither Party shall acquire any license or other intellectual property interest, by implication or otherwise, in any Know-How, or Confidential Information disclosed to it under this Agreement or under any Patent Rights owned or controlled by the other Party or its Affiliates.

2.4 No Grant of Inconsistent Rights by Chimerix

Chimerix (and its Affiliates) shall not assign, transfer, convey or otherwise grant to any Third Party, or otherwise encumber (including through lien, charge, security interest, mortgage, encumbrance or otherwise), (i) any rights to any Chimerix Know-How (or any rights to any intellectual property that would otherwise be included in the Chimerix Know-How) or any Chimerix Patent Rights, in any manner that is inconsistent with or would interfere with the grant of the rights or licenses to Merck hereunder, or (ii) any rights to any Compounds or Products (but excluding an Other Active in a given Combination Product as an individual separate component). Without limiting the foregoing, during the Term, Chimerix (and its Affiliates) shall not use (and shall not grant to any Third Party the right to use) any Compounds or Products for any purpose (including the research, development, manufacturing or commercialization thereof), except (x) Chimerix may utilize CMX157 (and any other Compounds synthesized or generated by Chimerix) for its internal research purposes in the course of the development or manufacture of any of Chimerix's other proprietary compounds or products (other than Compounds or Products) (the "**Chimerix Internal Research**") and (y) as otherwise set forth in Section 3.3.5.

2.5 Covenant Not to Sue

Chimerix hereby covenants that during the Term, it (and its Affiliates) shall not sue nor otherwise attempt to enforce against Merck (or any of its Affiliates or Related Parties) any letters patent or other intellectual property rights owned or otherwise controlled by Chimerix (or (x) any of its Affiliates as of the Effective Date or (y) any other Person which becomes an Affiliate of Chimerix after the Effective Date and over which Chimerix has control (as defined in Section 1.2)), as and to the extent such letters patent or other intellectual property rights (i) cover or claim the Compounds or Products (or the development, manufacture, commercialization, use or sale thereof, or the conduct of Research) and (ii) exist prior to or as of the date of expiration of the Initial Development Period.

2.6 Joint Steering Committee

2.6.1 Composition of the Joint Steering Committee. The Parties hereby establish a joint steering committee (the "**Committee**") to facilitate the collaboration hereunder during the Initial Development Period. The Committee shall be comprised of three (3) representatives of Merck and three (3) representatives of Chimerix. Each Party shall provide the other with a list of its initial members of the Committee no later than thirty (30) days after the Effective Date, and each Party may change its representatives on the Committee from time to time, in its sole discretion, effective upon notice to the other Party of such change. These representatives shall have appropriate technical credentials, experience and knowledge, and familiarity with respect to development of pharmaceutical compounds. Additional representatives or consultants may from time to time, by mutual consent of the Parties, be invited to attend Committee meetings, subject to such representative's or consultant's written agreement to comply with the requirements of Section 4.1. The Committee shall be chaired by a representative of Merck, who shall prepare written draft minutes of all Committee meetings within thirty (30) days following such meetings, and shall circulate such minutes to the Committee members. Merck shall issue final minutes within thirty (30) days following receipt of Chimerix's written comments, if any. Decisions of the Committee shall be made unanimously by the representatives, with each Party having a single vote. In the event that the Committee cannot or does not, after good faith efforts for a period of thirty (30) days, reach agreement on an issue, the issue will be communicated to the appropriate Vice-President of Merck Research Laboratories and the Chief Executive Officer of Chimerix (together, the "**Executives**"), who shall endeavor to facilitate a resolution of such issue. If the Executives have not resolved such issue within ten (10) business days following the communication of the issue to them, then the resolution and/or course of conduct shall be determined by Merck, in its sole discretion (and such matter shall not be subject to dispute resolution pursuant to Section 10.6). Each Party shall bear its own expenses related to the attendance of such meetings by its representatives.

2.6.2 Meetings and Responsibilities. The Committee shall meet in accordance with a schedule established by mutual written agreement of the Parties, but no less frequently than once per Calendar Quarter, with the location for such meetings alternating between Chimerix and Merck facilities (or such other location as may be determined by the Committee). Alternatively, the Committee may meet by means of teleconference, videoconference or other similar communications equipment. The Committee shall be responsible for:

(i) Facilitating the development of the Compound during the Initial Development Period;

(ii) Reviewing and discussing the Development Plan including amendments and updates thereto;

(iii) Monitoring and reviewing the status of the development activities under the Development Plan;

(iv) To oversee and coordinate the transfer of technology and Inventory pursuant to Sections 3.1 and 3.2; and

(v) Resolution of any disputes within the purview of the Committee and that are referred from the Alliance Managers, subject to the final decision-making rights under Section 2.6.1.

2.6.3 Disbandment of Committee. At the end of the Initial Development Period, the Committee shall be disbanded and shall have no further rights or obligations hereunder.

2.7 **Alliance Managers**. Each Party shall appoint an employee who shall oversee interactions between the Parties for all matters related to this Agreement (each, an "**Alliance Manager**"). During the Initial Development Period, the Alliance Managers shall have the right to attend all Committee meetings as non-voting participants and may bring to the attention of the Committee any matters or issues either of them reasonably believes should be discussed, and shall have such other responsibilities as the Parties may mutually agree. Each Party may replace its Alliance Manager at any time or may designate different Alliance Managers by notice in writing to the other Party. The role of the Alliance Manager shall terminate at the end of the Initial Development Period.

2.8 **Compliance with Law**

Merck and Chimerix each shall conduct its activities hereunder in compliance with all Applicable Laws.

ARTICLE 3
DEVELOPMENT, MANUFACTURING AND COMMERCIALIZATION

3.1 **Technology Transfer; Transition of Activities**. As soon as reasonably practicable following the Effective Date (but in all cases within thirty (30) days after Chimerix's receipt of the upfront payment pursuant to Section 5.1), Chimerix shall (i) disclose to Merck in English (and deliver in an electronic format, or in written format to the extent that electronic format is not available) all Chimerix Know-How as and to the extent embodied by the Compound or Product, (ii) transfer to Merck all materials (other than Inventory) related to a Compound or Product in Chimerix's (or any of its Affiliate's) possession or Control, and (iii) transfer and assign to Merck all Regulatory Documentation in Chimerix's (or any of its Affiliate's) possession or Control (including the transfer to Merck of a database that contains all relevant information regarding adverse events that have been observed during any clinical trials or studies with respect to a Compound or Product prior to the Effective Date), including the transfer and assignment of IND #103,150 to Merck. Thereafter during the Term, Chimerix shall cooperate with Merck and promptly disclose to Merck in English (and deliver in an electronic format, or in written format to the extent that electronic format is not available) any other intellectual property relating to a Compound or Product (or the development, making, use or sale thereof, or the Research) as may be developed or identified by Chimerix (or its Affiliates), to the extent that Merck has a license thereto under this Agreement. Chimerix shall assist Merck to ensure an orderly transition and uninterrupted development of the Compound, including providing technical assistance to Merck (or its designee) in connection therewith from time to time during the Term as requested by Merck; provided, however, that with respect to any such technical assistance under this Section 3.1 as well as with respect to any Manufacturing Consultation provided under Section 3.2.2, in each case, that is requested by Merck after the ninety (90) day anniversary of the Effective Date (such period from the Effective Date through the ninety (90) day anniversary of the Effective Date, the "**Transfer Period**"), Merck shall reimburse Chimerix (within thirty (30) days after a receipt of an itemized invoice from Chimerix) for those reasonable costs and expenses for such technical assistance under this Section 3.1 or Manufacturing Consultation under Section 3.2.2 (including on a pro-rata basis the FTE rate of [...***...] per FTE per annum for Chimerix's personnel engaged in such technical assistance), as applicable, but solely to the extent that such costs and expenses have been agreed to by Merck in writing prior to the commencement of such activities (and for clarity, Chimerix shall be solely responsible for, and shall not be entitled to reimbursement for, any other costs or expenses in connection therewith). For clarity, no such amounts shall be payable by Merck with respect to any such activities during the Transfer Period.

3.2 **Inventory Transfer and Manufacturing Technology Transfer**.

3.2.1 Inventory Transfer. As soon as reasonably practicable following the Effective Date (but in all cases within thirty (30) days after Chimerix's receipt of the upfront payment pursuant to Section 5.1), Chimerix shall transfer and deliver to

Merck (at a location to be specified by Merck to Chimerix), at no additional cost, all inventory of Compound and Product (including inventory of cGMP and non-cGMP bulk Compound as well as bulk Product) held by or on behalf of Chimerix or any of its Affiliates (including any such inventory held at any contract manufacturer) (the "**Inventory**"). The quantity of such Inventory shall be at a minimum, the quantities as set forth on Schedule 3.2, which schedule shall be broken down by cGMP and non-cGMP bulk Compound as well as by cGMP and non-cGMP bulk Product.

3.2.2 Manufacturing Technology Transfer. Without limiting the provisions of Section 3.1, as soon as reasonably practicable following the Effective Date (but in all cases within thirty (30) days after Chimerix's receipt of the upfront payment pursuant to Section 5.1), Chimerix shall transfer or cause to be transferred (including from its Third Party contract manufacturers) to Merck, or a Third Party manufacturer designated by Merck, copies in English (in writing and in an electronic format, or in written format to the extent that electronic format is not available) of all data, information and other Know-How Controlled by Chimerix (or any of its Affiliates or its Third Party contract manufacturers) that is related to the manufacture of the Compounds and/or Products, in order to enable Merck (or its designee) to manufacture the Compounds and Products, including to replicate the process employed by or on behalf of Chimerix to manufacture Compounds and Products. In addition, at the request of Merck from time to time during the eighteen (18) month period following the Effective Date, Chimerix shall make its (and its Affiliates') employees and consultants (including personnel of its Third Party contract manufacturers) available to Merck to provide consultation and technical assistance in order to ensure an orderly transition of the manufacturing technology and operations to Merck (or its designee) and to assist Merck (or its designee) in the start-up of its manufacture of Compound and Product (such consultation, the "**Manufacturing Consultation**"). For clarity, the Manufacturing Consultation shall be at no cost or expense to Merck during the Transfer Period; provided, however, that Merck shall at all times (including during the Transfer Period) reimburse Chimerix (within thirty (30) days after a receipt of an itemized invoice from Chimerix) for those reasonable out-of-pocket costs payable by Chimerix to its Third Party contract manufacturer for the use of such Third Party contract manufacturer's personnel in providing such Manufacturing Consultation to Merck to the extent applicable (but solely to the extent that Merck has agreed to the amount of such costs in writing prior to such Manufacturing Consultation, and for clarity, Chimerix shall be solely responsible for any costs incurred in excess of such agreed upon amount but shall not be obligated to incur such excess costs for Merck's benefit).

3.3 Development, Manufacture and Commercialization

3.3.1 General; Efforts. Merck (and its Affiliates), either itself or together with Third Party(ies), shall have the sole right to (and shall control all aspects of) conduct

Research, and to develop (including pre-clinical and clinical development), manufacture, register and commercialize (including marketing, promoting, selling, distributing and determining pricing for) Compounds and Products, and for clarity, Chimerix (and its Affiliates) shall have no right to do so, except as may be expressly provided in Section 3.3.5 and Section 2.4 (with respect to the Chimerix Internal Research). Merck shall use Commercially Reasonable Efforts to develop, seek Marketing Authorization (as necessary) for, and commercialize, at least one Product for use in the Field in (i) the United States, and (ii) at least three (3) of the Major Markets in the EU. For clarity, the Parties agree that Merck's primary focus with respect to the development of Product hereunder initially will be to use Commercially Reasonable Efforts to develop a Product for the HIV Indication, and following the First Commercial Sale of a Product for the HIV Indication, Merck shall also use Commercially Reasonable Efforts to develop a Product for one or more other Indications, which may include the HBV Indication; provided, however, that any failure to use Commercially Reasonable Efforts to develop a Product for any such other Indications shall not give rise to a right of termination of this Agreement (in whole or in part) by Chimerix under Section 8.3.1(a). All other development, seeking Marketing Authorizations, and commercialization efforts with respect to the Compounds and Products shall be at the discretion of Merck.

3.3.2 Development Plan. Attached hereto as Schedule 3.3.2 is the initial Development Plan for the development of the Product for the HIV Indication. From time to time during the Initial Development Period (but no less than once per Calendar Year), Merck shall update the Development Plan and provide such updated Development Plan, along with development reports (pursuant to Section 3.4.2) summarizing the status of Merck's development efforts as against such Development Plan, to the Committee for its review and discussion (provided that for clarity, following the end of the Initial Development Period, Merck shall no longer be obligated to update the Development Plan or provide any updates thereto to the Committee). Subject to Section 3.3.3, all decisions with respect to the creation, amendment, modification and implementation of the Development Plan shall be made by Merck. Notwithstanding the foregoing, the Development Plan shall be for informational purposes only.

3.3.3 Amendment of Success Criteria. In the event that the Development Plan is amended by Merck in any material way, then, at the request of either Party, the Parties shall discuss if the success criteria set forth in Schedule 1.53 should be amended as a result of the amendments to the Development Plan; provided, however, that such success criteria shall not be amended unless and until the Parties agree in writing to an amendment of the success criteria set forth in Schedule 1.53 in accordance with Section 10.7.

3.3.4 Regulatory Matters. In the event that Merck determines that any regulatory filings for any Compounds or Products are required for any activities hereunder,

including INDs, NDAs and other Marketing Authorizations (as applicable), then as between the Parties, Merck shall have the sole right, in its discretion, to file for and seek to obtain such regulatory filings (in its (or its Affiliate's or its Related Party's) name) and as between the Parties, Merck (or its Affiliate or its Related Party) shall be the owner of all such regulatory filings. As between the Parties, Merck shall have the sole right to communicate and otherwise interact with Regulatory Authorities with respect to the Compounds and/or Products. For clarity, Chimerix (and its Affiliates) shall have no right to, and shall not, make any regulatory filings related to any Compounds or Products or otherwise communicate or interact with any Regulatory Authorities with respect to the Compounds or Products.

3.3.5 Chimerix Manufacturing Opportunity. In the event that Merck determines to engage a Third Party contract manufacturer to manufacture commercial quantities of the active pharmaceutical ingredient for a Product (but solely with respect to active pharmaceutical ingredient containing the Compound, and, for clarity, this Section 3.3.5 shall not apply to any Other Actives, if any, in such Product) for commercialization purposes (but excluding, for clarity, Product for development or other non-commercial purposes), then Merck shall notify Chimerix thereof, and Chimerix shall have the right (but not the obligation) to bid on the manufacture of such quantities of active pharmaceutical ingredient in accordance with bid procedures made available by Merck to other potential Third Party manufacturers. Notwithstanding the foregoing, Merck shall have the right (in its sole discretion) to accept or reject Chimerix's bid and to accept or reject any other Third Party bid. In making such determination, Merck may consider various factors, including (i) experience, capability, and capacity with respect to the active pharmaceutical ingredient and relevant manufacturing technology, (ii) pricing, and (iii) Merck's global regulatory, compliance and commercial policies and expectations. If Merck accepts Chimerix's bid to manufacture such active pharmaceutical ingredient, Chimerix's manufacture of such active pharmaceutical ingredient shall be conditioned upon Chimerix and Merck entering into a mutually satisfactory manufacturing and supply agreement. For clarity, neither Merck nor any of its Affiliates is obligated to provide Chimerix with any preference over any other Third Party contract manufacturer in making any determinations with respect to the selection of a contract manufacturer.

3.4 Records and Reports

3.4.1 Records. Merck shall maintain accurate records relating to its development work with respect to the Product hereunder.

3.4.2 Reports. Within thirty (30) days following the end of each Calendar Year during the Initial Development Period, Merck shall provide to Chimerix (through the Committee) a written progress report which shall summarize (a) the development status of the Products and (b) the development efforts undertaken by Merck

hereunder with respect to the Products (including a comparison against the Development Plan) during such Calendar Year. Thereafter, following the Initiation of the first Phase II Clinical Trial for the Product through the end of the Term, Merck shall provide to Chimerix a written progress report, every six (6) months during a Calendar Year (which reports shall be due within thirty (30) days following June 30th and December 31st), which shall (i) summarize the development status of the Products (if any), (ii) list any NDAs submitted by Merck with respect to the Products, and any Marketing Authorizations (other than pricing approvals) obtained, and (iii) summarize the general commercialization activities undertaken by Merck hereunder with respect to the Product, in each case, since the last such report. After the Initial Development Period, Merck shall promptly respond in writing to Chimerix's reasonable requests or inquiries relating to the written progress reports provided hereunder pursuant to this Section 3.4.2 (but no more than once per Calendar Year) to answer questions that Chimerix may have (provided, however, that all such requests, inquiries and questions from Chimerix must be in writing).

3.5 Excused Performance

In addition to the provisions of Article 6 hereof, the obligations of Merck with respect to any Product under Section 3.3 are expressly conditioned upon the continuing absence of any adverse condition or event relating to the safety or efficacy of the Product, and any obligation of Merck to develop, manufacture, seek to obtain regulatory approval for, or commercialize any such Product may be delayed or suspended so long as in Merck's opinion any such condition or event exists.

ARTICLE 4
CONFIDENTIALITY AND PUBLICATION

4.1 Nondisclosure Obligation

All Confidential Information disclosed by one Party to the other Party hereunder shall be maintained in confidence by the receiving Party and shall not be disclosed to any Third Party or used for any purpose except as set forth herein without the prior written consent of the disclosing Party, except to the extent that such Confidential Information:

(a) is known by the receiving Party at the time of its receipt, and not through a prior disclosure by the disclosing Party, as documented by the receiving Party's business records;

(b) is in the public domain by use and/or publication before its receipt from the disclosing Party, or thereafter enters the public domain through no fault of the receiving Party;

(c) is subsequently disclosed to the receiving Party by a Third Party who may lawfully do so and is not under an obligation of confidentiality to the disclosing Party;

(d) is developed by the receiving Party independently of Confidential Information received from the disclosing Party, as documented by the receiving Party's business records;

(e) with respect to Merck (and/or its Affiliates and/or Related Parties), is disclosed to governmental or other regulatory agencies in order to gain or maintain approval to conduct clinical trials or to market Product, or with respect to either Party (and/or its Affiliates and/or Related Parties), is disclosed to governmental or other regulatory agencies as may be reasonably necessary in order to obtain patents (subject to the applicable provisions of Article 7);

(f) is deemed necessary or reasonably useful by Merck to be disclosed to Related Parties, agents, consultants, and/or other Third Parties for any and all purposes Merck and its Affiliates deem necessary or advisable in the ordinary course of business in accordance with this Agreement (including the exercise of licenses granted to Merck hereunder) on the condition that such Third Parties agree to be bound by confidentiality and non-use obligations that substantially are no less stringent than those confidentiality and nonuse provisions contained in this Agreement; provided, however, that the term of confidentiality for such Third Parties shall be no less than ten (10) years;

(g) is deemed necessary by counsel to the receiving Party to be disclosed to such Party's attorneys, independent accountants or financial advisors for the sole purpose of enabling such attorneys, independent accountants or financial advisors to provide advice to the receiving Party, on the condition that such attorneys, independent accountants and financial advisors agree to be bound by confidentiality and non-use obligations that substantially are no less stringent than those confidentiality and nonuse provisions contained in this Agreement; provided, however, that the term of confidentiality for such attorneys, independent accountants and financial advisors shall be no less than ten (10) years; or

(h) is deemed necessary to be disclosed to any bona fide potential or actual investor, investment banker, acquirer, merger partner or other potential or actual financial partner in connection with a financing, merger, or acquisition, in which case, each Party shall have the further right to disclose the material financial terms of this Agreement provided that in connection with such disclosure each disclosee shall be under a

confidentiality obligation no less protective than those set forth in this Agreement.

Any combination of features or disclosures shall not be deemed to fall within the foregoing exclusions merely because individual features are published or available to the general public or in the rightful possession of the receiving Party unless the combination itself and principle of operation are published or available to the general public or in the rightful possession of the receiving Party.

If a Party is required by judicial or administrative process to disclose Confidential Information that is subject to the non-disclosure provisions of this Section 4.1 or Section 4.2, as applicable, such Party shall promptly inform the other Party of the disclosure that is being sought in order to provide the other Party an opportunity to challenge or limit the disclosure obligations. Confidential Information that is disclosed by judicial or administrative process shall remain otherwise subject to the confidentiality and non-use provisions of this Section 4.1 or Section 4.2, as applicable, and the Party disclosing Confidential Information pursuant to Applicable Law or court order shall take all steps reasonably necessary, including without limitation, obtaining an order of confidentiality, to ensure the continued confidential treatment of such Confidential Information. The Parties shall reasonably agree in advance with each other on the terms of this Agreement to be redacted in any Securities and Exchange Commission filings.

4.2 **Chimerix Know-How**. Without limiting the provisions of Section 4.1, Chimerix agrees to keep all Chimerix Know-How relating solely to Compound or Product confidential, subject to Section 4.1(b). For clarity, Chimerix's obligation under this Section 4.2 shall not apply to the Lipid-Antiviral-Conjugate Technology.

4.3 **Publication**

Chimerix shall not, and shall cause its Affiliates and its and such Affiliates' employees, consultants, contractors and agents not to, publish or present any Confidential Information of Merck or any other information with respect to any Compound or Product without Merck's prior written consent (in its sole discretion). The foregoing sentence shall in no way prohibit or limit Chimerix's and its Affiliates' (and its and their respective employees', contractors' and agents') right to publish or present any information with respect to the Lipid-Antiviral-Conjugate Technology so long as such information is not specific to Compound or Product. For clarity, notwithstanding the provisions of Section 4.1, Merck and its Affiliates (and its and their respective employees, consultants, contractors and agents) shall have the right to publish the results of its or their Research, or the development with respect to the Compounds and Products, including the right to publish the results or summaries of results of any clinical trials conducted hereunder with respect to a Product on Merck's clinical trial register; provided, however, in the event any such publication describes Confidential Information of Chimerix related to the Lipid-Antiviral-Conjugate Technology, Merck shall provide Chimerix the prior opportunity to review, as described hereafter. With respect to any

publication describing Confidential Information of Chimerix related to the Lipid-Antiviral-Conjugate Technology, Merck shall deliver to Chimerix a copy of the applicable sections of the proposed written publication, or a detailed outline or draft presentation of an oral disclosure, at least thirty (30) days prior to submission for publication or presentation. Chimerix shall have the right to request a reasonable delay in publication or presentation of those portions of the publication containing Confidential Information of Chimerix regarding the Lipid-Antiviral-Conjugate Technology in order to protect patentable information on the Lipid-Antiviral-Conjugate Technology. If Chimerix requests such delay in publication for purposes of protecting such patentable information related to the Lipid-Antiviral-Conjugate Technology, Merck shall delay submission or presentation of those portions of the publication containing Confidential Information of Chimerix regarding the Lipid-Antiviral-Conjugate Technology for a period of sixty (60) days to enable filing of patent applications protecting the Lipid-Antiviral-Conjugate Technology. Upon expiration of such sixty (60) days, Merck and its Affiliates (and its and their respective employees, consultants, contractors and agents) shall be free to proceed with the publication or presentation of such portions of the publication.

4.4 Publicity/Use of Names

No disclosure of the existence, or the terms, of this Agreement may be made by either Party, and neither Party shall use the name, trademark, trade name or logo of the other Party, its Affiliates or their respective employees in any publicity, promotion, news release or disclosure relating to this Agreement or its subject matter, without the prior express written permission of the other Party, except as may be required by Applicable Law; provided that in the event disclosure is required by Applicable Law, the disclosing Party shall use good-faith efforts to give the non-disclosing Party an opportunity, with reasonable advance notice, to review and comment on any proposed disclosure. Notwithstanding the foregoing, Chimerix shall have the right to issue a press release on execution of this Agreement in the form set forth in Schedule 4.4. Disclosure of Confidential Information either for which consent has previously been obtained (including the contents of the press release set forth in Section 4.4) or which has previously been disclosed publicly will not require additional, advance approval.

4.5 Remedies

Each Party shall be entitled to seek, in addition to any other right or remedy it may have, at law or in equity, a temporary injunction, without the posting of any bond or other security, enjoining or restraining the other Party from any violation or threatened violation of this Article 4.

ARTICLE 5
PAYMENTS; ROYALTIES AND REPORTS

5.1 Upfront Payment

In consideration for the rights and licenses granted to Merck hereunder, upon the terms and conditions contained herein, Merck shall pay to Chimerix, within thirty (30) days following the Effective Date, a non-refundable, non-creditable upfront payment in the amount of Seventeen Million Five Hundred Thousand Dollars ($17,500,000).

5.2 Milestone Payments

5.2.1 Milestones. In consideration for the rights and licenses granted to Merck hereunder, upon the terms and conditions contained herein, Merck shall pay to Chimerix the following non-refundable, non-creditable amounts, for the first Compound (or Product, as applicable) for which Merck achieves the following milestone event during the Term:

Event	Payment Amount for the First Indication (if any)	Payment Amount for the Second Indication (if any)
Demonstration of Proof of Concept for Compound	$ [...***...]	$ [...***...]
Initiation of the first Phase II Clinical Trial for Product	$ [...***...]	$ [...***...]
Initiation of the first Phase III Clinical Trial for Product	$ [...***...]	$ [...***...]
Filing of the first NDA with the FDA in the United States for Product	$ [...***...]	$ [...***...]
Filing of first NDA with the EMA (through the centralized filing procedure) for Product	$ [...***...]	$ [...***...]
Approval by the FDA of Marketing Authorization in the United States for a Product (the "**US Approval Milestone**")	$ [...***...]	$ [...***...]
Approval by the relevant Regulatory Authorities of Marketing Authorization in the first three (3) Major Markets in the EU for a Product (the "**EU Approval Milestone**") (The EU Approval Milestone collectively with the US	$ [...***...]	$ [...***...]

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Approval Milestone are referred to as the "**Approval Milestones**")

For clarity, each of the foregoing milestones in this Section 5.2.1 shall be payable only one (1) time upon the initial achievement of the applicable milestone event (regardless of how many Products or Compounds achieve the relevant milestone) and no amounts shall be due hereunder for subsequent or repeated achievement of such milestones. For further clarity, the foregoing milestones will be payable only with respect to the first and second Indications (if any), as applicable, achieving such milestones (with the first Indication milestone payments being set forth in the column entitled "Payment Amount for the First Indication" and the second Indication milestone payments being set forth in the column entitled "Payment Amount for the Second Indication", if any) and no additional milestones shall be payable for any subsequent additional Indications. For any given event listed above, the first and second Indications may be achieved by the same Product or Compound, or achieved by different Products or Compounds, but in all cases, the second Indication shall mean a different and distinct disease. The maximum amount payable by Merck under this Section 5.2.1 is one hundred fifty one million dollars ($151,000,000) assuming each of the seven (7) milestones were achieved for each of two Indications.

Notwithstanding the foregoing, in the event that the approval of Marketing Authorizations (which would otherwise trigger an Approval Milestone) is subject to the satisfaction of additional requirements before Merck becomes legally permitted to market and sell the Product in the applicable market (including all applicable pricing and governmental reimbursement approvals), then the Approval Milestone shall not become payable until such requirements are satisfied.

In the event that Merck is required to pay the "Initiation of the first Phase II Clinical Trial for a Product" milestone for the first Indication, and Merck has previously determined that the Compound has not met the success criteria to establish Proof of Concept and thus not previously paid the "Demonstration of Proof of Concept for Compound" milestone for such first Indication, then Merck shall pay to Chimerix the "Demonstration of Proof of Concept for Compound" milestone simultaneously with the payment of such "Initiation of the first Phase II Clinical Trial for a Product" milestone for such first Indication. For clarity, in all cases, the "Demonstration of Proof of Concept for Compound" milestone shall be payable only one time.

5.2.2 Reporting and Payment. Merck shall notify Chimerix in writing within thirty (30) days following the achievement of each milestone as set forth in Section 5.2.1, as applicable, and shall make the appropriate milestone payment along with such notification to Chimerix.

5.3 Royalties

5.3.1 Royalties Payable By Merck. Subject to the terms and conditions of this Agreement, Merck shall pay Chimerix royalties, calculated on a Product-by-Product basis, as set forth in this Section 5.3.

5.3.2 Patent Royalties. Subject to the provisions of Section 5.3.3, on a Product-by-Product basis, Merck shall pay Chimerix royalties in an amount equal to the following percentage of aggregate Net Sales of a given Product sold by Merck or its Related Parties in countries in the Territory for use in the Field, provided that the sale of such Product by Merck or its Related Parties would infringe a Valid Patent Claim in the country of sale:

(a) [...***...] of such Net Sales of a given Product in the Territory in a given Calendar Year up to and including Net Sales of [...***...];

(b) [...***...] of such Net Sales of a given Product in the Territory in a given Calendar Year for the portion of such Net Sales exceeding [...***...] up to and including [...***...]; and

(c) [...***...] of such Net Sales of a given Product in the Territory in a given Calendar Year for the portion of such Net Sales exceeding [...***...].

For clarity, all Net Sales of the applicable Product for which a royalty is payable in a given country in a given Calendar Year under this Section 5.3.2 and under 5.3.3 shall be included in aggregate Net Sales for purposes of determining the foregoing royalty tiers for such Calendar Year; provided that in all cases, (i) if no royalty is payable on a given unit of Product, then the Net Sales of such unit of Product shall not be included for determining the foregoing royalty tiers and (ii) Net Sales of a given Product will not be combined with Net Sales of any other Product for purposes of determining the foregoing royalty tiers.

5.3.3 Know-How Royalty. Notwithstanding the provisions of Section 5.3.2 above, on a Product-by-Product basis, in countries in the Territory where the sale of such Product by Merck or its Related Parties would not infringe a Valid Patent Claim, Merck shall pay royalties on Net Sales of such Product sold by Merck or its Related Parties for use in the Field in such countries at royalty rates that shall be set at [...***...] of the applicable royalty rate determined according to Section 5.3.2, *mutatis mutandis*.

5.3.4 Royalty Calculation and Royalty Period. Royalties on a given Product at the rates set forth above shall, on a Product-by-Product basis, commence with the First

*****Confidential Treatment Requested**

Commercial Sale of the Product and shall continue on a country-by-country basis until the expiration of the later of: (i) the last-to-expire Valid Patent Claim that would be infringed by the sale of such Product in such country; or (ii) the period of [...***...] following the First Commercial Sale of such Product in such country (the "**Royalty Period**"). Notwithstanding anything to the contrary contained herein, all royalties are subject to the following conditions:

(i) that only one royalty shall be due with respect to the same unit of Product;

(ii) that no royalties shall be due upon the sale or other transfer among Merck or its Related Parties, but in such cases the royalty shall be due and calculated upon Merck's or its Related Party's Net Sales to the first independent Third Party;

(iii) no royalties shall accrue on the sale or other disposition of Product by Merck or its Related Parties for use in a Clinical Trial;

(iv) no royalties shall accrue on the disposition of Product by Merck or its Related Parties as samples (promotion or otherwise) or as donations (for example, to non-profit institutions or government agencies for a non commercial purpose);

(v) the determination of whether a royalty will be paid at the rate set forth under Section 5.3.2 or 5.3.3 shall be determined on a Product-by-Product and country-by-country basis, provided that for clarity, with respect to a given Product, the Net Sales of such Product in countries falling within the royalty scheme set forth in Section 5.3.2 and the Net Sales of such Product in countries falling within the royalty scheme set forth in Section 5.3.3 shall be aggregated for purposes of determining the applicable royalty tiers under Section 5.3.2 or 5.3.3, as applicable. Notwithstanding the foregoing, in order to calculate the actual amount of the royalty payments under Section 5.3.2 (Patent Royalty) or 5.3.3 (Know-How Royalty), as applicable, with respect to a given Product, the Net Sales subject to royalties under Section 5.3.2 and the Net Sales subject to royalties under Section 5.3.3 shall be allocated proportionately across each of the relevant royalties tiers.

5.3.5 Royalties for Bulk Compound. In those cases in which Merck sells bulk Compound rather than Product in packaged form to an independent Third Party, the royalty obligations of this Section 5.3 shall be applicable to the bulk Compound only (but solely to the extent that a royalty would otherwise be payable on the Product incorporating such Compound).

*****Confidential Treatment Requested**

5.3.6 Compulsory Licenses. If a compulsory license is granted to a Third Party with respect to Product in any country in the Territory with a royalty rate lower than the royalty rate provided by Section 5.3.2 or 5.3.3, as applicable, then the royalty rate to be paid by Merck on Net Sales in that country under Section 5.3.2 or 5.3.3, as applicable, shall be reduced to the rate paid by the compulsory licensee.

5.3.7 Merck Third Party Licenses. In the event that Merck or any of its Related Parties determines that it is commercially reasonable to obtain one or more licenses under any Patent Rights or know-how from Third Parties in order to make, have made, use, offer to sell, sell, export or import Compound(s) or Product(s) (but excluding any such licenses that are solely and specifically related to an Other Active in a given Combination Product as an individual separate component) (hereinafter "**Additional Third Party Licenses**"), then [...***...] of the consideration (including upfront payments, licenses fees, milestone payments and royalties) actually paid under such Additional Third Party Licenses by Merck or its Related Parties in connection with the manufacture, use, sale, export or import, as applicable, of such Compound or Product in a country for a given Calendar Quarter shall be creditable against the royalty payments due Chimerix by Merck with respect to the sale of such Compound or Product in such country; provided, however, that in no event shall the royalties owed by Merck to Chimerix for such Calendar Quarter in such country be reduced by more than [...***...] pursuant to this Section 5.3.7 (provided, however, that if Merck is not able to fully recover the amounts paid by Merck or its Related Parties under Additional Third Party Licenses as a result of the foregoing restriction, then Merck shall be entitled to carry forward such right of off-set to future Calendar Quarters with respect to such excess amount, subject to such [...***...] cap for any such future Calendar Quarters).

5.3.8 Generic Products. In the event that one or more Generic Product(s) is/are sold in a given country, and such Generic Product(s) attain, in the aggregate among all such Generic Products, on a Calendar Quarter basis a market share (which market share shall be calculated as the quotient of [...***...] divided by [...***...] plus [...***...] as measured by [...***...], then the royalty rate to be paid by Merck on Net Sales in that country for the applicable Product under Section 5.3.2 or 5.3.3, as applicable, shall thereafter during the Royalty Term be reduced by [...***...] in such country.

5.4 Reports; Payment of Royalty

During the Term following the First Commercial Sale of a Product, Merck shall furnish to Chimerix a quarterly written report for each Calendar Quarter showing, on a country-by-country and Product-by-Product basis, the calculation of Net Sales (including the calculation of royalties from Combination Products, if any, as determined in accordance with the applicable formula set forth under the definition of Net Sales), showing the aggregate deductions from gross sales (as such term is defined by Merck in its standard practices) under the definition of Net Sales, of all Products subject to royalty payments sold by Merck and its Related Parties in the Territory for use in the Field during the reporting period and the royalties payable under this Agreement. Reports shall be due on the sixtieth (60th) day following the close of each Calendar Quarter. Royalties shown to have accrued by each royalty report shall be due and payable on the date such royalty report is due. Merck shall keep complete and accurate records in sufficient detail to enable the royalties payable hereunder to be determined.

5.5 Audits

(a) Upon the written request of Chimerix and not more than once in each Calendar Year, Merck shall permit an independent certified public accounting firm of nationally recognized standing selected by Chimerix and reasonably acceptable to Merck, at Chimerix's expense, to have access during normal business hours to such of the books and records of account of Merck as may be reasonably necessary to verify the accuracy and completeness of the royalty reports and payments hereunder for any Calendar Year ending not more than [...***...] prior to the date of such request. The accounting firm shall disclose to Chimerix only whether the royalty reports are correct or incorrect, and the amount of and description of any discrepancy. No other information shall be provided to Chimerix.

(b) If such accounting firm correctly identifies a discrepancy made during such period, the appropriate Party shall pay the other Party the amount of the discrepancy within thirty (30) days of the date Chimerix delivers to Merck such accounting firm's written report so correctly concluding, or as otherwise agreed upon by the Parties. The fees charged by such accounting firm shall be paid by Chimerix; provided, however, that if such audit uncovers an underpayment of royalties by Merck that exceeds the greater of [...***...] or [...***...] of the total royalties owed for the period in question, the fees of such accounting firm shall be paid by Merck.

(c) Merck shall include in each sublicense granted by it pursuant to this Agreement a provision requiring the sublicensee to make reports to Merck

and to keep and maintain records of sales made pursuant to such sublicense to the same extent required of Merck under this Agreement.

(d) Upon the expiration of [...***...] following the end of any Calendar Year, the calculation of royalties payable with respect to such Calendar Year shall be binding and conclusive upon Chimerix, and Merck and its Related Parties shall be released from any liability or accountability with respect to royalties for such Calendar Year.

(e) Chimerix shall treat all financial information subject to review under this Section 5.5 or under any sublicense agreement in accordance with the confidentiality and non-use provisions of this Agreement, and shall cause its accounting firm to enter into an acceptable confidentiality agreement with Merck and/or its Related Parties obligating it to retain all such information in confidence pursuant to such confidentiality agreement.

5.6 Payment; Exchange Rate

All payments to be made by Merck to Chimerix under this Agreement shall be made in United States dollars and may be paid by check made to the order of Chimerix or bank wire transfer in immediately available funds to such bank account in the United States as may be designated in writing by Chimerix from time to time. In the case of sales outside the United States, the rate of exchange to be used in computing the monthly amount of currency equivalent in United States dollars due Chimerix shall be made at the monthly rate of exchange utilized by Merck in its worldwide accounting system (or such other globally accepted standard as Merck may choose from time-to-time) prevailing on the third to the last business day of the month preceding the month in which such sales are recorded by Merck.

5.7 Income Tax Withholding

Chimerix shall be liable for all income and/or other taxes (including interest) ("**Taxes**") imposed upon any payments made by Merck to Chimerix under this Article 5 or otherwise under this Agreement ("**License Payments**"). If applicable laws, rules or regulations require withholding of Taxes, Merck shall make such withholding payments and shall subtract the amount thereof from the License Payments. Merck shall submit appropriate proof of payment of the withheld Taxes to Chimerix and shall provide Chimerix with the official receipts within a reasonable period of time. Upon request by Chimerix, Merck shall provide Chimerix reasonable information in its possession in order to assist Chimerix in obtaining the benefit of any present or future treaty against double taxation which may apply to the License Payments.

If Merck is required to make a payment to Chimerix subject to a deduction or withholding of Tax, and if such deduction or withholding of Tax obligation arises solely as a result of the assignment of this Agreement by Merck or as a result of any failure on

the part of Merck to comply with Applicable Laws relating to the withholding of Tax, in each case, after the Effective Date, that has the effect of increasing the deduction or withholding of Tax on such payment above the amounts of deduction or withholding of Tax that would otherwise be deducted or withheld prior to such assignment of this Agreement or prior to such failure by Merck to comply with such Applicable Laws, as applicable (a "**Merck Withholding Tax Action**"), then the payment by Merck (in respect of which such deduction or withholding of Tax is required to be made) shall be increased by the amount of such additional deduction or withholding Tax (the "**Additional Tax**"), but solely to the extent that (i) such Additional Tax arises solely as a direct result of such Merck Withholding Tax Action and (ii) such Additional Tax cannot be recovered by Chimerix. The Additional Tax, along with any other Tax deducted and withheld from the payment made by Merck, shall be timely remitted to the proper Governmental Authority for the account of Chimerix in accordance with Applicable Laws.

5.8 **Chimerix Third Party Licenses.** Notwithstanding the provisions of Section 5.3.7, Chimerix shall be solely responsible for satisfying all costs and payments of any kind (including all upfront fees, annual payments, milestone payments and royalty payments) arising under the Chimerix Third Party License Agreements, which payments arise as a result of any activities hereunder.

ARTICLE 6
REPRESENTATIONS AND WARRANTIES; CERTAIN COVENANTS

6.1 **Mutual Representations and Warranties**

Each Party represents and warrants to the other Party the following as of the Effective Date of this Agreement:

(a) Corporate Power. Such Party is duly organized and validly existing under the laws of the state of its organization and has full corporate power and authority to enter into this Agreement and to perform its obligations hereunder.

(b) Due Authorization and Execution. The execution and delivery of this Agreement and the consummation of the transactions contemplated hereby have been duly authorized by the necessary corporate actions of such Party. This Agreement has been duly executed by such Party. This Agreement and any other documents contemplated hereby constitute valid and legally binding obligations of such Party enforceable against it in accordance with their respective terms, except to the extent that enforcement of the rights and remedies created thereby is subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws of general application affecting the rights and remedies of creditors.

(c) Non-Contravention. The execution, delivery and performance by such Party of this Agreement and any other agreements and instruments contemplated hereunder will not (i) in any material respect violate any statute, regulation, judgment, order, decree or other restriction of any governmental authority to which such Party is subject, (ii) violate any provision of the corporate charter, by-laws or other organizational documents of such Party, or (iii) constitute a material violation or breach by such Party of any provision of any material contract, agreement or instrument to which such Party is a party or to which such Party may be subject although not a party (including, with respect to Chimerix, the Chimerix Third Party License Agreements).

6.2 Representations and Warranties

Chimerix represents and warrants to Merck that as of the Effective Date of this Agreement:

(a) Schedule 1.11 sets forth a true, correct and complete list of Chimerix Patent Rights existing as of the Effective Date and such schedule contains all application numbers and filing dates, registration numbers and dates, jurisdictions and owners. The Chimerix Patent Rights and the Chimerix Know-How constitute all intellectual property owned or otherwise controlled (through license or otherwise) by Chimerix (or any of its Affiliates) that are necessary or useful to conduct the Research and/or to develop, manufacture, sell or use the Compounds and/or Products;

(b) all issued patents within the Chimerix Patent Rights are in full force and effect, and, to the best of Chimerix's knowledge, the Chimerix Patent Rights exist and are not invalid or unenforceable, in whole or in part;

(c) it has the full right, power and authority (including the full right, power and authority under the Chimerix Third Party License Agreements) to enter into this Agreement, to perform the activities hereunder and to grant the licenses and sublicenses granted herein (including the licenses and sublicenses granted under Article 2 hereof);

(d) it (and its Affiliates) has not previously (i) assigned, transferred, conveyed or otherwise encumbered its right, title and/or interest in Chimerix Patent Rights or Chimerix Know-How, or (ii) otherwise granted any rights to any Third Parties that would conflict with the rights granted to Merck hereunder, and, to the best of Chimerix's knowledge, there is no unauthorized use, infringement or misappropriation of any Chimerix Patent Rights or Chimerix Know-How;

(e) it is the sole and exclusive owner or, to the best of Chimerix's knowledge, the sole and exclusive licensee (pursuant to the Chimerix Third Party License Agreements, as applicable) of the Chimerix Patent Rights (and, to the best of Chimerix's knowledge, the Chimerix Know-How), all of which are free and clear of any liens, charges and encumbrances, and, to the best of Chimerix's knowledge, no other Person has any claim of ownership whatsoever with respect to the Chimerix Patent Rights and/or the Chimerix Know-How;

(f) to the best of Chimerix's knowledge, the exercise of the license granted to Merck under the Chimerix Patent Rights and Chimerix Know-How pursuant to Section 2.1, as well as the Research, and the development, manufacture, use, sale, export and import of Compounds and Products (provided that no such representation or warranty is made with respect to an Other Active in a given Combination Product as an individual separate component or in combination with the Compound), as contemplated as of the Effective Date, does not and will not infringe or misappropriate any intellectual property rights owned or possessed by any Third Party;

(g) there are no claims, judgments or settlements against or owed by Chimerix (or any of its Affiliates) with respect to the Chimerix Patent Rights, Chimerix Know-How and/or the Compounds, and, to the best of Chimerix's knowledge, no pending or threatened claims or litigation, relating to the Chimerix Patent Rights and/or Chimerix Know-How and/or the Compounds;

(h) the Chimerix Third Party License Agreements are the only agreements (including any licenses), written or, to the best of the Company's knowledge, oral, granting any licenses or other rights to Chimerix (or any of its Affiliates) relating to the Compounds, Products, Chimerix Patent Rights and/or Chimerix Know-How;

(i) with respect to each Chimerix Third Party License Agreement, (i) it is in full force and effect; (ii) neither Chimerix nor any of its Affiliates is in breach thereof; (iii) neither Chimerix nor any of its Affiliates has received any notice of breach or notice of threatened breach thereof; (iv) neither Chimerix nor any of its Affiliates has received any notice of any intent to reduce the scope of the field or the licenses thereunder or render any license thereunder non-exclusive, and, to the best of its knowledge, no event, act or omission has occurred which could give rise to the right of the counterparty to such Chimerix Third Party License Agreement to reduce the scope of the field or the licenses thereunder or render any of the licenses thereunder non-exclusive; and (v) Chimerix has made available to Merck all material written correspondence under Chimerix's reasonable control relating to such Chimerix Third Party License Agreement;

(j) Chimerix has disclosed to Merck all material information regarding the Chimerix Patent Rights and Chimerix Know-How, including any licenses and material agreements related to the Chimerix Patent Rights and/or Chimerix Know-How;

(k) Chimerix has obtained all necessary consents, approvals and authorizations of all governmental authorities and other Persons required to be obtained by it as of the Effective Date, as applicable, in connection with the execution, delivery and performance of this Agreement;

(l) neither Chimerix nor any of its Affiliates has obtained, or filed for, any INDs (other than IND #103,150), NDAs or Marketing Authorizations for any Compounds or Products, and, to the best of Chimerix's knowledge, no other Person has obtained, or filed for, any INDs, NDAs or Marketing Authorizations for any Compounds or Products;

(m) Chimerix has disclosed to Merck all material information and data, including all correspondences to/from any Regulatory Authority, in each case related to any Compounds or Products (but excluding such information or data solely and specifically related to an Other Active in a given Combination Product as an individual separate component), regardless of whether such data and information would have a positive, negative or neutral impact on the potential commercial, scientific or strategic value or attractiveness of the Compounds or Products, and including in all cases, all safety or efficacy information and data related to the Compounds or Products (but excluding such information or data solely and specifically related to an Other Active in a given Combination Product as an individual separate component);

(n) Chimerix (and its Affiliates) has not employed or otherwise used in any capacity, and will not employ or otherwise use in any capacity, the services of any Person debarred under United States law, including to Section 21 USC 335a, or any foreign equivalent thereof with respect to the Compounds;

(o) all research and development (including non-clinical studies and Clinical Studies) related to the Compounds and/or Products (but excluding any research and development solely and specifically related to an Other Active in a given Combination Product as an individual separate component, if applicable) prior to the Effective Date, including the research and development set forth on Schedule 6.2(o), has been conducted by or on behalf of Chimerix (and/or any of its Affiliates), and, to the best of Chimerix's knowledge, any other Person, in accordance and compliance with all Applicable Laws and all GLPs, GCPs and GMPs;

(p) except as set forth in Schedule 6.2(p), there are no ongoing research or development activities (including any Clinical Trials) being conducted by or on behalf of Chimerix or any of its Affiliates with respect to the Compounds or Products;

(q) the compounds set forth on Schedule 1.18 as well as the compound known as "CMX157" are the only compounds owned by Chimerix (or any of its Affiliates) or to which Chimerix (or any of its Affiliates) has rights (by license or otherwise) that are known to be Tenofovir Diphosphate Converting Compounds; and

(r) the Inventory to be provided to Merck hereunder was (and at all times up until delivery of such Inventory hereunder shall remain) manufactured, packaged, labeled, tested, stored and handled in accordance with all Applicable Laws, cGMPs, specifications (including release specifications as provided by Chimerix to Merck in writing prior to the Effective Date) and all applicable regulatory approvals, except as otherwise set forth on Schedule 3.2. Such Inventory is not adulterated or misbranded within the meaning of the Act and is not an article that could not, under the provisions of the Act, be introduced into interstate commerce. All such Inventory is free and clear of all encumbrances (including through lien, charge, security interest, mortgage, encumbrance or otherwise). The Inventory set forth on Schedule 3.2 constitutes all of the inventory of Compound and Product held by or on behalf of Chimerix or any of its Affiliates (including any such inventory held at any contract manufacturer).

6.3 Chimerix Further Representations, Warranties and Covenants

6.3.1 Chimerix Third Party License Agreements. Chimerix represents and warrants to Merck that it has provided to Merck in writing prior to the Effective Date a true, correct and complete copy of each of the Chimerix Third Party License Agreements, and each such copy includes any and all amendments, restatements, side letters, and other modifications thereto, as each such Chimerix Third Party License Agreement is in effect as of the Effective Date. Chimerix further covenants and agrees that during the Term of this Agreement, (a) it will satisfy all of its obligations (including all payment obligations) under, and take all steps necessary to maintain in full force and effect, each of the Chimerix Third Party License Agreements, including taking all reasonable steps to ensure that all licenses granted thereunder remain in full force and effect (on an exclusive basis) and that the scope of such licenses (including with respect to all licensed Patent Rights and other intellectual property and all fields) are not reduced or limited in any way; (b) it will not assign (except an assignment to a party to which this Agreement has been assigned as permitted under Section 10.2), amend, restate, amend and restate, terminate in whole or in part, or otherwise modify any of the

Chimerix Third Party License Agreements in any manner that would have an adverse effect on the Chimerix Patent Rights licensed to Merck hereunder or any other rights of Merck hereunder without the prior written consent of Merck; (c) it will provide Merck with prompt notice of any claim of a breach under any of the Chimerix Third Party License Agreements or notice of termination of any of the Chimerix Third Party License Agreements, made by either Chimerix or the counterparty to such Chimerix Third Party License Agreement (or any party acting on behalf of such counterparty); and (d) it will promptly send to Merck copies of all other material correspondence to or from the counterparty to any such Chimerix Third Party License Agreement related to such Chimerix Third Party License Agreement and related to the rights licensed Merck hereunder. For the purposes of clarity, Chimerix (and not Merck) shall be responsible for all of the financial and other obligations of Chimerix (and/or any of its Affiliates) under any of the Chimerix Third Party License Agreements, including any and all financial obligations thereunder with respect to Net Sales of Merck and its Related Parties.

6.4 Disclaimer

EACH PARTY HEREBY DISCLAIMS ANY AND ALL REPRESENTATIONS AND WARRANTIES IN CONNECTION WITH THE TRANSACTIONS CONTEMPLATED HEREIN NOT EXPRESSLY MADE IN THIS AGREEMENT TO THE MAXIMUM EXTENT PERMITTED UNDER APPLICABLE LAWS, INCLUDING WITH RESPECT TO THE COMPOUNDS, PRODUCTS, OR ANY TECHNOLOGY OR OTHER INTELLECTUAL PROPERTY LICENSED OR GRANTED UNDER THIS AGREEMENT, INCLUDING ANY WARRANTY OF NON-INFRINGEMENT, QUALITY, PERFORMANCE, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. FOR THE AVOIDANCE OF DOUBT, NOTHING CONTAINED IN THIS SECTION 6.4 SHALL OPERATE TO LIMIT OR INVALIDATE ANY EXPRESS WARRANTY CONTAINED HEREIN OR ANY IMPLIED WARRANTY OF GOOD FAITH AND/OR FAIR DEALING.

ARTICLE 7
IP OWNERSHIP; PATENT PROVISIONS

7.1 Ownership of Collaboration Inventions; Know-How

7.1.1 Ownership. Inventorship of Collaboration Inventions shall be determined in accordance with United States patent laws (regardless of where the applicable activities occurred). Notwithstanding the foregoing, all right, title and interest in or to any and all Collaboration Inventions shall be determined in accordance with the following terms and conditions:

(a) Chimerix Collaboration Inventions shall be owned solely by Chimerix;

(b) Merck Collaboration Inventions shall be owned solely by Merck; and

(c) Joint Collaboration Inventions shall be owned jointly by Chimerix and Merck.

7.1.2 Chimerix Rights in Lipid-Antiviral-Conjugate Technology. Subject to the rights and licenses granted to Merck hereunder with respect to the Lipid-Antiviral-Conjugate Technology solely as related to the Compound or Product, nothing in the provisions of this Agreement shall be construed as limiting Chimerix's right to practice, transfer, license, assign (or otherwise exploit its rights with respect to) the Lipid-Antiviral-Conjugate Technology for the development and commercialization of compounds or products other than Compounds or Products (e.g., CMX001).

7.2 Filing, Prosecution and Maintenance of Patents for Collaboration Inventions

7.2.1 Joint Collaboration Inventions. With respect to Joint Collaboration Inventions, Merck shall have the first right to file patent applications for Joint Collaboration Inventions (in the name of both Merck and Chimerix) and thereafter prosecute and maintain Patent Rights for such Joint Collaboration Inventions. In connection therewith, Chimerix shall execute such documents and perform such ministerial acts as may be reasonably necessary for Merck to continue such prosecution or maintenance of Patent Rights claiming such Joint Collaboration Invention. Any and all of the expenses and costs incurred by Merck with respect to the filing of patent applications for, and the prosecution and maintenance of Patent Rights for, Joint Collaboration Inventions, shall be shared equally by the Parties. With respect to Patent Rights for a given Joint Collaboration Invention, Merck (i) may elect not to file, (ii) may elect not to file in a particular country (including electing not to validate in a particular country) and/or (iii) may elect not to maintain in a particular country; and in any such case, Merck shall provide Chimerix with at least thirty (30) days prior notice and Chimerix shall have the right, at its sole expense, to assume responsibility for such Patent Rights for such Joint Collaboration Invention (in the name of both Merck and Chimerix), including thereafter prosecuting, maintaining, and validating Patent Rights for such Joint Collaboration Invention to the extent Merck has elected not to do so (and Merck shall have no further obligations in connection therewith).

7.2.2 Chimerix Collaboration Inventions. With respect to Chimerix Collaboration Inventions, Chimerix shall have the first right, at its sole expense, to file patent applications for Chimerix Collaboration Inventions and thereafter prosecute and maintain Patent Rights for such Chimerix Collaboration Inventions. With respect to Patent Rights for a given Chimerix Collaboration Invention, Chimerix (i) may elect not to file, (ii) may elect not to file in a particular country (including electing not to validate in a particular country) and/or (iii) may elect not to maintain in a particular country; and in any such case, Chimerix shall provide Merck with at

least thirty (30) days prior notice and Merck shall have the right (in its discretion and at its sole expense) to assume responsibility for such Patent Rights for such Chimerix Collaboration Invention, including thereafter prosecuting, maintaining, and validating Patent Rights for such Chimerix Collaboration Invention to the extent Chimerix has elected not to do so. In such event, Chimerix shall execute such documents and perform such ministerial acts, at Merck's expense, as requested by Merck as may be reasonably necessary to, in a timely manner, allow Merck to make such filings and/or continue such prosecution, maintenance and validation. In such case, all of the expenses and costs incurred by Merck to fund such filing and/or continued prosecution and maintenance and validation of such Patent Rights shall be fully creditable against royalties due under Section 5.3 of this Agreement.

7.2.3 Right of Review and Consultation. In each of the foregoing cases with respect to Joint Collaboration Inventions and/or Chimerix Collaboration Inventions, as applicable, the filing Party shall give the non-filing Party an opportunity to review the text of the application before filing, shall consult with the non-filing Party with respect thereto, and shall supply the non-filing Party with a copy of the application as filed, together with notice of its filing date and serial number. Chimerix shall keep Merck advised of the status of the actual and prospective patent filings and, upon Merck's request, shall provide advance copies of any papers related to the filing, prosecution and maintenance of such patent filings. Chimerix shall promptly give notice to Merck of the grant, lapse, revocation, surrender, invalidation or abandonment of any Chimerix Patent Rights or Joint Patent Rights for which Chimerix is responsible for the filing, prosecution and maintenance.

7.2.4 Merck Collaboration Inventions. Notwithstanding the foregoing provisions of this Section 7.2, Merck shall have the sole right, in its discretion, to file, prosecute and maintain Patent Rights claiming or covering Merck Collaboration Inventions (the "**Merck Patent Rights**"), and Chimerix shall have no rights in connection therewith.

7.3 Filing, Prosecution and Maintenance of Other Chimerix Patents; Option of Merck to Prosecute and Maintain Other Chimerix Patents

7.3.1 Chimerix Patent Rights Licensed from UC. The rights of the Parties set forth in Section 7.3.2 shall be subject the rights of UC under the UC License with respect to Chimerix Patent Rights Controlled by Chimerix through the UC License (the "**Chimerix/UC Patent Rights**"). Subject to the terms of the UC License, Chimerix agrees to keep Merck advised of the status of the actual and prospective patent filings within such Chimerix/UC Patent Rights and shall provide copies of all relevant documentation relating to the prosecution thereof, upon Chimerix's receipt of the same from UC.

7.3.2 Chimerix Patent Rights (other than Chimerix Patent Rights for Chimerix Collaboration Inventions). With respect to Chimerix Patent Rights other than Chimerix Patent Rights for Chimerix Collaboration Inventions (which shall be handled pursuant to Section 7.2.2), Chimerix agrees to, and shall, file, prosecute and maintain in the Territory, upon consultation with Merck, all such other Chimerix Patent Rights. Chimerix shall keep Merck advised of the status of the actual and prospective patent filings with respect to such other Chimerix Patent Rights and shall provide advance copies of any papers related to the filing, prosecution and maintenance of such patent filings prior to the submission thereof. Merck shall have the right to review and comment on such filings and papers prior to the submission thereof, and Chimerix shall give due consideration to Merck's comments. Chimerix shall promptly give notice to Merck of the grant, lapse, revocation, surrender, invalidation or abandonment of any Chimerix Patent Rights for which Chimerix is responsible for the filing, prosecution and maintenance. In the event Chimerix desires not to file, or to cease prosecution and/or maintenance of, any such other Chimerix Patent Rights, on a country-by-country basis in the Territory (at Chimerix's discretion), Chimerix will give at least thirty (30) days prior notice to Merck, and Merck shall have the right (at Merck's discretion), to file and/or take over the prosecution and maintenance thereof. If Merck elects to file and/or to continue such prosecution or maintenance, as applicable, Chimerix shall execute such documents and perform such ministerial acts at Merck's expense as may be reasonably necessary to perform such filing, prosecution or maintenance. In such case, all of the expenses and costs incurred by Merck to fund such filing and/or continued prosecution and maintenance of such Chimerix Patent Rights shall be fully creditable against royalties due under Section 5.3 of this Agreement.

7.4 Interference, Opposition, Invalidation, Reexamination and Reissue

7.4.1 Interpretation. The Parties hereby acknowledge and agree that any Patent Rights with respect to Joint Collaboration Inventions filed by Merck in accordance with the foregoing Section 7.2.1 shall be considered "Merck Patent Rights" for purposes of this Section 7.4 and any Patent Rights with respect to Joint Collaboration Inventions filed by Chimerix in accordance with the foregoing Section 7.2.1 shall be considered "Chimerix Patent Rights" for purposes of the remaining provisions of this Section 7.4.

7.4.2 First Right with Respect to Chimerix Patent Rights. Chimerix shall, within ten (10) days of learning of such event, inform Merck of any request for, or filing or declaration of, any interference, opposition, invalidation, reissue or reexamination relating to Chimerix Patent Rights. With respect to any request for, or filing or declaration of, any interference, opposition, invalidation, reissue or reexamination relating to the Chimerix Patent Rights, Chimerix shall have the first right (in its discretion) to initiate, prosecute and/or respond, to such action or proceeding; provided that Chimerix shall consult with Merck with respect to any such action

or proceeding and shall consider Merck's positions in good faith. In the event that Chimerix elects to initiate, prosecute and/or respond to any interference, opposition, invalidation, reexamination, or reissue proceeding relating to any Chimerix Patent Rights, the expenses thereof shall be borne solely by Chimerix. Subject to the rights of UC under the UC License with respect to the Chimerix/UC Patent Rights, Chimerix shall not settle any interference, opposition, invalidation, reissue or reexamination action or proceeding relating to any Chimerix Patent Rights (or otherwise initiate any interference, opposition, invalidation, reissue or reexamination action or proceeding relating to any Chimerix Patent Rights) without the prior written consent of Merck, which consent shall not be unreasonably withheld, and Merck shall have the right to review and approve any submission to be made in connection with such proceeding, such approval not to be unreasonably withheld.

7.4.3 Right to Be Informed. Chimerix shall keep Merck informed of developments in any such action or proceeding involving the Chimerix Patent Rights, including the status of any settlement negotiations and the terms of any offer related thereto.

7.4.4 Back-Up Rights of Merck. Chimerix shall promptly inform Merck in the event that Chimerix elects not to initiate, prosecute and/or respond to any interference, opposition, invalidation, reissue or reexamination relating to Chimerix Patent Rights, and in such case, subject to the rights of UC under the UC License with respect to the Chimerix/UC Patent Rights, Merck shall have the right to do so (in Merck's discretion), at its cost and expense. In such case, Merck and Chimerix shall consult and cooperate fully to determine a course of action with respect to such action or proceeding. At the request of Merck, Chimerix will provide Merck with reasonable assistance that Merck may reasonably request (including that Chimerix will join such action voluntarily and will execute and cause its Affiliates to execute all documents necessary for Merck to initiate, prosecute and/or respond to any interference, opposition, invalidation, reissue or reexamination relating to Chimerix Patent Rights in the event that Merck is unable to do so in its own name). All of the expenses and costs incurred by Merck shall be fully creditable against royalties due under Section 5.3 of this Agreement.

7.4.5 Merck Patent Rights. Notwithstanding the foregoing provisions of this Section 7.4, Merck shall have the sole right, in its discretion, to handle any interference, opposition, invalidation, reissue, or reexamination proceeding relating to Merck Patent Rights, and Chimerix shall have no rights in connection therewith; provided, however, that at the request and sole expense of Merck, Chimerix will provide Merck with reasonable assistance that Merck may reasonably request.

7.5 Enforcement and Defense.

7.5.1 Interpretation. The Parties hereby acknowledge and agree that any Patent Rights with respect to Joint Collaboration Inventions filed by Merck in accordance with

the foregoing Section 7.2.1 shall be considered "Merck Patent Rights" for purposes of this Section 7.5 and any Patent Rights with respect to Joint Collaboration Inventions filed by Chimerix in accordance with the foregoing Section 7.2.1 shall be considered "Chimerix Patent Rights" for purposes of the remaining provisions of this Section 7.5.

7.5.2 First Right to Enforce Relevant Chimerix Patent Claims. Chimerix shall give Merck, and Merck shall give Chimerix, notice of any infringement of any Chimerix Patent Rights, but only where such infringement relates to claims within the Chimerix Patent Rights which claim or cover the Compounds or Products or their use or manufacture (the "**Relevant Chimerix Patent Claims**"), that may come to Chimerix's or Merck's attention. Subject to the rights of UC under the UC License with respect to the Chimerix/UC Patent Rights, Merck shall have the first right (in its discretion) to initiate and prosecute any legal action for infringement of Relevant Chimerix Patent Claims against one or more Third Parties based on the manufacture, use, sale, offer for sale, import or export of one or more products which have as an active agent, a Tenofovir Diphosphate Converting Compound (including any Compound) (a "**Product Infringement Action**"), and in the name of Merck and/or Chimerix (as determined by Merck), or to control the defense of any declaratory judgment action relating to such Relevant Chimerix Patent Claim involved therein. For any such action, in the event that Merck is unable to initiate or prosecute such action solely in its own name, Chimerix will join such action voluntarily and will execute and cause its Affiliates to execute all documents necessary for Merck to initiate litigation to prosecute and maintain such action. In connection with any such action, Chimerix will provide reasonable assistance that Merck may reasonably request at Merck's sole expense. In the event that Merck elects to initiate and prosecute an action as provided in this Section 7.5.2, any and all costs incurred by Merck in connection therewith, including the costs of any legal action commenced or the defense of any declaratory judgment, shall be borne solely by Merck; provided that [...***...] of all Merck's reasonable out-of-pocket legal costs shall be fully creditable against royalties due based upon the Net Sales of Products in any applicable country under Section 5.3 of this Agreement.

7.5.3 Back Up Right to Enforce Relevant Chimerix Patent Claims. Merck shall promptly inform Chimerix if it elects not to exercise such first right under Section 7.5.2 above, and Chimerix shall thereafter have the right to initiate and prosecute such Product Infringement Action or control the defense of such declaratory judgment action. In such case, Merck and Chimerix shall consult and cooperate fully to determine a course of action, including but not limited to the commencement of legal action by Chimerix, to terminate any infringement of the Relevant Chimerix Patent Claims in such Product Infringement Action. To the extent legally permissible, Merck shall have the right to join and participate in such action at its own expense. Each Party shall have the right to be represented by counsel of its own choice. Any and all costs in connection therewith,

including without limitation the costs of any legal action commenced or the defense of any declaratory judgment, shall be borne solely by Chimerix.

7.5.4 Cooperation and Consultation. In connection with the foregoing, each Party shall keep the other informed of developments in any action or proceeding, including the status of any settlement negotiations and the terms of any offer related thereto. Neither Merck nor Chimerix shall settle any such action or proceeding set forth in the foregoing clauses 7.5.2 or 7.5.3 with respect to the Relevant Chimerix Patent Claims in a Product Infringement Action, as applicable, without the prior written consent of the other Party, such consent not to be unreasonably withheld.

7.5.5 Recovery. Any recovery obtained by either or both Merck and Chimerix in connection with or as a result of any action contemplated by the foregoing provisions of this Section 7.5 with respect to Relevant Chimerix Patent Claims in a Product Infringement Action, whether by settlement or otherwise, shall be shared in order as follows:

(i) on a pro rata and dollar for dollar basis, the recovery shall first be used to: (a) recoup all of Merck's costs and expenses incurred in connection with the action, and (b) recoup all of Chimerix's costs and expenses, including any payments to UC required by the UC License, incurred in connection with the action.

(ii) then, to the extent possible, in the case where Merck is prosecuting such action, reimbursement dollar for dollar of any amounts of royalties withheld by Merck pursuant to Section 7.5.2; and

(iii) the amount of any recovery remaining shall then be shared equally between the Parties, subject to any payments to UC required by the UC License.

7.5.6 Enforcement of Chimerix Patent Rights Against an Agent that is not a Tenofovir Diphosphate Converting Compound. Chimerix shall have the sole right to enforce Chimerix Patent Rights against a compound that is not a Tenofovir Diphosphate Converting Compound (including any Compound), based on the manufacture, use, sale, offer for sale, import or export of such compound, provided, however, that (i) Chimerix shall keep Merck informed of any such contemplated action, or developments in any action or proceeding, including the status of any settlement negotiations and (ii) Chimerix shall not settle or compromise any such action (or enter into any consent order for the settlement or compromise thereof) without the prior written consent of Merck, which consent shall not be unreasonably withheld, conditioned or delayed, if such settlement or compromise: (i) involves an admission of invalidity or limitation of the scope with respect to a Compound or enforceability of any Relevant Chimerix Patent Claim; and (ii) would impose any financial obligations on Merck or its Affiliates,

or otherwise adversely impact Merck's rights, with respect to the Compound and/or the Product.

7.5.7 Patent Certification. Chimerix shall inform Merck of any certification regarding any Chimerix Patent Rights it has received pursuant to either 21 U.S.C. §§355(b)(2)(A)(iv) or (j)(2)(A)(vii)(IV) or its successor provisions, or any similar provisions in a country in the Territory, and Chimerix shall provide Merck with a copy of such certification within five (5) days of receipt. Chimerix's and Merck's rights with respect to the initiation and prosecution of any legal action as a result of such certification or any recovery obtained as a result of such legal action shall be as defined in Sections 7.5.1 through 7.5.6 hereof; provided, however, that Merck may exercise its first right to initiate and prosecute any action (in accordance with Section 7.5.2) and shall inform Chimerix of such decision within ten (10) days of Chimerix's receipt of the certification, after which time Chimerix shall have the right to initiate and prosecute such action; and provided, further, that if such certification pertains to any of the Chimerix/UC Patent Rights, then the foregoing five (5)-day and ten (10)-day notification periods shall be reduced to two (2) days and five (5) days, respectively, in order to permit Chimerix to comply with its notification obligations under the UC License. Regardless of which Party has the right to initiate and prosecute such action, both Parties shall, as soon as practicable after receiving notice of such certification, convene and consult with each other regarding the appropriate course of conduct for such action. The non-initiating Party shall have the right to be kept fully informed and participate in decisions regarding the appropriate course of conduct for such action, and the right to join and participate in such action.

7.5.8 Merck Patent Rights. Notwithstanding the foregoing provisions of this Section 7.5, Merck shall have the sole right, in its discretion, to handle any action with respect to any infringement of Merck Patent Rights, and Chimerix shall have no rights in connection therewith. For any action with respect to any infringement of Merck Patent Rights, in the event that Merck is unable to initiate or prosecute such action solely in its own name, Chimerix will join such action voluntarily and will execute and cause its Affiliates to execute all documents necessary for Merck to initiate litigation to prosecute and maintain such action. In connection with any action, at the request and sole expense of Merck, Chimerix will provide Merck with reasonable assistance that Merck may reasonably request. As between the Parties, any recovery obtained in connection with or as a result of any action contemplated by this Section 7.5.8, whether by settlement or otherwise, shall be shall be retained solely by Merck. Merck shall also have the sole right, in its discretion, to handle any certification matter regarding any Merck Patent Rights pursuant to either 21 U.S.C. §§355(b)(2)(A)(iv) or (j)(2)(A)(vii)(IV) or its successor provisions, or any similar provisions in a country in the Territory, and Chimerix shall have no rights in connection therewith.

7.6 Patent Term Extensions

Subject to the rights of UC with respect to the Chimerix/UC Patent Rights, as between the Parties, Merck shall have the exclusive right, but not the obligation, to seek, in Chimerix's name if so required, patent term extensions or supplemental patent protection in any country in the Territory in relation to all Chimerix Patent Rights. Merck and Chimerix shall reasonably cooperate in connection with such activities. In the event that elections with respect to obtaining such patent term restoration are to be made, subject to the rights of UC with respect to the Chimerix/UC Patent Rights, Merck shall have the right to make the election and Chimerix agrees to abide by such election; provided that Merck shall consider any comments of Chimerix with respect thereto in good faith.

7.7 Third Party Infringement Suits

Without limiting Merck's rights under Sections 5.3.7, 5.8 and 9.2, in the event that a Third Party sues, or otherwise brings a claim against, Merck (or any of its Related Parties) alleging that the making, having made, using, selling, offering for sale, exporting or importing Compound(s) or Product(s) infringes or will infringe any Patent Rights or other intellectual property rights of such Third Party, then Merck may elect to defend such suit. Merck shall have the right to apply [...***...] of the expenses incurred by Merck (or its Related Party) in connection with defending such suits against the royalties due Chimerix hereunder; but only to the extent such suits are not solely related to the manufacture, use, sale or offer for sale or import of any Other Actives and provided that in no event shall such royalties be reduced by more than [...***...] of the amount otherwise owed in any given Calendar Quarter (provided, however, that if Merck is not able to fully recover the amounts as a result of the foregoing restriction, then Merck shall be entitled to carry forward such right of off-set to future Calendar Quarters with respect to such excess amount, subject to such [...***...] cap for any such future Calendar Quarters).

7.8 UC License

To the extent the rights of Merck under this Article 7 are subject to the terms of the UC License with respect to the Chimerix/UC Patent Rights, Chimerix agrees to use its reasonable efforts to facilitate interactions between UC and Merck so as to allow for Merck to exercise its rights as set forth in this Article 7, and Chimerix agrees to reasonably consult and cooperate with Merck and UC in connection therewith.

ARTICLE 8
TERM AND TERMINATION

8.1 Term and Expiration

This Agreement shall be effective as of the Effective Date and unless terminated earlier pursuant to Sections 8.2 or 8.3 below, this Agreement shall continue in full force and

effect on a Product-by-Product and country-by-country basis until expiration of all Merck royalty obligations hereunder with respect to such Product in such country. The period from the Effective Date until the date of expiration or earlier termination of this Agreement in its entirety, or as the case may be, until the date of the expiration or earlier termination of this Agreement in part with respect to a given Product on a country-by-country basis, shall be referred to herein as the "**Term**". Upon expiration of the Term, Merck's licenses pursuant to Section 2.1 and Section 2.2 shall become a fully paid-up, perpetual, irrevocable licenses.

8.2 Termination by Merck

Merck shall have the right to terminate this Agreement at any time in its sole discretion either in its entirety or on a Region-by-Region basis. Any termination under this Section 8.2 shall be accomplished by Merck giving ninety (90) days' advance written notice to Chimerix (provided, however that Merck shall have the right to terminate this Agreement with respect to a given Product immediately upon written notice to Chimerix in the event that Merck has a safety concern with respect to such Product, which safety concern either (i) has been demonstrated or evidenced by the FDA or applicable Regulatory Authority or (ii) has otherwise been reasonably determined by Merck and Merck has provided evidence of such safety concern to Chimerix (each, a "**Safety Termination**")). The effects of termination as set forth in Sections 8.4(b) and (c) shall apply upon Merck's termination under this Section 8.2; provided, however, that in the event that this Agreement is terminated only with respect to a given Region pursuant to this Section 8.2, then such effects of termination shall only apply with respect to such terminated Region.

8.3 Termination for Cause

8.3.1 Cause for Termination. This Agreement may be terminated at any time during the Term of this Agreement:

(a) upon written notice by either Party if the other Party is in breach of its material obligations hereunder, and has not cured such breach within ninety (90) days after notice requesting cure of the breach (except for any breach based upon failure to pay any amount when due hereunder, which shall have a cure period of thirty (30) days); provided, however, that in the event of a good faith dispute with respect to the existence of a material breach, the ninety (90) (or thirty (30), as applicable) day cure period shall be tolled until such time as the dispute is resolved pursuant to Section 10.6 hereof; provided further, however, that notwithstanding the foregoing, it is agreed that termination pursuant to this Section 8.3.1(a) shall be on a Product-by-Product and Region-by-Region basis to which the material breach relates, as applicable, and that the non-breaching Party cannot terminate this Agreement under this Section 8.3.1(a) with respect to non-affected Products and/or non-affected Regions, as applicable (and the effects of termination as set forth in Section 8.4 shall only apply with

respect to such terminated Product and/or Region, as applicable). Notwithstanding the foregoing, any failure to use Commercially Reasonable Efforts to develop a Product for Indications other than the HIV Indication as required under Section 3.3.1 shall not be deemed to be a breach of Merck's material obligations under this Agreement which is subject to termination of this Agreement (in whole or in part) under this Section 8.3.1(a), and any breach of such obligation shall be subject only to those financial remedies available at law (if any); or

(b) by either Party upon the filing or institution of bankruptcy, reorganization, liquidation or receivership proceedings, or upon an assignment of a substantial portion of the assets for the benefit of creditors by the other Party; provided, however, that in the case of any involuntary bankruptcy proceeding such right to terminate shall only become effective if the Party consents to the involuntary bankruptcy or such proceeding is not dismissed within ninety (90) days after the filing thereof.

8.4 Effect of Early Termination

(a) If Merck terminates this Agreement under Section 8.3.1(a), then (i) Merck's licenses pursuant to Sections 2.1 and 2.2 shall survive and shall become perpetual, irrevocable licenses; provided, however, that Merck shall continue to be obligated to pay the milestone and royalty amounts under Sections 5.2 and 5.3 for the terminated Product and/or Region, as applicable, that would otherwise have been payable under the terms of this Agreement during its Term; provided further, however, that such amounts shall be reduced to [...***...] of the amount that would otherwise have been payable under the terms of this Agreement during its Term and (ii) except with respect to the reduced royalties and milestones as provided in the foregoing clause (i), no further payments of any kind shall be owed to Chimerix on account of the Products or Regions for which this Agreement was terminated, other than any share of any potential recovery in the case of infringement litigation as and to the extent provided under Article 7, or any amounts owed Chimerix pursuant to the indemnification provisions of Article 9. In addition, Chimerix shall, within thirty (30) days after the effective date of such termination, return or cause to be returned to Merck all Confidential Information relating to the terminated Product and/or Region, as applicable, delivered or provided by Merck and all copies thereof. For clarity, the effects of termination under this Section 8.4(a) shall only apply with respect to the terminated Product and/or Region, as applicable, to which Chimerix's uncured material breach relates.

(b) If Chimerix terminates this Agreement under Section 8.3.1(a) or Merck terminates this Agreement under Section 8.2, except as provided for

below, each Party shall, within thirty (30) days after the effective date of such termination, return or cause to be returned to the other Party all Confidential Information relating to the terminated Product and/or Region, as applicable, of the other Party provided by such other Party and all copies thereof (provided, however, that receiving Party may keep one copy of Confidential Information received from the other Party in its confidential files for record purposes).

In addition, if Chimerix terminates this Agreement under Section 8.3.1(a) or Merck terminates this Agreement under Section 8.2, Merck's licenses pursuant to Sections 2.1 and 2.2 as they relate to the terminated Product and/or Region, as applicable, shall terminate as of such termination date, and Merck shall (except in the case of a Safety Termination, in which case the following provisions of Section 8.4(b)(i) through (v) shall not apply), promptly after such termination:

(i) transfer and assign to Chimerix (or to an Affiliate designated by Chimerix) ownership of all Marketing Authorizations (in each case, to the extent transferable) obtained hereunder, in each case, that relate solely and exclusively to the terminated Product in the terminated Region, as applicable (but excluding any Marketing Authorizations that relate to Combination Products (including fixed-dose combination products)) owned by, and in the possession of, Merck or its Affiliates, and, if such Marketing Authorizations have not been obtained by Merck or its Affiliates as of the date of termination, Merck shall inform Chimerix of the status of any such regulatory filings in progress and provide to Chimerix any such regulatory filings in progress prepared by Merck or its Affiliates, provided that such applications are provided on an "as is" basis;

(ii) deliver to Chimerix copies of the material clinical data and material adverse event reports (including all such material adverse event reports contained in Merck's or its Affiliates' regulatory and/or safety databases) generated hereunder and owned by Merck or its Affiliates, which is in Merck's or its Affiliates' possession (and in the same form in which Merck or its Affiliates maintains such data or reports, as applicable), in each case, relating solely and exclusively to the terminated Product in the terminated Region, as applicable (but excluding any of the foregoing that relate to Combination Products (including fixed-dose combination products)); but in all cases, solely to the extent that such material data and reports are necessary for Chimerix to develop and commercialize the specific form of the terminated Product that is in clinical development or is being commercialized by Merck or its Affiliates as of the effective date of such termination;

(iii) deliver to Chimerix, in the same form in which Merck maintains such items, copies of the material regulatory correspondence generated hereunder and owned by Merck or its Affiliates, which is in Merck's or its Affiliates' possession relating solely and exclusively to the pre-clinical and clinical development of the terminated Product in the terminated Region, as applicable (but excluding any correspondence that relates to Combination Products (including fixed-dose combination products); but in all cases, solely to the extent that such material regulatory correspondence is necessary for Chimerix to develop and commercialize for the specific form of the terminated Product that is in clinical development or is being commercialized by Merck or its Affiliates as of the effective date of such termination;

The following clauses (iv) and (v) shall only apply with respect to terminations which are effective after the Initiation of a Phase II Clinical Trial by Merck with respect to the applicable Product hereunder for which this Agreement is being terminated:

(iv) subject to Section 8.4(c), deliver to Chimerix all remaining Inventory (if any, and to the extent applicable), and inventory of cGMP and non-cGMP bulk terminated Product, in each case, generated hereunder and relating solely and exclusively to the terminated Product in the terminated Region, as applicable, in each case owned by Merck (or its Affiliate) and which is in Merck's (or its Affiliates) possession or control, but excluding, in all cases, any of the foregoing that relate to Combination Products (including fixed-dose combination products)). In connection therewith, Chimerix shall pay to Merck, within thirty (30) days after invoice therefor, an amount equal to Merck's (or its Affiliate's, as applicable) fully burdened costs of goods sold for such inventory (including Inventory) plus a mark-up of [...***...]; and

(v) upon written request of Chimerix (which written request must be made by Chimerix to Merck within thirty (30) days after such termination), grant (and hereby grants) to Chimerix a non-exclusive license in the terminated Region, as applicable, with the right to sublicense (through multiple tiers of sublicenses), under all of Merck's (and its Affiliates') right, title and interest in and to those Merck Collaboration Inventions which are Controlled by Merck or its Affiliates as of the effective date of such termination and which are actually incorporated into the terminated Product as of the date of such termination, solely for Chimerix to develop, manufacture, use and sell the terminated Product in the Field in the terminated Regions, as applicable; provided, however, that the foregoing license is only for the specific form of the terminated Product that is in clinical development or is being commercialized by Merck or its Affiliates as of the effective date of such termination.

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Notwithstanding the foregoing, the foregoing license grant shall exclude any Merck Collaboration Inventions and/or any other intellectual property related to any Combination Product (including fixed-dose combination products). In partial consideration of the foregoing license grant, Chimerix shall be required to pay to Merck royalties on Products in accordance with Section 5.3, *mutatis mutandis*, at the following rates:

(i) where such termination occurred following Initiation of the first Phase II Clinical Trial, but prior to Initiation of the first Phase III Clinical Trial, a royalty on Chimerix's (and any of its Affiliate's and sublicensee's) Net Sales, at the rate equal to [...***...] of the amount that would otherwise have been payable under Section 5.3 by Merck (*i.e.*, [...***...] of Net Sales);

(ii) where such termination occurred following Initiation of the first Phase III Clinical Trial, but prior to receipt of approval of the first NDA for the applicable Product anywhere in the Territory by the applicable Regulatory Authority, a royalty on Chimerix's (and any of its Affiliate's and sublicensee's) Net Sales at the rate equal to [...***...] of the amount that would otherwise have been payable under Section 5.3 by Merck (*i.e.*, [...***...] of Net Sales); and

(iii) where such termination occurred following receipt of approval of the first NDA for the applicable Product anywhere in the Territory by the applicable Regulatory Authority, a royalty on Chimerix's (and any of its Affiliate's and sublicensee's) Net Sales at the rate equal to [...***...] of the amount that would otherwise have been payable under Section 5.3 by Merck (*i.e.*, [...***...] of Net Sales).

For purposes of clarity, in determining the royalty payments due by Chimerix, such royalty payments shall be calculated in accordance with Section 5.3, *mutatis mutandis*, provided that, (i) references to Net Sales shall refer to Net Sales of the applicable terminated Product by Chimerix and its Affiliates and their respective sublicensees in the Field and in the terminated countries (or Regions, as applicable), (ii) references to First Commercial Sale shall refer to the First Commercial Sale of the applicable Product in the applicable terminated country by Chimerix (or its Affiliate or sublicensee), (iii) references to Related Parties shall refer to Chimerix, its Affiliates and their respective sublicensees, and (iv) references to Valid Patent Claim shall refer to Valid Patent Claims under (x) the Chimerix Patent Rights or (y) any Patent Rights licensed to Chimerix hereunder (if any), in each case, as applicable. In connection with the calculation and

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payment of the foregoing royalties, Chimerix shall comply with, and shall be entitled to the rights under, the provisions of Sections 5.3 (including reductions allowed under Sections 5.3.6, 5.3.7 and 5.3.8), 5.4, 5.5, 5.6 and 5.7, *mutatis mutandis*, and for clarity, Merck shall have the rights of the party receiving such payments as set forth in such Sections (including the right to audit as set forth in Section 5.5), *mutatis mutandis*. In addition to payment of the foregoing royalties, in the event that Merck (or any of its Affiliates) is required to pay a Third Party(ies) any license fees or other payments as a result of the licenses granted to Chimerix under this Section 8.4(b)(v), then Chimerix shall reimburse Merck for such amounts within thirty (30) days after issuance by Merck of an invoice therefor. In connection with any such payments, Chimerix shall provide to Merck such reasonably necessary information (including Net Sales information) related to the applicable terminated Products as Merck may reasonably request in order to determine the amounts of such payments owed to such Third Party and to report the relevant information to such Third Party.

Notwithstanding the foregoing provisions of Sections 8.4(b)(i) through (v), any good faith, inadvertent failure by Merck to provide data, information, correspondence or other item to Chimerix shall not be a breach of Merck's obligations under this Section 8.4(b). For clarity, the foregoing items (i) through (v) shall only apply as they relate to the terminated Product and/or Region, as applicable. All of the foregoing items provided by Merck (or its Related Parties, as applicable) pursuant to this Section 8.4(b) shall be provided on a one-time basis and on an "as-is" basis, and shall only be provided as they exist as of the effective date of termination. Chimerix shall provide reasonable assistance to Merck in connection with the transfer and delivery of the foregoing items.

(c) Notwithstanding the foregoing, upon termination of this Agreement by Merck pursuant to Section 8.2, or by Chimerix pursuant to Section 8.3.1(a), the licenses set forth in Sections 2.1 and 2.2 shall become non-exclusive and survive for a period of twelve (12) months solely in order for Merck and its Affiliates, Related Parties, sublicensees and distributors, at their discretion, during such twelve (12) month period immediately following the effective date of termination, to finish any Product related manufacturing work-in-progress and to sell such Products and any other Products or Compound remaining in inventory, in accordance with the terms of this Agreement (including amounts payable by Merck to Chimerix pursuant to Section 5.3), in each case, utilizing such licenses. For clarity, the foregoing shall only apply as they relate to the terminated Product and/or Region, as applicable.

(d) If this Agreement is terminated by Merck pursuant to Section 8.3.1(b), then the provisions of Section 8.4(a) shall apply, and in addition, if such

termination is due to the rejection of this Agreement by or on behalf of Chimerix under Section 365 of the United States Bankruptcy Code (the "**Code**"), all licenses and rights to licenses granted under or pursuant to this Agreement by Chimerix to Merck are, and shall otherwise be deemed to be, for purposes of Section 365(n) of the Code, licenses of rights to "intellectual property" as defined under Section 101(35A) of the Code. The Parties agree that Merck, as a licensee of such rights under this Agreement, shall retain and may fully exercise all of its rights and elections under the Code, and that upon commencement of a bankruptcy proceeding by or against Chimerix under the Code, Merck shall be entitled to a complete duplicate of, or complete access to (as Merck deems appropriate), any such intellectual property and all embodiments of such intellectual property. Such intellectual property and all embodiments thereof shall be promptly delivered to Merck (i) upon any such commencement of a bankruptcy proceeding upon written request therefor by Merck, unless Chimerix elects to continue to perform all of its obligations under this Agreement or (ii) if not delivered under (i) above, upon the rejection of this Agreement by or on behalf of Chimerix upon written request therefore by Merck.

The foregoing provisions of Section 8.4(d) are without prejudice to any rights Merck may have arising under the Code or other Applicable Law.

8.5 Effect of Expiration or Termination; Survival

(a) Expiration or termination of this Agreement shall not relieve the Parties of any obligation accruing prior to such expiration or termination. Each Party shall pay all amounts then due and owing as of the expiration or termination date. Any expiration or termination of this Agreement shall be without prejudice to the rights of either Party against the other accrued or accruing under this Agreement prior to expiration or termination. In case of partial termination of this Agreement where termination is only with respect to one or more of the countries, Regions and/or Products in the Territory, then the consequences of termination described under this Article 8 shall only apply to the countries, Regions and/or Products terminated.

(b) The provisions of Article 4 shall survive the expiration or termination of this Agreement and shall continue in effect for ten (10) years; provided, however, that if Merck terminates this entire Agreement under Section 8.2, or Chimerix terminates this entire Agreement under Section 8.3.1(a) or Section 8.3.1(b), Sections 4.2 and 4.3 shall terminate. In addition, the provisions of Articles 1 (as necessary for the interpretation of other surviving provisions) and 10, and Sections 5.4, 5.5, 5.6, 5.7, 5.8,

6.4, 7.1, 8.1, 8.4, 9.1 through 9.4, and this Section 8.5, shall survive any expiration or termination of this Agreement.

ARTICLE 9
INDEMNIFICATION; LIMITATION ON LIABILITY

9.1 Indemnification by Merck

Merck hereby agrees to indemnify, hold harmless and defend Chimerix, its Affiliates and their respective officers, directors, agents, employees, successors and assigns (collectively, the "**Chimerix Indemnified Parties**") against any and all losses, costs, expenses, fees or damages arising out of or relating to claims, allegations, suits, actions or proceedings asserted by any Third Party, whether governmental or private, arising out of or relating to (i) the breach of any of Merck's covenants, representations or warranties under this Agreement, (ii) the research, development, manufacture, use, sale or other disposition of any Compound or Product by Merck, or (iii) the negligence or willful misconduct by Merck, its Affiliates or their respective officers, directors, agents or employees, in performing any obligations under this Agreement; provided, however, that Merck shall not be required to indemnify, hold harmless or defend any Chimerix Indemnified Party against any claim to the extent that Chimerix has an obligation to indemnify the Merck Indemnified Parties under Sections 9.2(i) or (iii).

9.2 Indemnification by Chimerix

Chimerix agrees to indemnify, hold harmless and defend Merck, its Affiliates and their respective officers, directors, agents, employees, successors and assigns (collectively, the "**Merck Indemnified Parties**") against any and all losses, costs, expenses, fees or damages arising out of or relating to claims, allegations, suits, actions or proceedings asserted by any Third Party, whether governmental or private, arising out of or relating to (i) the breach of any of Chimerix's covenants, representations or warranties under this Agreement, (ii) the research, development, manufacture, use, sale or other disposition of any Compound or Product by Chimerix, or (iii) the negligence or willful misconduct by Chimerix, its Affiliates or their respective officers, directors, agents or employees, in performing any obligations under this Agreement; provided, however, that Chimerix shall not be required to indemnify, hold harmless or defend any Merck Indemnified Party against any claim to the extent that Merck has an obligation to indemnify the Chimerix Indemnified Parties under Sections 9.1(i) or (iii).

9.3 Procedure

If either Party is seeking indemnification under Section 9.1 or 9.2 (the "**Indemnified Party**"), it shall inform the other Party (the "**Indemnifying Party**") of the claim giving rise to the obligation to indemnify pursuant to such Section as soon as reasonably practicable after receiving notice of the claim (provided, however, any delay or failure to provide such notice shall not constitute a waiver or release of, or otherwise limit, the

Indemnified Party's rights to indemnification under, as applicable, Section 9.1 or 9.2, except to the extent that such delay or failure materially prejudices the Indemnifying Party's ability to defend against the relevant claims). The Indemnifying Party shall have the right to assume the defense of any such claim for which it is obligated to indemnify the Indemnified Party. The Indemnified Party shall cooperate with the Indemnifying Party and the Indemnifying Party's insurer as the Indemnifying Party may reasonably request, and at the Indemnifying Party's cost and expense. The Indemnified Party shall have the right to participate, at its own expense and with counsel of its choice, in the defense of any claim or suit that has been assumed by the Indemnifying Party. The Indemnifying Party shall not settle any claim without the prior written consent of the Indemnified Party, not to be unreasonably withheld or delayed. The Indemnified Party shall not settle or compromise any such claim without the prior written consent of the Indemnifying Party, which it may provide in its sole discretion. If the Parties cannot agree as to the application of Section 9.1 or 9.2 to any claim, pending resolution of the dispute pursuant to Section 10.6, the Parties may conduct separate defenses of such claims, with each Party retaining the right to claim indemnification from the other Party in accordance with Section 9.1 or 9.2 upon resolution of the underlying claim.

9.4 Limitation of Liability

NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, PUNITIVE, OR INDIRECT DAMAGES (INCLUDING LOST PROFITS) ARISING FROM OR RELATING TO THIS AGREEMENT (INCLUDING BREACH OF THIS AGREEMENT) OR THE EXERCISE OF ITS RIGHTS HEREUNDER, REGARDLESS OF ANY NOTICE OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING THE FOREGOING, NOTHING IN THIS SECTION 9.4 IS INTENDED TO AND SHALL NOT LIMIT OR RESTRICT THE INDEMNIFICATION RIGHTS OR OBLIGATIONS OF ANY PARTY UNDER SECTION 9.1 OR 9.2.

9.5 Insurance

Each Party shall procure and maintain insurance, including product liability insurance (or self-insure), adequate to cover its obligations hereunder and which is consistent with normal business practices of prudent companies similarly situated. It is understood that such insurance shall not be construed to create a limit of either Party's liability with respect to its indemnification obligations under this Article 9 or otherwise. Each Party shall provide the other Party with written evidence of such insurance upon request. Each Party shall provide the other Party with written notice at least thirty (30) days prior to the cancellation, non renewal or material change in such insurance or self insurance which materially adversely affects the rights of the other Party hereunder.

ARTICLE 10
MISCELLANEOUS

10.1 Force Majeure

Neither Party shall be held liable to the other Party nor be deemed to have defaulted under or breached this Agreement for failure or delay in performing any obligation under this Agreement to the extent that such failure or delay is caused by or results from causes beyond the reasonable control of the affected Party, potentially including, embargoes, war, acts of war (whether war be declared or not), acts of terrorism, insurrections, riots, civil commotions, strikes, lockouts or other labor disturbances, fire, floods, or other acts of God, or acts, omissions or delays in acting by any governmental authority or the other Party. The affected Party shall notify the other Party of such force majeure circumstances as soon as reasonably practical, and shall promptly undertake all reasonable efforts necessary to cure such force majeure circumstances.

10.2 Assignment/Change of Control

Except as provided in this Section 10.2, this Agreement may not be assigned or otherwise transferred, nor may any right or obligation hereunder be assigned or transferred, by either Party without the consent of the other Party. Notwithstanding the foregoing, Merck may, without Chimerix's consent, assign this Agreement and its rights and obligations hereunder in whole or in part to (i) a Merck Affiliate (provided that Merck shall remain fully liable under this Agreement) or (ii) in connection with a Change of Control of Merck. Chimerix may, without Merck's consent, assign this Agreement and its rights and obligations to (a) a Chimerix Affiliate (provided that Chimerix shall remain fully liable under this Agreement) or (b) in connection with a Change of Control of Chimerix; provided, however, that Chimerix must notify Merck upon completion of any such Change of Control, and Merck shall have the right (but not the obligation), at any time during the six (6) months after receipt of such notice, to elect any one or more of the following options: (X) require Chimerix, including its acquiring party, to adopt reasonable procedures to be agreed upon in writing with Merck to prevent the disclosure of all Confidential Information of Merck and its Affiliates and other information with respect to the development and commercialization of Compounds or Products (the "**Sensitive Information**") beyond Chimerix personnel having access to and knowledge of Sensitive Information prior to the Chimerix Change of Control, and to control the dissemination of Sensitive Information disclosed after the Chimerix Change of Control, which procedures shall include reasonable restrictions on the scope of any Sensitive Information to be provided by Merck; (Y) terminate Chimerix's involvement on the Committee; and/or (Z) limit Merck's obligation to provide any reports hereunder to providing just royalty reports pursuant to Article 5 with respect to Merck's total worldwide royalty obligations. Any permitted assignee shall assume all obligations of its assignor under this Agreement. Any attempted assignment not in accordance with this Section 10.2 shall be void.

10.3 Severability

If any one or more of the provisions contained in this Agreement is held invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby, unless the absence of the invalidated provision(s) adversely affects the substantive rights of the Parties. The Parties shall in such an instance use their best efforts to replace the invalid, illegal or unenforceable provision(s) with valid, legal and enforceable provision(s) which, insofar as practical, implement the purposes of this Agreement.

10.4 Notices

All notices which are required or permitted hereunder shall be in writing and sufficient if delivered personally, sent by facsimile (and promptly confirmed by personal delivery, registered or certified mail or overnight courier), sent by nationally-recognized overnight courier or sent by registered or certified mail, postage prepaid, return receipt requested, addressed as follows:

If to Chimerix, to:
Chimerix, Inc.
2505 Meridian Parkway
Suite 340
Durham, NC 27713
Attn: Corporate Counsel
Facsimile No.: (919) 806-1146

and:
Cooley LLP
4401 Eastgate Mall
San Diego, California 92121-1909
Attn: Jason Kent
Facsimile No.: (858) 550-6420

If to Merck, to:
Merck Sharp & Dohme Corp.
One Merck Drive
P.O. Box 100, WS 3A-65
Whitehouse Station, NJ 08889-0100
Attn: Office of Secretary
Facsimile No.: (908) 735-1246

and:
Merck Sharp & Dohme Corp.
One Merck Drive
P.O. Box 100, WS 2A-50
Whitehouse Station, NJ 08889-0100
Attn: Chief Licensing Officer
Facsimile No.: (908) 735-1201

or to such other address(es) as the Party to whom notice is to be given may have furnished to the other Party in writing in accordance herewith. Any such notice shall be deemed to have been given: (a) when delivered, if personally delivered or sent by facsimile on a business day (or if delivered or sent on a non-business day, then on the next business day); (b) on the business day after dispatch, if sent by nationally-recognized overnight courier; or (c) on the fifth (5th) business day following the date of mailing, if sent by mail.

10.5 Applicable Law

This Agreement shall be governed by and construed in accordance with the laws of the State of New York and the patent laws of the United States, without reference to any rules of conflict of laws or renvoi.

10.6 Dispute Resolution

10.6.1 The Parties shall negotiate in good faith and use reasonable efforts to settle any dispute, controversy or claim arising from or related to this Agreement or the breach thereof. If the Parties do not fully settle, and a Party wishes to pursue the matter, each such dispute, controversy or claim that is not an "Excluded Claim" shall be finally resolved by binding arbitration in accordance with the Commercial Arbitration Rules and Supplementary Procedures for Large Complex Disputes of the American Arbitration Association ("**AAA**"), and judgment on the arbitration award may be entered in any court having jurisdiction thereof.

10.6.2 The arbitration shall be conducted by a panel of three persons experienced in the pharmaceutical business: within thirty (30) days after initiation of arbitration, each Party shall select one person to act as arbitrator; and the two Party-selected arbitrators shall select a third arbitrator within thirty (30) days of their appointment. If the arbitrators selected by the Parties are unable or fail to agree upon the third arbitrator, the third arbitrator shall be appointed by the AAA. The Parties shall not be obligated to select arbitrators from the AAA panel of arbitrators. The place of arbitration shall be New York, New York, and all proceedings and communications shall be in English.

10.6.3 Either Party may apply to the arbitrators for interim injunctive relief until the arbitration award is rendered or the controversy is otherwise resolved. Either Party also may, without waiving any remedy under this Agreement, seek from any court having jurisdiction any injunctive or provisional relief necessary to protect the rights or property of that Party pending the arbitration award. The arbitrators shall have no authority to award punitive or any other type of damages not measured by a Party's compensatory damages. Each Party shall bear its own costs and expenses and attorneys' fees and an equal share of the arbitrators' fees and any administrative fees of arbitration.

10.6.4 Except to the extent necessary to confirm an award or as may be required by Applicable Law, neither a Party nor an arbitrator may disclose the existence, content, or results of an arbitration without the prior written consent of both Parties. In no event shall arbitration be initiated after the date when commencement of a legal or equitable proceeding based on the dispute, controversy or claim would be barred by the applicable New York statute of limitations.

10.6.5 The Parties agree that, in the event of a good faith dispute over the nature or quality of performance under this Agreement, neither Party may terminate this Agreement until final resolution of the dispute through arbitration or other judicial determination. The Parties further agree that any payments made pursuant to this Agreement pending resolution of the dispute shall be refunded if an arbitrator or court determines that such payments are not due.

10.6.6 As used in this Section, the term "**Excluded Claim**" shall mean a dispute, controversy or claim that concerns (a) the validity or infringement of a patent, trademark or copyright; or (b) any antitrust, anti-monopoly or competition law or regulation, whether or not statutory.

10.7 Entire Agreement; Amendments

This Agreement together with the Schedules hereto contains the entire understanding of the Parties with respect to the subject matter hereof, including the licenses granted hereunder. Any other express or implied agreements and understandings, negotiations, writings and commitments, either oral or written, with regard to the subject matter hereof, including the licenses granted hereunder, are superseded by the terms of this Agreement. The Schedules to this Agreement are incorporated herein by reference and shall be deemed a part of this Agreement. This Agreement may be amended, or any term hereof modified, only by a written instrument duly executed by authorized representatives of both Parties hereto.

10.8 Headings and Interpretation

The captions to the several Articles and Sections and subsections hereof are not a part of this Agreement, but are merely for convenience to assist in locating and reading the several Articles and Sections hereof. Any reference in this Agreement to an Article, Section, subsection, paragraph, clause, or Schedule or Exhibit shall be deemed to be a reference to an Article, Section, subsection, paragraph, clause, or Schedule or Exhibit, of or to, as the case may be, this Agreement, unless otherwise indicated. Unless the context of this Agreement otherwise requires, (a) words of any gender include each other gender, (b) words such as "herein", "hereof", and "hereunder" refer to this Agreement as a whole and not merely to the particular provision in which such words appear, (c) words using the singular shall include the plural, and vice versa, (d) whenever any provision of this Agreement uses the term "including" (or "includes" or words of similar import), such

term shall not be limiting and such term shall be deemed to mean "including without limitation" (or "includes without limitation"), (e) the word "or" shall not be construed as exclusive, and (f) references to any Articles or Sections include Sections and subsections that are part of the reference Article or section (e.g., a section numbered "Section 2.2.1" would be part of "Section 2.2.", and references to "Article 2" or "Section 2.2." would refer to material contained in the subsection described as "Section 2.2.2").

10.9 Business Day Requirements

In the event that any notice or other action or omission is required to be taken by a Party under this Agreement on a day that is not a business day then such notice or other action or omission shall be deemed to be required to be taken on the next occurring business day.

10.10 Independent Contractors

It is expressly agreed that Chimerix and Merck shall be independent contractors and that the relationship between the Parties shall not constitute a partnership, joint venture or agency. Neither Chimerix nor Merck shall have the authority to make any statements, representations or commitments of any kind, or to take any action, which shall be binding on the other Party, without the prior written consent of the other Party.

10.11 Waiver

The waiver by either Party hereto of any right hereunder, or of any failure of the other Party to perform, or of any breach by the other Party, shall not be deemed a waiver of any other right hereunder or of any other breach by or failure of such other Party, whether of a similar nature or otherwise.

10.12 Cumulative Remedies

No remedy referred to in this Agreement is intended to be exclusive, but each shall be cumulative and in addition to any other remedy referred to in this Agreement or otherwise available under law.

10.13 Waiver of Rule of Construction

Each Party has had the opportunity to consult with counsel in connection with the review, drafting and negotiation of this Agreement. Accordingly, the rule of construction that any ambiguity in this Agreement shall be construed against the drafting Party shall not apply.

10.14 Counterparts

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same

instrument. For purposes hereof, a scanned copy of this Agreement, including the signature pages hereto, will be deemed to be an original.

10.15 Further Actions

Each Party will execute, acknowledge and deliver such further instruments, and to do all such other ministerial, administrative or similar acts, as may be necessary or appropriate in order to carry out the purposes and intent of this Agreement.

10.16 No Third Party Rights

The provisions of this Agreement are for the exclusive benefit of the Parties, and no other person or entity shall have any right or claim against any Party by reason of these provisions or be entitled to enforce any of these provisions against any Party.

10.17 Expenses

Except as otherwise specifically provided in this Agreement, each Party (and its Affiliates) shall bear its own costs and expenses in connection with entering into this Agreement and the consummation of the transactions and performance of its obligations contemplated hereby.

10.18 Extension to Affiliates

Merck shall have the right to extend the rights, licenses, immunities and obligations granted in this Agreement to one or more of its Affiliates (so long as it remains an Affiliate). All applicable terms and provisions of this Agreement shall apply to any such Affiliate to which this Agreement has been extended to the same extent as such terms and provisions apply to Merck. Merck shall remain fully liable for any acts or omissions of such Affiliates.

[Remainder of this page is left intentionally blank]

IN WITNESS WHEREOF, the Parties have executed this Collaboration and Exclusive License Agreement as of the date first set forth above.

MERCK SHARP & DOHME CORP.

By: /s/ Kenneth C. Frazier
Name: Kenneth C. Frazier
Title: Chief Executive Officer and President

CHIMERIX, INC.

By: /s/ Kenneth I. Moch
Name: Kenneth I. Moch
Title: President and Chief Executive Officer

Schedule 1.11

Chimerix Patent Rights

[See Attached]

Country	Status	Application No.	Effective Filing Date	Patent No.	Issue Date	Owner
[...***...]	**[...***...]**	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	**[...***...]**	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	**[...***...]**	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	**[...***...]**	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	**[...***...]**	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	**[...***...]**	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	**[...***...]**	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	**[...***...]**	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	**[...***...]**	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	**[...***...]**	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	**[...***...]**	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	**[...***...]**	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	**[...***...]**	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	**[...***...]**	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]

*****Confidential Treatment Requested**

Country	Status	Application No.	Effective Filing Date	Patent No.	Issue Date	Owner
[...***...]	**[...***...]**	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	**[...***...]**	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	**[...***...]**	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	**[...***...]**	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	**[...***...]**	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]

*****Confidential Treatment Requested**

Country	Status	Application No.	Effective Filing Date	Patent No.	Issue Date	Owner
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	**[...***...]**	[...***...]	[...***...]			[...***...]
[...***...]	**[...***...]**	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]
[...***...]	[...***...]	[...***...]	[...***...]			[...***...]

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Schedule 1.18

Other Chimerix Tenofovir Diphosphate Converting Compounds

HDP-(R)-PMPA (CMX157)
[...***...]
[...***...]
[...***...]

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Schedule 1.53

Proof of Concept – Success Criteria

[See Attached]

Demonstration of Proof of Concept for Compound

Overview:

Proof of Concept for CMX157 shall be based on the outcome of a two part clinical study establishing an effective, safe, commercially acceptable dose of CMX157 suitable for [...***...], as well as on [...***...] and will be supported by establishing a suitable formulation.

Overall Success Criteria:

CMX157 must achieve all three goals: Clinical, Toxicology, and Formulation to have met Success Criteria for Proof of Concept.

- Clinical goal: [...***...] with suitable [...***...] to proceed to [...***...]. Doses identified in the [...***...] will be compared to criteria established by [...***...] of [...***...] directed at [...***...]
- Toxicology goal: CMX157 must be shown to have an acceptable [...***...] in[...***...][...***...] to support [...***...].
- Formulation goal: CMX157 can be administered as [...***...] in [...***...] or [...***...] with an image size no larger than that of [...***...].

Study:

Part 1: evaluation of the potential for [...***...].

- Primary outcome parameter: [...***...]
- Subjects: [...***...], [...***...]]individuals [...***...]; [...***...] subjects per group
- Dose: highest dose that is found to be safe in [...***...]
- Treatment duration: [...***...]
- Design: [...***...], [...***...], [...***...], [...***...] study:
    - [...***...]: [...***...]
    - [...***...]: [...***...]
    - [...***...]: [...***...]
- Timeline: [...***...]

Outcomes:

- Scenario 1:
    - Endpoint 1: [...***...] as defined in the [...***...] at [...***...] equal to or greater [...***...] at [...***...] and a posterior probability of at least [...***...] to rule out a difference no larger than [...***...] change from baseline between groups [...***...].

- § Endpoint met: [...***...]should be conducted to establish [...***...] dose for [...***...].
  - Next Step: Go to [...***...]
- o Endpoint not met: [...***...].

- Scenario 2:
  - o Endpoint 2: [...***...] as defined in the [...***...] at [...***...] equal to or greater than [...***...] and a posterior probability of at least [...***...] to rule out a difference no larger than [...***...] change from baseline between groups [...***...] AND a posterior probability of at least [...***...] to rule out a difference of no larger than [...***...] change from baseline between groups at [...***...].
    - § Endpoint 2 is met: provides evidence for [...***...] for [...***...] post dosing and supports use of [...***...] to achieve [...***...].
      - Next Step: compare [...***...] and [...***...] for [...***...] or [...***...]:
        - o Endpoint: [...***...] as defined in the [...***...] and [...***...] [...***...] after last [...***...] equal to or greater than [...***...] and a posterior probability of at least [...***...] to rule out a difference no larger than [...***...] change from baseline between groups [...***...]
          - § Endpoint met: [...***...] supports [...***...]
            - Next Step: Go to [...***...]
          - § Endpoint not met: [...***...].

- If neither Scenario 1 nor Scenario 2 endpoints are met: [...***...]. Merck option remains to continue development to further [...***...] and [...***...]

Part 2: [...***...]
[...***...], [...***...] and [...***...] guided by [...***...]

Schedule 3.2

Inventory

Inventory Description Quantity

cGMP CMX157:

CMX157 cGMP

Lot	Form	Manufacturer	# Containers	Amount
CMX157-CTM-002	[...***...]	[...***...]	[...***...]	[...***...]
CMX157-021	[...***...]	[...***...]	[...***...]	[...***...]kg

non-cGMP CMX157 API:

CMX157

Lot	Form	Manufacturer	# Containers	Grams
004	[...***...]	[...***...]	[...***...]	[...***...]
008	[...***...]	[...***...]	[...***...]	[...***...]
011	[...***...]	[...***...]	[...***...]	[...***...]
013	[...***...]	[...***...]	[...***...]	[...***...]
018	[...***...]	[...***...]	[...***...]	[...***...]
022	[...***...]	[...***...]	[...***...]	[...***...]
024	[...***...]	[...***...]	[...***...]	[...***...]
025	[...***...]	[...***...]	[...***...]	[...***...]
026	[...***...]	[...***...]	[...***...]	[...***...]

*****Confidential Treatment Requested**

Schedule 3.3.2

Initial Development Plan for the development of the Product for the HIV Indication

[See Attached]

Plan is for informational purposes only and the activities and dates are subject to change by Merck (itself or through the JSC)

Agreed-to in principle
[...***...]

CLINICAL			
Phase I	**FPFV**	**LPLV**	**Sample Size**
[...***...]	[...***...]	[...***...]	[...***...]
[...***...]	[...***...]	[...***...]	[...***...]
[...*...] studies (parallel to Phase 2/3)**			
[...***...]			
[...***...]			
[...***...]			
[...***...]			
[...***...]			
[...***...]			
Phase Ib – Description	**FPFV**	**LPLV**	**Sample Size**
			[...***...]
[...***...]			[...***...]
	[...***...]	[...***...]	
	[...***...]	[...***...]	
Phase 2 – Description			
[...***...]	[...***...]	[...***...]	[...***...]
Phase III – Description	**FPFV**	**LPLV**	**Estimate size**
Phase III programs and/or sample size may change due to additional assessment and health authority input			
[...***...]	TBD	TBD	[...***...]
Additional Clinical Studies (Phase II and III)	**FPFV**	**LPLV**	**Estimate size**
TBD			

TOXICOLOGY / PHARMACOLOGY/Preclinical	**Start**	**Finish**
[...*...]**		
[...*...]**	TBD	TBD
[...***...]	TBD	TBD
[...***...]	TBD	TBD
[...***...]	TBD	TBD
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[...***...]	TBD	TBD
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PHARMDEV	**Start**	**Finish**
Timing subject to change		
[...***...]	[...***...]	[...***...]
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RESEARCH	**Start**	**Finish**
[...*...]**		
[...***...]	TBD	TBD

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Schedule 4.4

Form of Press Release

[See Attached]

CHIMERIX SIGNS WORLDWIDE LICENSE AGREEMENT WITH MERCK FOR CMX157, A NOVEL CANDIDATE FOR THE TREATMENT OF HIV

RESEARCH TRIANGLE PARK, NC – July 24, 2012 – Chimerix, Inc. today announced the execution of a license agreement granting Merck, known as MSD outside the United States and Canada, exclusive worldwide rights to CMX157, Chimerix's novel lipid acyclic nucleoside phosphonate currently being evaluated to treat HIV infection.

Under the terms of the agreement, Merck receives an exclusive worldwide license and will be responsible for development and commercialization of CMX157, an investigational oral nucleoside reverse transcriptase inhibitor (NRTI). Chimerix will receive a $17.5 million upfront payment and will be eligible to receive up to $151 million in milestones, as well as royalties on future sales.

"This agreement is a significant milestone in Chimerix's mission of developing best-in-class therapies for major unmet medical needs based on our lipid technology platform," said Kenneth I. Moch, President and CEO of Chimerix. "Merck is the ideal collaborator to develop this drug and help us to maximize the potential of CMX157, given its commitment to its HIV franchise. The value created through the licensure of CMX157 will help us continue to advance our lead compound, CMX001, through its critical Phase 3 trial, for which we currently plan to begin enrolling patients early next year."

"Merck is committed to bringing forward new treatment options for patients with HIV/AIDs," said Daria Hazuda, Vice President and Worldwide Discovery Head for Infectious Diseases, Merck Research Laboratories. "We look forward to working closely with Chimerix to advance development of this NRTI candidate."

About CMX157

CMX157 is a novel lipid acyclic nucleoside phosphonate that delivers high intracellular concentrations of the active antiviral agent tenofovir diphosphate. CMX157 is more than 200-fold more potent in vitro versus tenofovir against all major HIV subtypes resistant to current therapies, which may allow activity against tenofovir-resistant viruses (e.g., K65R), and against HBV. CMX157's novel structure results in decreased circulating levels of tenofovir, lowering systemic exposure and thereby reducing the potential for renal side effects. CMX157 has completed a Phase 1 clinical trial in healthy volunteers, demonstrating a favorable safety, tolerability and drug distribution profile.

About Chimerix

Chimerix is developing novel oral antiviral therapeutics with the potential to improve quality of life for patients in multiple settings, including transplant, oncology, acute care and global health. The company's proprietary lipid technology has given rise to two clinical stage compounds, CMX001 and CMX157, which have demonstrated the potential for enhanced activity, bioavailability and safety compared to currently approved drugs.

Chimerix's lead compound, CMX001, is a broad spectrum lipid acyclic nucleoside phosphonate that inhibits double-stranded DNA (dsDNA) viruses including cytomegalovirus (CMV), adenovirus, BK virus, herpes simplex virus and variola (smallpox). CMX001 has completed Phase 2 clinical development for the prophylaxis of CMV and is in Phase 2 development for the preemption and treatment of adenovirus infection in hematopoietic stem cell transplant (HSCT) recipients. To date, more than 750 patients have been dosed with CMX001 in controlled clinical trials and open-label treatment protocols. Antiviral activity from completed and ongoing studies, coupled with the lack of myelotoxicity and nephrotoxicity that are associated with currently available therapies, indicate that CMX001 has the potential to improve outcomes for stem cell and solid organ transplant recipients. Chimerix has completed an End of Phase 2 meeting with the FDA for CMX001 and is preparing to initiate Phase 3 clinical development of CMX001 for the prophylaxis of CMV in HSCT recipients.

Led by an experienced antiviral drug development team, Chimerix is also leveraging its lipid technology and novel chemical library to pursue new treatments for other areas of high unmet medical need. For additional information on Chimerix, please visit http://www.chimerix.com.

# # #

Chimerix Media Contacts:

Rebecca Heath, 919.972.7124

Elizabeth Kelly, 919.972.7109

Schedule 6.2(o)

Compound Research and Development

CMX157 001 Phase I Clinical Trial

Schedule 6.2(p)

List of Active Material Transfer Agreements

1. Public Health Service Material Transfer Agreement between Chimerix, Inc. and [...***...] dated February 7, 2012.

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Exhibit 10.16

*****Text Omitted and Filed Separately with the Securities and Exchange Commission. Confidential Treatment Requested Under 17 C.F.R. Sections 200.80(b)(4) and 230.406**

OMB Approval 0990-0115

AWARD/CONTRACT	1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350) ►	RATING N/A.	PAGE OF PAGES 1 61
2. CONTRACT *(Proc. Inst. Ident.)* NO. HHSO100201100013C	3. EFFECTIVE DATE See Block 20C.	4. REQUISITION/PURCHASE REQUEST/PROJECT NO. OS57601	

5. ISSUED BY CODE	6. ADMINISTERED BY *(If other than Item 6)* CODE
Office of Acquisitions Management, Contracts, and Grants (AMCG) 330 Independence Ave., S.W. Room G640 Washington, D.C. 20201	**See Block 5.**

7. NAME AND ADDRESS OF CONTRACTOR *(No. street, county, state and ZIP Code)*	8. DELIVERY **See Schedule.**
Chimerix, Incorporated 2505 Meridian Parkway, Suite 340 Durham, NC 27713	9/ DISCOUNT FOR PROMPT PAYMENT N/A.
CAGE: 4WYN4	10. SUBMIT INVOICES ADDRESS SHOWN IN: ITEM See Section G.
CODE DUNS No. […*…]** FACILITY CODE N/A	

11. SHIP TO/MARK FOR CODE	12. PAYMENT WILL BE MADE BY CODE N/A
See Block 5.	See Block 5.

13. AUTHORITY FOR USING OTHER FULL AND OPEN COMPETITION: **N/A**	14. ACCOUNTING AND APPROPRIATION DATA
£ 10 U.S.C. 2304(c)( ) £ 41 U.S.C. 253(c)( )	Appropriation Year: 2011; Object Class: 25329; CAN# 1992002 $24,819,527.00

15A. ITEM NO.	15B. SUPPLIES/SERVICES	15C. UNIT PRICE	15D. AMOUNT	15E. UNIT PRICE	15F. AMOUNT
See Section B.					
	15G. TOTAL AMOUNT OF CONTRACT ►				**$24,819,527.00**

16. TABLE OF CONTENTS

(ü)	SEC.	DESCRIPTION	PAGE(S)	(ü)	SEC.	DESCRIPTION	PAGE(S)
		PART I - THE SCHEDULE				PART II - CONTRACT CLAUSES	
x	A	SOLICITATION/CONTRACT FORM	1	x	I	CONTRACT CLAUSES	54
x	B	SUPPLIES OR SERVICES AND PRICE/COST	3			PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH.	
x	C	DESCRIPTION / SPECS / WORK STATEMENT	9	x	J	LIST OF ATTACHMENTS	60
x	D	PACKAGING AND MARKING	16			PART IV - REPRESENTATIONS AND INSTRUCTIONS	
x	E	INSPECTION AND ACCEPTANCE	16	x	K	REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS	61
x	F	DELIVERIES OR PERFORMANCE	17				
x	G	CONTRACT ADMINISTRATION DATA	39	☐	L	INSTRS., CONDS., AND NOTICES TO OFFERORS	
x	H	SPECIAL CONTRACT REQUIREMENTS	44	☐	M	EVALUATION FACTORS FOR AWARD	

CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE

17. ☒ CONTRACTOR'S NEGOTIATED AGREEMENT (*Contractor is required to sign this document and return* ___1___ *copies to issuing office.)* Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. *(Attachments are listed herein.)*

18. £ AWARD (*Contractor is not required to sign this document.)* Your offer on Solicitation Number _____, including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.

19A. NAME AND TITLE OF SIGNER *(Type or print)*	20A. NAME OF CONTRACTING OFFICER
GEORGE R. PAINTER, PH.D., CSO AND CHAIRMAN	ETHAN J. MUELLER AMCG, ASPR, OS, DHHS

19B. NAME OF CONTRACTOR	19C. DATE SIGNED	20B. UNITED STATES OF AMERICA	20C. DATE SIGNED
/s/ George R. Painter *(Signature of person authorized to sign)*	2/15/11	BY /s/ Ethan J. Mueller *(Signature of Contracting Officer)*	2/16/11

NSN 7540-01-152-8069 26-107 STANDARD FORM 26 (REV. 4-85)
PREVIOUS EDITION UNUSABLE Computer Generated Prescribed by GSAFAR (48 CFR) 53.214(a)

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CONTRACT TABLE OF CONTENTS

PART I – THE SCHEDULE

SECTION B – SUPPLIES OR SERVICES AND PRICES/COSTS

ARTICLE B.1. BRIEF DESCRIPTION OF SUPPLIES OR SERVICES

This contract is for the development of CMX001 for the Treatment of Smallpox. The Research and Development (R&D) effort for the antiviral will progress in specific stages that cover the base performance segment and each of the four (4) option segments specified in this contract. Work performed during the base segment and during each of the option segments is considered to constitute a non-severable discrete work segment that is necessary for the R&D effort related to the antiviral. The Contractor must complete specific tasks required in each discrete work segment before the Government will exercise any of the follow-on option segments. Exercise of the follow-on options is solely at the discretion of the Government. The contractor's success in completing the required tasks under each work segment must be demonstrated through the Deliverables and Milestones specified under Article F.2. Those deliverables will support the GO/NO GO Decision Gates specified therein. The GO/NO GO Decision Gates will constitute the basis for the Government's decision, at its sole discretion, to exercise any follow-on option segment.

Work under this contract will proceed for a maximum of 5 years. The base and option segments under Contract Line Items (CLINs) 0001 through 0005 are event driven work segments rather than time driven CLINs. The periods of performance listed under each of the CLINs under Article B.2 and B.3 below are estimated time periods. Those individual time periods may be extended to complete the tasks required under each work segment. However, if exercised, the completion of the final tasks required under CLIN 0005 and option segment 4 must be completed no later than 5 years after initial award of this contract.

ARTICLE B.2. ESTIMATED COST AND FIXED FEE

a. The total estimated cost of ***the base performance segment*** is [**...***...**].
b. The total fixed fee for ***the base performance segment*** is **$[...***...]**. The fixed fee shall be paid as a percentage of costs incurred on any given month, subject to Allowable Cost and Payment and Fixed Fee Clauses.
c. The total amount of ***the base performance segment***, CLIN 0001, represented by the sum of the total estimated cost plus fixed fee is **$24,819,527.00**.
d. It is estimated that the amount currently allotted will cover performance of the contract through **15 February 2012**.

CLIN	Estimated Period of Performance	Supplies/Services	Total Estimated Cost	Fixed Fee	Total Estimated Cost Plus Fixed Fee
0001	[...***...]	Research and development of CMX001 for the Treatment of Smallpox to include [...***...].	$[...***...]	$[...***...]	$ 24,819,527.00

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Reports and Other Data Deliverables.

ARTICLE B. 3. OPTION PRICES

a. Unless the government exercises its option pursuant to the option clause contained in ARTICLE I.3, the contract consists only of the Base Work segment specified in the Statement of Work as defined in SECTONS C and F, for the price set forth in ARTICLE B.2 of the contract.

b. Pursuant to FAR Clause 52.217-9 (Option to Extend the Term of the Contract), the Government may, by unilateral contract modification, require the Contractor to perform the Option Work Segments specified in the Statement of Work as defined in SECTIONS C and F of this contract. If the Government exercises the/these option(s), written notice must be given to the Contractor within 30 days after the Government has completed its analysis of the deliverables associated with the applicable GO/NO GO Decision gate*;* and the Government must give the Contractor a preliminary written notice of its intent to exercise the option at least 30 days before the contract expires. Specific information regarding the time frame for this notice is set forth in the OPTION CLAUSE Article in SECTION G of this contract. The estimated cost of the contract will be increased as set forth below:

OPTIONS

Option 1 (CLIN 0002)
Option 2 (CLIN 0003)
Option 3 (CLIN 0004)
Option 4 (CLIN 0005)

CLIN	Estimated Period of Performance	Supplies/Services	Total Estimated Cost	Fixed Fee	Total Estimated Cost Plus Fixed Fee
		[...***...]			
0002	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
0003	[...***...]	[...***...][...***...][...***...]	[...***...]	[...***...]	[...***...]
0004	[...***...]	[...***...][...***...][...***...]	[...***...]	[...***...]	[...***...]

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0005	[...***...]	[...***...][...***...]	[...***...]	[...***...]	[...***...]

ARTICLE B. 4. PROVISIONS APPLICABLE TO DIRECT COSTS

a. Items Unallowable Unless Otherwise Provided

Notwithstanding the clauses, ALLOWABLE COST AND PAYMENT and FIXED FEE, incorporated in this contract, unless authorized in writing by the Contracting Officer, the cost of the following items or activities shall be unallowable as direct costs: 1) Acquisition, by purchase or lease, of any interest in real property; 2) Special rearrangement or alteration of facilities; 3) Purchase or lease of any item of general purpose office furniture or office equipment regardless of dollar value; and 4) Accountable Government Property.

b. Travel Costs

1. Travel

a. Total expenditures for travel (transportation, lodging, subsistence, and incidental expenses) incurred in direct performance of this contract during the base segment or any option segment(s) shall not exceed **$[...***...]** without the prior written approval of the Contracting Officer. The Contractor shall notify the Contracting Officer in writing when travel has exceeded **$[...***...]** within the base segment.

b. Subject to the annual dollar limitation specified under B.4.b.1.a. above, the Contactor shall invoice and be reimbursed for all travel costs in accordance with Federal Acquisition Regulations (FAR) 31.2 – Contracts with Commercial Organizations, Subsection 31.205-46, Travel Costs.

ARTICLE B.5. ADVANCE UNDERSTANDINGS

a. **Man-in-Plant**

With 7 days advance notice to the Contractor in writing from the Contracting Officer, the Government may place a man-in-plant in the Contractor's facility, who shall be subject to the Contractor's polices and procedures regarding security and facility access at all times while in the Contractor's facility.

b. **Security Plan**

No Security Plan is required for this effort due to an approved security waiver dated 12 November 2010.

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c. **Subcontracts and Consultants**

Award of any FFP subcontract or FFP consulting agreement in excess of $100,000 or any cost reimbursement subcontract or consulting agreement shall not proceed without the prior written consent of the Contracting Officer via a Contracting Officer Authorization (COA) Letter upon review of the supporting documentation required by FAR Clause 52.244-2, Subcontracts. The Contracting Officer shall complete review of such documentation within eight (8) business days and provide either an approval or request changes or additional information from the Contractor. Upon receipt of the changes and additional information from the Contractor, the Contracting Officer will have eight (8) business days to review the submitted information and respond. After receiving written consent of the subcontract by the Contracting Officer, a copy of the signed, executed subcontract and consulting agreement shall be provided to the Contracting Officer.

d. **Site Visits and Inspections**

At the discretion of the U.S. Government and independent of activities conducted by the Contractor, within ten (10) business days notice to the Contractor via written notification from the Contracting Officer, the U.S. Government reserves the right to conduct site visits and inspections on an as needed basis, including collection of samples limited to 250 treatment courses of Final Drug Product and samples of key intermediates held at the Contractor's or Subcontractor's site, provided that the Government's collection of such samples shall not frustrate the Contractor's ability to perform under the contract, and provided further that such samples shall be used for internal Government purposes only and not provided to any third party without the express written permission of Contractor.

e. **Invoices - Cost and Personnel Reporting, and Variances from the Negotiated Budget**

The Contractor agrees to provide a detailed breakdown on invoices of the following cost categories:

a. Direct Labor - List individuals by name, title/position, hourly/annual rate, level of effort, and amount claimed.
b. Fringe Benefits - Cite rate and amount
c. Overhead - Cite rate and amount
d. Materials & Supplies - Include detailed breakdown when total amount is over $1,000.
e. Travel - Identify travelers, dates, destination, purpose of trip, and amount. Cite COA, if appropriate. List separately domestic travel, general scientific meeting travel, and foreign travel.
f. Consultant Fees - Identify individuals and amounts.
g. Subcontracts - Attach Subcontractor invoice(s).
h. Equipment - Cite authorization and amount.
i. Other Direct Costs - Include detailed breakdown when total amount is over $1,000.
j. G&A - Cite rate and amount.
k. Total Cost
l. Fixed Fee
m. Total CPFF

Monthly Invoices must include the cumulative total expenses to date, adjusted (as applicable) to show any amounts suspended by the Government.

f. **Confidential Treatment of Sensitive Information**

The Contractor shall guarantee strict confidentiality of any information/data of a sensitive nature that is provided to the Contractor by the Government during the performance of the contract. The Government has determined that the information/data that the Contractor will be provided during the performance of the contract is of a sensitive nature.

Disclosure of information/data that is sensitive in nature, in whole or in part, by the Contractor can only be made after the Contractor receives prior written approval from the Contracting Officer. Whenever the Contractor is uncertain with regard to the proper handling of information/data under the contract, the Contractor shall obtain a written determination from the Contracting Officer. (See also HHSAR clause 352.224-70).

Notwithstanding the foregoing, such information/data shall not be deemed of a sensitive nature with respect to the Contractor for purposes of this contract if such information/data: (a) was already known to the Contractor; (b) was generally available or known, or was otherwise part of the public domain, at the time of its disclosure to the Contractor; (c) became generally available or known, or otherwise became part of the public domain, after its disclosure to, or, with respect to the information/data by, the Contractor through no fault of the Contractor; (d) was disclosed to the Contractor, other than under an obligation of confidentiality or non-use, by a third party who had no obligation to the Government that controls such information/data not to disclose such information/data to others; or (e) was independently discovered or developed by the Contractor, as evidenced by its written records, without the use of information/data belonging to the Government.

Contractor may disclose information/data of a sensitive nature provided by the Government to the extent that such disclosure is: (a) made in response to a valid order of a court of competent jurisdiction or other supra-national, federal, national, regional, state, provincial or local governmental or regulatory body of competent jurisdiction; provided, however, that the Contractor shall first have given notice to the Government and give the Government a reasonable opportunity to quash such order and to obtain a protective order requiring that the information/data of a sensitive nature that is the subject of such order be held in confidence by such court or agency or, if disclosed, be used only for the purposes for which the order was issued; and provided further that if a disclosure order is not quashed or a protective order is not obtained, the information/data disclosed in response to such court or governmental order shall be limited to that information which is legally required to be disclosed in response to such court or governmental order; (b) otherwise required by law, in the opinion of legal counsel to the Contractor as expressed in an opinion letter in form and substance reasonably satisfactory to the Government, which shall be provided to the Government at least two (2) business days prior to the Contractor's disclosure of the information/data; or (c) made by the Contractor to the Regulatory Authorities as required in connection with any filing, application or request for Regulatory Approval; provided, however, that reasonable measures shall be taken to assure confidential treatment of such information/data.

g. **RESERVED.**

h. **Sharing of contract deliverables within United States Government (USG)**

In an effort to build a robust medical countermeasure pipeline through increased collaboration, BARDA may share technical deliverables with USG entities responsible for Medical Countermeasure Development. In accordance with recommendations from the Public Health Emergency Medical Countermeasure Enterprise Review, agreements established in the Integrated Portfolio's Portfolio Advisory Committee (PAC) Charter, Technology Transfer Agreements (TTA) between BARDA and the Defense Threat Reduction Agency and the National Institute of Allergies and Infectious Diseases (NIAID), BARDA may share technical deliverables set forth in Article F.2 with colleagues within the Integrated Portfolio. This advance understanding does not authorize BARDA to share financial information outside HHS. The Contractor is advised to review the terms of FAR Clause 52.227-14, Alternative II, regarding the Government's rights to deliverables submitted during performance as well as the Government's rights to data contained within those deliverables.

i. **Earned Value Management System (EVMS) Implementation Requirements**

The Contractor and BARDA agree that the EVMS implementation requirements that are contained in this contract are limited to the implementation requirements outlined by the 7 Principles of Earned Value Management Tier 2 System Implementation Intent Guide contained in Attachment 9 of the contract. The total amount of this contract reflects the use of the 7 Principles of EVMS Implementation. Any EVMS implementation requirements that are beyond the intent of the 7 Principles of EVMS Implementation and/or exceed the negotiated cost to implement of $[...***...] shall not proceed until the Contracting Officer sends a written request for a proposal to the Contractor and a bilateral modification is issued to the contract for the purposes of incorporating the additional costs for the performance of these requirements into the contract.

j. **Recognition of Dual Use Nature of CMX001**

The Contractor and BARDA recognize and acknowledge that CMX001 is being developed for several commercial indications (outside of the smallpox indication funded by BARDA under this contract) using funds from financing sources independent of BARDA. As such, the development and commercialization of CMX001 for such commercial indications shall not be impeded or in any way restricted by BARDA in the implementation of, or in connection with, this contract. This includes an express acknowledgment by BARDA that the Contractor has no obligation to submit for prior review or approval any information (including, but not limited to, clinical trial protocols, publications, and/or regulatory submissions) regarding those activities funded 100% independently for commercial development efforts for CMX001. This excludes activities directly funded in part/or in whole by BARDA. The Contractor agrees to work in good faith to provide BARDA with any information related to the commercial development of CMX001 that the Contractor deems relevant, in its sole discretion, to the development of the product for the smallpox indication.

k. **Recognition of Chimerix Control Over CMX001 Development Program**

In accordance with Articles C.2 and F.2 below, BARDA shall have the opportunity to review and comment on certain Contractor documents, including study protocols, study reports, minutes of meetings with the FDA, and other regulatory filings to FDA. Wherever such review and comment is specifically required by the terms of this contract, the Contractor shall provide BARDA with a minimum of eight (8) business days in which to review and provide comments back to the Contractor provided, however, that at BARDA's request, the Contractor shall provide BARDA with such additional time for review and comment as Contractor deems practicable under the circumstances. As the drug sponsor, Contractor shall have sole discretion over the development of CMX001 and regarding how to respond to BARDA's comments. BARDA shall not require

Contractor to change a submission to FDA or other submission that may impact the development of CMX001. Except for study protocols, Contractor may make its submission to the FDA and/or otherwise proceed with performance upon the expiration of the specified review period (if the Contractor has not received BARDA's comments), or upon issuance of the response to BARDA's comments that is required by the terms of the contract. For study protocols, Contractor may make the submission and/or otherwise proceed with performance upon the expiration of the specified review period (if the Contractor has not received BARDA's comments), or upon issuance of the COA Letter. BARDA shall issue COA Letters for study protocols within eight (8) business days of receipt of Contractor's response to BARDA's comments.

BARDA and the Contractor agree that wherever a contractual deadline for review, comment and/or submission to BARDA is established within this contract, such deadline(s) may be impacted by events currently unknown or unknowable that may trigger a need for the Contractor to respond to FDA without the ability to provide the agreed upon advance notice to BARDA. Contractor's response to such events, should they occur, shall not be deemed by BARDA to be a breach of this contract.

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

ARTICLE C.1. STATEMENT OF WORK

Independently and not as an agent of the Government, the Contractor shall furnish all the necessary services, qualified personnel, material, equipment, and facilities not otherwise provided by the Government as needed to perform the Statement of Work dated 10 February 2011 as set forth in SECTION J-List of Attachments, attached hereto and made a part of the contract.

ARTICLE C.2. REPORTING REQUIREMENTS

Technical Reports

In addition to those reports required by the other terms of this contract, the Contractor shall prepare and submit the following reports in the manner stated below and in accordance with the DELIVERIES Article in SECTION F of this contract and in SECTION J-List of Attachments, attached hereto and made a part of the contract. Such reports relate solely to the development activity funded under this contract.

A. Monthly Progress Report

This report shall include a description of the activities during the reporting period, and the activities planned for the ensuing reporting period. The first reporting period consists of the first full month of performance plus any fractional part of the initial month. Thereafter, the reporting period shall consist of each calendar month.

The Contractor shall submit a Monthly Progress Report on or before the 20th calendar day following the last day of each reporting period and shall include the following:

A cover page that includes the contract number and title; the type of report and period that it covers; the Contractor's name, address, telephone number, fax number, and e-mail address; and the date of submission; The progress report shall include a Table of Contents and Executive summary in accordance with the DELIVERIES Article in SECTION F of this contract.
SECTION I-An introduction covering the purpose and scope of the contract effort;
SECTION II-PROGRESS
SECTION II Part A: OVERALL PROGRESS-A description of overall progress;

SECTION II Part B: MANAGEMENT AND ADMINISTRATIVE UPDATE-A description of all meetings, conference calls, etc. that have taken place during the reporting period. Include progress on administration and management issues (e.g. evaluating, and managing subcontractor performance, and personnel changes);
SECTION II Part C: TECHNICAL PROGRESS-For each activity related to Gantt chart, document the results of work completed and cost incurred during the period covered in relation to proposed progress, effort and budget. The report shall be in sufficient detail to explain comprehensively the results achieved. The description shall include pertinent data and/or graphs in sufficient detail to explain any significant results achieved and preliminary conclusions resulting from analysis and scientific evaluation of data accumulated to date under the contract. The report shall include a description of problems encountered and proposed corrective action; differences between planned and actual progress, why the differences have occurred and what corrective actions are planned; preliminary conclusions resulting from analysis and scientific evaluation of data accumulated to date under the project;
SECTION II Part D; PROPOSED WORK-A summary of work proposed related to Gantt chart for the next reporting period and preprints/reprints of papers and abstracts.

SECTION III Part A: Earned Value Management Reporting: Contractor will provide a monthly Contract Performance Report (CPR) at an agreed upon reporting level (WBS level 3) using the BARDA provided WBS and a Variance Analysis Report. EVMS shall be applied to all Cost Plus Fixed Fee CLINs as part of the Integrated Master Project Plan following the Seven Principles of Earned Value Management. In accordance with FAR 52.215-2, Audit and Records-Negotiation, BARDA may request, on a quarterly or ad hoc basis that the Contractor provide raw data. BARDA may request additional data at a reporting level or at lower levels, as BARDA deems necessary so long as such requests do not impose requirements beyond what has been specifically agreed to and funded by BARDA regarding EVMS implementation as provided in the Advance Understanding "Earned Value Management System (EVMS) Implementation."

A Monthly Progress Report will not be required in the same month that the Quarterly or Annual Technical Progress Report is submitted.

B. Quarterly Progress Report

This report shall include a description of the activities during the reporting period, and the activities planned for the ensuing reporting period. The first reporting period consists of the first full quarter of performance plus any fractional part of the initial quarter. Thereafter, the reporting period shall consist of each calendar quarter.

The Contractor shall submit a Quarterly Progress Report on or before the 20th calendar day following the last day of each reporting period and shall include the following:
A cover page that includes the contract number and title; the type of report and period that it covers; the Contractor's name, address, telephone number, fax number, and e-mail address; and the date of submission;
SECTION I-An introduction covering the purpose and scope of the contract effort. The progress report shall include a Table of Contents and Executive summary in accordance with the DELIVERIES Article in SECTION F of this contract.
SECTION II-PROGRESS
SECTION II Part A: OVERALL PROGRESS-A description of overall progress;
SECTION II Part B: MANAGEMENT AND ADMINISTRATIVE UPDATE-A description of all meetings, conference calls, etc. that have taken place during the reporting period. Include progress on administration and management issues (e.g. evaluating, managing subcontractor performance and personnel changes);

SECTION II Part C: TECHNICAL PROGRESS-For each activity related to Gantt chart, document the results of work completed and cost incurred during the period covered in relation to proposed progress, effort and budget. The report shall be in sufficient detail to explain comprehensively the results achieved. The description shall include pertinent data and/or graphs in sufficient detail to explain any significant results achieved and preliminary conclusions resulting from analysis and scientific evaluation of data accumulated to date under the contract. The report shall include a description of problems encountered and proposed corrective action; differences between planned and actual progress, why the differences have occurred and what corrective actions are planned; preliminary conclusions resulting from analysis and scientific evaluation of data accumulated to date under the project;
SECTION II Part D; PROPOSED WORK- A summary of work proposed for the next reporting period; and preprints/reprints of papers, abstracts and a current/updated Gantt chart. A Quarterly Progress Report will not be required in the same month that the Annual Progress Report is submitted.
SECTION III Part A: Earned Value Management Reporting: Contractor will provide a quarterly Contract Performance Report (CPR) at an agreed upon reporting level (WBS level 3) using the BARDA provided WBS and a Variance Analysis Report. EVMS shall be applied to all Cost Plus Fixed Fee CLINs as part of the Integrated Master Project Plan following the Seven Principles of Earned Value Management. In accordance with FAR 52.215-2, Audit and Records-Negotiation, BARDA may request, on a quarterly or ad hoc basis that the Contractor provide raw data. BARDA may request additional data at a reporting level or at lower levels, as BARDA deems necessary so long as such requests do not impose requirements beyond what has been specifically agreed to and funded by BARDA regarding EVMS implementation as provided in the Advance Understanding “Earned Value Management System (EVMS) Implementation.”

C. Annual Progress Report

This report shall include a summation of the results of the entire contract work for the period covered. An Annual Technical Progress Report will not be required for the period when the Final Technical Progress Report is due. Monthly and Quarterly Progress Reports shall not be submitted in the same month when an Annual Progress Report is due.

The first Annual Progress Report shall be due on or before the 20th calendar day following the last day of the reporting period. Each Annual Progress Report shall include:
A Cover page that includes the contract number and title; the type of report and period that it covers; the Contractor's name, address, telephone number, fax number, and email address; and the date of submission; The progress report shall include a Table of Contents in accordance with the DELIVERIES Article in SECTION F of this contract.
SECTION I: EXECUTIVE SUMMARY - A brief overview of the work completed, and the major accomplishments achieved during the reporting period;
SECTION II: PROGRESS
SECTION II Part A: OVERALL PROGRESS-A description of overall progress;
SECTION II Part B: MANAGEMENT AND ADMINISTRATIVE UPDATE-A description of all meetings, conference calls, etc. that have taken place during the reporting period. Include progress on administration and management issues (e.g. evaluating, and managing subcontractor performance; regulatory compliance audits, and personnel changes);
SECTION II Part C: TECHNICAL PROGRESS - A detailed description of the work performed structured to follow the activities and decision gates outlined at the Integrated Baseline Review and as described in the Integrated Master Plan. The Report should include a description of any problems (technical or financial) that occurred or were identified during the reporting period, and how these problems were resolved;
SECTION II Part D; PROPOSED WORK-A summary of work proposed for the next year period to include an updated Gantt Chart.

SECTION III Part A: Earned Value Management Reporting: Contractor will provide a quarterly Contract Performance Report (CPR) at an agreed upon (WBS level 3) reporting level using the BARDA provided WBS and a Variance Analysis Report. EVMS shall be applied to all Cost Plus Fixed Fee CLINs as part of the Integrated Master Project Plan following the Seven Principles of Earned Value Management. In accordance with FAR 52.215-2, Audit and Records-Negotiation, BARDA may request, on a quarterly or ad hoc basis that the Contractor provide raw data. BARDA may request additional data at a reporting level or at lower levels, as BARDA deems necessary so long as such requests do not impose requirements beyond what has been specifically agreed to and funded by BARDA regarding EVMS implementation as provided in the Advance Understanding "Earned Value Management System (EVMS) Implementation."

Contractor also should include the following in the Annual Progress Report:

1. Copies of manuscripts (published and unpublished), abstracts, and any protocols or methods developed specifically under the contract during the reporting period; and

2. A summary of any Subject Inventions per the requirements under FAR Clause 52.227-11

D. Draft Final Technical Progress Report and Final Technical Progress Report

These reports are to include a summation of the work performed and results obtained for the entire contract period of performance. This report shall be in sufficient detail to describe comprehensively the results achieved. The Draft Final Report and Final Report shall be submitted in accordance with the DELIVERIES Article in SECTION F of the contract. An Annual Technical Progress Report will not be required for the period when the Final Technical Progress Report is due. The Draft Final Technical Progress Report shall be submitted 75 calendar days before the agreed completion date of the contract and the Final Technical Progress Report shall be submitted on or before the completion date of the contract. The report shall conform to the following format:

1. Cover page to include the contract number, contract title, performance period covered, Contractor's name and address, telephone number, fax number, email address and submission date; The progress report shall include a Table of Contents in accordance with the DELIVERIES Article in SECTION F of this contract.

2. SECTION I: EXECUTIVE SUMMARY-Summarize the purpose and scope of the contract effort including a summary of the major accomplishments relative to the specific activities set forth in the Statement of Work.

3. SECTION II: RESULTS-A detailed description of the work performed related to the Gantt chart, the results obtained, and the impact of the results on the scientific and/or public health community, including a listing of all manuscripts (published and in preparation) and abstracts presented during the entire period of performance, and a summary of all inventions.

Draft Technical Progress Report: The Contractor is required to submit the Draft Final Technical Progress Report to the Contracting Officer's Technical Representative and Contracting Officer. This draft report is due 75 calendar days before the completion date of the contract. The Contracting Officer's Technical Representative and Contracting Officer will review the Draft Final Technical Progress Report and provide the Contractor with comments within 8 business days after receipt.

Final Technical Progress Report: The Contractor will deliver the final version of the Final Technical Progress Report on or before the completion date of the contract. The final version shall include or address the Contracting Officer's Technical Representative comments and Contracting Officer comments on the draft report. Final Technical Progress Report shall be submitted on or before the completion date of the contract.

E. Summary of Salient Results

The Contractor shall submit, with the Final Technical Progress Report, a summary (not to exceed 200 words) of salient results achieved during the performance of the contract.

F. Other Technical Progress Reports

1. **Draft Report for Clinical and Non-Clinical Studies and Final Report for Clinical and Non-Clinical Studies**
   - The non-clinical and clinical trial reports shall follow the format of International Conference on Harmonization document ICH E3 "Guidelines on Structure and Content of Clinical Study Reports" (http://www.pharmacontract.ch/support/su_ich_liste.htm).
   - Draft Final Report for Clinical and Non-Clinical Studies funded by this contract will be submitted to the Contracting Officer's Technical Representative and Contracting Officer (CO) for review and comment within 45 calendar days (draft) or 75 calendar days (final) after completion of analysis of Pre-Clinical/Non Clinical/Clinical data and 8 business days prior to submission to FDA. Subcontractor prepared reports shall be submitted to the Contracting Officer's Technical Representative and Contracting Officer (CO) for review and comment no later than 5 business days after receipt by the prime contractor.
   - The Contracting Officer shall provide written comments within 8 business days after the submission of the Draft Final Report for Clinical and Non-Clinical Studies.
   - The comprehensive Final Report for Clinical and Non-Clinical Studies will be submitted to the Contracting Officer and the Contracting Officer's Technical Representative within 30 calendar days after receiving comments on the Draft Final Report for Clinical and Non-Clinical Studies from the Contracting Officer. The final version shall include or address the Contracting Officer's Technical Representative comments and Contracting Officer comments on the draft report.
   - See section ARTICLE F.2. REPORTING REQUIREMENTS AND DELIVERABLES for additional clarification and deliverable requirements.

G. Audit Reports

Within three (3) business days of receipt of an FDA Form 483 related to conformance to FDA regulations and guidance, including adherence to GLP, GMP, or GCP guidelines, as it relates to performance under this contract where the results will adversely impact contract performance, the Contractor shall provide the Contracting Officer's Technical Representative and the Contracting Officer with copies of the form. Within fifteen (15) business days of receipt of the form Contractor shall provide a plan for addressing areas of nonconformance to FDA regulations and guidance for GLP, GMP or GCP guidelines as identified in the final audit report. See section ARTICLE F.2. REPORTING REQUIREMENTS AND DELIVERABLES for additional clarification and deliverable requirements.

H. Clinical and Non-Clinical Protocols

BARDA has a responsibility to obtain documentation concerning mechanisms and procedures that are in place to protect the safety of participants and animals in BARDA funded clinical trials and non-clinical studies. Therefore the Contractor shall develop a protocol for each clinical trial and non-clinical study funded under this contract and submit all such protocols and protocol amendments to the BARDA Contracting Officer's Technical Representative (COTR) for review by the Contracting Officer. Subject to Article B.5.k. above, the Contractor's consideration of the BARDA COTR comments shall be addressed in writing or by corrective action in the protocol prior to the issuance of a Contracting Officer Authorization (COA) Letter authorizing the execution of the specific clinical trial or non-clinical study(ies).

Important information regarding performing human subject research is available at http://www3.niaid.nih.gov/healthscience/clinicalstudies/. For additional information contractor shall review the Attachment 11: Non-Clinical and Clinical Terms of Award set forth in SECTION J-List of Attachments and ARTICLE F.2. REPORTING REQUIREMENTS AND DELIVERABLES.

Any updates to technical reports are to be addressed in the Monthly, Quarterly and Annual Progress Reports. The Contractor shall advise the Contracting Officer's Technical Representative or designee in writing and via electronic communication in a timely manner of any issues potentially affecting contract performance.

I. Other Reports/Deliverables

The Contractor shall provide all deliverables as outlined in the table under ARTICLE F.2. REPORTING REQUIREMENTS AND DELIVERABLES section of this document.

ARTICLE C.3. SUBJECT INVENTION REPORTING REQUIREMENT

All reports and documentation required by FAR Clause 52.227-11, including, but not limited to, the invention disclosure report, the confirmatory license, and the Government support certification, shall be directed to the Extramural Inventions and Technology Resources Branch, OPERA, NIH, 6705 Rockledge Drive, Room 2207, MSC 7987, Bethesda, Maryland 20892-7987 (Telephone: 301-435-1986). In addition, one copy of an annual utilization report, and a copy of the final invention statement, shall be submitted to the Contracting Officer. The final invention statement (see FAR 27.303(b)(2)(ii)) shall be submitted to the Contracting Officer on the expiration date of the contract. See also FAR clause 52.227-11 (Patent Rights-Ownership by the Contractor).

Reports and documentation submitted to the Contracting Officer shall be sent to the following address:

Contracting Officer
Ethan J. Mueller
Office of Acquisitions Management, Contracts, and Grants (AMCG)
330 Independence Avenue, S.W.
Room G640
Washington, D.C. 20201
Ethan.Mueller@hhs.gov

If no invention is disclosed or no activity has occurred on a previously disclosed invention during the applicable reporting period, a negative report shall be submitted to the Contracting Officer at the address listed above.

To assist contractors in complying with invention reporting requirements of the clause, "Interagency Edison," an electronic invention reporting system has been developed. Use of Interagency Edison is encouraged as it streamlines the reporting process and greatly reduces paperwork. Access to the system is through a secure interactive Web site to ensure that all information submitted is protected. Interagency Edison and information relating to the capabilities of the system can be obtained from the Web (http://www.iedison.gov), or by contacting the Extramural Inventions and Technology Resources Branch, OPERA, NIH.

ARTICLE C.4. PROJECT MEETING CONFERENCE CALLS ONCE EVERY TWO WEEKS
A conference call between the Contracting Officer's Technical Representative and the Contractor's Program Manager shall occur once every two weeks. During this call, the Program Manager will discuss the activities during the reporting period, any problems that have arisen and the activities planned for the ensuing reporting period. The first reporting period consists of the first full month of performance plus any fractional part of the initial month. Thereafter, the reporting period shall consist of each calendar month. The Contractor's Program Manager may choose to include other key personnel on the conference call to give detailed updates on specific projects or this may be requested by the Contracting Officer's Technical Representative.

ARTICLE C.5. PROJECT MEETINGS
The Contractor shall participate in Project Meetings to coordinate the performance of the contract, as requested by the Contracting Officer's Technical Representative. These meetings may include face-to-face meetings with BARDA/AMCG in Washington, D.C. and at work sites of the Contractor and its subcontractors. Such meetings may include, but are not limited to, meetings of the Contractor (and subcontractors invited by the Contractor) to discuss study designs, site visits to the Contractor's and subcontractor's facilities, and meetings with the Contractor and HHS officials to discuss the technical, regulatory, and ethical aspects of the program. The Contractor must provide data, reports, and presentations to groups of outside experts (subject to appropriate protections for Contractor confidential or proprietary data) and USG personnel as required by the Contracting Officer's Technical Representative in order to facilitate review of contract activities. Subject to other provisions specified in this contract (See for example Article F.2), the Contractor shall provide notice to

the COTR no later than 10 business days where practicable, prior to both formal and informal meetings and communications with the Food and Drug Administration (FDA) related to the efforts funded by this contract including anticipated telephone communications. In the event that the COTR or other authorized BARDA representative is unable to participate in a meeting or telephone conference the Contractor shall provide the COTR with a written summary of all subjects discussed no later than three (3) business days following the meeting or conference.

SECTION D – PACKAGING, MARKING AND SHIPPING

All deliverables required under this contract shall be packaged, marked and shipped in accordance with Government specifications. At a minimum, all deliverables shall be marked with the contract number and Contractor name. The Contractor shall guarantee that all required materials shall be delivered in immediate usable and acceptable condition.

Report Deliverables

Unless otherwise specified by the Contracting Officer, delivery of reports to be furnished to the Government under this contract (including invoices), shall be delivered to BARDA electronically along with a concurrent email notification to the Contracting Officer, Contract Specialist, and COTR summarizing the electronic delivery.

In addition, a physical hard copy, will be sent unless otherwise specified by the Contracting Officer. Delivery of reports to be furnished to the Government under this contract (including invoices), shall be addressed as follows:

Tyler Merkeley, M.S., MBA
Contracting Officer's Technical Representative (COTR)
330 Independence Avenue, S.W.
Washington, D.C. 20201
202-260-0315 (Office)
Tyler.Merkeley@hhs.gov

Ethan J. Mueller, Contracting Officer (CO)
DHHS/OS/ASPR/AMCG
330 Independence Avenue, S.W.
Room G640
Washington, D.C. 20201
Ethan.Mueller@hhs.gov

SECTION E – INSPECTION AND ACCEPTANCE

1. The Contracting Officer (CO) or the duly authorized representative will perform inspection and acceptance of materials and services to be provided under this contract.

2. For the purpose of this SECTON, the designated Contracting Officer's Technical Representative (COTR) is the authorized representative of the Contracting Officer. The COTR will assist in resolving technical issues that arise during performance. The COTR however is not authorized to change any contract terms or authorize any changes in the Statement of Work or modify or extend the period of performance, or authorize reimbursement of any costs incurred during performance.

3. Inspection and acceptance will be performed at:

Biomedical Advanced Research and Development Authority/Office of Acquisition Management, Contracts, and Grants (AMCG)
Office of the Assistant Secretary for Preparedness and Response
U.S. Department of Health and Human Services
330 Independence Avenue, S.W., Room G644
Washington, D.C. 20201

4. The contract incorporates the following clause by reference with the same force and effect as if it were given in full text. Upon request, the Contracting Officer will make its full text available.

FAR Clause 52.246-9, Inspection of Research and Development (Short Form) (April 1984)

SECTION F – DELIVERIES OR PERFORMANCE

Deliveries and performance under these Contract Line Item Numbers (CLINs) and Option CLINs shall be as follows:

ARTICLE F.1. ESTIMATED PERIOD OF PERFORMANCE

a. Under CLIN 0001, the estimated period of performance for the base work segment of this contract shall be from 2/16/2011-2/15/2012. As discussed under Article B.1, this estimated period of performance may be subject to adjustment. The period of performance for each of the Option work segments under CLINS 0002 through 0005 may also be subject to adjustment in order to complete the tasks required under each work segment.

CLIN	Estimated Period of Performance	Supplies/Services
0002	[...***...]	[...***...]
		[...***...]
0003	[...***...]	[...***...]
		[...***...]
0004	[...***...]	[...***...]
		[...***...]

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0005 [...***...] [...***...]
[...***...]

ARTICLE F.2. DELIVERABLES

Successful performance of the final contract shall be deemed to occur upon performance of the work set forth in the Statement of Work dated 10 February 2011 set forth in SECTION J-List of Attachments of this contract and upon delivery and acceptance, as required by the Statement of Work, by the Contracting Officer, or the duly authorized representative, of the following items in accordance with the stated delivery schedule:

The items specified below as described in the REPORTING REQUIREMENTS Article in SECTION C of this contract and the Statement of Work dated 10 February 2011 set forth in SECTION J-List of Attachments will be required to be delivered F.O.B. Destination as set forth in FAR 52.247-35, F.O.B. DESTINATION, WITHIN CONSIGNEE'S PREMISES (APRIL 1984), and in accordance with and by the date(s) specified below and any specifications stated in SECTION D, PACKAGING, MARKING AND SHIPPING, of this contract. All reports identified below relate solely to the development activity funded under this contract:

1. **Other Contract Deliverables**

#	Type of Deliverable	Frequency/ time periods	Description of Deliverable	Reporting Procedures	Quantity/ Form
1.	Project Meeting	Every two weeks or as amended by CO and COTR	The Contractor shall participate in teleconferences every two weeks with BARDA to discuss the performance of the contract. The Contractor prepares a proposed agenda and shall record, maintain and provide draft-meeting minutes to the COTR for approval. The COTR will approve the draft version and distribute the final version to the Contract Officer (CO) and Contractor.	· Contractor provides agenda 48hrs in advance of meeting to the COTR. COTR approves (with CO concurrence) and distributes agenda. · Contractor provides meeting minutes within 2 business days of the meeting · COTR reviews, comments and approves minutes	1 Electronic Copy to COTR and CO
2.	Monthly, Quarterly and Annual Project Status Report/ Meeting	Monthly reports are due on the 20th of each month, except on months when Quarterly/Annual Technical Progress Reports are due	The Monthly/Quarterly Project/Annual Status Report shall address the items listed below and cross-referenced to the Work Breakdown Structure (WBS), Scope of Work (SOW), Integrated Master Schedule (IMS), Integrated Baseline Review (IBR) report, Earned Value Management (EVM) Contract Performance Reports (CPR), and approval strategy. 1. An Executive Summary in MS PowerPoint (.ppt) format,	Monthly Reports: · Contractor provides Monthly Status Report deliverables on the 20th of each month. · COTR and CO will review Monthly Reports with the Contractor and provide feedback Quarterly Meeting: · Contractor provides Quarterly Status Report	1 Electronic Copy to COTR and CO

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#	Type of Deliverable	Frequency/ time periods	Description of Deliverable	Reporting Procedures	Quantity/ Form
		due	highlighting the progress, issues, and relevant activities in manufacturing, non-clinical, clinical, and regulatory. The Executive Summary should be limited to 2-3 pages and highlight critical issues for that reporting period. The Monthly, Quarterly, and Annual Technical Progress Report shall address each of the items below and be cross-referenced to the Critical Path, Integrated Master Schedule (IMS), EVM, WBS and the Risk Mitigation Matrix. 2. Progress in meeting contract milestones - broken out by subtasks within each milestone, overall project assessment, problems encountered and recommended solutions. The reports shall detail the planned progress and actual progress during the period covered, explaining occurrences of any differences between the two, and the corrective steps. 3. Provide EVM CPR (monthly) and Updated Risk Management Plan/Register (quarterly) 4. The reports shall also include a three-month rolling forecast of key planned activities, referencing the WBS/IMS. 5. A tracking log of progress on regulatory submissions with the FDA submission number, description of submission, date of submission, status of submission, and next steps shall be updated upon submission for all activities supported in part or whole with BARDA funding. 6. Estimated and Actual Expenses: This report shall also contain a narrative statement or in table form as to whether there is any significant discrepancy (greater than 10%) at this time between the % of work completed and the cumulative costs incurred to date. Monthly and Actual Expenses should be broken down to the appropriate WBS reporting level. This section of the report shall also contain estimates for the	five business days prior to meeting. This report is an expanded version of the Monthly Status Report · Contractor shall identify itinerary for the quarterly site visits · Contractor provides agenda to the COTR 48hrs in advance of meeting · COTR approves (with CO concurrence) and distributes agenda · Contractor provides meeting minutes within 2 business days of the meeting · COTR reviews, comments and approves minutes Annual Meeting: · Contractor provides Annual Project Status Report deliverables five business days prior to meeting. A draft report including .ppt slides should be provided 5 business days prior to the meeting. The annual report should also include information from the annual meeting due 15 business days after the meeting. · BARDA reserves the right to meet with the Contractor's board of directors once a year to discuss the contract at a time and place agreed upon by the parties. · COTR approves (with CO concurrence) and distributes agenda · COTR approves (with CO concurrence) all meeting material · Contractor provides	

#	Type of Deliverable	Frequency/ time periods	Description of Deliverable	Reporting Procedures	Quantity/ Form
			subcontractors' expenses from the previous month if the subcontractor did not submit a bill in the previous month. Estimates shall be listed for each subcontractor. If the subcontractor(s) was not working or did not incur any costs in the previous month, then a statement to this effect should be included in this report for those respective subcontractors. This section should also include a summary of any cost savings identified by the Contractor. . 7. Contractor shall identify the itinerary for the quarterly site visits (quarterly)	meeting minutes within 2 business days of meeting · COTR reviews, comments and approves minutes · Contractor provides a FINAL annual report within 15 business days after the conclusion of the annual meeting. COTR (with CO concurrence) reviews, comments and approves FINAL Annual Report · BARDA and Contractor shall participate in an in-process review	
3.	Performance Measurement Baseline Review (PMBR)	Within 90 days of contract award	The PMBR Report shall address each of the items listed below and be cross-referenced to the WBS, SOW, IMS, Risk Management Plan and product approval strategy. 1. Contractor provides baseline proposal and PowerPoint brief 2. Responsibility Assignment Matrix 3. A description of the work scope through control account Work Authorization Documents (WADs) and/or WBS Dictionary down to the control account level 4. Template for Work Packages 5. Integrated Master Schedule (IMS) with the inclusion of agreed major milestones and control account plans (CAP) for all control accounts 6. Baseline revision documentation and program logs (s) risk management plan.	· Contractor provides baseline proposal, .ppt briefing, 10 business days prior to meeting · Contractor provides agenda to the COTR 48hr in advance of meeting · COTR approves (with CO concurrence) and distributes agenda · COTR approves (with CO concurrence) all meeting material · Contractor provides minutes within 2 business days of the meeting · COTR reviews and approves minutes · BARDA will review documentation and provide written comments and questions to Contractor · Contractor shall address its consideration of BARDA's comments and resubmit PMBR Report within 10 business days	1 Electronic Copy to COTR and CO
4.	Risk	90 days	The Contractor will provide a Risk	· Contractor shall provide	1

#	Type of Deliverable	Frequency/ time periods	Description of Deliverable	Reporting Procedures	Quantity/ Form
	Management Plan	following contract award and updated quarterly	Management Plan that outlines the impacts of each risk in relation to the cost, schedule and performance objectives. The Risk Management Plan will include risk mitigation strategies. Each risk mitigation strategy will capture how the corrective action will reduce impacts on cost, schedule and performance.	a Risk Management Plan 90 days following contract award and update on the 20th of each Quarter in their Quarterly or Annual Project Status Reports · BARDA shall provide Contractor with a written list of concerns in response to Contractor's submitted Risk Management Plan, and the Contractor must address in writing its consideration of all concerns raised by BARDA within 20 business days of Contractor's receipt of this list of concerns.	Electronic Copy to COTR and CO
5.	Integrated Master Schedule	The 20th of each month	The Contractor will provide Integrated Master Schedule (IMS) with monthly status updates to reflect changes in schedule, performance, and critical path. Contractor will include BARDA Portfolio Management Milestones in their IMS and provide monthly updates within their IMS.	· The first draft IMS is due 30 days after contract award. The contractor and BARDA will establish an agreed upon IMS at the PMBR. · Thereafter the Contractor shall provide an Integrated Master Schedule on the 20th of each month in their Project Status Reports · Integrated Master Schedule shall be in both PDF and Microsoft Project Form · BARDA shall provide Contractor with a written list of concerns in response to Contractor's submitted IMS, and the Contractor must address in writing its consideration of all concerns raised by BARDA within 10 business days of Contractor's receipt of this list of concerns.	1 Electronic Copy (PDF and Microsoft Project Schedule (.mmp) format to COTR and CO
6.	EVM / Contract Performance Report	The 20th day of the month after	Contractor will provide a monthly Contract Performance Report (CPR) Format 1 at WBS level 3 using the	· Contractor shall provide a CPR and Variance Analysis Report on the	Electronic Copy to COTR

#	Type of Deliverable	Frequency/ time periods	Description of Deliverable	Reporting Procedures	Quantity/ Form
		each calendar month	BARDA provided WBS and a Variance Analysis Report (Format 5). A supplemental monthly Control Account Plan (CAP) report shall contain, at the work package level, time phased budget (budgeted cost of work scheduled (BCWS)), earned value (budgeted cost of work performed (BCWP)) and actual costs of work performed (ACWP) as captured in Contractor's EVM systems. The contractor shall provide a rationale in the package of its use of % complete as EVMS methodology or identity if any other EVMS methodology is being used.	20th day of the month after the end of each Month. · Contractor shall discuss any anticipated cost savings or risks in its Variance Analysis Report. · Contractor shall provide a PDF of deliverables or in a format as directed by COTR. · BARDA may request additional data at a reporting level or at lower levels, as BARDA deems necessary · The Contractor must address in writing its consideration of all concerns raised by BARDA staff	and CO
7.	Incident Report	Within 24 or 48 hrs of activity or incident	The Contractor shall communicate to BARDA and document all critical programmatic concerns or risks within 48 hours. The Contractor shall communicate via email or telephone. In addition, the Contractor shall report to the government any activity or incident that is in violation of established security standards or indicates the loss or theft of government products within 24 hrs of loss or theft. The Contractor shall communicate via email, oral or written communication.	· Email, Letter to CO Telephone (w/ written follow-up) · Written communication with BARDA COTR and CO within 48 hrs of Contractor identifying a critical programmatic risk. Additional updates within 48 hrs of additional developments, additional information and/or understanding · Contractor shall submit within 5 business days a Corrective Action Plan (if deemed necessary by Contractor) · If corrective action is recommended, the Contractor must address in writing, within 5 business days, its consideration of concerns raised by BARDA	1 Electronic Copy COTR and CO

#	Type of Deliverable	Frequency/ time periods	Description of Deliverable	Reporting Procedures	Quantity/ Form
8.	Deviation Request	TBD	Process for changing the IMS activities as baselined at the PMBR.	· Contractor shall submit a Deviation Request as soon as the Contractor has sufficient data to support the need for a significant change from the baselined IMS, mutually agreed upon at the PMBR (in excess of one (1) month) and/or PBMR costs (in excess of 10%) · The BARDA CO will review and provide a written response to the Deviation Request which may include rebaseline of the IMS and/or PBMR. · Contractor shall address its consideration of BARDA's comments within 10 business days.	1 Electronic Copy to COTR and CO
9.	Draft and Final Technical Progress Report	Draft 75 calendar days before and Final shall be submitted on or before the completion date of the POP	A draft of Final Technical Progress Report containing a summation of the work performed and the results obtained for the entire contract period of performance. The draft report shall be duly marked as 'Draft'. The Final Technical Progress Report addressing Contractor's consideration of the feedback received from BARDA and containing a summation of the work performed and the results obtained for the entire contract period of performance. This final report shall detail, document and summarize the results of the entire contract. This report shall be in sufficient detail to fully describe the progress achieved under all milestones. The final report shall be duly marked as 'Final'.	· Contractor shall provide a draft Technical Progress Report 75 calendar days before the end of the POP and the Final Technical Progress Report shall be submitted on or before the completion date of the POP · COTR provides suggested edits and additional feedback, which Contractor will consider for incorporation into the Final Technical Progress Report · The Contractor shall submit one (1) copy of a comprehensive final report to the CO and one (1) copy (electronically on a CD) to the COTR	1 Electronic Copy to COTR and CO
10.	Product Transition Strategy	90 days prior to end of the	Contractor shall provide a 2-3 page summary document containing a Product Transition Strategy to	· Contractor shall provide a Product Transition Strategy to support	1 Electronic Copy to

#	Type of Deliverable	Frequency/ time periods	Description of Deliverable	Reporting Procedures	Quantity/ Form
		(base/option) POP	support transition of the product(s) prior to end of the base and/or option(s) POP. The Product Transition Strategy should provide a strategic plan for further development and/or stockpiling of the product. The transition strategy shall provide options and/or a specific approach for the transition of MCM product for further development, procurement, approval by FDA and/or stockpile.	transition of the product(s) 90 days prior to end of the (base/option) POP as an addendum to that Quarter's Quarterly Project Status Report.	COTR and CO
11.	GO/NO GO Decision Gate Presentation	Event Driven Review following completion of a pre-defined stage of product development and prior to initiation of a new stage	Contractor shall provide a presentation following a prescribed template provided by BARDA prior to the Decision Gate Review	· Contractor shall provide an update to technical progress made towards completion of the GO/NO GO Decision Gate and provide the presentation, 10 business days prior to the Decision Gate Review · Contractor shall submit written justification of progress towards satisfying GO/NO GO Decision Gate criteria · After reviewing, the BARDA COTR and CO will provide a written response.	1 Electronic Copy to COTR and CO
12.	Standard Operating Procedures	As requested by COTR and CO	Contractor shall provide Standard Operating Procedures (SOPs) relevant to the activities under this contract to BARDA for review, as they are completed and updated	· Contractor shall submit the Standard Operating Procedures (SOPs) in the form requested by the COTR and CO within 15 business days of request	1 Electronic Copy to COTR and CO
13.	Approval Strategy	Within 90 days of contract award and updated as part of the quarterly report (if strategy changes)	Contractor shall provide a 2-3 page summary of the approval strategy for all indications supported by this contract to include all clinical and non-clinical studies	· Contractor will submit proposed clinical and non-clinical strategy to support approval · If corrective action is recommended by the BARDA COTR, the Contractor shall address in writing its consideration of concerns raised by BARDA	1 Electronic Copy to COTR and CO
14.	Study Protocol	At least 8 business	Contractor shall provide Pre-Clinical/Non-Clinical/ Clinical Trial	· Contractor will submit proposed protocols to	1 Electronic

#	Type of Deliverable	Frequency/ time periods	Description of Deliverable	Reporting Procedures	Quantity/ Form
		days for BARDA to review protocols prior to FDA submission and 30 days for study protocols that are not submitted to FDA	Protocols for studies funded under this contract to BARDA for review, prior to FDA submission (The CO and COTR reserves the right to request within the period of performance a non-proprietary Study Protocol for distribution within the United States Government(USG))	· BARDA at least 8 business days prior to FDA submission or at least 30 days prior to study execution for study protocols that are not being submitted to the FDA · If corrective action is recommended , the Contractor must address in writing its consideration of all safety, regulatory, ethical, and conflict of interest concerns raised by BARDA · After receiving the required documentation the CO will provide a written Contract Officer Authorization (COA) Letter to the Contractor. This COA Letter provides authorization to the Contractor to execute the specific clinical or non-clinical study funded in part or in whole by BARDA · If study protocols require submission to the FDA prior to execution, then FDA shall have final authority over Study Protocols and all amendments thereto. · Final FDA submissions shall be submitted to BARDA concurrently or no later than 1 business day after its submission to CDER	Copy to COTR and CO
15.	Study Reports	Within 45 (draft) or 75 (final) calendar days after completion of analysis and 8	Contractor shall provide Draft and Final Pre-Clinical/Non-Clinical Study Reports for studies funded under this contract to BARDA for review and edits within 45 (draft) or 75 (final) calendar days after completion of analysis of Pre-Clinical/Non-Clinical/ Clinical data and 15 business days	· Contractor shall provide Draft and Final Pre-Clinical/Non-Clinical Study Reports to BARDA within 45 (draft) or 75 (final) calendar days after completion of analyses	Electronic Copy to COTR and CO

#	Type of Deliverable	Frequency/ time periods	Description of Deliverable	Reporting Procedures	Quantity/ Form
		business days prior to submission to FDA	prior to submission to FDA (The CO and COTR reserves the right to request within the period of performance a non-proprietary Study Report for distribution within the USG) Contractor shall submit an interim study report to BARDA for any severable discrete work segments. If funding for a severable study is scheduled in two separate periods of performance than an interim study report is due on or before the completion date of the POP	· Contractor will submit proposed Pre-Clinical/Non-Clinical Study Report to BARDA for review and comment at least 8 business days prior to FDA Submission · If corrective action is recommended , the Contractor must address in writing its consideration of all concerns raised by BARDA before FDA Submission · Final FDA submissions shall be provided to BARDA concurrently or no later than 1 business day of its submission to CDER	
16.	Manufacturing Campaign Reports	Within 30 calendar days after receipt of batch records and 8 business days prior to submission to FDA	Contractor shall provide any Manufacturing Campaign Reports required by FDA to BARDA for review and comment prior to submission to FDA (The CO and COTR reserve the right to request within the period of performance a non-proprietary Manufacturing Campaign Reports for distribution within the USG)	· Contractor will submit proposed Manufacturing Campaign Reports to BARDA at least 8 business days prior to FDA Submission. · If corrective action is recommended , the Contractor must address in writing its consideration of all concerns raised by BARDA before FDA Submission · Final FDA submissions shall be submitted to BARDA concurrently or no later than one (1) business day after its submission to CDER	1 Electronic Copy to COTR and CO
17.	FDA Meeting Notification	Within 24 hours of scheduling meeting	The contractor shall forward the dates and times of any meeting with the FDA relating to work funded under this contract to BARDA and to the extent practicable arrange for appropriate BARDA staff to attend the FDA meetings. BARDA staff shall include up to a maximum of four people (PO, CO, and up to two (2) Subject Matter Experts (SME(s)).	· Contractor must notify BARDA of an upcoming meeting with the FDA relating to work funded under this contract within 24 hours of scheduling the meeting, if practicable. To the extent practicable, Contractor will give	1 Electronic Copy to COTR and CO

#	Type of Deliverable	Frequency/ time periods	Description of Deliverable	Reporting Procedures	Quantity/ Form
				BARDA 10 business days notice prior to the scheduled meeting.	
18.	FDA Correspondence and Meeting Minutes	Within three (3) business days of receiving correspondence from the FDA	The contractor shall forward initial Contractor and CDER-issued draft minutes and final minutes of any meeting with the FDA relating to work funded under this contract to BARDA. All documents shall be duly marked as either 'Draft' or 'Final'.	· Contractor provides FDA correspondence and meeting minutes within three (3) business days of the meeting or correspondence	1 Electronic Copy to COTR and CO
19.	FDA Submissions	At least 15 business days where practicable, but no less than 8 business days prior to submission to FDA	The Contractor shall provide BARDA the opportunity to review and comment upon all draft regulatory filings and other material submissions and correspondence relating to work funded under this contract before submission to the FDA. Contractors shall provide BARDA with an electronic copy of the final FDA submission. All documents shall be duly marked as either 'Draft' or 'Final'.	· Contractor will submit proposed FDA Meeting Briefing Packets to BARDA at least 15 business days where practicable, but no less than 8 business days prior to FDA submission · If corrective action is recommended , the Contractor must address in writing its consideration of all concerns raised by BARDA staff before FDA submission · Final FDA submissions shall be submitted to BARDA concurrently or no later than one (1) business day of its submission to CDER	1 Electronic Copy to COTR and CO
20.	FDA Audits	Within 10 business days of a scheduled audit or within 24 hours of an *ad hoc* site visits/audits if the FDA did not provide advanced notification	The Contractor shall notify the COTR and CO within 24 hours of FDA's arrival to conduct site visits/audits by any regulatory agency. In the event of an FDA inspection which occurs as a result of this contract and for this product, or for any other FDA inspection that has the reasonable potential to impact the performance of this contract, the Contractor shall provide BARDA with an exact copy (non-redacted of the FDA Form 483, Establishment Inspection Report (EIR). The contractor shall provide the COTR and CO copies of the plan for addressing areas of non-conformance to FDA regulations for GLP, GMP, or GCP guidelines as identified in the audit report within 10 business days, status updates	· The Contractor shall notify the COTR and CO within 10 business days of a scheduled audit or within 24 hours of an ad hoc site visits/audits if the FDA did not provide advanced notification. Contractor must provide QA Audit Reports within 15 business days of the audit. · The Contractor shall also provide copies of any FDA audit report received from subcontractors that occur as a result of this contract or for this product within three (3)	1 Electronic Copy to COTR and CO

#	Type of Deliverable	Frequency/ time periods	Description of Deliverable	Reporting Procedures	Quantity/ Form
			during the plan's execution, and a copy of all final responses to the FDA. The Contractor shall also provide redacted copies of any FDA audit report received from subcontractors that occur as a result of this contract or for this product within three (3) business days of receiving correspondence from the FDA and/or third party. The Contractor shall make arrangements for a BARDA representative(s) to be present during the final debrief by the regulatory inspector.	business days of receiving such a report from the FDA and/or third party	
21.	QA Audit Reports	5 business days of report completion	The Contractor shall inform the COTR and CO in advance of upcoming audits/site visits of subcontractors funded under this contract as part of the regularly scheduled communications, including goals and agenda. BARDA reserves the right to observe the audit. Upon completion of the audit/site visit the Contractor shall provide a report capturing the findings, results and next steps in proceeding with the subcontractor. If action is requested of the subcontractor, details addressing areas of non-conformance to FDA regulations for GLP, GMP, or GCP guidelines, as identified in the audit report, must be provided to BARDA. The Contractor shall provide responses from the subcontractors to address these concerns and plans for corrective action execution.	· The Contractor shall inform the COTR and CO 10 days in advance of upcoming audits/site visits of subcontractors · The Contractor shall notify the COTR and CO within 5 business days of report completion	1 Electronic Copy to COTR and CO
22.	BARDA Audit	Ad Hoc	The contractor shall accommodate periodic or *ad hoc* site visits by BARDA. If BARDA or the Contractor identifies any material issues during an audit, the Contractor shall capture the issues, identify potential solutions, and provide a report to BARDA.	· If BARDA or the Contractor identifies any material issues during an audit, the Contractor shall capture the issues, identify potential solutions, and provide a report to BARDA within 10 business days. · The COTR and CO will review the deliverable and provide a response to the Contractor. · If corrective action is recommended and	1 Electronic Copy to COTR and CO

#	Type of Deliverable	Frequency/ time periods	Description of Deliverable	Reporting Procedures	Quantity/ Form
				undertaken, then Contractor will provide a final report to BARDA upon completion.	
23.	Technical Documents	Within 10 business days upon request by CO/COTR and 8 business days prior to submission to FDA	Contractor shall provide COTR and CO upon request with deliverables from the following contract funded activities: Process Development Reports, Assay Qualification Plan/Report, Assay Validation Plan/Report, Assay Technology Transfer Report, Batch Records, SOPs, Master Production Records, Certificate of Analysis (The CO and COTR reserves the right to request within the period of performance a non-proprietary Technical Documents for distribution within the USG)	· Contractor shall provide Technical documents within 10 business days upon request by CO/COTR · If additional time is required, Contractor shall request additional time from BARDA on a per deliverable basis · If corrective action is recommended , the Contractor must address in writing its consideration of concerns raised by BARDA · Contractor will submit proposed FDA Technical Documents to BARDA at least 5 business days prior to FDA submission · If corrective action is recommended, the Contractor must address in writing its consideration of all concerns raised by BARDA before FDA Submission	For Final Documents: 1 Electronic Copy to COTR and CO
24.	Animal Model or Other Technology Transfer Package	Within 10 business days of request by CO/COTR	Contractor shall provide Animal Model or Other Technology Transfer Package relevant data	· Contractor shall provide Animal Model or other Technology Transfer Package within 10 business days of request by CO/COTR	1 Electronic Copy to COTR and CO
25.	EVMS Raw Data	Within 20 business days after receipt of request by CO/COTR	Contractor shall provide EVMS Raw Data for review by BARDA, if requested, in accordance with FAR 52.215-2, Audit and Records-Negotiation	· Contractor shall provide Raw Data within 20 business days of request by CO/COTR	1 Electronic Copy to COTR and CO
26.	Samples of Therapeutics	Within 20 business	Contractor shall provide samples of non-GMP candidate therapeutics	· Contractor must submit samples of therapeutics	CO will provide

#	Type of Deliverable	Frequency/ time periods	Description of Deliverable	Reporting Procedures	Quantity/ Form
		days of request by CO/COTR	and GMP material manufactured with contract funding to include raw material, Bulk Drug Substance (BDS), Final Drug Product (FDP) and/or labeled and packaged treatment courses. The request will state the type of material and the amount but it is not to exceed the equivalent of 250 treatment courses or its individual manufacturing equivalent. The Contractor will be advised by the CO how samples are to be packaged and where samples are to be shipped. It is acceptable to label material "Not for Clinical Use". BARDA reserves the right to request samples throughout the period of performance.	within 20 business days of request by CO/COTR. · The Contractor will be advised by the CO how samples are to be packaged and where samples are to be shipped.	details upon request
27.	Publications	20 business days for manuscripts and 10 business days for abstracts	Any manuscript or scientific meeting abstract containing data generated under this contract must be submitted to BARDA for review prior to submission	· Contractor must submit all manuscript or scientific meeting abstract to COTR and CO within 20 business days for manuscripts and 10 business days for abstracts · Any Final submissions shall be submitted to BARDA concurrently or no later than one (1) business day of its submission	1 Electronic Copy to COTR and CO
28.	Press Releases	4 business days prior to release	The Contractor agrees to accurately and factually represent the work conducted under this contract in all press releases	· The Contractor shall ensure that the CO has received and approved an advanced copy of any press release to this contract not less than 4 business days prior to the issuance of the press release · Any final submissions shall be submitted to BARDA concurrently or no later than one (1) business day of its submission.	1 Electronic Copy to COTR and CO
29.	Contract financing Report	No later than the 30th business day after the end of the	The Financial Report shall be submitted by the Contractor in accordance with the instructions set forth in section G.4 of this contract.	The Contractor shall provide the contract financing report no later than the 30th business day after the end of the reporting period in	

#	Type of Deliverable	Frequency/ time periods	Description of Deliverable	Reporting Procedures	Quantity/ Form
		reporting period		accordance with the instructions set forth in section G.4 of this contract.	

2. **WBS Milestones/Deliverables and Technical Deliverables**

Contract Milestones and GO/NO GO Decision Gates						
Milestone #	Milestone Definition	GO/NO GO Decision Gates		Deliverable	WBS/SOW #	Date
		Go Criteria	No-Go Criteria			
1.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
2.	[...***...]	[...***...] [...***...]	[...***...] [...***...]	[...***...] [...***...] [...***...]	[...***...] [...***...]	[...***...] [...***...]
3.	[...***...]	[...***...]	[...***...]	[...***...][...***...][...***...] [...***...][...***...]	[...***...][...***...]	[...***...] [...***...]

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Contract Milestones and GO/NO GO Decision Gates						
Milestone #	Milestone Definition	GO/NO GO Decision Gates		Deliverable	WBS/SOW #	Date
		Go Criteria	No-Go Criteria			
4.	[...***...]	[...***...]	[...***...]	[...***...][...***...]	[...***...][...***...]	[...***...] [...***...]
5.	[...***...]	[...***...]	[...***...]	[...***...] [...***...] [...***...]	[...***...] [...***...]	[...***...] [...***...] [...***...]
6.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
7.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
8.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	

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Contract Milestones and GO/NO GO Decision Gates						
Milestone #	Milestone Definition	GO/NO GO Decision Gates		Deliverable	WBS/SOW #	Date
		Go Criteria	No-Go Criteria			
	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
9.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...][...***...]	[...***...]
10.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
11.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...] [...***...] [...***...] [...***...]	[...***...] [...***...] [...***...]

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Contract Milestones and GO/NO GO Decision Gates						
Milestone #	Milestone Definition	GO/NO GO Decision Gates		Deliverable	WBS/SOW #	Date
		Go Criteria	No-Go Criteria			
	[...***...]	[...***...]				
12.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
13.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
14.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
15.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]

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Contract Milestones and GO/NO GO Decision Gates						
Milestone #	Milestone Definition	GO/NO GO Decision Gates		Deliverable	WBS/SOW #	Date
		Go Criteria	No-Go Criteria			
	[...***...]	[...***...]	[...***...]			[...***...]
16.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
17.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
18.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
19.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]

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Contract Milestones and GO/NO GO Decision Gates						
Milestone #	Milestone Definition	GO/NO GO Decision Gates		Deliverable	WBS/SOW #	Date
		Go Criteria	No-Go Criteria			
		[...***...]	[...***...]	[...***...]		[...***...]
20.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
21.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...] [...***...] [...***...]
22.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
23.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
24.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]

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Contract Milestones and GO/NO GO Decision Gates						
Milestone #	Milestone Definition	GO/NO GO Decision Gates		Deliverable	WBS/SOW #	Date
		Go Criteria	No-Go Criteria			
25.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]
26.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]	[...***...]

Unless otherwise specified by the Contracting Officer, reports to be furnished to the Government under this contract (including invoices), shall be delivered electronically along with a concurrent email notification to the Contracting Officer, Contract Specialist, and COTR summarizing the electronic delivery.

In addition, unless otherwise specified by the Contracting Officer, a physical hard copy of reports to be furnished to the Government under this contract (including invoices), shall be sent and addressed as follows:

Contracting Officer's and Contracting Specialist's address:

Ethan J. Mueller, Contracting Officer (CO)
DHHS/OS/ASPR/AMCG
330 Independence Avenue, S.W.
Room G640
Washington, D.C. 20201
Ethan.Mueller@hhs.gov

Contracting Officer's Technical Representative's address:

Tyler Merkeley, M.S., MBA
Contracting Officer's Technical Representative (COTR)
330 Independence Avenue, S.W.
Washington, D.C. 20201
202-260-0315 (Office)
Tyler.Merkeley@hhs.gov

ARTICLE F.3. CLAUSES INCORPORATED BY REFERENCE, FAR 52.252-2 (FEBRUARY 1998)

The contract incorporates the following clause(s) by reference, with the same force and effect as if it were given in full text. Upon request, the Contracting Officer will make its full text available. Also, the full text of a clause may be accessed electronically at this address:
http://www.acquisition.gov/comp/far/index.html

FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSE:

52.242-15, Stop Work Order (August 1989) with Alternate I (April 1984).

SECTION G - CONTRACT ADMINISTRATION DATA

ARTICLE G.1. CONTRACTING OFFICER

The following Contracting Officer (CO) will represent the Government for the purpose of this contract:

Ethan J. Mueller, Contracting Officer
DHHS/OS/ASPR/AMCG
330 Independence Avenue, S.W.
Room G640
Washington, D.C. 2020
E-mail: Ethan.Mueller@hhs.gov

1) The Contracting Officer is the only individual who can legally commit the Government to the expenditure of public funds. No person other than the Contracting Officer can make any changes to the terms, conditions, general provisions, or other stipulations of this contract.
2) The Contracting Officer is the only person with the authority to act as agent of the Government under this contract. Only the Contracting Officer has authority to (1) direct or negotiate any changes in the statement of work; (2) modify or extend the period of performance; (3) change the delivery schedule; (4) authorize reimburse to the Contractor of any costs incurred during the performance of this contract; (5) otherwise change any terms and conditions of this contract.
3) No information other than that which may be contained in an authorized modification to this contract, duly issued by the Contracting Officer, which may be received from any person employed by the US Government, other otherwise, shall be considered grounds for deviation from any stipulation of this contract.
4) The Government may unilaterally change its COTR designation.

ARTICLE G.2. CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR)

The following Contracting Officer's Technical Representative (COTR) will represent the Government for the purpose of this contract:

Tyler Merkeley, M.S., MBA
Contracting Officer’s Technical Representative (COTR)
Biomedical Advanced Research and Development Authority (BARDA)
Office of the Assistant Secretary for Preparedness and Response
Department of Health and Human Services
202-260-0315 (Office)
Tyler.Merkeley@hhs.gov

Mailing Address:
330 Independence Avenue, SW
Washington, D.C. 20201
202-260-0315 (Office)
e-mail: Tyler.Merkeley@hhs.gov

Alternate PO/COTR:
Dr. Joseph Larsen
Alternate Contracting Officer's Technical Representative (COTR)
BARDA/ASPR/HHS
330 Independence Avenue, SW
Washington, D.C. 20201
202-260-0050(Office)
e-mail: Joseph.Larsen@hhs.gov

The COTR is responsible for: (1) monitoring the Contractor's technical progress, including the surveillance and assessment of performance and recommending to the Contracting Officer changes in requirements; (2) assisting the contracting Officer in interpreting the statement of work and any other technical performance requirements; (3) performing technical evaluation as required; (4) performing technical inspections and acceptances required by this contract; and (5) assisting in the resolution of technical problems encountered during performance.

ARTICLE G.3. KEY PERSONNEL

Pursuant to the Key Personnel clause incorporated in Section I of this contract, the following individuals are considered to be essential to the work being performed hereunder:

#	NAME	ORGANIZATION	TITLE
1	[...***...]	Chimerix	[...***...]
2	[...***...]	Chimerix	[...***...]
3	[...***...]	Chimerix	[...***...]
4	[...***...]	Chimerix	[...***...]
5	[...***...]	Chimerix	[...***...]
6	[...***...]	Chimerix	[...***...]
7	[...***...]	Chimerix	[...***...]
8			
9			
10			
11			
12			
13			
14			
15			
16			

The key personnel specified in this contract are considered to be essential to work performance. At least 30 business days prior to diverting any of the specified individuals to other programs or contracts, including, where practicable, an instance when an individual must be replaced as a result of leaving the employ of the Contractor, the Contractor shall notify the Contracting Officer and shall submit comprehensive justification for the diversion or replacement request (including proposed substitutions for key personnel) to permit evaluation by the Government of the impact on performance under this contract. The Contractor shall not divert or otherwise replace any key personnel without the written consent of the Contracting Officer.

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ARTICLE G.4. CONTRACT FINANCIAL REPORT

a. Financial reports on the attached Financial Report of Individual Project/Contract (see Attachments 2 and 3) shall be submitted by the Contractor in accordance with the instructions for completing this form, which accompany the form, in an original and two copies, not later than the 30th business day after the close of the reporting period. The line entries for subdivisions of work and elements of cost (expenditure categories) which shall be reported within the total contract are discussed in paragraph e., below. Subsequent changes and/or additions in the line entries shall be made in writing.

b. Unless otherwise stated in that part of the instructions for completing this form, entitled " PREPARATION INSTRUCTIONS ," (see Attachment 4) all columns A through J, shall be completed for each report submitted.

c. The first financial report shall cover the period consisting of the first full three calendar months following the date of the contract, in addition to any fractional part of the initial month. Thereafter, reports will be on a quarterly basis.

d. The Contracting Officer may require the Contractor to submit detailed support for costs contained in one or more interim financial reports. This clause does not supersede the record retention requirements in FAR Part 4.7.

e. The listing of expenditure categories to be reported is incorporated within the Attachment entitled, "Financial Report of Individual Project/Contract," located in SECTION J and made a part of this contract.

f. The Government may unilaterally revise the “Financial Report of Individual Project/Contract” to reflect the allotment of additional funds.

ARTICLE G.5. INVOICE/FINANCING REQUEST AND CONTRACT FINANCIAL REPORTING

1) The Contractor shall submit an electronic copy of contract monthly invoices/financial reports to the address shown below:

   DHHS/OS/ASPR/AMCG
   Attn: Ethan J. Mueller, Contracting Officer
   330 Independence Ave., S.W.
   Room G640
   Washington, D.C. 20201

2) Contractor invoices/financial reports shall conform to the form, format, and content requirements of the instructions for Invoice/Financing requests and Contract Financial Reporting made a part of the contract in Section J (See also Attachment 2) .

3) Monthly invoices must include the cumulative total expenses to date, adjusted (as applicable) to show any amounts suspended by the Government.

4) The Contractor agrees to immediately notify the Contracting Officer in writing if there is an anticipated overrun (any amount) or unexpended balance (greater than 10 percent) of the estimated costs for the base segment or any option segment(s) (See estimated costs under Articles B.2. and B.3., CLINs 0001 through 0005 to the contract) and the reasons for the variance. Also refer to the requirements of the Limitation of Cost FAR 52.232-20 clause in the contract.

5) All invoice submissions shall be in accordance with FAR Clause 52.232-25 (c) in Section I of this contract.

ARTICLE G.6. REIMBURSEMENT OF COST

1) The Government shall reimburse the Contractor the cost determined by the Contracting Officer to be allowable (hereinafter referred to as allowable cost) in accordance with the clause entitled Allowable Cost and Payment in Section I, Contract Clauses, and FAR Subpart 31.2. Examples of allowable costs include, but are not limited to, the following:

   a) All direct materials and supplies that are used in the performing of the work provided for under the contract, including those purchased for subcontracts and purchase orders.

   b) All direct labor, including supervisory, that is properly chargeable directly to the contract, plus fringe benefits.

   c) All other items of cost budgeted for and accepted in the negotiation of this basic contract or modifications thereto.

   d) Travel costs including per diem or actual subsistence for personnel while in an actual travel status in direct performance of the work and services required under this contract subject to the following:

      (i) Air travel shall be by the most direct route using “air coach” or “air tourist” (less than first class) unless it is clearly unreasonable or impractical (e.g., not available for reasons other than avoidable delay in making reservations, would require circuitous routing or entail additional expense offsetting the savings on fare, or would not make necessary connections).

      (ii) Rail travel shall be by the most direct route, first class with lower berth or nearest equivalent.

      (iii) Costs incurred for lodging, meals, and incidental expenses shall be considered reasonable and allowable to the extent that they do not exceed on a daily basis the per diem rates set forth in the Federal Travel Regulation (FTR).

      (iv) Travel via privately owned automobile shall be reimbursed at not more than the current General Services Administration (GSA) FTR established mileage rate.

ARTICLE G.7. INDIRECT COST RATES

The following rates will be utilized for billing purposes during the base period. Fringe benefits at [...***...]% and G&A at [...***...]%. The billing rates for each option period will be based on the incurred cost submission for the previous calendar year, subject to Government audit adjustments. Final rate proposals must be sent to the Contracting Officer, within 6 months subsequent to the fiscal year end. (See also FAR Clause 52.216-7 incorporated herein)

ARTICLE G.8. POST AWARD EVALUATION OF CONTRACTOR PERFORMANCE

1. Contractor Performance Evaluations

Interim and final evaluations of Contractor performance will be prepared on this contract in accordance with FAR Subpart 42.15. The final performance evaluation will be prepared at the time of completion of work. In addition to the final evaluation, an interim evaluation shall be submitted June 29, 2012.

Interim and final evaluations will be provided to the Contractor as soon as practicable after completion of the evaluation. The Contractor will be permitted thirty days to review the document and to submit additional information or a rebutting statement. If agreement cannot be reached between the parties, the matter will be referred to an individual one level above the Contracting Officer whose decision will be final.

Copies of the evaluations, Contractor responses, and review comments, if any, will be retained as part of the contract file, and may be used to support future award decisions.

2. Electronic Access to Contractor Performance Evaluations

Contractors that have Internet capability may access evaluations through a secure Web site for review and comment by completing the registration form that can be obtained at the following address:

http://oamp.od.nih.gov/OD/CPS/cps.asp

The registration process requires the Contractor to identify an individual that will serve as a primary contact and who will be authorized access to the evaluation for review and comment. In addition, the Contractor will be required to identify an alternate contact who will be responsible for notifying the cognizant contracting official in the event the primary contact is unavailable to process the evaluation within the required 30-day time frame.

ARTICLE G.9. CONTRACT COMMUNICATIONS/CORRESPONDENCE (JULY 1999)

The Contractor shall identify all correspondence, reports, and other data pertinent to this contract by imprinting the contract number from Page 1 of the contract.

ARTICLE G.10. GOVERNMENT PROPERTY

1. In addition to the requirements of the clause, GOVERNMENT PROPERTY, incorporated in SECTION I of this contract, the Contractor shall comply with the provisions of HHS Publication, "Contractor's Guide for Control of Government Property," which is incorporated into this contract by reference. This document can be accessed at:

http://www.hhs.gov/oamp/policies/contractors_guide_for_control_of_gov_property.pdf .. Among other issues, this publication provides a summary of the Contractor's responsibilities regarding purchasing authorizations and inventory and reporting requirements under the contract.

2. Notwithstanding the provisions outlined in the HHS Publication, "Contractor's Guide for Control of Government Property," which is incorporated in this contract in paragraph 1. above, the Contractor shall use the form entitled, "Report of Government Owned, Contractor Held Property" for submitting summary reports required under this contract, as directed by the Contracting Officer or his/her designee. This form is included as an attachment in SECTION J of this contract.

3. Title will vest in the Government for equipment purchased as a direct cost.

SECTION H - SPECIAL CONTRACT REQUIREMENTS

ARTICLE H.1. PROTECTION OF HUMAN SUBJECTS, HHSAR 352.270-4 (January 2006)

(a) The Contractor agrees that the rights and welfare of human subjects involved in research under this contract shall be protected in accordance with 45 CFR Part 46 and with the Contractor's current Assurance of Compliance on file with the Office for Human Research Protections (OHRP), Department of Health and Human Services. The Contractor further agrees to provide certification at least annually that the Institutional Review Board has reviewed and approved the procedures, which involve human subjects in accordance with 45 CFR Part 46 and the Assurance of Compliance.

(b) The Contractor shall bear full responsibility for the performance of all work and services involving the use of human subjects under this contract and shall ensure that work is conducted in a proper manner and as safely as is feasible. The parties hereto agree that the Contractor retains the right to control and direct the performance of all work under this contract. The Contractor shall not deem anything in this contract to constitute the Contractor or any subcontractor, agent or employee of the Contractor, or any other person, organization, institution, or group of any kind whatsoever, as the agent or employee of the Government. The Contractor agrees that it has entered into this contract and will discharge its obligations, duties, and undertakings and the work pursuant thereto, whether requiring professional judgment or otherwise, as an independent contractor without imputing liability on the part of the Government for the acts of the Contractor or its employees.

(c) If at any time during the performance of this contract, the Contracting Officer determines, in consultation with OHRP that the Contractor is not in compliance with any of the requirements and/or standards stated in paragraphs (a) and (b) above, the Contracting Officer may immediately suspend, in whole or in part, work and further payments under this contract until the Contractor corrects the noncompliance. The Contracting Officer may communicate the notice of suspension by telephone with confirmation in writing. If the Contractor fails to complete corrective action within the period of time designated in the Contracting Officer's written notice of suspension, the Contracting Officer may, after consultation with OHRP, terminate this contract in whole or in part, and the Contractor's name may be removed from the list of those contractors
with approved Human Subject Assurances.

ARTICLE H.2. HUMAN MATERIALS (ASSURANCE OF OHRP COMPLIANCE)

The acquisition and supply of all human specimen material (including fetal material) used under this contract shall be obtained by the Contractor in full compliance with applicable Federal, State and Local laws and the provisions of the Uniform Anatomical Gift Act in the United States, and no undue inducements, monetary or otherwise, will be offered to any person to influence their donation of human material.

The Contractor shall provide written documentation that all human materials obtained as a result of research involving human subjects conducted under this contract, by collaborating sites, or by subcontractors identified under this contract, were obtained with prior approval by the Office for Human Research Protections (OHRP) of an Assurance to comply with the requirements of 45 CFR 46 to protect human research subjects. This restriction applies to all collaborating sites without OHRP-approved Assurances, whether domestic or foreign, and compliance must be ensured by the Contractor.

Provision by the Contractor to the Contracting Officer of a properly completed "Protection of Human Subjects Assurance Identification/IRB Certification/Declaration of Exemption", Form OMB No. 0990-0263(formerly Optional Form 310), certifying IRB review and approval of the protocol from which the human materials were obtained constitutes the written documentation required. The human subject certification can be met by submission of a self designated form provided that it contains the information required by the "Protection of Human Subjects Assurance Identification/IRB Certification/Declaration of Exemption", Form OMB No. 0990-0263(formerly Optional Form 310).

ARTICLE H.3. RESEARCH INVOLVING HUMAN FETAL TISSUE

All research involving human fetal tissue shall be conducted in accordance with the Public Health Service Act, 42 U.S.C. 289g-1 and 289g-2. Implementing regulations and guidance for conducting research on human fetal tissue may be found at 45 CFR 46, Subpart B and http://grants1.nih.gov/grants/guide/notice-files/not93-235.html and any subsequent revisions to this NIH Guide to Grants and Contracts ("Guide") Notice.

The Contractor shall make available, for audit by the Secretary, HHS, the physician statements and informed consents required by 42 USC 289g-1(b) and (c), or ensure HHS access to those records, if maintained by an entity other than the Contractor.

ARTICLE H.4. NEEDLE EXCHANGE

The Contractor shall not use contract funds to carry out any program of distributing sterile needles or syringes for the hypodermic injection of any illegal drug.

ARTICLE H.5.

RESERVED.

ARTICLE H.6. CARE OF LIVE VERTEBRATE ANIMALS, HHSAR 352.270-5 (October 2009)

(a) Before undertaking performance of any contract involving animal-related activities where the species is regulated by USDA, the Contractor shall register with the Secretary of Agriculture of the United States in accordance with 7 U.S.C. 2136 and 9 CFR sections 2.25 through 2.28. The Contractor shall furnish evidence of the registration to the Contracting Officer.

(b) The Contractor shall acquire vertebrate animals used in research from a dealer licensed by the Secretary of Agriculture under 7 U.S.C. 2133 and 9 CFR Sections 2.1-2.11, or from a source that is exempt from licensing under those sections.

(c) The Contractor agrees that the care, use and intended use of any live vertebrate animals in the performance of this contract shall conform with the Public Health Service (PHS) Policy on Humane Care of Use of Laboratory Animals (PHS Policy), the current Animal Welfare Assurance (Assurance), the Guide for the Care and Use of Laboratory Animals (National Academy Press, Washington, DC) and the pertinent laws and regulations of the United States Department of Agriculture (see 7 U.S.C. 2131 et seq. and 9 CFR Subchapter A, Parts 1-4). In case of conflict between standards, the more stringent standard shall govern.

(d) If at any time during performance of this contract, the Contracting Officer determines, in consultation with the Office of Laboratory Animal Welfare (OLAW), National Institutes of

Health (NIH), that the Contractor is not in compliance with any of the requirements and standards stated in paragraphs (a) through (c) above, the Contracting Officer may immediately suspend, in whole or in part, work and further payments under this contract until the Contractor corrects the noncompliance. Notice of the suspension may be communicated by telephone and confirmed in writing. If the Contractor fails to complete corrective action within the period of time designated in the Contracting Officer's written notice of suspension, the Contracting Officer may, in consultation with OLAW, NIH, terminate this contract in whole or in part, and the Contractor's name may be removed from the list of those contractors with approved Assurances.

Note: The Contractor may request registration of its facility and a current listing of licensed dealers from the Regional Office of the Animal and Plant Health Inspection Service (APHIS), USDA, for the region in which its research facility is located. The location of the appropriate APHIS Regional Office, as well as information concerning this program may be obtained by contacting the Animal Care Staff, USDA/APHIS, 4700 River Road, Riverdale, Maryland 20737 (E-mail: ace@aphis.usda.gov; Web site: (http://www.aphis.usda.gov/animal_welfare).

ARTICLE H.7. ANIMAL WELFARE

All research involving live, vertebrate animals shall be conducted in accordance with the Public Health Service Policy on Humane Care and Use of Laboratory Animals. This policy may be accessed at:
http://grants1.nih.gov/grants/olaw/references/phspol.htm

ARTICLE H.8. PROTECTION OF PERSONNEL WHO WORK WITH NONHUMAN PRIMATES

All Contractor personnel who work with nonhuman primates or enter rooms or areas containing nonhuman primates shall comply with the procedures set forth in NIH Policy

Manual 3044-2, entitled, "Protection of NIH Personnel Who Work with Nonhuman Primates," located at the following URL:

http://www1.od.nih.gov/oma/manualchapters/intramural/3044-2/

ARTICLE H.9. PUBLICATION AND PUBLICITY

No information related to data obtained under this contract shall be released or publicized without the prior written consent of the Contracting Officer Technical Representative.

In addition to the requirements set forth in HHSAR Clause 352.227-70, Publications and Publicity incorporated by reference in SECTION I of this contract, the Contractor shall acknowledge the support of the Biomedical Advanced Research and Development Authority whenever publicizing the work under this contract in any media by including an acknowledgment substantially as follows:

"This project has been funded in whole or in part with Federal funds from the Biomedical Advanced Research and Development Authority, Office of the Assistant Secretary for Preparedness and Response, Office of the Secretary, Department of Health and Human Services, under Contract No. _____"

ARTICLE H.10. REPORTING MATTERS INVOLVING FRAUD, WASTE AND ABUSE

Anyone who becomes aware of the existence or apparent existence of fraud, waste and abuse in BARDA funded programs is encouraged to report such matters to the HHS Inspector General's Office in writing or on the Inspector General's Hotline. The toll free number is 1-800-HHS-TIPS (1-800-447-8477). All telephone calls will be handled confidentially. The e-mail address is Htips@os.dhhs.gov and the mailing address is:

Office of Inspector General
Department of Health and Human Services
TIPS HOTLINE
P.O. Box 23489
Washington, D.C. 20026

ARTICLE H.11. PROHIBITION ON CONTRACTOR INVOLVEMENT WITH TERRORIST

ACTIVITIES

The Contractor acknowledges that U.S. Executive Orders and Laws, including but not limited to E.O. 13224 and P.L. 107-56, prohibit transactions with, and the provision of resources and support to, individuals and organizations associated with terrorism. It is the legal responsibility of the Contractor to ensure compliance with these Executive Orders and Laws. This clause must be included in all subcontracts issued under this contract.

ARTICLE H.12. CONFLICT OF INTEREST

The Contractor represents and warrants that, to the best of the Contractor's knowledge and belief, there are no relevant facts or circumstances which could give rise to an organizational conflict of interest, as defined in FAR Subpart 9.5, or that the Contractor has disclosed all such relevant information. Prior to commencement of any work, the Contractor agrees to notify the Contracting Officer promptly that, to the best of its knowledge and belief, no actual or potential conflict of interest exists or to identify to the Contracting Officer any actual or potential conflict of interest the firm may have. In emergency situations, however, work may begin but notification shall be made within five (5) working days. The Contractor agrees that if an actual or potential organizational conflict of interest is identified during performance, the

Contractor shall promptly make a full disclosure in writing to the Contracting Officer. This disclosure shall include a description of actions, which the Contractor has taken or proposes to take, after consultation with the Contracting Officer, to avoid, mitigate, or neutralize the actual or potential conflict of interest. The Contractor shall continue performance until notified by the Contracting Officer of any contrary action to be taken. Remedies include termination of this contract for convenience, in whole or in part, if the Contracting Officer deems such termination necessary to avoid an organizational conflict of interest. If the Contractor was aware of a potential organizational conflict of interest prior to award or discovered an actual or potential conflict after award and did not disclose it or misrepresented relevant information to the Contracting Officer, the Government may terminate the contract for default, debar the Contractor from Government contracting, or pursue such other remedies as may be permitted by law or this contract.

ARTICLE H.13. EXERCISE OF OPTIONS

Unless the Government exercises its option pursuant to the Option Clause set forth in Section I, Article I.3, the contract will consist only of **CLIN 0001** of the Statement of Work, Deliverables and Requirements as defined in Sections C, F and J of the contract. Pursuant to **FAR Clause 52.217-9 (Option to Extend the Term of the Contract)** set forth in Section I of this contract, under Article I.3., the Government may, by unilateral contract modification, require the Contractor to perform **any of the additional CLINs listed in Section B, Article B.3.,** and as also defined in Sections C, F and J of this contract. If the Government exercises an option, written notice must be given to the Contractor within 30 days after the Government has completed its analysis of the deliverables associated with the applicable GO/NO GO Decision gate*;* and the Government must give the Contractor a preliminary written notice of its intent to exercise the option at least 30 days before the contract expires. The amount of the contract may then be increased as set forth in Section B, Article B.3 provided that funds are available.

ARTICLE H.14. PROHIBITION ON THE USE OF APPROPRIATED FUNDS FOR LOBBYING ACTIVITIES AND HHSAR 352.203-70 ANTI-LOBBYING (Jan 2006)

The Contractor is hereby notified of the restrictions on the use of Department of Health and Human Service's funding for lobbying of Federal, State and Local legislative bodies.

Section 1352 of Title 10, United Stated Code (Public Law 101-121, effective 12/23/89), among other things, prohibits a recipient (and their subcontractors) of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds (other than profits from a federal contract) to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions; the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; or the modification of any Federal contract, grant, loan, or cooperative agreement. For additional information of prohibitions against lobbying activities, see FAR Subpart 3.8 and FAR Clause 52.203-12.

In addition, as set forth in HHSAR 352.203-70 “Anti-Lobbying” (January 2006), the current Department of Health and Human Services Appropriations Act provides that no part of any appropriation contained in this Act shall be used, other than for normal and recognized executive-legislative relationships, for publicity or propaganda purposes, for the preparation, distribution, or use of any kit, pamphlet, booklet, publication, radio, television, or video presentation designed to support, or defeat legislation pending before the Congress, or any State or Local legislature except in presentation to the Congress, or any State or Local legislative body itself.

The current Department of Health and Human Services Appropriations Act also provides that no part of any appropriation contained in this Act shall be used to pay the salary or expenses of any contract or grant recipient, or agent acting for such recipient, related to any activity designed to influence legislation or appropriations pending before the Congress, or any State or Local legislature.

ARTICLE H.15. PRIVACY ACT APPLICABILITY (Apr 2000)

1) Notification is hereby given that the Contractor and its employees are subject to criminal penalties for violation of the Privacy Act to the same extent as employees of the Government. The Contractor shall assure that each of its employees knows the prescribed rules of conduct and that each is aware that he or she can be subjected to criminal penalty for violation of the Act. A copy of 45 CFR Part 5b, Privacy Act Regulations, may be obtained at http://www.gpoaccess.gov/cfr/index.html

2) The Project Officer is hereby designated as the official who is responsible for monitoring contractor compliance with the Privacy Act.

3) The Contractor shall follow the Privacy Act guidance as contained in the Privacy Act System of Records number 09-25-0200. This document may be obtained at the following link: http://oma.od.nih.gov/ms/privacy/pa-files/0200.htm

ARTICLE H.16. LABORATORY LICENSE REQUIREMENTS (May 1998)

The Contractor shall comply with all applicable requirements of Section 353 of the Public Health Service Act (Clinical Laboratory Improvement Act as amended). This requirement shall also be included in any subcontract for services under the contract.

ARTICLE H.17. DISSEMINATION OF INFORMATION (May 1998)

No information related to data obtained under this contract shall be released or publicized without the prior written consent of the Contracting Officer.

ARTICLE H.18. IDENTIFICATION AND DISPOSITION OF DATA

The Contractor will be required to provide certain data generated under this contract to the Department of Health and Human Services (DHHS). DHHS reserves the right to review any other data determined by DHHS generated under this contract. The Contractor shall keep copies of all data required by the Food and Drug Administration (FDA) relevant to this contract for the time specified by the FDA.

ARTICLE H.19. INFORMATION ON COMPLIANCE WITH ANIMAL CARE REQUIREMENTS

Registration with the U. S. Dept. of Agriculture (USDA) is required to use regulated species of animals for biomedical purposes. USDA is responsible for the enforcement of the Animal Welfare Act (7 U.S.C. 2131 et. seq.), http://www.nal.usda.gov/awic/legislat/awa.htm.

The Public Health Service (PHS) Policy is administered by the Office of Laboratory Animal Welfare (OLAW) http://grants2.nih.gov/grants/olaw/olaw.htm. An essential requirement of the PHS Policy http://grants2.nih.gov/grants/olaw/references/phspol.htm is that every institution using live vertebrate animals must obtain an approved assurance from OLAW before they can receive funding from any component of the U. S. Public Health Service.

The PHS Policy requires that Assured institutions base their programs of animal care and use on the *Guide for the Care and Use of Laboratory Animals* http://www.nap.edu/readingroom/books/labrats/ and that they comply with the regulations (9 CFR, Subchapter A) http://www.nal.usda.gov/awic/legislat/usdaleg1.htm issued by the U.S. Department of Agriculture (USDA) under the Animal Welfare Act. The *Guide* may differ from USDA regulations in some respects. Compliance with the USDA regulations is an absolute requirement of this Policy.

The Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC) http://www.aaalac.org is a professional organization that inspects and evaluates programs of animal care for institutions at their request. Those that meet the high standards are given the accredited status. As of the 2002 revision of the PHS Policy, the only accrediting body recognized by PHS is the AAALAC. While AAALAC Accreditation is not required to conduct biomedical research, it is highly desirable. AAALAC uses the *Guide* as their primary evaluation tool. They also use the *Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching*. It is published by the Federated of Animal Science Societies http://www.fass.org.

ARTICLE H.20. REQUIREMENTS FOR ADEQUATE ASSURANCE OF PROTECTION OF VERTEBRATE ANIMAL SUBJECTS

The PHS Policy on Humane Care and Use of Laboratory Animals requires that applicant organizations proposing to use vertebrate animals file a written Animal Welfare Assurance with the Office for Laboratory Animal Welfare (OLAW), establishing appropriate policies and procedures to ensure the humane care and use of live vertebrate animals involved in research activities supported by the PHS. The PHS Policy stipulates that an applicant organization, whether domestic or foreign, bears responsibility for the humane care and use of animals in PHS-supported research activities. Also, the PHS policy defines “animal” as “any live, vertebrate animal used, or intended for use, in research, research training, experimentation, biological testing or for related purposes”. This Policy implements and supplements the U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training, and requires that institutions use the Guide for the Care and Use of Laboratory Animals as a basis for developing and implementing an institutional animal care and use program. This Policy does not affect applicable State or local laws or regulations that impose more stringent standards for the care and use of laboratory animals. All institutions are required to comply, as applicable, with the Animal Welfare Act as amended (7 USC 2131 et. seq.) and other Federal statutes and regulations relating to animals. These documents are available from the Office of Laboratory Animal Welfare, National Institutes of Health, Bethesda, MD 20892, (301) 496-7163. See http://grants.nih.gov/grants/olaw/olaw.htm.

No PHS supported work for research involving vertebrate animals will be conducted by an organization, unless that organization is operating in accordance with an approved Animal Welfare Assurance and provides verification that the Institutional Animal Care and Use Committee (IACUC) has reviewed and approved the proposed activity in accordance with the PHS policy. Applications may be referred by the PHS back to the institution for further review in the case of apparent or potential violations of the PHS Policy. No award to an individual will be made unless that individual is affiliated with an assured organization that accepts responsibility for compliance with the PHS Policy. Foreign applicant organizations applying for PHS awards for activities involving vertebrate animals are required to comply with PHS Policy or provide evidence that acceptable standards for the humane care and use of animals will be met. Foreign applicant organizations are not required to submit IACUC approval, but should provide information that is satisfactory to the Government to provide assurances for the humane care of such animals.

ARTICLE H.21. APPROVAL OF REQUIRED ASSURANCE BY OLAW

Under governing regulations, federal funds which are administered by the Department of Health and Human Services, Office of Biomedical Advanced Research and Development Authority (BARDA) shall not be expended by the Contractor for research involving live vertebrate animals, nor shall live vertebrate animals be involved in research activities by the Contractor under this award unless a satisfactory assurance of compliance with 7 U.S.C. 2316 and 9 CFR Sections 2.25-2.28 is submitted within 30 days of the date of this award and approved by the Office of Laboratory Animal Welfare (OLAW). Each performance site (if any) must also assure compliance with 7 U.S.C. 2316 and 9 CFR Sections 2.25-2.28 with the following restriction: Only activities which do not directly involve live vertebrate animals (i.e. are clearly severable and independent from those activities that do involve live vertebrate animals) may be conducted by the Contractor or individual performance sites pending OLAW approval of their respective assurance of compliance with 7 U.S.C. 2316 and 9 CFR Sections 2.25-2.28. Additional information regarding OLAW may be obtained via the Internet at http://grants2.nih.gov/grants/olaw/references/phspol.htm.

ARTICLE H.22. REGISTRATION WITH THE SELECT AGENT PROGRAM FOR WORK INVOLVING THE POSSESSION, USE, AND/OR TRANSFER OF SELECT BIOLOGICAL AGENTS OR TOXINS

Work involving select biological agents or toxins shall not be conducted under this contract until the Contractor and any affected subcontractor(s) are granted a certificate of registration or are authorized to work with the applicable select agents.

For prime or subcontract awards to domestic institutions who possess, use, and/or transfer Select Agents under this contract, the institution must complete registration with the Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (DHHS) or the Animal and Plant Health Inspection Services (APHIS), U.S. Department of Agriculture (USDA), as applicable, before performing work involving Select Agents, in accordance with 42 CFR 73. No Government funds can be used for work involving Select Agents, as defined in 42 CFR 73, if the final registration certificate is denied.

For prime or subcontract awards to foreign institutions who possess, use, and/or transfer Select Agents under this contract, the institution must provide information satisfactory to the Government that a process equivalent to that described in 42 CFR 73 (http://www.cdc.gov/od/sap/docs/42cfr73.pdf) for U.S. institutions is in place and will be administered on behalf of all Select Agent work sponsored by these funds before using these funds for any work directly involving the Select Agents. The Contractor must provide information addressing the following key elements appropriate for the foreign institution: safety, security, training, procedures for ensuring that only approved/appropriate individuals have access to the Select Agents, and any applicable laws, regulations and policies equivalent to 42 CFR 73. The Government will assess the policies and procedures for comparability to the U.S. requirements described in 42 CFR Part 73. When requested by the contracting officer, the Contractor shall provide key information delineating any laws, regulations, policies, and procedures applicable to the foreign institution for the safe and secure possession, use, and transfer of Select Agents. This includes summaries of safety, security, and training plans, and applicable laws, regulations, and policies. For the purpose of security risk assessments, the Contractor must provide the names of all individuals at the foreign institution who will have access to the Select Agents and procedures for ensuring that only approved and appropriate individuals have access to Select Agents under the contract.

Listings of HHS select agents and toxins, biologic agents and toxins, and overlap agents or toxins as well as information about the registration process, can be obtained on the Select Agent Program Web site at http://www.cdc.gov/od/sap/.

ARTICLE H.23. EPA ENERGY STAR REQUIREMENTS

In compliance with Executive Order 12845 (requiring Agencies to purchase energy efficient computer equipment) all microcomputers, including personal computers, monitors, and printers that are purchased using Government funds in performance of a contract shall be equipped with or meet the energy efficient low-power standby feature as defined by the EPA Energy Star program unless the equipment always meets EPA Energy Star efficiency levels. The microcomputer, as configured with all components, must be Energy Star compliant.

This low-power feature must already be activated when the computer equipment is delivered to the agency and be of equivalent functionality of similar power managed models. If the equipment will be used on a local area network, the vendor must provide equipment that is fully compatible with the network environment. In addition, the equipment will run commercial off-the-shelf software both before and after recovery from its energy conservation mode.

ARTICLE H.24. MANUFACTURING STANDARDS

The Good Manufacturing Practice Regulations (GMP)(21 CFR Parts 210-211) and regulations pertaining to small molecules will be the standard to be applied for manufacturing, processing, packaging, storage and delivery of this product.

If at any time during the life of the contract, the Contractor fails to comply with GMP in the manufacturing, processing, packaging, storage, stability and other testing of the manufactured drug substance or product and delivery of this product and such failure results in a material adverse effect on the safety, purity or potency of the product (a material failure) as identified by the FDA, the Contractor shall have thirty (30) calendar days from the time such material failure is identified to cure such material failure. If, within the thirty (30) calendar day period, the Contractor fails to take such an action to the satisfaction of the USG Project Officer, or fails to provide a remediation plan that is acceptable to the COTR, then the contract may be terminated.

ARTICLE H.25. EXPORT CONTROL NOTIFICATION

Offerors are responsible for ensuring compliance with all export control laws and regulations that maybe applicable to the export of and foreign access to their proposed technologies. Offerors may consult with the Department of State with any questions regarding the International Traffic in Arms Regulation (ITAR) (22 CRF Parts 120-130) and /or the Department of Commerce regarding the Export Administration Regulations (15 CRF Parts 730-774).

ARTICLE H.26. INSTITUTIONAL RESPONSIBILITY REGARDING CONFLICTING INTERESTS OF INVESTIGATORS

The Contractor shall comply with the requirements of 45 CFR Part 94, Responsible Prospective Contractors, which promotes objectivity in research by establishing standards to ensure that investigators (defined as the principal investigator and any other person who is responsible for the design, conduct, or reporting of research funded under BARDA contracts) will not be biased by any conflicting financial interest. For the purposes of this part relating to financial interests, "Investigator" includes the Investigator's spouse and dependent children. 45 CFR Part 94 is available at the following Web site: http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr;sid=9f130b6d2d48bb73803ca91ce943be3a;rgn=div5;view=text;node=45%3A1.0.1.1.53;idno=45;cc=ecfr

As required by 45 CFR Part 94, the Contractor shall, at a minimum:

a. Maintain a written, enforceable policy on conflict of interest that complies with 45 CFR Part 94 and inform each investigator of the policy, the investigator's reporting responsibilities, and the applicable regulations. The Contractor must take reasonable steps to ensure that investigators working as collaborators or subcontractors comply with the regulations.

b. Designate an official(s) to solicit and review financial disclosure statements from each investigator participating in BARDA-funded research. Based on established guidelines consistent with the regulations, the designated official(s) must determine whether a conflict of interest exists, and if so, determine what actions should be taken to manage, reduce, or eliminate such conflict. A conflict of interest exists when the designated official(s) reasonably determines that a *Significant Financial Interest* could directly and significantly affect the design, conduct, or reporting of the BARDA-funded research. The Contractor may require the management of other conflicting financial interests in addition to those described in this paragraph, as it deems appropriate. Examples of conditions or restrictions that might be imposed to manage actual or potential conflicts of interests are included in 45 CFR Part 94, under Management of Conflicting Interests.

c. Require all financial disclosures to be updated during the period of the award, either on an annual basis or as new reportable Significant Financial Interests are obtained.

d. Maintain records, identifiable to each award, of all financial disclosures and all actions taken by the Contractor with respect to each conflicting interest 3 years after final payment or, where applicable, for the other time periods specified in 48 CFR Part 4, subpart 4.7, Contract Records Retention.

e. Establish adequate enforcement mechanisms and provide for sanctions where appropriate.

If a conflict of interest is identified, the Contractor shall report to the Contracting Officer the existence of the conflicting interest found. This report shall be made and the conflicting interest managed, reduced, or eliminated, at least on a temporary basis, within sixty (60) days of that identification.

If the failure of an investigator to comply with the conflict of interest policy has biased the design, conduct, or reporting of the BARDA-funded research, the Contractor must promptly notify the Contracting Officer of the corrective action taken or to be taken. The Contracting Officer will take appropriate action or refer the matter to the Contractor for further action which may include directions to the Contractor on how to maintain appropriate objectivity in the funded research.

The Contracting Officer may at any time inquire into the Contractor's procedures and actions regarding conflicts of interests in BARDA-funded research including a review of all records pertinent to compliance with 45 CFR Part 94. The Contracting Officer may require submission of the records or review them on site. On the basis of this review, the Contracting Officer may decide that a particular conflict of interest will bias the objectivity of the BARDA-funded research to such an extent that further corrective action is needed or that the Contractor has not managed, reduced, or eliminated the conflict of interest. The issuance of a Stop Work Order by the Contracting Officer may be necessary until the matter is resolved.

If the Contracting Officer determines that BARDA-funded clinical research, whose purpose is to evaluate the safety or effectiveness of a drug, medical device, or treatment, has been designed, conducted, or reported by an investigator with a conflict of interest that was not disclosed or managed, the Contractor must require disclosure of the conflict of interest in each public presentation of the results of the research.

ARTICLE H.27. REVIEW OF PRESS RELEASES

The contractor agrees to accurately and factually represent the work conducted under the contract in all press releases. Misrepresenting contract results or releasing information that is injurious to the integrity of BARDA may be construed as improper conduct. Press releases shall be considered to include the public release of information to any medium, excluding peer-reviewed scientific publications. The contractor shall ensure that the COTR has received an advance copy of any press release related to the contract not less than four (4) working days prior to the issuance of the press release.

PART II - CONTRACT CLAUSES

SECTION I - CONTRACT CLAUSES

ARTICLE I.1. FAR 52.252-2, CLAUSES INCORPORATED BY REFERENCE (FEBRUARY 1998)

This contract incorporates the following clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at these addresses: **http://www.arnet.gov**

General Clauses for Cost-Reimbursement Research and Development Contract

(1) FEDERAL ACQUISITION REGULATION (FAR) (48 CFR CHAPTER 1) CLAUSES:

FAR CLAUSE NO.	DATE	TITLE
52.202-1	Jul 2004	Definitions
52.203-3	Apr 1984	Gratuities (Over $100,000)
52.203-5	Apr 1984	Covenant Against Contingent Fees (Over $100,000)
52.203-6	Sep 2006	Restrictions on Subcontractor Sales to the Government (Over $100,000)
52.203-7	Oct 2010	Anti-Kickback Procedures (Over $100,000)
52.203-8	Jan 1997	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity (Over $100,000)
52.203-10	Jan 1997	Price or Fee Adjustment for Illegal or Improper Activity (Over $100,000)
52.203-12	Oct 2010	Limitation on Payments to Influence Certain Federal Transactions (Over $100,000)
52.203-13	Apr 2010	Contractor Code of Business Ethics and Conduct
52.203-14	Dec 2007	Display of Hotline Poster
52.204-4	Aug 2000	Printed or Copied Double-Sided on Recycled Paper (Over $100,000)
52.204-7	Apr 2008	Central Contractor Registration
52.209-6	Sep 2006	Protecting the Government’s Interests When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment (Over $25,000)

52.215-2	Oct 2010	Audit and Records - Negotiation (Over $100,000)
52.215-8	Oct 1997	Order of Precedence - Uniform Contract Format
52.215-10	Oct 2010	Price Reduction for Defective Certified Cost or Pricing Data
52.215-12	Oct 2010	Subcontractor Certified Cost or Pricing Data (Over $500,000)
52.215-14	Oct 2010	Integrity of Unit Prices (Over $100,000)
52.215-15	Oct 2010	Pension Adjustments and Asset Reversions
52.215-18	Jul 2005	Reversion or Adjustment of Plans for Post-Retirement Benefits (PRB) other than Pensions
52.215-19	Oct 1997	Notification of Ownership Changes
52.215-21	Oct 2010	Requirements for Certified Cost or Pricing Data or Information Other Than Certified Cost or Pricing Data – Modifications
52.216-7	Dec 2002	Allowable Cost and Payment (Note: the following language is included in this clause – "(3) The designated payment office will make interim payments for contract financing on the 30th day after the designated billing office receives a proper payment request…"
52.216-8	Mar 1997	Fixed Fee
52.219-8	Dec 2010	Utilization of Small Business Concerns (Over $100,000)
52.219-9	Oct 2010	Small Business Subcontracting Plan (Over $500,000)
52.219-16	Jan 1999	Liquidated Damages - Subcontracting Plan (Over $500,000)
52.222-3	Jun 2003	Convict Labor
52.222-19	Jul 2010	Child Labor – Cooperation with Authorities and Remedies
52.222-21	Feb 1999	Prohibition of Segregated Facilities
52.222-26	Mar 2007	Equal Opportunity
52.222-35	Sep 2010	Equal Opportunity for Veterans
52.222-36	Oct 2010	Affirmative Action for Workers with Disabilities
52.222-37	Sep 2010	Employment Reports on Veterans
52.222-50	Feb 2009	Combating Trafficking in Persons
52.222-54	Jan 2009	Employment Eligibility Verification
52.223-6	May 2001	Drug-Free Workplace
52.223-14	Aug 2003	Toxic Chemical Release Reporting (Over $100,000)
52.224-1	April 1984	Privacy Act Notification
52.224-2	April 1984	Privacy Act
52.225-1	Feb 2009	Buy American Act – Supplies

52.225-13	Jun 2008	Restrictions on Certain Foreign Purchases
52.227-1	Dec 2007	Authorization and Consent, Alternate I (Apr 1984)
52.227-2	Dec 2007	Notice and Assistance Regarding Patent and Copyright Infringement (Over $100,000)
52.227-11	Dec 2007	Patent Rights - Ownership by the Contractor
52.227-14	Dec 2007	Rights in Data – General, Alternate II (Dec 2007)
52.229-8	Mar 1990	Taxes—Foreign Cost-Reimbursement Contracts
52.230-4	Jun 2010	Disclosure and Consistency of Cost Accounting Practices—Foreign Concerns
52.232-9	Apr 1984	Limitation on Withholding of Payments
52.232-17	Oct 2010	Interest (Over $100,000)
52.232-20	Apr 1984	Limitation of Cost
52.232-23	Jan 1986	Assignment of Claims
52.232-25	Oct 2008	Prompt Payment
52.232-33	Oct 2003	Payment by Electronic Funds Transfer—Central Contractor Registration
52.233-1	Jul 2002	Disputes
52.233-3	Aug 1996	Protest After Award, Alternate I (June 1985)
52.233-4	Oct 2004	Applicable Law for Breach of Contract Claim
52.242-1	Apr 1984	Notice of Intent to Disallow Costs
52.242-3	May 2001	Penalties for Unallowable Costs (Over $500,000)
52.242-4	Jan 1997	Certification of Final Indirect Costs
52.242-13	Jul 1995	Bankruptcy (Over $100,000)
52.242-15	Aug 1989	Stop Work Order. Alt I (Aug 1984)
52.243-2	Aug 1987	Changes - Cost Reimbursement, Alternate V (Apr 1984)
52.244-2	Oct 2010	Subcontracts
52.244-5	Dec 1996	Competition in Subcontracting (Over $100,000)
52.244-6	Oct 2010	Subcontracts for Commercial Items
52.245-1	Aug 2010	Government Property
52.245-9	Aug 2010	Use and Charges
52.246-23	Feb 1997	Limitation of Liability (Over $100,000)
52.249-6	May 2004	Termination (Cost-Reimbursement)
52-249-14	Apr 1984	Excusable Delays
52.253-1	Jan 1991	Computer Generated Forms

(2) DEPARTMENT OF HEALTH AND HUMAN SERVICES ACQUISITION REGULATION (HHSAR) (48 CFR CHAPTER 3) CLAUSES:

HHSAR CLAUSE NO.	DATE	TITLE
352.202-1	Jan 2006	Definitions - with Alternate paragraph (h) (Jan 2001)
352.203-70	Jan 2006	Anti-Lobbying
352.216-70	Jan 2006	Additional Cost Principles
352.227-70	Jan 2006	Publications and Publicity
352.228-7	Dec 1991	Insurance - Liability to Third Persons
352.231-71	Jan. 2001	Pricing of adjustments.
352.233-71	Jan 2006	Litigation and Claims
352.234-3	Oct 2008	Full Earned Value Management System
352.242-70	Jan 2006	Key Personnel
352.242-73	Jan 2006	Withholding of Contract Payments
352.242-74	Apr 1984	Final Decisions on Audit Findings

ARTICLE I.2. ADDITIONAL CONTRACT CLAUSES

This contract incorporates the following clauses by reference, with the same force and effect, as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

a. FEDERAL ACQUISITION REGULATION (FAR) (48 CFR CHAPTER 1) CLAUSES

1. FAR Clause **52.215-17, Waiver of Facilities Capital Cost of Money** (October 1997).

2. FAR Clause 52.219-25, Small Disadvantaged Business Participation Program—Disadvantaged Status and Reporting (April 2008).

3. FAR Clause 52.227-16, Additional Data Requirements (June 1987).

b. DEPARTMENT OF HEALTH AND HUMAN SERVICES ACQUISITION REGULATION (HHSAR) (48 CHAPTER 3) CLAUSES:

1. HHSAR Clause 352.223-70, Safety and Health (January 2006).
2. HHSAR Clause 352.224-70, Privacy Act (January 2006).
3. HHSAR Clause 352.201-70, Paperwork Reduction Act (January 2006).

ARTICLE I.3. ADDITIONAL FAR CONTRACT CLAUSES INCLUDED IN FULL TEXT

This contract incorporates the following clauses in full text.

FEDERAL ACQUISITION REGULATION (FAR)(48 CFR CHAPTER 1)CLAUSES:

a. FAR Clause 52.217-9, Option to Extend the Term of the Contract (Mar 2000)

(a) The Government may extend the term of this contract by written notice to the Contractor within 30 days after the Government has completed its analysis of the deliverables associated with the applicable GO/NO GO Decision gate*;* provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 30 days before the contract expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 5 years.

b. FAR Clause 52.219-28, Post-Award Small Business Program Representation (April 2009).

(a) *Definitions* . As used in this clause—

Long-term contract means a contract of more than five years in duration, including options. However, the term does not include contracts that exceed five years in duration because the period of performance has been extended for a cumulative period not to exceed six months under the clause at 52.217-8, Option to Extend Services, or other appropriate authority.

Small business concern means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR part 121 and the size standard in paragraph (c) of this clause. Such a concern is "not dominant in its field of operation" when it does not exercise a controlling or major influence on a national basis in a kind of business activity in which a number of business concerns are primarily engaged. In determining whether dominance exists, consideration shall be given to all appropriate factors, including volume of business, number of employees, financial resources, competitive status or position, ownership or control of materials, processes, patents, license agreements, facilities, sales territory, and nature of business activity.

(b) If the Contractor represented that it was a small business concern prior to award of this contract, the Contractor shall represent its size status according to paragraph (e) of this clause or, if applicable, paragraph (g) of this clause, upon the occurrence of any of the following:

(1) Within 30 days after execution of a novation agreement or within 30 days after modification of the contract to include this clause, if the novation agreement was executed prior to inclusion of this clause in the contract.

(2) Within 30 days after a merger or acquisition that does not require a novation or within 30 days after modification of the contract to include this clause, if the merger or acquisition occurred prior to inclusion of this clause in the contract.

(3) For long-term contracts—

(i) Within 60 to 120 days prior to the end of the fifth year of the contract; and
(ii) Within 60 to 120 days prior to the date specified in the contract for exercising any option thereafter.

(c) The Contractor shall represent its size status in accordance with the size standard in effect at the time of this representation that corresponds to the North American Industry Classification System (NAICS) code assigned to this contract. The small business size standard corresponding to this NAICS code can be found at http://www.sba.gov/contractingopportunities/officials/size/index.html .

(d) The small business size standard for a Contractor providing a product which it does not manufacture itself, for a contract other than a construction or service contract, is 500 employees.
(e) Except as provided in paragraph (g) of this clause, the Contractor shall make the representation required by paragraph (b) of this clause by validating or updating all its representations in the Online Representations and Certifications Application and its data in the Central Contractor Registration, as necessary, to ensure that they reflect the Contractor's current status. The Contractor shall notify the contracting office in writing within the timeframes specified in paragraph (b) of this clause that the data have been validated or updated, and provide the date of the validation or update.

(f) If the Contractor represented that it was other than a small business concern prior to award of this contract, the Contractor may, but is not required to, take the actions required by paragraphs (e) or (g) of this clause.

(g) If the Contractor does not have representations and certifications in ORCA, or does not have a representation in ORCA for the NAICS code applicable to this contract, the Contractor is required to complete the following representation and submit it to the contracting office, along with the contract number and the date on which the representation was completed:

[...*...].**

[Contractor to sign and date and insert authorized signer's name and title].

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PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

SECTION J - LIST OF ATTACHMENTS

The following documents are attached and incorporated in this contract:

1. Statement of Work

Statement of Work, dated 10 February 2011.

2. Invoice/Financing Request Instructions and Contract Financial Reporting Instructions for BARDA Cost-Reimbursement Type Contracts,

Invoice/Financing Request Instructions and Contract Financial Reporting Instructions for BARDA Cost-Reimbursement Type Contracts, 5 pages.

3. Financial Report of Individual Project/Contract, 1 page

4. Instructions for Completing Financial Report of Individual Project/Contract, 3 pages

5. Inclusion Enrollment Report

Inclusion Enrollment Report, 5/01 (Modified OAMP: 10/01), 1 page.

6. Research Patient Care Costs

Research Patient Care Costs, 1 page.

7. Report of Government Owned, Contractor Held Property

Report of Government Owned, Contractor Held Property, dated 12/2/09, 1 page. Located at: http://rcb.cancer.gov/rcb-internet/forms/Govt-Owned-Prop.pdf **(Not Attached)**

8. Earned Value Management (EVM) Requirements

9. 7 Principles of Earned Value Management Tier 2 System Implementation Intent Guide

10. Communication Management Plan

11. Non-Clinical and Clinical Terms of Award

PART IV - REPRESENTATIONS AND INSTRUCTIONS

SECTION K - REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS

The following documents are incorporated by reference in this contract:

1) Annual Representations and Certifications completed at the Online Representations Applications (ORCA) website.

2) Representations & Certifications dated 3 December 2010.

3) Human Subjects Assurance Identification Number: 00010398.

4) Animal Welfare Assurance Numbers:

Battelle	A3034-01
USAMRIID	A3473-01

Attachment 1 - Statement of Work, dated 10 February 2011

BARDA Broad Agency Announcement (BAA)
(CBRN-BAA-10-100-SOL-00012)
Advanced Research and Development of Chemical, Biological, Radiological, and
Nuclear Medical Countermeasures
DEVELOPMENT OF CMX-001 FOR THE TREATMENT OF SMALLPOX
Topical Area of Interest No. 3, Antimicrobial Drugs

Contractual Statement of Work

1. PREAMBLE

Independently and not as an agency of the Government, the Contractor shall be required to furnish all the necessary services, qualified personnel, material, equipment, and facilities, not otherwise provided by the Government, as needed to perform the Statement of Work submitted in response to the BARDA Broad Agency Announcement (BAA) CBRN-BAA-10-100-SOL-00012.

In accordance with FAR 52.243-2, Changes-Cost Reimbursement (Alt. V), the Government reserves the right to modify the milestones, progress, schedule, budget, or deliverables to add or delete deliverables , process, or schedules if the need arises. Because of the nature of this research and development (R&D) contract and the complexities inherent in this and prior programs, at designated milestones the Government will evaluate whether work should be redirected, removed, or whether schedule or budget adjustments should be made.

1.0 Overall Objectives and Scope

The overall objective of this contract is to advance the development of CMX-00l as a broad-spectrum therapeutic antiviral for the treatment of smallpox infections and dsDNA viruses. The scope of work for this contract includes preclinical, clinical and manufacturing development activities that fall into the following areas: non-clinical efficacy studies; clinical activities; manufacturing activities; and all associated regulatory, quality assurance, management, and administrative activities. The Research and Development (R&D) effort for the antiviral will progress in specific stages that cover the base performance segment and four (4) option segments as specified in this contract. The Contractor must complete specific tasks required in each of the five discrete work segments. The scope of work has been broken into the following five phases which are discrete work segments:

I. [...***...]
II. [...***...]
III. [...***...]
IV. [...***...]
V. [...***...]

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2. PHASE I: [...*...]**

Research and development of CMX-001 for the treatment of smallpox and dsDNA viruses to include the following activities: [...***...]. The contractor shall carry out the following tasks and subtasks and in accordance with an agreed upon Integrated Master Schedule and Integrated Master Plan (defined in 2.1.8 and 2.1.9 below) which shall further detail the conduct of the specific tasks and subtasks.

2.1 Program Management

The Contractor shall provide for the following as outlined below and in the contract deliverables list (Article F.2):

2.1.1 The overall management, integration and coordination of all contract activities, including a technical and administrative infrastructure to ensure the efficient planning, initiation, implementation, and direction of all contract activities;

2.1.2 A Principal Investigator (PI) responsible for project management, communication, tracking, monitoring and reporting on status and progress, and modification to the project requirements and timelines, including projects undertaken by subcontractors; The contract deliverables list (reference), identifies all contract deliverables and reporting requirements for this contract.

2.1.3 Project Manager(s) with responsibility for monitoring and tracking day-to-day progress and timelines, coordinating communication and project activities; costs incurred; and program management; The contract deliverables list (reference), identifies all contract deliverables and reporting requirements for this contract.

2.1.4 A BARDA Liaison with responsibility for effective communication with the Project Officer and Contracting Officer.

2.1.5 Administrative and legal staff to provide development of compliant subcontracts, consulting, and other legal agreements, and ensure timely acquisition of all proprietary rights, including IP rights, and reporting all inventions made in the performance of the project.

2.1.6 Administrative staff with responsibility for financial management and reporting on all activities conducted by the Contractor and any subcontractors.

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2.1.7 Contract Review Meetings.

2.1.7.1 The Contractor shall participate in regular meetings to coordinate and oversee the contract effort as directed by the Contracting and Project Officers. Such meetings may include, but are not limited to, meeting of the Contractors and subcontractors to discuss clinical manufacturing progress, product development, product assay development, scale up manufacturing development, clinical sample assays development, preclinical/clinical study designs and regulatory issues; meetings with individual contractors and other HHS officials to discuss the technical, regulatory, and ethical aspects of the program; and meeting with technical consultants to discuss technical data provided by the Contractor.

2.1.7.2 The Contractor shall participate in teleconferences every two weeks between the Contractor and subcontractors and BARDA to review technical progress. Teleconferences or additional face-to-face meetings shall be more frequent at the request of BARDA.

2.1.8 Integrated Master Schedule

2.1.8.1 Within 30 calendar days of the effective date of the contract, the Contractor shall submit a first draft of an updated Integrated Master Schedule in a format agreed upon by BARDA to the Project Officer and the Contracting Officer for review and comment. The Integrated Master Schedule shall be incorporated into the contract, and will be used to monitor performance of the contract. Contractor shall include the key milestones and Go/No Go decision gates. The IMS for the period of performance will be mutually agreed upon at the PMBR

2.1.9 Integrated Master Plan

2.1.9.1 Work Breakdown Structure: The Contractor shall utilize a WBS template agreed upon by BARDA for reporting on the contact. The Contractor shall expand and delineate the Contract Work Breakdown Structure (CWBS) to a level agreed upon by BARDA as part of their Integrated Master Plan for contract reporting. The CWBS shall be discernable and consistent, BARDA may require Contractor to furnish WBS data at the work package level or at a lower level if there is significant complexity and risk associated with the task.

2.1.9.2 GO/ NO-GO Decision Gates: The Integrated Master Plan outlines key milestones with “Go/No Go” decision criteria (entrance and exit criteria for each phase of the project). The project plan should include, but not be limited to milestones in manufacturing, non-clinical and clinical studies, and regulatory submissions.

2.1.9.3 Earned Value Management System Plan: Subject to the requirements under 1-11-ISAR Clause 352.234-4, the Contractor shall use principles of Earned Value Management System (EVMS) in the management of this contract. The Seven Principles are:

I. Plan all work scope for the program to completion.

II. Break down the program work scope into finite pieces that can be assigned to a responsible person or organization for control of technical, schedule, and cost objectives.
III. Integrate program work scope, schedule, and cost objectives into a performance measurement baseline plan against which accomplishments may be measured. Control Changes to the baseline.
IV. Use actual cost incurred and recorded in accomplishing the work performed.
V. Objectively assess accomplishments at the work performance level.
VI. Analyze significant variances from the plan, forecast impacts, and prepare an estimate at completion based on performance to date and work to be performed.
VII. Use earned value information in the company's management processes.

Elements of EVMS shall be applied to all Cost Plus Fixed Fee CLINs as part of the Integrated Master Project Plan, the Contractor shall submit a written summary of the management procedures that it will establish, maintain and use to comply with EVMS requirements.

2.1.10 Decision Gate Reporting: On completion of a stage of the product development, as defined in the agreed upon Integrated Master Schedule and Integrated Master Plan, the Contractor shall prepare and submit to the Project Officer and the Contracting Officer a Decision Gate Report that contains (i) sufficient detail, documentation and analysis to support successful completion of the stage according to the predetermined qualitative and quantitative criteria that were established for Go/No Go decision making; and (ii) a description of the next stage of product development to be initiated and a request for approval to proceed to the next stage of product development.

2.1.11 Risk Management Plan: The Contractor shall develop a risk management plan within 90 days of contract award highlighting potential problems and/or issues that may arise during the life of the contract, their impact on cost, schedule and performance, and appropriate remediation plans. This plan should reference relevant RIBS elements where appropriate. Updates to this plan shall be included every three months (quarterly) in the monthly Project Status Report.

2.1.12 Performance Measurement Baseline Review (PMBR): The Contractor shall submit a plan for a PMBR to occur within 90 days of contract award. At the PMBR, the Contractor and BARDA shall mutually agree upon the budget, schedule and technical plan baselines (Performance Measurement Baseline). These baselines shall be the basis for monitoring and reporting progress throughout the life of the contract. The PMBR is conducted to achieve confidence that the baselines accurately capture the entire technical scope of work, are consistent with contract schedule requirements, are reasonably and logically planned, and have adequate resources assigned. The goals of the PMBR are as **FOLLOWS:**

I. Jointly assess areas such as the Contractor's planning for complete coverage of the SOW, logical scheduling of the work activities, adequate resources, and identification of inherent risks
II. Confirm the integrity of the Performance Measurement Baseline (PMB)
III. Foster the use of INM as a means of communication
IV. Provide confidence in the validity of Contractor reporting
V. Identify risks associated with the PMB
VI. Present any revised PMBs for mutual agreement
VII. Present an Integrated Master Schedule: The Contractor shall deliver an initial program level Integrated Master Schedule (IMS) that rolls up all time-phased WBS elements down to the activity level. This 1MS shall include the dependencies that exist between tasks. This IMS will be agreed to and finalized at the PMBR. DI-MGMT-8 1 650 may be referenced as guidance in creation of the IMS (see http://www.acq.osdanil/pm/).
VIII. Present the Risk Management Plan

2.1.13 Deviation Request: During the course of contract performance, in response to a need to change IMS activities as baselined at the PMBR, the Contractor shall submit a Deviation Report. This report shall request a change in the agreed-upon IMS and timelines. This report shall include: (i) discussion of the justification/rationale for the proposed change; (ii) options for addressing the needed changes from the agreed upon timelines, including a cost-benefit analysis of each option; and (iii) recommendations for the preferred option that includes a full analysis and discussion of the effect of the change on the entire product development program, timelines, and budget.

2.1.14 Monthly and Annual Reports: The Contractor shall deliver Project Status Reports on a monthly basis. The reports shall address the items below cross referenced to the WBS, SOW, IMS, and EVM:

I. Executive summary highlighting the progress, issues, and relevant activities in manufacturing, non-clinical, clinical, and regulatory;
II. Progress in meeting contract milestones, detailing the planned progress and actual progress during the reporting period, explaining any differences between the two and corrective steps;
III. Updated IMS;
IV. Updated EVM;

V. Updated Risk Management Plan (Every 3 months);
VI. Three month rolling forecast of planned activities;
VII. Progress of regulatory submissions;
VIII. Estimated and actual expenses;

2.1.15 Data Management: The Contractor shall develop and implement data management and quality control systems/procedures, including transmission, storage, confidentiality, and retrieval of all contract data;
2.1.15.1 Provide for the statistical design and analysis of data resulting from the research;
2.1.15.2 Provide raw data or specific analyses of data generated with contract funding to the Project Officer, upon request.

2.2 Non-Clinical Toxicology
2.2.1 N/A (no scope)

2.3 Non-Clinical
2.3.1 Develop and validate [...***...] to lower ...***...].
2.3.2 [...***...]: Conduct [...***...] studies including [...***...] studies, [...***...], and [...***...] studies in [...***...].
2.3.3 [...***...]
2.3.3.1 Conduct [...***...] study in [...***...].
2.3.3.2 Conduct [...***...] studies including [...***...] studies, [...***...] studies including [...***...] for CMX-001 and [...***...] in [...***...].
2.3.4 Use of [...***...] as a CMX-001 Surrogate in [...***...] Studies.
2.3.4.1 Dose [...***...] with [...***...] to identify the concentration of the [...***...] in [...***...] associated with [...***...] of [...***...].
2.3.5 Scaling of [...***...] to [...***...] by conducting studies with [...***...] to determine [...***...] in [...***...].
2.3.6 [...***...] determination of CMX00l, [...***...] and [...***...] in the [...***...].
2.3.7 Conduct [...***...] experiments to demonstrate [...***...] following effective [...***...] prior to [...***...].
2.3.8 Conduct studies to optimize [...***...] in [...***...].

2.4 Clinical
2.4.1 Measurement of [...***...] levels in [...***...] and correlate the [...***...] to studies conducted in [...***...].
2.4.2 Conduct expanded access protocol ([...***...]).

2.5 Regulatory

2.5.1 Engaging the FDA on a path to support the treatment of smallpox indication with CMX-001.

2.5.2 Preparing materials for and requesting, scheduling and participating in all meetings with the FDA, including meetings to review EUA and/or all other data packages;

2.5.3 Providing BARDA with (i) the initial draft minutes and final draft minutes of any formal meeting with the FDA; (ii) final minutes of any informal meeting with the FDA;

2.6 CMC

2.6.1 Chemical development and manufacture of one [...***...], to prepare for [...***...].

3. PHASE II: [...*...]**

Research and development of CMX-001 for the treatment of smallpox to include the following activities: [...***...]. The contractor shall carry out the following tasks and subtasks and in accordance with the agreed upon Integrated Master Schedule and Integrated Master Plan (defined in 2.1.8 and 2.1.9) which shall further detail the conduct of the specific tasks and subtasks.

3.1 Program Management (consistent with section 2.1)

3.1.1 Program management scope in BASE year is consistent with program management scope in each option year.

3.2 Non-toxicology

3.2.1 N/A (no scope)

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3.3 Non-Clinical

3.3.1 Quantify [...***...] levels in [...***...] in [...***...].

3.3.2 Determine [...***...] for CMX-001, [...***...], and [...***...] in [...***...].

3.3.3 Scaling of [...***...] to [...***...] studies to determine scaling between [...***...] and [...***...] using [...***...] as well as comparisons of levels of [...***...] in the [...***...].

3.3.4 [...***...] in the [...***...]. This study will determine the [...***...] in [...***...] and the concentration of [...***...] in [...***...] when [...***...] are treated with [...***...] at the effective dose and regimen.

3.3.5 [...***...]- (Final Report from Sections 2.3.2.). The initial study ([...***...]) will compare different regimens of [...***...] administered after the [...***...]. The studies will include [...***...] and [...***...], as well as [...***...] including [...***...].

3.4 Clinical

3.4.1 Conduct [...***...] study in [...***...] will be conducted as part of the scope of work to determine whether CMX001 has a [...***...], as detected by [...***...].

3.4.2 Analyze data and provide a Final Report for [...***...] evaluation of CMX001 in [...***...].

3.5 Regulatory

3.5.1 Engaging the FDA on a path to support the treatment of smallpox indication with CMX-001

3.5.2 Preparing materials for and requesting, scheduling and participating in all meetings with the FDA, including meetings to review EUA and/or all other data packages;

3.5.3 Providing BARDA with (i) the initial draft minutes and final draft minutes of any formal meeting with the FDA; (ii) final draft minutes of any informal meeting with the FDA;

3.6 CMC

3.6.1 Validation of the [...***...] process: Validation of the process to demonstrate the [...***...] of a [...***...] of [...***...] will be performed.

3.6.2 Validation of the [...***...] process to produce [...***...]: Validation of the process to demonstrate the [...***...] of a [...***...] of [...***...] will be performed.

4. PHASE III: [...*...]**

Research and development of CMX-001 for the treatment of smallpox and dsDNA viruses to include the following activities: [...***...].
The contractor shall carry out the following tasks and subtasks and in accordance with agreed upon Integrated Master Schedule and Integrated Master Plan (defined in 2.1.8 and 2.1.9) which shall further detail the conduct of the specific tasks and subtasks.

4.1 Program Management (Consistent with section 2.1)

4.1.1 Program management scope in BASE year is consistent with program management scope in each option year.

4.2 Non-toxicology

4.2.1 N/A (no scope)

4.3 Non-Clinical

4.3.1 [...***...] studies: [...***...] will be conducted with the [...***...] of CMX001 identified in the [...***...] studies. [...***...] will be [...***...] to receive [...***...] beginning at the [...***...]. These studies will include [...***...] and [...***...] as well as [...***...] including [...***...] in [...***...]. The primary endpoint will be [...***...]

4.3.2 [...***...] studies: This study will determine the [...***...] at the [...***...]. [...***...] and [...***...] at the [...***...]. The primary endpoint will be [...***...]

4.3.3 Initiate [...***...]: Conduct [...***...] studies for [...***...]. This study will determine the [...***...] at doses selected based on [...***...]. [...***...] and [...***...].

4.4 Clinical

4.4.1 Phases I [...***...] study, If acceptable to FDA, the [...***...] database will be supplemented by a study in [...***...]. The size of this study will be determined to ensure an adequate [...***...] database is available at the time of [...***...]

4.4.2 [...***...] study. This study will [...***...] doses of CMX001 to [...***...] to determine if the [...***...] of CMX001 are comparable to those observed for [...***...], and to determine if any dose adjustment is necessary in [...***...].

4.5 Regulatory

4.5.1 Generating all necessary data and preparing documentation for [...***...] submissions to regulatory agencies;

4.5.2 Preparing materials for and requesting, scheduling and participating in all meetings with the FDA, including meetings to review [...***...], EUA and/or all other data packages;

4.5.3 Providing BARDA with (i) the initial draft minutes and final draft minutes of any formal meeting with the FDA; (ii) final draft minutes of any informal meeting with the FDA;

4.5.4 Filing of an [...***...]

4.6 CMC

4.6.1 Manufacture of [...***...] in sufficient quantities for use in non-clinical and late phase clinical studies. Develop [...***...].

5. PHASE IV: [...*...]**

Research and development of CMX-001 for the treatment of smallpox to include the following activities: [...***...]. [...***...] studies and phase I [...***...] study. The contractor shall carry out the following tasks and subtasks and in accordance with agreed upon Integrated Master Schedule and Integrated Master Plan (defined in 2.1.8 and 2.1.9) which shall further detail the conduct of the specific tasks and subtasks.

5.1 Program Management (Consistent with section 2.1)

5.1.1 Program management scope in BASE year is consistent with program management scope in each option year.

5.2 Non-toxicology

5.2.1 N/A (no scope)

5.3 Non-Clinical

5.3.1 [...***...] studies. [...***...] will be randomized to receive [...***...] beginning at the [...***...]. These studies will include [...***...] and [...***...] as well as [...***...] including [...***...]. The primary endpoint will be [...***...]

5.3.2 [...***...] Studies. This study will determine the [...***...] at the [...***...]. [...***...] and [...***...] at the [...***...]. The primary endpoint will be [...***...]. If FDA requires a [...***...] in the [...***...] studies, the [...***...] study may not be needed.

5.3.3 Conduct [...***...] Studies. This study will determine the [...***...] at the [...***...]. [...***...] and [...***...] at the [...***...].

5.4 Clinical

5.4.1 Phase 3 development including [...***...] study, [...***...] study, phases II [...***...] study. A [...***...] study will be conducted to compare the [...***...] of CMX001 in [...***...] to [...***...]. A [...***...] study will be conducted to compare the [...***...] of CMX001 when [...***...]. A [...***...] study will be conducted to [...***...] to support an NDA.

5.5 Regulatory

5.5.1 Generating all necessary data and preparing documentation for NDA submissions to regulatory agencies;

5.5.2 Preparing materials for and requesting, scheduling and participating in all meetings with the FDA, including meetings to review IND, EUA and/or all other data packages;

5.5.3 Providing BARDA with (i) the initial draft minutes and final draft minutes of any formal meeting with the FDA; (ii) final draft minutes of any informal meeting with the FDA;

5.6 CMC

5.6.1 [...***...]. [...***...] of the process to demonstrate the [...***...] of a [...***...] will be performed.

6. PHASE V: [...*...]**

Research and development of CMX-001 for the treatment of smallpox to include the following activities: [...***...]. The contractor shall carry out the following tasks and subtasks and in accordance with an agreed upon Integrated Master Schedule and Integrated Master Plan (defined in 2.1.8 and 2.1.9) which shall further detail the conduct of the specific tasks and subtasks.

6.1 Program Management (Consistent with section 2.1)

6.1.1 Program management scope in BASE year is consistent with program management scope in each option year.

6.2 Non-toxicology

6.2.1 N/A (no scope)

6.3 Non-Clinical

6.3.1 [...***...] Studies. This study replicates [...***...] if a [...***...] is necessary to achieve a [...***...] result.

6.4 Clinical

6.4.1 Compile [...***...]. A database of [...***...] data collected from all CMX001 clinical studies, irrespective of [...***...], will be populated and analyzed in order to support an [...***...] for smallpox.

6.5 Regulatory

6.5.1 Generating all necessary data and preparing documentation for NDA submissions to regulatory agencies;

6.5.2 Submitting NDA documentation to the FDA in a timely manner, consistent with timelines set out in the contract and by the FDA.

6.5.3 Preparing materials for and requesting, scheduling and participating in all meetings with the FDA, including meetings to review IND, EUA and/or all other data packages;

6.5.4 Providing BARDA with (i) the initial draft minutes and final draft minutes of any formal meeting with the FDA; (ii) final draft minutes of any informal meeting with the FDA;

6.6 CMC

6.6.1 [...***...]. [...***...] of the process to demonstrate the [...***...] of a [...***...] will be performed.

7. Other Items

7.1 Facilities, Equipment and Other Resources. (Contract: Section J)

The Contractor shall provide equipment; facilities and other resources required for implementation of the SOW dated January 11, 2011 to comply with all Federal

and HHS regulations in:

7.1.1 The [...***...] and use of [...***...];
7.1.2 The acquisition, handling, storage and shipment of [...***...], including [...***...] required for working with the [...***...];
7.1.3 The [...***...] of [...***...] under cGMP;
7.1.3.1 The design and conduct of [...***...]; and
7.1.4 Design and conduct of [...***...] under GCP.

ATTACHMENT 2

INVOICE/FINANCING REQUEST AND CONTRACT FINANCIAL REPORTING
INSTRUCTIONS FOR BARDA COST-REIMBURSEMENT TYPE CONTRACTS

Format: Payment requests shall be submitted on the Contractor's self-generated form in the manner and format prescribed herein and as illustrated in the Sample Invoice/Financing Request. Standard Form 1034, Public Voucher for Purchases and Services Other Than Personal, may be used in lieu of the Contractor's self-generated form provided it contains all of the information shown on the Sample Invoice/Financing Request. DO NOT include a cover letter with the payment request.

Number of Copies: Payment requests shall be submitted in the quantity specified in the Invoice Submission Instructions in Section G of the Contract Schedule.

Frequency: Payment requests shall not be submitted more frequently than once every two weeks in accordance with the Allowable Cost and Payment Clause incorporated into this contract. Small business concerns may submit invoices/financing requests more frequently than every two weeks when authorized by the Contracting Officer.

Cost Incurrence Period: Costs incurred must be within the contract performance period or covered by precontract cost provisions.

Billing of Costs Incurred: If billed costs include (1) costs of a prior billing period, but not previously billed, or (2) costs incurred during the contract period and claimed after the contract period has expired, the Contractor shall site the amount(s) and month(s) in which it incurred such costs.

Contractor's Fiscal Year: Payment requests shall be prepared in such a manner that the Government can identify costs claimed with the Contractor's fiscal year.

Currency: All BARDA contracts are expressed in United States dollars. When the Government pays in a currency other than United States dollars, billings shall be expressed, and payment by the Government shall be made, in that other currency at amounts coincident with actual costs incurred. Currency fluctuations may not be a basis of gain or loss to the Contractor. Notwithstanding the above, the total of all invoices paid under this contract may not exceed the United States dollars
authorized.

Costs Requiring Prior Approval: Costs requiring the Contracting Officer's approval, which are not set forth in an Advance Understanding in the contract, shall be identified and reference the Contracting Officer's Authorization (COA) Number. In addition, the Contractor shall show any cost set forth in an Advance Understanding as a separate line item on the payment request.

Invoice/Financing Request Identification: Each payment request shall be identified as either:

(a) **Interim Invoice/Contract Financing Request:** These are interim payment requests submitted during the contract performance period.

(b) **Completion Invoice:** The completion invoice shall be submitted promptly upon completion of the work, but no later than one year from the contract completion date, or within 120 days after settlement of the final indirect cost rates covering the year in which the contract is physically complete (whichever date is later). The Contractor shall submit the completion invoice when all costs have been assigned to the contract and it completes all performance provisions.

(c) **Final Invoice:** A final invoice may be required after the amounts owed have been settled between the Government and the Contractor (e.g., resolution of all suspensions and audit exceptions).

Preparation and Itemization of the Invoice/Financing Request: The Contractor shall furnish the information set forth in the instructions below. The instructions are keyed to the entries on the Sample Invoice/Financing Request.

(a) **Designated Billing Office Name and Address:** Enter the designated billing office name and address, as identified in the Invoice Submission Instructions in Section G of the Contract Schedule.

(b) **Contractor's Name, Address, Point of Contact, VIN, and DUNS or DUNS+4 Number:** Show the Contractor's name and address exactly as they appear in the contract, along with the name, title, phone number, and e-mail address of the person to notify in the event of an improper invoice or, In the case of payment by method other than Electronic Funds Transfer, to whom payment is to be sent. Provide the Contractor's Vendor Identification Number (VIN), and Data Universal Numbering System (DUNS) number or DUNS+4. The DUNS number must identify the Contractor's name and address exactly as stated on the face page of the contract. When an approved assignment has been made by the Contractor, or a different payee has been designated, provide the same information for the payee as is required for the Contractor (i.e., name, address, point of contact, VIN, and DUNS).

(c) **Invoice/Financing Request Number:** Insert the appropriate serial number of the payment request.

(d) **Date Invoice/Financing Request Prepared:** Insert the date the payment request is prepared.

(e) **Contract Number and Order Number (if applicable):** Insert the contract number and order number (if applicable).

(f) **Effective Date:** Insert the effective date of the contract or if billing under an order, the effective date of the order.

(g) **Total Estimated Cost of Contract/Order:** Insert the total estimated cost of the contract, exclusive of fixed-fee. If billing under an order, insert the total estimated cost of the order, exclusive of fixed-fee. For incrementally funded contracts/orders, enter the amount currently obligated and available for payment.

(h) **Total Fixed-Fee:** insert the total fixed-fee (where applicable). For incrementally funded contracts/orders, enter the amount currently obligated and available for payment.

(i) **Two-Way/Three-Way Match:** Identify whether payment is to be made using a two-way or three-way match. To determine required payment method, refer to the Invoice Submission Instructions in Section G of the Contract Schedule.

(j) **Office of Acquisitions:** Insert the name of the Office of Acquisitions, as identified in the Invoice Submission Instructions in Section G of the Contract Schedule.

(k) **Central Point of Distribution:** Insert the Central Point of Distribution, as identified in the Invoice Submission Instructions in Section G of the Contract Schedule.

(I) **Billing Period:** Insert the beginning and ending dates (month, day, and year) of the period in which costs were incurred and for which reimbursement is claimed.

(m) **Amount Billed - Current Period:** Insert the amount claimed for the current billing period by major cost element, including any adjustments and fixed-fee. If the Contract Schedule contains separately priced line items, identify the contract line item(s) on the payment request and include a separate breakdown (by major cost element) for each line item.

(n) **Amount Billed - Cumulative:** Insert the cumulative amounts claimed by major cost element, including any adjustments and fixed-fee. If the Contract Schedule contains separately priced line items, identify the contract line item(s) on the payment request and include a separate breakdown (by major cost element) for each line item.

(o) **Direct Costs:** Insert the major cost elements. For each element, consider the application of the paragraph entitled "Costs Requiring Prior Approval" on page 1 of these instructions.

(1) **Direct Labor:** Include salaries and wages paid (or accrued) for direct performance of the contract.

For Level of Effort contracts only, the Contractor shall provide the following information on a separate sheet of paper attached to the payment request:

- hours or percentage of effort and cost by labor category (as specified in the Level of Effort Article in Section F of the contract) for the current billing period, and

- hours or percentage of effort and cost by labor category from contract inception through the current billing period. (NOTE: The Contracting Officer may require the Contractor to provide additional breakdown for direct labor, such as position title, employee name, and salary or hourly rate.)

(2) **Fringe Benefits:** List any fringe benefits applicable to direct labor and billed as a direct cost. Do not include in this category fringe benefits that are included in indirect costs.

(3) **Accountable Personal Property:** Include permanent research equipment and general purpose equipment having a unit acquisition cost of $1,000 or more, with a life expectancy of more than two years, and sensitive property regardless of cost (see the HHS *Contractor's Guide for Control of Government Property*). Show permanent research equipment separate from general purpose equipment.

On a separate sheet of paper attached to the payment request, list each item for which reimbursement is requested. An asterisk (*) shall precede the item if the equipment is below the $1,000 approval level. Include reference to the following (as applicable):

- item number for the specific piece of equipment listed in the Property Schedule, and - COA number, if the equipment is not covered by the Property Schedule.

The Contracting Officer may require the Contractor to provide further itemization of property having specific limitations set forth in the contract.

(4) **Materials and Supplies:** Include equipment with unit costs of less than $1,000 or an expected service life of two years or less, and consumable material and supplies regardless of amount.

(5) **Premium Pay:** List remuneration in excess of the basic hourly rate.

(6) **Consultant Fee:** List fees paid to consultants. Identify consultant by name or category as set forth in the contract or COA, as well as the effort (i.e,, number of hours, days, etc.) and rate billed.

(7) **Travel:** Include domestic and foreign travel. Foreign travel is travel outside of Canada, the United States and its territories and possessions. However, for an organization located outside Canada, the United States and its territories and possessions, foreign travel means travel outside that country. Foreign travel must be billed separately from domestic travel.

(8) **Subcontract Costs:** List subcontractor(s) by name and amount billed.

(9) **Other:** List all other direct costs in total unless exceeding $1,000 in amount. If over $1,000, list cost elements and dollar amounts separately. If the contract contains restrictions on any cost element, that cost element must be listed separately.

(p) **Cost of Money (COM):** Cite the COM factor and base in effect during the time the cost was incurred and for which reimbursement is claimed.

(q) **Indirect Costs:** Identify the indirect cost base (IDC), indirect cost rate, and amount billed for each indirect cost category.

(r) **Fixed-Fee:** Cite the formula or method of computation for fixed-fee, if applicable. The fixed-fee must be claimed as provided for by the contract.

(s) **Total Amounts Claimed:** Insert the total amounts claimed for the current and cumulative periods.

(t) **Adjustments:** Include amounts conceded by the Contractor, outstanding suspensions, and/or disapprovals subject to appeal.

(u) **Grand Totals**

(v) **Certification of Salary Rate Limitation:** If required by the contract (see Invoice Submission Instructions in Section G of the Contract Schedule), the Contractor shall include the following certification at the bottom of the payment request:

"I hereby certify that the salaries billed in this payment request are in compliance with the Salary Rate Limitation Provisions in Section H of the contract."

The Contracting Officer may require the Contractor to submit detailed support for costs claimed on one or more interim payment requests.

FINANCIAL REPORTING INSTRUCTIONS:

These instructions are keyed to the Columns on the sample invoice/financing request.

Column A - Expenditure Category: Enter the expenditure categories required by the contract.

Column B - Cumulative Percentage of Effort/Hrs. - Negotiated: Enter the percentage of effort or number of hours agreed to for each employee or labor category listed in Column A.

Column C - Cumulative Percentage of Effort/Hrs. - Actual: Enter the percentage of effort or number of hours worked by each employee or labor category listed in Column A.

Column D - Amount Billed - Current: Enter amounts billed during the current period.

Column E - Amount Billed - Cumulative: Enter the cumulative amounts to date.

Column F - Cost at Completion: Enter data only when the Contractor estimates that a particular expenditure category will vary from the amount negotiated. Realistic estimates are essential.

Column G - Contract Amount: Enter the costs agreed to for all expenditure categories listed in Column A.

Column H - Variance (Over or Under): Show the difference between the estimated costs at completion (Column F) and negotiated costs (Column G) when entries have been made in Column F. This column need not be filled in when Column F is blank. When a line item varies by plus or minus 10 percent, i.e., the percentage arrived at by dividing Column F by Column G, an explanation of the variance should be submitted. In the case of an overrun (net negative variance), this submission shall not be deemed as notice under the Limitation of Cost (Funds) Clause of the contract.

Modifications: Any modification In the amount negotiated for an item since the preceding report should be listed in the appropriate cost category.

Expenditures Not Negotiated: An expenditure for an item for which no amount was negotiated (e.g., at the discretion of the Contractor in performance of its contract) should be listed in the appropriate cost category and all columns filled in, except for G. Column H will of course show a 100 percent variance and will be explained along with those identified under H above.

SAMPLE INVOICE/FINANCING REQUEST AND CONTRACT FINANCIAL REPORT

(a) Designated Billing Office Name and Address: DHHS/OS/ASPR/BARDA Attn: Contracting Officer 330 Independence Ave., S.W. Room G644 Washington, D.C. 20201 (b) Contractor's Name, Address, Point of Contact, VIN, and DUNS or DUNS+4 Number: ABC CORPORATION 100 Main Street Anywhere, USA Zip Code Name, Title, Phone Number, and E-mail Address of person to notify in the event of an improper invoice or, in the case of payment by method other than Electronic Funds Transfer, to whom payment is to be sent. **VIN:** **DUNS or DUNS+4:**	(c) Invoice/Financing Request No.: (d) Date Invoice Prepared: (e) Contract No, and Order No. (if applicable): _____ (f) Effective Date: (g) Total Estimated Cost of Contract/Order: (h) Total Fixed-Fee (if applicable): (i) ☐Two-Way Match: ☐Three-way Match: (j) Office of Acquisitions: (k) Central Point of Distribution:

(i) This invoice/financing request represents reimbursable costs for the period from _____ to

Expenditure Category* A	Cumulative Percentage of Effort/Hrs. Negotiated B	Cumulative Percentage of Effort/Hrs. Actual C	Amount Billed (m) Current D	Amount Billed (n) Cumulative E	Cost at Completion F	Contract Amount G	Variance H
(o) Direct Costs							
(1) Direct Labor							
(2) Fringe Benefits							
(3) Accountable Property							
(4) Materials & Supplies							
(5) Premium Pay							
(6) Consultant Fees							
(7) Travel							
(8) Subcontracts							
(9) Other							
Total Direct Costs							
(p) Cost of Money							
(q) Indirect Costs							
(r) Fixed Fee							
(s) Total Amount Claimed							
(t) Adjustments							
(u) Grand Totals							

I certify that all payments are for appropriate purposes and in accordance with the contract.

_____ _____

(Name of Official) (Title)

' Attach details as specified in the contract

ATTACHMENT 3

FINANCIAL REPORT OF INDIVIDUAL PROJECT/CONTRACT Note: Complete this Form in Accordance with Accompanying Instructions.	**Project Task:**	**Contract No.**	**Date of Report:**	**0990-0134** **0990-0131**
	Reporting Period:	**Contractor Name and Address:**		

Expenditure Category	Percentage of Effort/Hours		Cumulative Incurred Cost at End of Prior Period	Incurred Cost-Current Period	Cumulative Cost to Date (D + E)	Estimated Cost to Complete	Estimated Cost at Completion (F + G)	Negotiated Contract Amount	Variance (Over or Under) (I - H)
	Negotiated	Actual							
A	B	C	D	E	F	G	H	I	J

ATTACHMENT 4

INSTRUCTIONS FOR COMPLETING
"FINANCIAL REPORT OF INDIVIDUAL PROJECT/CONTRACT"

GENERAL INFORMATION

Purpose. This Quarterly Financial Report is designed to: (1) provide a management tool for use by be BARDA in monitoring the application of financial and personnel resources to the BARDA contracts; (2) provide contractors with financial and personnel management data which is usable in their management processes; (3) promptly indicate potential areas of contract underruns or overruns by making possible comparisons of actual performance and projections with prior estimates on individual elements of cost and personnel; and (4) obtain contractor's analyses of cause and effect of significant variations between actual and prior estimates of financial and personnel performance.

REPORTING REQUIREMENTS

Scope. The specific cost and personnel elements to be reported shall be established by mutual agreement prior to award. The Government may require the contractor to provide detailed documentation to support any element(s) on one or more financial reports.

Number of Copies and Mailing Address. An original and two (2) copies of the report(s) shall be sent to the contracting officer at the address shown on the face page of the contract, no later than 30 working days after the end of the period reported. However, the contract may provide for one of the copies to be sent directly to the Contracting Officer's Technical Representative.

REPORTING STATISTICS

A modification which extends the period of performance of an existing contract will not require reporting on a separate quarterly report, except where it is determined by the contracting officer that separate reporting is necessary. Furthermore, when incrementally funded contracts are involved, each separate allotment is not considered a separate contract entity (only a funding action). Therefore, the statistics under incrementally funded contracts should be reported cumulatively from the inception of the contract through completion.

Definitions and Instructions for Completing the Quarterly Report. For the purpose of establishing expenditure categories in Column A, the following definitions and instructions will be utilized. Each contract will specify the categories to be reported.

(1) **Key Personnel.** Include key personnel regardless of annual salary rates. All such individuals should be listed by names and job titles on a separate line including those whose salary is not directly charged to the contract but whose effort is directly associated with the contract. The listing must be kept up to date.

(2) **Personnel—Other.** List as one amount unless otherwise required by the contract.

(3) **Fringe Benefits.** Include allowances and services provided by the contractor to employees as compensation in addition to regular salaries and wages. If a fringe benefit rate(s) has been established, identify the base, rate, and amount billed for each category. If a rate has not been established, the various fringe benefit costs may be required to be shown separately. Fringe benefits which are included In the Indirect cost rate should not be shown here.

(4) **Accountable Personal Property.** Include nonexpendable personal property with an acquisition cost of $1,000 or more and with an expected useful life of two or more years, and sensitive items regardless of cost. Form HHS 565, "Report of Accountable Property," must accompany the contractor's public voucher (SF 1034/SF 1035) or this report if not previously submitted. See "Contractor's Guide for Control of Government Property."

(5) **Supplies.** Include the cost of supplies and material and equipment charged directly to the contract, but excludes the cost of nonexpendable equipment as defined in (4) above.

(6) **Inpatient Care.** Include costs associated with a subject while occupying a bed in a patient care setting. It normally includes both routine and ancillary costs.

(7) **Outpatient Care.** Include costs associated with a subject while not occupying a bed. It normally includes ancillary costs only.

(8) **Travel.** Include all direct costs of travel, including transportation, subsistence and miscellaneous expenses. Travel for staff and consultants shall be shown separately. Identify foreign and domestic travel separately. If required by the contract, the following information shall be submitted: (i) Name of traveler and purpose of trip; (ii) Place of departure, destination and return, including time and dates; and (iii) Total cost of trip.

(9) **Consultant Fee.** Include fees paid to consultant(s). Identify each consultant with effort expended, billing rate, and amount billed.

(10) **Premium Pay.** Include the amount of salaries and wages over and above the basic rate of pay.

(11) **Subcontracts.** List each subcontract by name and amount billed.

(12) **Other Costs.** Include any expenditure categories for which the Government does not require individual line item reporting. It may include some of the above categories.

(13) **Overhead/Indirect Costs.** Identify the cost base, indirect cost rate, and amount billed for each indirect cost category.

(14) **General and Administrative Expense.** Cite the rate and the base. In the case of nonprofit organizations, this item will usually be included in the indirect cost.

(15) **Fee.** Cite the fee earned, if any.

(16) **Total Costs to the Government.**

PREPARATION INSTRUCTIONS

These instructions are keyed to the Columns on the Quarterly Report.

Column A—Expenditure Category. Enter the expenditure categories required by the contract.

Column B—Percentage of Effort/Hours Negotiated. Enter the percentage of effort or number of hours agreed to during contract negotiations for each labor category listed in Column A.

Column C—Percentage of Effort/Hours-Actual. Enter the cumulative percentage of effort or number of hours worked by each employee or group of employees listed in Column A.

Column D—Cumulative Incurred Cost at End of Prior Period. Enter the cumulative incurred costs up to the end of the prior reporting period. This column will be blank at the time of the submission of the initial report.

Column E—Incurred Cost-Current Period. Enter the costs which were incurred during the current period. Column F—Cumulative Incurred Cost to Date. Enter the combined total of Columns D and E.

Column G—Estimated Cost to Complete. Make entries only when the contractor estimates that a particular expenditure category will vary from the amount negotiated. Realistic estimates are essential.

Column H—Estimated Costs at Completion. Complete only if an entry is made in Column G.

Column I—Negotiated Contract Amount. Enter in this column the costs agreed to during contract negotiations for all expenditure categories listed in Column A.

Column J—Variance (Over or Under). Complete only if an entry is made in Column H. When entries have been made in Column H, this column should show the difference between the estimated costs at completion (Column H) and negotiated costs (Column I). When a line item varies by plus or minus 10 percent, i.e., the percentage arrived at by dividing Column J by Column I, an explanation of the variance should be submitted. In the case of an overrun (net negative variance), this submission shall not be deemed as notice under the Limitation of Cost (Funds) Clause of the contract.

Modifications. List any modification in the amount negotiated for an Item since the preceding report in the appropriate cost category.

Expenditures Not Negotiated. List any expenditure for an item for which no amount was negotiated (e.g., at the discretion of the contractor in performance of its contract) in the appropriate cost category and complete all columns except for 1. Column J will of course show a 100 percent variance and will be explained along with those identified under J above.

Attachment 5
INCLUSION ENROLLMENT REPORT

This report format should NOT be used for data collection from study participants

Study Title:				
Total Enrollment:		**Protocol Number:**		
Contract Number:				
PART A. TOTAL ENROLLMENT REPORT: Number of Subjects Enrolled to Date (Cumulative) by Ethnicity and Race				
Ethnic Category	**Sex/Gender**			
	Females	**Males**	**Unknown or Not Reported**	**Total**
Hispanic or Latino				
Not Hispanic or Latino				
Unknown (Individuals not reporting ethnicity)				
Ethnic Category: Total of All Subjects*				
Racial Categories				
American Indian/Alaska Native				
Asian				
Native Hawaiian or Other Pacific Islander				
Black or African American				
White				
More than one race				
Unknown or not reported				
Racial Categories: Total of All Subjects*				
PART B. HISPANIC ENROLLMENT REPORT: Number of Hispanics or Latinos Enrolled to Date (Cumulative)				
Racial Categories	**Females**	**Males**	**Unknown or Not Reported**	**Total**
American Indian/Alaska Native				
Asian				
Native Hawaiian or Other Pacific Islander				
Black or African American				
White				
More than one race				
Unknown or not reported				
Racial Categories: Total of Hispanics or Latinos**				
*These totals must agree **These totals must agree				

ATTACHMENT 6

Research Patient Care Costs

(a) Research patient care costs are the costs of routine and ancillary services provided to patients participating in research programs described in this contract.

(b) Research patient care costs shall be computed in a manner consistent with the principles and procedures used by the Medicare Program for determining the part of Medicare reimbursement based on reasonable costs. The Diagnostic Related Group (DRG) prospective reimbursement method used to determine the remaining portion of Medicare reimbursement shall not be used to determine research patient care costs. Research patient care rates or amounts shall be established by the Secretary of HHS or his/her duly authorized representative.

(c) Prior to submitting an invoice for research patient care costs under this contract, the contractor must make every reasonable effort to obtain third party payment, where third party payors (including Government agencies) are authorized or are under a legal obligation to pay all or a portion of the charges incurred under this contract for research patient care.

(d) The contractor must maintain adequate procedures to identify those research patients participating in this contract who are eligible for third party reimbursement.

(e) Only those charges not recoverable from third party payors or patients and which are consistent with the terms and conditions of the contract are chargeable to this contract

Attachment 8 - Earned Value Management (EVM) Requirements

The Contractor shall propose and provide a Performance Measurement System that meets the Seven Principles of Earned Value Management. The Seven Principles are:

1. Plan all work scope for the program to completion of the contract.

2. Break down the program work scope into finite pieces that can be assigned to a responsible person or organization for control of technical, schedule, and cost objectives.

3. Integrate program work scope, schedule, and cost objectives into a performance measurement baseline plan against which accomplishments may be measured. Control changes to the baseline,

4. Use actual cost incurred and recorded in accomplishing the work performed.

5. Objectively assess accomplishments at the work performance level.

6. Analyze significant variances from the plan, forecast impacts, and prepare an estimate at completion based on performance to date and work to be performed.

7. Use Performance Based information in the company's management processes.

The Contractor shall develop a Work Breakdown Structure (WBS) to an appropriate level and a WBS dictionary which lists and defines the WBS elements that also is inclusive of the applicable EVM requirements.

Contractors required to provide Earned Value Management to their project can obtain additional instruction from the 7 Principles of EVM Intent Guide.

The EVM requirements for this contract will be as follows:

<u>Tier 2</u> — Contracts greater than $25m in total value (includes base and options) and with a proposed product that has a Technology Readiness Level (TRL) of 6 or greater.

GLOSSARY OF TERMS

Actual Cost of Work Performed (ACWP)	The costs actually applied and recorded in accomplishing the work performed within a specified period.
Baseline	(See Performance Measurement Baseline).
Budget at Completion (BAC)	The sum of all budgets (BCWS) allocated to the contract. Synonymous with the term Performance Measurement Baseline.
Budgeted Cost for Work Performed (BCWP)	The sum of the budgets for completed Work Packages and completed portions of open Work Packages, plus the appropriate portion of the budgets for level of effort and apportioned effort (Also see Earned Value).

Control Account	A management control point at which actual costs can be accumulated and compared to budgeted cost for work performed. A control account is a natural control point for cost/schedule planning and control since it represents the work assigned to one responsible organizational element on one contract work breakdown structure (CWBS) element.
Control Account Manager	A member of a functional organization responsible for (CAM) task performance detailed in a Control Account and for managing the resources authorized to accomplish the tasks.
Control Account Plan (CAP) Report	A CAP report is a timephased report which reflects all the work and effort to be performed in a control account. The CAP report will reflect the hours and dollars by element of cost (labor, subcontract, ODC, etc).

Contract Performance Report (CPR)	The monthly report submitted to the customer showing the current, cumulative and at completion status, the performance measurement baseline, manpower loading, and a narrative explanation of significant program variances.
Contract Target Cost	The dollar value (excluding fee or profit) negotiated in the original contract plus the cumulative cost (excluding fee or profit) applicable to all definitizcd changes to the contract. It consists of the estimated cost negotiated for a cost plus fixed fee contract and the definitized target cost for an incentive contract. The contract target cost does not include the value of authorized/un-negotiated work, and is thus equal to the contract budget base only when all authorized work has been negotiated/definitized.
Earned Value	See Budgeted Cost for Work Performed (BCWP)
Earned Value Management System (EVMS)	A project management system utilized for measuring project progress in an objective manner. Combines measurements of scope, schedule, and cost in a single integrated system.

Estimate at Completion (EAC)	A value (expressed in dollars and/or hours) developed to represent a realistic appraisal of the final cost of tasks when accomplished. It's the sum of direct & indirect costs to date plus the estimate of costs for all authorized Work remaining. The EAC = ACWP + the Estimate-to-Complete.
Estimate to Completion (ETC)	A value (expressed in dollar and/or hours) developed to represent a realistic appraisal of the cost of the work still required to be accomplished in completing a task.
Integrated Master Schedule (IMS)	The IMS expands the IMP to the work planning level. It defines the tasks, their durations, milestones, milestone dates which relate to the IMP completion criteria, and interdependencies required to complete the program. The IMP and IMS are used to track and execute the program.
Negotiated Contract Target Cost	The estimated cost negotiated in a Cost Plus Award Fee (CPAF), Cost Plus Fixed Fee (CPFF), Cost Plus Incentive Fee (CPIF) or Fixed Price Incentive Fee (BPIF) contract.

Performance Measurement Baseline (PMB)	The time-phased budget plan against which contract performance is measured. It is formed by the budgets assigned to scheduled Control Accounts and the allocation of overhead costs. For future effort, not planned to the Control Account level, the performance measurement baseline also includes budgets assigned to higher level WBS elements, and undistributed budgets. It equals the total assigned budget less management reserve.
Risk Register	Is a tool commonly used in project planning and organizational risk assessments. It is °lien referred to as a Risk Log. It is used for identifying, analyzing and managing risks.
Variance Analysis Report (VAR)	The internal report completed by the Control Account Manager and submitted, through the Intermediate Manager, to the program manager for those Control Accounts which have variances in excess of established thresholds.

Work Authorization Document (WAD)	A form used to formally authorize and budget work to the Control Account Manager. This document must include, as a minimum, the Control Account number, Statement of Work, scheduled start and finish dates, budget, and the identity of the CAM. It must be approved by Intermediate Manager, and be agreed to by the Control Account Manager.

Attachment 9 - Department of Health & Human Services
HHS
Office of the Assistant Secretary for Preparedness and Readiness
ASPR
Biomedical Advanced Research and Development Authority
BARDA

7 Principles of Earned Value Management
Tier 2
System implementation
Intent Guide

01 November 2010

TABLE OF CONTENTS

7 Principles of EVM Tier 2 System Implementation Intent Guide

OVERVIEW

Earned Value Management (EVM) is a program management tool, technique, and discipline that facilitates systematic planning for and monitoring of, high value, complex projects. It integrates a project's scope of work with the related budget and schedule to permit detailed assessment of overall performance during the life of the project.

Several government-wide guidance documents govern the definition and use of EVM systems. Guidelines outlining the qualities and characteristics of an EVM system are set forth in the American National Standards Institute/Electronic Industries Alliance (ANSI/EIA) Standard-748 (most current version). More detailed and specific guidance and direction is contained in OMB Circular A-11, *Preparation, Submission and Execution fo the Budget*, specifically in Part 7 of that Circular A-11, *Planning, Budgeting, Acquisition, and Management of Capital Assets*, and its supplement, the Capital Programming Guide. Based on this collective OMB guidance, EVMS is intended to be used on those pads of acquisitions that will involve developmental effort. This would include not only those acquisitions designated by the agency as major systems but also those acquisitions that include significant developmental, modification, or upgrade during the operational or steady-state phase of a program.

The FAR rule on EVMS became effective on July 5, 2006. Its purpose is to implement EVMS policy in accordance with OMB Circular A-11. Because the new FAR coverage applies throughout the executive branch and to agencies with disparate definitions of and processes and procedures for major systems acquisitions, the FAR Council decided against a "one-size-fits all" approach and left several significant aspects attic detailed implementation up to the discretion of each covered agency.

The FAR and Health and Human Services Acquisition Regulations (HHSAR) language for EVMS will be utilized for all construction or Information Technology (IT) projects. Since most of the acquisitions at the Biomedical Advanced Research and Development Agency (BARDA) are unique in that most acquisitions are not Information Technology projects or construction projects, BARDA is developing EVM language that incorporates the 7 Principles of Earned Value Management. These principles allow flexibility to an EVM system structure but still meet the spirit of the ANSI/EIA Standard-748. It also incorporates discipline in implementation and operations and also provides the same reporting data outlined by OMB.

The Seven Principles of Earned Value Management are as follows:

1. Plan all work scope to completion

2. Break down the program work scope into finite pieces that can be assigned to a responsible person or organization for control of technical, schedule and cost objectives

3. Integrate program work scope, schedule, and cost objectives into a performance measurement baseline plan against which accomplishments can be measured. Control changes to the baseline.

4. Use actual costs incurred and recorded in accomplishing the work performed.

5. Objectively assess accomplishments at the work performance level.

6. Analyze significant variances from the plan, forecast impacts, and prepare an estimate at completion based on performance to date and work to be performed.

7. Use earned value information in the company’s management processes.

EVM IMPLEMENTATION TIERS

BARDA will be implementing a tiered approach to EVM based on the type of acquisition, size of the acquisition and the technical readiness level. There are three tiers and they are as follows:

TIER I

For all construction contracts and IT contracts the ANSI/EIA-748 Standard for Earned Value Management Systems will apply and all relevant FAR/HHSAR clauses pertaining to EVMS will be incorporated in the contract. The National Defense Industrial Association (NDIA) Program Management Systems Committee (PMSC) ANSI/EIA-748 Standard for Earned Value Management Systems Intent Guide should be used as guidance.

TIER 2

For countermeasure research and development contracts that have a total acquisition costs greater than or equal to $25 million and have a Technical Readiness Level (TRL) of less than 7 will apply EVM principles for tracking cost, schedule and technical performance that comply with the 7 Principles of EVM Implementation.

TIER 3

For countermeasure research and development contracts that are greater than or equal to $10 million but less than $25 million and/or have a TRL of less than 7 will apply EVM principles for tracking cost, schedule and technical performance that comply with the 7 Principles of EVM Implementation.

This Guide is an explanation of the intent of what is expected for a Tier 2 or 3 system implementation of the 7 Principles of EVM.

SEVEN PRINCIPLES OF EVM

Principle 1: Plan all Work Scope

in a performance measurement system implementation the Statement of Work (SOW) should reflect all work that is to be performed. In a 7 Principles implementation a Work Breakdown Structure (WBS) shall be developed to include all elements of the SOW. The level of the WBS may not be as detailed as in a Tier I implementation. It would be developed at a higher level, such as level three or four. It is beneficial and required to develop a WBS dictionary that explains what work is going to be performed in each WBS. This will ensure that the contractor has identified all work scope and left no major work undefined. It is recommended that the work packages descriptions are clear and detailed so that there is an understanding of the work that is to be performed in the work packages. For the 7 Principles implementation programs it would be acceptable for the WBS Dictionary be expanded to include information that would normally be kept on a Work Authorization Document, such as charge numbers associated with the work, period of performance, the manager who is responsible for the work, and budget associated with the WBS. The additional “WAD info” would only be added to the lowest level (i.e. level 3 or 4) of the WBS. The roll up level WBS would only include scope. By doing this documentation is limited to one document instead of two.

By developing a WBS and a WBS Dictionary/Work Authorization Document the work scope has been defined but the documentation is greatly reduced and the costs associated with developing and updating the documentation is reduced. The intent of the combination document is not to reduce the level of information provided to the government but to reduce the amount of documents that need to be produced.

Principle 2: Break Work into Finite Pieces and Define Person/Organization Responsible for Work

In a 7 Principles Tier 2 implementation it is recommended that the work be broken into finite pieces in the schedule tool. It is recommended to plan the work by the lowest level WBS. The lowest level WBS (level 3 or 4) should be the control account and the activities would act as the work packages. For Tier 2 programs that are of larger value (greater than $25M) the expectation is that the control account will be at least at level 4 and potentially level 5. Most of the normal functions accomplished when scheduling will be required on a 7 Principles Tier 2 implementation. These normal functions include, network scheduling, horizontal and vertical traceability, forecasting schedule start and completion dates, and running critical path analysis. As part of vertical traceability it is expected that all contract milestones will be listed on the schedule.

The schedule should include but is not limited to include the following fields:

WBS number
Control Account number
Work package number
Task name
Duration
Baseline Start and Finish Dates

Actual Start and Finish Dates
Forecast Start and Finish Dates
Predecessor/Successors
Activity Percent Complete

All the work scheduled at the lowest level WBS should be identified by a single responsible manager. This manager, known as a Control Account Manager should be identified in the schedule tool and/or in a cost tool. In a 7 Principles implementation, only individuals at the lowest level WBS need be identified and there is no requirement for the costs to roll up by organization, although if it is not cost intensive or tool restricted then developing the OBS is recommended. In many cases, BARDA will provide the top three levels of the WBS for the contractor to use.

Principle 3a: Integrate Scope, Schedule and Budget into a Performance Measurement Baseline

This principle integrates the work scope, the schedule and the budget into a performance measurement baseline. Since we discussed work scope and schedule the focus of this principle is the incorporation of the budget in a time-phased manner. The budget must be integrated with the scope of work and the schedule into a Performance Measurement Baseline (PMB). An accepted way of incorporating the budget and integrating with the scope and schedule is to resource load the Microsoft Project (or other scheduling tool) schedule. This is done by loading the individual people and their loaded rate into the tool. This budget data will be input at the work package level with a rate that includes the indirect costs. The budget will have to have the capability to be rolled up to the control account level and will need to be reported in a way that provides the responsible manager (Control Account Manager) with information needed to manage the program. Resource loading of the schedule is not the only way to incorporate the budget. As long as the budget in the budget/EV tool is linked to the schedule activities and it is flexible to change when schedule baseline dates change, then loading the budget in the Budget/EV tool is an acceptable way to integrate the cost and schedule baselines.

It is recommended that management reserve and undistributed budget be utilized in the budgeting process. Undistributed budget is budget that has not yet been distributed to a control account and it requires additional time to plan the work and distribute the budget to a control account. It is a temporary holding account and budget should only stay in Undistributed Budget for one or two months. If the work scope is easily identified to all the control accounts then the use of Undistributed Budget may not be necessary.

Management Reserve is budget that is set aside, normally by the Program Manager, to be used to budget future but currently unknown tasks. It is associated with risk issues and is to be used to mitigate risk. It is not part of the Performance Measurement Baseline and it should not be used for out of scope work and to cover overruns.

Principle 3b: Control Changes to the Baseline

A properly controlled PMB is crucial to effective program management. The timely and accurate incorporation of contractual changes ensures that the information generated from the execution of

the baseline plan provides an accurate picture of progress and facilitates correct management actions and decisions. The accurate and timely incorporation of authorized and negotiated changes into the PMB ensures that valid performance measurement information is generated for the new scope being executed. Near term new scope effort should be planned and have budget in control accounts. Far term new scope effort that cannot be reasonably planned in the near term can either be put in planning packages in the control account or left in Undistributed Budget if the control account has not been identified. The timely and accurate incorporation of authorized and negotiated changes into the PMB ensures that valid performance measurement information is generated for the new scope being executed. Budget revisions are made when work is added to the contract and are traceable from authorized contract target costs to the control account budgets or from management reserve. Management reserve may be used for future work when additional in-scope work has been identified.

Retroactive changes to the baseline may mask variance trends and prevent the use of performance data to project estimates of cost and schedule at completion. Controlling retroactive adjustments, which should only be made in the current period, if possible, is imperative because they could arbitrarily eliminate existing cost and schedule variances.

The use of program budget logs should be used to track and log all budget changes. The ability to track budget values for both the internal and external changes will help in the maintenance of the performance measurement baseline from program start to completion. Contractor is expected to utilize baseline change documentation facilitating the change. It should provide the rationale/justification, approval process, work scope additions or deletions, dollars, changes to schedules, estimate at completion, etc. It should also include contractual change documents for external changes, such as a contract modification, letter to proceed, not to exceed letter, change order, etc., that transmit and authorize the change or addition to work, budget, and schedule. Other documents that should change if a change of scope has been authorized is: Statement of Work, WBS (changes if applicable); WBS Dictionary (additions or deletions to scope); work authorization documents authorizing new scope, schedule and budget; schedules.

Principle 4: Use Actual Costs Incurred and Recorded in Accomplishing the Work Performed

Some of the new acquisitions at BARDA will be required to be compliant with the Cost Accounting Standards. For 7 Principles implementation contractors must utilize a work order/job order/task code charge number structure that uniquely identifies costs at the control account level. This will allow for accumulation and summarization of costs to higher levels of the work breakdown structure. Actual costs are accumulated in the formal accounting system in a manner consistent with the way the related work is planned and budgeted. Actual costs reported in the performance reports agrees with the costs recorded in the accounting system or can be explained as timing differences. The contractor will have to be able to incorporate and reconcile to the accounting system actual costs on their Contract Performance Reports (CPR) to the customer.

Depending on the amount of material and subcontractors on the program, it is beneficial for management purposes, to include accruals, or estimated actuals, for these costs. Since material and subcontractor invoices are not paid and recorded in the accounting system for up to several months after the work has been planned, performance data will be skewed. Accruing or

estimating actual costs based on receipt (for material) and expended hours for subcontractors will alleviate this issue. The use of accrual/estimated actuals should be reviewed on a case by case basis depending on the size of program, the amount of material or subcontractor budget and costs. If the material and subcontract effort is minimal then the time and effort needed to manage the accruals would outweigh the benefit of having the costs accrued since the performance data would only be minimally affected.

If the subcontractor has a fixed price contract the prime contractor, then the prime contractor must report actual costs in line with the work that is accomplished. The way this is accomplished is to record the actual costs equal to the work that was performed on the CPR.

Principle 5: Objectively Assess Accomplishments at the Work Performance Level

In order to meet this Principle, the scheduling of the scope of work in work packages or activities need to incorporate measurable units or milestones in order to objectively assess accomplishments or obtain what we call “earned value”. These units or milestones are given a value based on labor resources needed to accomplish the work (which becomes the Budgeted Cost of Work Scheduled or BCWS). When they arc accomplished (known as Budgeted Cost of Work Performed or BCWP) they receive the value associated with the budget which measures progress.

Schedule status to measure progress needs to be on at least on a monthly basis although it is preferred on a bi-weekly basis. As part of the status process progress dates, such as actual start/complete and forecast start/complete need to be updated.

Since Microsoft Project seems to be the schedule tool of choice by most contractors, there are four types of earned value methodologies utilized by Microsoft Project of which two assess progress by the completion of milestones and they are the 50/50 and 0/100 methodologies. In both cases, progress is reported for completion milestones and in the 50/50 methodology fifty percent of the value of the work package/activity is credited for stalling the work. The other two earned value methodologies are assessed percent complete (also know as Supervisor’s Estimate) and level of effort (LOE). All four methodologies are legitimate earn value measurement techniques but the assessed percent complete based or supervisor’s estimates are highly discouraged. The reason is that it is highly subjective and is not based on any quantifiable criteria. BARDA will not accept these earned value methodologies unless approved as an exception on a case by ease basis. If percent complete on work packages is used with objective measurable activities, the contractor must show distinct relationship between the budget planned at the work package level and the value earned at the activity level. If this is done properly then the measurement will be objective and the schedule variance will be clearly understood and easy to explain. If this is not done properly then schedule activities are not aligned with the budget in the performance measurement baseline and schedule variances will not be easy to understand. If the latter is the case, BARDA will not accept that as an acceptable earned value methodology.

There are built in weaknesses with the 0/100 and 50/50 methodologies also. If the responsible manager is being asked to plan their work in monthly increments in order to utilize the 0/100 methodology then they may be asked to break the work up in pieces that don’t make logical sense or represent the natural ending of the work. Also the 50/50 methodology, which is usually used for a two month work package, will provide skewed monthly data if the resources in the work

package are not loaded equally for each month. It will give an artificial positive or negative schedule variance the first month and vice versa the next month.

Additional earned value methodologies, such as the weighted milestone methodology and percent complete with milestone gates may be utilized. The weighted milestone method allows value to be earned based on the resource value in each month, which eliminates artificial schedule variances.

For all discrete measurable work packages or control accounts, there must be an activity in each month to measure. Gaps, in which there is nothing to measure in a month or months is not acceptable.

For subcontractors that have a fixed price contract with the prime contractor, the expectation is that there will be no cost variance. The ACWP reported on the CPR will equal the BCWP earned, regardless of the payment schedule with subcontractor.

Principle 6a: Analyze Significant Variances From the Plan

The purpose of this principle is to ensure that the earned value data is analyzed by the contractor and reported to the customer. The 7 Principles programs should be able to calculate the cost variance (BCWP minus Actual Cost of Work Performed (ACWP) and the schedule variance (BCWP minus BCWS) at least on a cumulative basis. It is recommended that variances be calculated on a current month basis also. The EVM system should also provide both monthly and cumulative Cost Performance Index (BCWP divided by ACWP) and Schedule Performance
Index (BCWP divided by the BCWS). This data should be provided at the control account level and at the roll up levels and it needs to be in a format for Control Account Managers and program management to be able to utilize in managing the work.

It is also recommended that the To-Complete Performance Index (TCPI) be included in the Control Account Manager performance report. The TCPI is a valuable index that calculates the cost performance the control account needs to perform at in order to complete the work within the current reported EAC. When the TCPI is compared against the cumulative CPI it gives a good indication whether or not the current EAC is reasonable. For example, if a cumulative CPI is .85 and the TCPI calculates to equal 1.15 that is the performance factor that work would need to perform at in order to meet the current EAC. If the cumulative CPI is .85 then it can be determined that the current EAC might not be reasonable. It allows management and Project Controls the opportunity to question the Control Account Manager as to the validity of the current EAC. As a rule in thumb if the deviation between the CPI and the TCPI is greater than .2 then the CAM should reassess the control account EAC.

These reports, which should be provided monthly, should also include the current Budget at Completion (BAC) and the current Estimate at Completion (BAC). In addition, it would be a plus if the CAM could see a report with their time-phased spread of hours and dollars for their budget plan (BCWS), work accomplished (BCWP) and actual costs (ACWP).

For all variances that exceed the contractual variance threshold will include a description of what caused the variance, impact to the control account and the program, and a corrective action.

Principle 6b: Prepare an Estimate at Completion Based on Performance to Date and Work to be Performed

Providing an updated EAC is a prime concern of the customer and the contractor. Therefore a robust EAC process should be in place whether the program is ANSI compliant or not.

Based on the performance to date the Estimates at Completion can be updated on a monthly basis by the Control Account Manager in the scheduling tool during the status process or in the cost/EVM tool at the end of the month's process prior to submittal of the EVM report. The EAC is an element of the performance measurement system that needs to accurately reflect the contractor's best estimate of what it will cost to complete the project.

Program management should be able to validate control account manager's EACs by looking at performance indices, such as the To-Complete Performance Index, as well as independent statistical EACs.

Principle 7: Use EVMS Information in the Company's Management Processes

One of the key areas that concerns government Program Management Offices (PMO) is the level of importance that contractor's place on EVM as a management tool. During a site visit, such as conducting an Integrated Baseline Review, the PMO gauges what the interest, knowledge, and most importantly, the usage of the performance measurement data in managing the program. They want to know that the managers on the program, including the program manager, have received some earned value training. The level of involvement and use of the EVM data to manage their schedule, cost and technical issues is ascertained by questions. The PMO can also tell by how robust the EACs are and if the variance narratives are being written with impacts to the program and corrective actions being monitored by the contractor. It is important that the contractor's management team, including the Program Manager, utilize the data from the performance measurement system as a management tool. They should be knowledgeable and understand the data. They should know what is causing the variances and ensure that the variance narratives are written properly and answer what the issues, impacts and corrective actions are. They should be able to demonstrate that they use the information to assist them in the management decision process. They should hold their Control Account Managers accountable to use the data and write clear proper variance analysis report (VAR). If the Control Account Manager does not write a proper VAR then Project Controls needs to help instruct them how to do it. It is recommended that prior to the Earned Value report be sent to the government that the Program Manager has a meeting with the Control Account Managers and Project Control and review the data and ensure that the variance analysis is complete and that the Program Manager agrees with it. This review is also used to ensure that the EACs arc acceptable to the Program Manager, who is ultimately responsible for the program EAC. This is an efficient and quick way to make any adjustments to the earned value report since all the key personnel are in one room. If the data appears to be unreliable then the PM needs to hold Project Controls accountable to ensure that they are using discipline in changing baselines, assessing process properly, and capturing actual costs to ensure that the data that is reported is accurate.

APPENDIX: GLOSSARY OF TERMS

Actual Cost of Work Performed (ACWP)	The costs actually applied and recorded in accomplishing the work performed within a specified period.
Actual Direct Cost	Those costs identified specifically with a contract, based upon the contractor's cost identification and accumulation system as accepted by the cognizant DCAA representatives. (See Direct Costs).
Advance Agreement (AA)	An agreement between the contractor and the Contract Administration Office concerning the application of an approved earned value management system to contracts within the affected facility.
Authorized Work	That effort which has been authorized and is on contract, or that for which authorized contract costs have not been agreed to but for which written authorization has been received.
Baseline	(See Performance Measurement Baseline).
Budget at Completion (BAC)	The sum of all budgets (BCWS) allocated to the contract. Synonymous with the term Performance Measurement Baseline.
Budgeted Cost for Work Performed (BCWP)	The sum of the budgets for completed Work Packages and completed portions of open Work Packages, plus the appropriate portion of the budgets for level of effort and apportioned effort (Also see Earned Value).
Budgeted Cost for Work Scheduled (BCWP)	The sum of the budgets for completed Work Packages, planning packages, etc., scheduled to be accomplished (including in-process Work Packages), plus the amount of level of effort and apportioned effort scheduled to be accomplished within a given time period.

Change Order (CO)	A formal authorization by the Procuring Contracting Officer for a change of scope to an existing contract
Contract Modification	A written and binding authorization to proceed created after change proposal negotiations.
Contract Budget Base (CBB)	The negotiated contract cost plus the estimated cost of authorized unpriced work, where: (1) Negotiated Contract Cost is that cost on which contractual agreement has been reached. For an incentive contract, it is the definitized contract target cost plus/minus the value of changes which have been priced and incorporated into the contract through contract change order or supplemental agreement. For fixed-fee contracts, it is the negotiated estimated cost. Changes to the estimated cost will consist only of the formal contract modifications or change orders or change in the contract statement of work, not for cost growth, and (2) Estimated cost of authorized, unpriced work is the estimated cost (excluding fee or profit) for that work for which written authorization has been received, but for which definitized contract prices have not been incorporated into the contract through supplemental agreement.
Control Account	A management control point at which actual costs can be accumulated and compared to budgeted cost for work performed. A control account is a natural control point for cost/schedule planning and control since it represents the work assigned to one responsible organizational element on one contract work breakdown structure (CWBS) element.
Control Account Manager (CAM)	A member of a functional organization responsible for task performance detailed in a Control Account and for managing the resources authorized to accomplish the tasks.

Control Account Plan (CAP) Report	A CAP report is a timephased report which reflects all the work and effort to be performed in a control account. The CAP report will reflect the hours and dollars by element of cost (labor, subcontract, ODC, etc).
Contract Performance Report (CPR)	The monthly report submitted to the customer showing the current, cumulative and at completion status, the performance measurement baseline, manpower loading, and a narrative explanation of significant program variances.
Contract Target Cost	The dollar value (excluding fee or profit) negotiated in the original contract plus the cumulative cost (excluding fee or profit) applicable to all definitized changes to the contract. It consists of the estimated cost negotiated for a cost plus fixed fee contract and the definitized target cost for an incentive contract. The contract target cost does not include the value of authorized/un-negotiated work, and is thus equal to the contract budget base only when all authorized work has been negotiated/definitized.
Cost Performance Index (CPI)	An efficiency rating reflecting a project’s budget performance - either over or under. Measured as a ratio of the budgeted value of work accomplished versus the actual costs expended for a given project time period. The formula for CPI is BCWP/ACWP.
Discrete Effort	Program effort that has a measurable output, product or service.
Direct Costs	Those costs (labor, material, etc.) that can be reasonably and consistently related directly to service performed on a unit of work, and are charged directly to the contract, without distribution to an overhead unit.

Earned Value	See Budgeted Cost for Work Performed (BCWP)
Earned Value Management System (EVMS)	A project management system utilized for measuring project progress in an objective manner. Combines measurements of scope, schedule, and cost in a single integrated system.
Estimate at Completion (EAC)	A value (expressed in dollars and/or hours) developed to represent a realistic appraisal of the final cost of tasks when accomplished. It's the sum of direct & indirect costs to date plus the estimate of costs for all authorized Work remaining. The EAC ACWP ± the Estimate-to-Complete.
Estimate to Completion (ETC)	A value (expressed in dollar and/or hours) developed to represent a realistic appraisal of the cost of the work still required to be accomplished in completing a task.
Indirect Costs	Represents those costs, because they are incurred for common or joint objectives, are not readily subject to treatment as direct costs. (See overhead).
Integrated Baseline Review (IBR)	An Integrated Baseline Review (IBR) is a formal review led by the Government Program Manager and Technical Support Staff. An IBR is conducted jointly with the Government and their Contractor counterparts. The purpose of an IBR is to: verify the technical content of the Performance Measurement Baseline (PMB); assess the accuracy of the related resources (budgets) and schedules; identify potential risks.
Integrated Master Plan (IMP)	The overall program plan including the work definition, technical approach, performance criteria, and completion criteria.

Integrated Master Schedule (IMS)	The IMS expands the IMP to the work planning level. It defines the tasks, their durations, milestones, milestone dates which relate to the IMP completion criteria, and interdependencies required to complete the program. The IMP and 1MS are used to track and execute the program.
Integrated Product Team (IPT)	A grouping of project personnel along project objective lines rather than along organizational lines. Integrated Product Teams are work teams that represent a transition from a functional organization structure to a multi-functional project objective arrangement.
Internal Replanning	Replanning actions performed by the program for remaining effort within the recognized total allocated budget.
Level of Effort (LOE)	Work that does not result in a final product, e. g., liaison, coordination, follow-up, or other support activities, and which cannot be effectively associated with a definable end product process result. It is measured only in terms of resources actually consumed within a given time period.
Management Reserve (MR)	An amount of the total Contract Budget Base (CBB) withheld for management control purposes rather than designated for the accomplishment of a specific task or set of tasks. It is not a part of the Performance Measurement Baseline.
Negotiated Contract Target Cost	The estimated cost negotiated in a Cost Plus Award Fee (CPAF), Cost Plus Fixed Fee (CPFF), Cost Plus Incentive Fee (CPIF) or Fixed Price Incentive Fee (FPIF) contract.
Original Budget	The budget established at, or near, the time the contract was signed, based on the negotiated contract cost.

Overhead	Indirect labor and material, supplies and services costs and other charges, which cannot be consistently identified with individual programs.
Other Direct Costs	A group of accounting elements which can be isolated to specific tasks, other than labor and material. Included in ODC are such items as travel, computer time, and services
Performance Measurement Baseline (PMB)	The time-phased budget plan against which contract performance is measured. It is formed by the budgets assigned to scheduled Control Accounts and the allocation of overhead costs. For future effort, not planned to the Control Account level, the performance measurement baseline also includes budgets assigned to higher level WBS elements, and undistributed budgets. It equals the total assigned budget less management reserve.
Performing Organization	A defined unit within the program organization structure, which applies the resources to performs the authorized scope of work.
Planning Package	A logical aggregation of far term work within a Control Account that can be identified and budgeted but not yet defined into Work Packages.
Reprogramming	Replanning of the effort remaining in the contract, resulting in a new budget allocation which exceeds the contract budget base. The resulting baseline is called an Over Target Baseline (OTB).
Responsible Organization	A defined unit within program’s organization structure that is assigned responsibility for accomplishing specific tasks.

Risk Register	Is a tool commonly used in project planning and organizational risk assessments. It is often referred to as a Risk Log. It is used for identifying, analyzing and managing risks.
Schedule Performance Index (SPI)	An efficiency rating reflecting how quickly or slowly project work is progressing. Measured as a ratio of work accomplished versus work planned for a given period of time. The formula for SP1 is BCWP/BCWS.
Significant Variances	Those differences between planned and actual cost and schedule performance which require further review, analysis, or action. Appropriate thresholds are established as to the magnitude of variances which will require variance analysis.
Statistical Estimate at Completion	Is a single point estimate that can be quickly prepared and used to test the reasonableness of the current cost estimates and budget and to indicate when a comprehensive EAC should be prepared
To Complete Performance Index (TCPI)	An efficiency rating that provides a projection of the anticipated performance required to achieve the EAC. TCPI indicates the future required cost efficiency needed to achieve a target EAC (Estimate At Complete). Any significant difference between TCPI and the CPI needed to meet the EAC should be accounted for by management in their forecast of the final cost.
Total Allocated Budget (TAB)	The sum of all budgets allocated to the contract. Total allocated budget consists of the performance measurement baseline and all management reserve. The total allocated budget will reconcile directly to the Contract Budget Base (CBB). Any differences will be documented as to quantity and cause.

Undistributed Budget (UB)	Budget applicable to contract effort which has not yet been identified to WBS elements at or below the lowest level of reporting to the Government.
Variance Analysis Report (VAR)	The internal report completed by the Control Account Manager and submitted, through the Intermediate Manager, to the program manager for those Control Accounts which have variances in excess of established thresholds.

Variances	(See Significant Variances).
Work Authorization Document (WAD)	A form used to formally authorize and budget work to the Control Account Manager. This document must include, as a minimum, the Control Account number, Statement of Work, scheduled start and finish dates, budget, and the identity of the CAM. It must be approved by Intermediate Manager, and be agreed to by the Control Account Manager.
Work Breakdown Structure (WBS)	A product-oriented, family-tree composed of hardware, software, services, data and facilities which results from system engineering efforts. A work breakdown structure displays and defines the product(s) to be developed and/ or produced and relates the elements of work to be accomplished to each other and to the end product. (1) Program WBS. The work breakdown structure that covers the acquisition of a specific defense material item and is related to contractual effort. A program work breakdown structure includes all applicable elements consisting of at least the first three levels of the work breakdown structure and extended by the program manager and /or contractor(s). A program work breakdown structure has uniform element terminology, definition, and placement in the family tree structure. (2) Contract WBS (CWBS) The complete WBS for a contract, developed and used by a contractor within the guidelines of MIL-Handbook 881 (latest revision) or NASA WBS Handbook (insert reference) or other customer guidelines and according to the contract work statement. It includes the approved work breakdown structure for reporting purposes and its discretionary extension to the lower levels by the contractor, in accordance with MIL-Handbook 881 and the contract work statement. It includes all the elements for the products (hardware, software, data, or services) which are the responsibility of the contractor.

Work Packages	Detailed short-span jobs, or material items, identified by the contractor for accomplishing work required to complete the contract. A Work Package has the following characteristics. 1. It represents units of work at levels where work is performed. 2. It is clearly distinguishable from all other work packages. 3. It is assignable to a single organizational element. 4. It has scheduled start and finish dates and, as applicable, interim milestones, all of which are representative of physical accomplishment. 5. It has a budget or assigned value expressed in terms of dollars, man-hours or other measurable units. 6. Its duration is limited to a relatively short span of time or it is subdivided by discrete value milestones to facilitate the objective measurement of work performed. 7. It is integrated with detailed engineering, manufacturing, or other schedules.
Work Package Budgets	Resources which are formally assigned by the CAM to accomplish a Work Package, expressed in dollars and/or hours.

Attachment 10

Communication Management Plan

Biomedical Advanced Research and Development Authority
(BARDA)
Broad Spectrum Antimicrobial Program
Chimerix Contract
Number HHSO100201100013C
330 Independence Ave. SW
Washington, DC 20201

BSA Communications Management Plan

Introduction:

The purpose of the Broad Spectrum Antimicrobial (BSA) communications management plan is to define the communication requirements for the project and outline how BARDA and the Contractor will distribute information. The communications management plan defines the following:

- Communication requirements based on roles,
- What information will be communicated,
- How the information will be communicated,
- When will information be distributed,
- Who does the communication,
- Who receives the communication,

This BSA communications management plan sets the communications framework for this project. It will serve as a guide for communications throughout the period of performance and will be updated, as communication needs change. This plan identifies and defines the roles of persons involved in the project. The BSA communications management plan provides an in-depth guide on how the program plans to conduct meetings between stakeholders to ensure a successful outcome. A project team directory is below to provide contact information for all stakeholders directly involved in the project.

Communications Management Approach

The BARDA Project Officer (PO) and Contracting Officer (CO) and Contractor's Program Manager will take a proactive role in ensuring effective communication between all parties on this contract. The goal of all parties is to maintain a transparent communicative relationship that fosters the sharing of information to relevant Stakeholders in a timely and efficient manor to facilitate the successful outcome of the programs mutual objectives, the development of CMX-001 as a novel broad spectrum antibiotic for the therapeutic treatment of individuals exposed to biodefense threat agents. This communication plan documents the communication requirements for all parties that will support the implementation of this contract. The Communications Matrix will provide a guide for the communication process, including:

- What type of information Stakeholders will communicate,
- Who is responsible for communicating relevant information,
- When should stakeholders communicate program relevant information,

Roles

Project Sponsor: BSA Branch Chief

The project sponsor is responsible for overseeing the BSA contracts and the champion of the project and has authorized the project by signing the project charter. This person is responsible for the funding of the project and is ultimately responsible for its success. Since the Project Sponsor is at the executive level, communications should be presented in summary format unless the Project Sponsor requests more detailed communications. Communication from the Contractor to the Project Sponsor should flow through the BARDA

Contracting Officer or Project Officer through the appropriate chain of command to the Project Sponsor, unless otherwise indicated by the Project Sponsor.

Contract Officer

The BARDA Contract Officer (CO) oversees the project at the program level and is responsible for all contract related issues. The CO is the United State Government's representative that has the legal authority to bind BARDA to a contract with the Contractor. The CO will communicate directly with the Contractor and shall be included on all communications between the Contractor and BARDA staff. At any time, if the Contractor shall have contractual or programmatic concerns regarding the contract, scope of work, or any other issues, the Contractor should immediately address all concerns directly to the CO.

Project Officer

The BARDA Project Officer (PO) [and/or Contracting Officer's Technical Representative (COTR)] oversees the project at the program level and is responsible for the technical implementation of the BSA contract. The PO is responsible for managing the cost, schedule, and performance parameters for the contract. The PO will be in regular communication with Contractor's POC to ensure the contract is maintaining cost, schedule, and performance objectives.

The PO manages day-to-day resources, provides project guidance, monitors, and reports on the projects metrics as defined in the Project Management Plan. The PO is responsible for the execution of the project and is the primary communicator for the project.

The PO is responsible for briefing the Project Sponsor and subsequent leadership levels. The PO is the individual responsible for communicating program progress, program risk, and contract relevant issues raised by the Product Coordination Team charter, stakeholders, and/or Contractor.

Program Manager

The BARDA Program Manager (PM) a contractor for BARDA will support the Project Officer. The PM may communicate with the contractor on program management related issues on behalf of the BARDA PO. The intent of the communication is to provide information and is not to be taken as a directive.

Key Stakeholders and the Product Coordination Team

The BARDA Branch Chief responsible for overseeing the BSA contract signed a Product Coordination Team (PCT) Charter, identifying internal and external BARDA program members and stakeholders supporting this contract. The BARDA BSA PCT will meet regularly to review the project. The PO will chair the PCT. Based on their technical or program management expertise, each stakeholder and PCT member will play a key role. All BARDA and USG Team members will work to communicate all activities through the PO.

Members of the PCT may at times work directly with other stakeholders and/or the Contractor with consent of the CO and PO. In such situations, the CO, PO, and Contractor POC shall be included on all communications. It is important to note that the intent of this communication is to provide information and is not to be taken as a directive by the Contractor. If the recipient(s) believe(s) the information provided herein may be construed as a directive, the recipient(s) should disregard that portion of the communication and contact the BARDA BSA Contracting Officer.

Contractor Liaison

The Contractor has identified a BARDA Liaison (BL) as a primary POC and alternative POC (in the advent that the primary POC is unavailable) to communicate directly with the BARDA CO and PO. The Contractor BL will work closely with the CO and BARDA PO to manage the implementation of this contract. This communication shall be transparent and informative for all entities. Communication from the Contractor to BARDA should flow through the Contractor BL to the CO and PO to ensure proper coordination within BARDA and the Contractor's organization.

The Contractor's BL is responsible for the implementation of the scope of work agreed to under the contract. The Contractor's BL provide reports on the project's metrics as defined in the Project Management Plan. As the person responsible for the implementation of the project, the Contractor's BL is the primary communicator for the Contractor and responsible for distributing information according to the Communications Management Plan.

Food and Drug Administration

The Food and Drug Administrations', Center for Drug Evaluation and Research (CDER) is the regulatory authority overseeing the development of the BSA Medical Countermeasure. CDER plays a critical role in the success of this contract between BARDA and the Contractor. In an effort to provide open communication, the communications management plan encourages the sharing of communications between the FDA, BARDA, and the Contractor. The communication management plan does not prevent either BARDA or the Contractor from engaging CDER.

Project Team Directory

Role	Name	Email	Phone
Project Sponsor	[...***...]	[...***...]	[...***...]
Contracting Officer	[...***...]	[...***...]	[...***...]
Project Officer/PCT Chair	[...***...]	[...***...]	[...***...]
Program Manager (Contractor)	[...***...]	[...***...]	[...***...]
Contractor POC/BARDA Liaison	[...***...]	[...***...]	[...***...]
Alternative Contractor			

*****Confidential Treatment Requested**

Communication Deliverables and Procedures

The Contract Deliverables List (reference) outlines the communication requirements and expectations for various types of meetings and program deliverables.

Guidelines for Meetings

Meeting Agenda

The Contractor will send the meeting agenda to the PO in advance of the meeting as outlined in the Contract Deliverables List. The agenda will include ongoing action items, requested participants and provide a brief agenda for the meeting. The BARDA PO will review and finalize the meeting agenda and distribute accordingly.

Meeting Minutes

The Contractor will draft meeting minutes and forward to the PO within a specific amount of time as outlined in Contract Deliverables List. The meeting minutes will provide a synopsis of the meeting, list of participants, highlight decisions made, reference supportive material and include the status of all open and closed action items and a parking lot list. The BARDA PO will review and finalize meeting minutes.

Action Items

The meeting agenda and minutes will record action items. Action items will include the action item, owner of the action item, and the anticipated date of completion. Meetings will start with a review of the status of all action items from previous meetings and end with a review of all new action items resulting from the meeting. The review of the new action items will include identifying the owner for each action item and setting a date for completing the action item.

Meeting Chair - BARDA Project Officer

The meeting chair is responsible for distributing the meeting agenda, facilitating the meeting and distributing the meeting minutes. As the meeting chair, the BARDA Project Officer will ensure that the meeting starts and ends on time and that all presenters adhere to their allocated time frames. The Contractor will be responsible for developing the initial agenda, drafting the minutes, capturing action items, and following up on meeting outcomes.

Note Taker: Contractor

The Contractor is the note taker responsible for documenting the status of all meeting items, maintaining a parking lot item list and taking notes of anything else of importance during the meeting. The note taker will give a copy of their minutes to the BARDA CO for final approval of meeting minutes.

Parking Lot

The parking lot is a tool used by the facilitator to record and defer items which are not on the meeting agenda but that, merit further discussion later or through another forum.
A parking lot record should identify an owner for the item, as this person will he responsible for ensuring follow-up. The Contractor will include a parking lot list in the meeting minutes.

Attachment 11
Non-Clinical Terms of Award

These Non-Clinical Terms of Award detail an agreement between the Biomedical Advanced Research and Development Authority (BARDA) and the Awardee (i.e., the Contractor); they apply to all grants and contracts that involve non-clinical research.

Draft protocols for each nonclinical study funded by BARDA will be submitted to BARDA for review and comment. Contractor will address in writing its consideration of BARDA comments prior to submission of protocols to the FDA for comment.

BARDA shall have rights to all protocols, data resulting from execution of these protocols, and final reports, funded by BARDA under this contract, as defined in Rights in Data Clause in FAR 52.227-14, Alternative II. BARDA reserves the right to request that the Awardee provide any contract deliverable in a non-proprietary form, to ensure BARDA has the ability to review and distribute the deliverables, as BARDA deems necessary.

A. Safety and Monitoring Issues

PHS Policy on Humane Care and Use of Laboratory Animals

Before award and then with the annual progress report, the Awardee must submit to BARDA a copy of the current Institutional Animal Care and Use Committees (IACUC) documentation of continuing review and approval and the Office of Laboratory Animal Welfare (OLAW- National Institutes of Health) Federal Wide Assurance (FWA) number for the institution or site.

If other institutions are involved in the research (e.g., a multicenter trial or study), each institution's IACUC must review and approve the protocol. They must also provide BARDA initial documentation and documentation of continuing review and approval and FWA number.

The Awardee must ensure that the application as well as all protocols are reviewed by the performing institution's IACUC.

To help ensure the safety of animals used in BARDA funded studies, the Awardee must provide BARDA copies of documents related to all major changes in the status of ongoing protocols for studies funded by BARDA, including the following:

- All amendments or changes to the protocol, identified by protocol version number, date, or both and date it is valid.
- All material changes in IACUC policies and procedures, identified by version number, date, and all required signatories (if applicable)
- Termination or temporary suspension of the study(ies) for regulatory issues
- Termination or temporary suspension of the protocol.
- Any change that is made in the specific IACUC approval for the indicated study(ies).
- Any other problems or issues that could affect the scientific integrity of the study(ies), i.e. fraud, misrepresentation, misappropriation of funds, etc.

Awardees must notify BARDA by email or fax of any of the above changes within five business days from the time awardee becomes aware of such changes, followed by a letter signed by the institutional business official, detailing notification of the change of status to the local IACUC and a copy of any responses from the IACUC.

If a non-clinical protocol has been reviewed by an institutional biosafety committee (IBC) or the NIH Recombinant DNA Advisory Committee (RAC), the Awardee must provide information about the initial and ongoing review and approval, if any. See the NIH Guidelines for Research Involving Recombinant DNA Molecules.

Non-Clinical Data and Safety Monitoring Requirements

BARDA strongly recommends continued safety monitoring for all non-clinical studies of investigational drugs, devices, or biologics. FDA expects non-clinical studies to include safety in addition to efficacy. Awardee should consider evaluation of clinical relevant safety markers in the pivotal and non-pivotal, non-clinical studies.

BARDA will provide input to the Awardee decisions regarding the type and extent of safety data accrual to be employed before the start of efficacy or safety studies.

The Awardee shall inform BARDA of any upcoming site visits and/or audits of CRO facilities funded under this effort. BARDA reserves the right to accompany the awardee on site visits and/or audits of CROs as BARDA deems necessary.

B. BARDA Review Process Before Non-Clinical Study Execution Begins

BARDA is under the same policy-driven assurances as NIH in that it has a responsibility to obtain documentation concerning mechanisms and procedures that are in place to protect the safety and welfare of animals used in BARDA funded non-clinical trials. Therefore, before study execution, the Awardee must provide the following (as applicable) for review by BARDA:

- IACUC approved (signed) non-clinical research protocol identified by version number, date, or both, including details of study design, euthanasia criteria, proposed interventions, and exclusion criteria.
- Documentation of IACUC approval, including OLAW FWA number, IACUC registration number, and IACUC name.
- Awardee should reduce the number of animals required for a study using power of statistics
- Plans for the management of side effects, rules for interventions and euthanasia criteria
- Procedures for assessing and collecting safety data
- If a study is contracted through CRO(s), work orders and service agreements the Awardee shall assure that an integrated safety documentation plan is in place for the study site, pharmacy service records on the dosing material to be used and excipients, and laboratory services (including histopathology).
- Documentation that the Awardee or CRO and all staff responsible for the conduct of the research have received required training in the protection and handling of animals
- Purchasing of animals and/or other supplies for non-clinical studies funded in part or in whole by BARDA requires written approval by the Contracting Officer in accordance with the contract. The Awardee must have the ability to return/re-sell animals, at purchase price, to distributor or a third party, in the event that the Contracting Officer Authorization is not granted.
- Provide justification for whether studies require good laboratory practice (GLP) conditions
- Provide justification for whether studies will be classified as non-pivotal or pivotal studies

Non-Clinical Studies not being submitted to the FDA prior to execution:

Awardee will submit proposed protocols to BARDA at least 30 days prior to study execution for study protocols that are not being submitted to the FDA. BARDA staff comments will be forwarded to the Awardee within 8 business days of receipt of the above information provided. The Awardee must address in writing its consideration of all study design, safety, regulatory, ethical, and conflict of interest concerns raised by BARDA . After receiving the documentation, the BARDA Contracting Officer will provide a written Contract Officer Authorization (COA) Letter to

the Awardee. This COA provides authorization to the Awardee to execute the specific nonclinical study funded in part or in whole by BARDA.

Non-Clinical Studies that will be submitted to the FDA prior to execution:

BARDA staff continents will be forwarded to the Awardee within 8 business days of receipt of the above information. The Awardee must address in writing its consideration of all study design, safety, regulatory, ethical, and conflict of interest concerns raised by BARDA, However the FDA shall have final authority over such protocols and protocol amendments. After receiving the documentation, the BARDA Contracting Officer will provide a Contracting Officer Authorization (COA) Letter authorizing the execution of the study.

Final decisions regarding ongoing safety reporting requirements for research not performed under an Investigational New Drug Application (IND) or investigational device exemption (IDE) must be made by the Awardee in consultation with BARDA.

References

- **Public Health Service Policy on Humane Care and Use of Laboratory Animals** (http://grants.nih.gov/grants/olaw/InvestigatorsNeed2Know.pdf)
- **USDA Animal Welfare Act** (http://awic.nal.usda.gov/nal_display/index.php?info_center=3&tax_level=3&tax_subject=182&topic_id=1118&Ievel3_d=6735&level4_id=0&level5_id=0&placement_default=0)

Clinical Terms of Award

These Clinical Terms of Award detail an agreement between the Biomedical Advanced Research and Development Authority (BARDA) and the Awardee; they apply to all grants and contracts that involve clinical research.

Draft protocols for each clinical study funded by BARDA will be submitted to BARDA for review and comment. Contractor will address in writing its consideration of BARDA comments prior to submission of protocols to the FDA for comment.

BARDA shall have rights to all protocols, data generated from the execution of those protocols, and final reports, funded by BARDA under this contract, as defined in Rights in Data Clause in FAR 52.227-14, Alternative II. BARDA reserves the right to request that the Awardee provide any contract deliverable in a non-proprietary form, to ensure BARDA has the ability to review and distribute the deliverables, as BARDA deems necessary.

A. Safety and Monitoring Issues

Institutional Review Board (IRB) or independent Ethics Committee (IEC) Approval

Before award and then with the annual progress report, the Awardee must submit to BARDA a copy of the current IRB or IEC approved informed consent document, documentation of continuing review and approval and the Office of Human Research Protections (OHRP) FWA number for the institution or site.

If other institutions are involved in the research (e.g., a multicenter clinical trial or study), each institution's IRB or IEC must review and approve the protocol. They must also provide BARDA initial and annual documentation of continuing review and approval, including the current approved informed consent document and FWA number.

The Awardee must ensure that the application as well as all protocols are reviewed by their IRB or IEC.

To help ensure the safety of participants enrolled in BARDA funded studies, the Awardee must provide BARDA copies of documents related to all major changes in the status of ongoing protocols for studies funded by BARDA, including the following:

- All amendments or changes to the protocol, identified by protocol version number, date, or both and date it is valid.
- All changes in informed consent documents, identified by version number, date, or both and dates it is valid.
- Termination or temporary suspension of patient accrual.
- Termination or temporary suspension of the protocol.
- Any change in IRB approval.
- Any other problems or issues that could affect the participants in the studies.

Awardees must notify BARDA through the Contracting Officer's Technical Representative (COTR) or Contracting Officer (CO) of any of the above changes within five working days by email or fax, followed by a letter signed by the institutional business official, detailing notification of the change of status to the local IRB and a copy of any responses from the IRB or IEC.

If a clinical protocol has been reviewed by an institutional biosafety committee (IBC) or the NIH Recombinant DNA Advisory Committee (RAC), the Awardee must provide information about the initial and ongoing review and approval, if any. See the NIH Guidelines for Research Involving Recombinant DNA Molecules.

Data and Safety Monitoring Requirements

BARDA strongly recommends independent safety monitoring for clinical trials of investigational drugs, devices, or biologics; clinical trials of licensed products; and clinical research of any type involving more than minimal risk to volunteers. Independent monitoring can take a variety of forms, Phase III clinical trials must be reviewed by an independent data and safety monitoring board (DSMB); other trials may require DSMB oversight as well. The Awardee shall inform BARDA of any upcoming site visits and/or audits of CRO facilities funded under this effort. BARDA reserves the right to accompany the awardee on site visits and/or audits of CROs as BARDA deems necessary.

A risk is minimal where the probability and magnitude of harm or discomfort anticipated in the proposed research are not greater than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests. For example, the risk of drawing a small amount of blood from a healthy individual for research purposes is no greater than the risk of doing so as part of a routine physical examination (45 CFR 46.102l).

Final decisions regarding the type of monitoring to be used must be made by the Awardee before enrollment starts in consultation with BARDA. Discussions with the responsible BARDA COTR regarding appropriate safety monitoring must occur before patient enrollment begins and may include discussions about the appointment of one of the following.

- **Independent Safety Monitor -** a physician or other appropriate expert who is independent of the study and available in real time to review and recommend appropriate action regarding adverse events and other safety issues.

- **Independent Monitoring Committee (IMC) or Safety Monitoring Committee (SMC**) **-** a small group of independent investigators and biostatisticians who review data from a particular study.

- **Data and Safety Monitoring Board -** an independent committee charged with reviewing safety and trial progress and providing advice with respect to study continuation, modification, and termination. All phase III clinical trials must be reviewed by a DSMB; other trials may require DSMB oversight as well. Please refer to: NIAID Principles for Use of a Data and Safety Monitoring Board (DSMB) For Oversight of Clinical Trials Policy.

When a monitor or monitoring board is organized, a description of it, its charter or operating procedures (including a proposed meeting schedule and plan for review of adverse events), and roster and *curriculum vitae* from all members must be submitted to BARDA before enrollment starts.

Additionally, the Awardee must submit written summaries of all reviews conducted by the monitoring group to the BARDA within 30 days of reviews or meetings.

B. BARDA Protocol Review Process Before Patient Enrollment Begins

BARDA has a responsibility to obtain documentation concerning mechanisms and procedures that are in place to protect the safety of participants in BARDA-supported clinical trials. Therefore, before patient accrual or participant enrollment, the Awardee must provide the following (as applicable) for review by BARDA.

- IRB or IEC approved clinical research protocol identified by version number, date, or both, including details of study design, proposed interventions, patient eligibility, and exclusion criteria.

- Documentation of IRB or IEC approval, including OHRP FWA number, IRB or IEC registration number, and IRB or IEC name.

- IRB or IEC approved informed consent document, identified by version number, date, or both and date it is valid.

- Plans for the management of side effects.

- Procedures for assessing and reporting adverse events.

- Plans for data and safely monitoring (see A above) and monitoring of the clinical study site, pharmacy, and laboratory.

- Documentation that the Awardee and all study staff responsible for the design or conduct of the research have received Good Clinical Practice (GCP) training in the protection of human subjects.

BARDA staff comments will be forwarded to the Awardee within 8 business days of receipt of the above information. The Awardee must address in writing its consideration of BARDA COTR comments. However the FDA shall have final authority over such protocols and protocol amendments. After receiving the documentation, the BARDA Contracting Officer will provide a Contracting Officer Authorization (COA) Letter authorizing the execution of the study. This COA provides authorization to the awardee to execute the specific clinical study funded in part or in whole by BARDA.

C. Investigational New Drug or Investigational Device Exemption Requirements

Consistent with federal regulations, clinical research projects involving the use of investigational therapeutics, vaccines, or other medical interventions (including licensed products and devices for a purpose other than that for which they were licensed) in humans under a research protocol must he performed under a Food and Drug Administration (FDA) investigational new drug (IND) or investigational device exemption (IDE).

Exceptions must be granted in writing by FDA. If the proposed clinical trial will be performed under an IND or IDE, the Awardee must provide BARDA with the name and institution of the IND or IDE sponsor, the date the IND or IDE was filed with FDA, the FDA IND or IDE number, any written comments from FDA, and the written responses to those comments.

Unless FDA notifies Awardee otherwise, the Awardee must wait 30 calendar days from FDA receipt of an initial IND or IDE application before initiating a clinical trial.

The Awardee must notify BARDA if the FDA places a study on clinical hold and provide BARDA any written comments from FDA, written responses to the comments, and documentation in writing that the hold has been lifted.

The Awardee must not use grant or contract funds during a clinical hold to fund clinical studies that are on hold.

Required Time-Sensitive Notification

Under an IND or IDE, the sponsor must provide FDA safely reports of serious adverse events. Under these Clinical Terms of Award, the Awardee must submit copies to the responsible BARDA Project Officer or the Contracting Officer’s technical representative (COTR) as follows:

- *Expedited safety report of unexpected or life-threatening experience or death* — A copy of any report of unexpected or life-threatening experience or death associated with the use of an IND drug, which must be reported to FDA by telephone or fax as soon as possible but no later than seven days after the IND sponsor’s receipt of the information, must be submitted to the BARDA program officer or the contracting officer’s technical representative within 24 hours of FDA notification.

- *Expedited safety reports of serious and unexpected adverse experiences* — A copy of any report of unexpected and serious adverse experience associated with use of an IND drug or any finding from tests in laboratory animals that suggests a significant risk for human subjects, which must be reported in writing to FDA as soon as possible but no later than 15 days after the IND sponsor’s receipt of the information, must be submitted to the BARDA Project Officer or the Contracting Officer’s Technical Representative within 24 hours of FDA notification.

- *IDE reports of unanticipated adverse device effect* — A copy of any reports of unanticipated adverse device effect submitted to FDA must be submitted to the BARDA Project Officer or the Contracting Officer’s Technical Representative within 24 hours of FDA notification.

- *Expedited safety reports* — should be sent to the BARDA Project Officer or the Contracting Officer's Technical Representative concurrently with the report to FDA.

- Other adverse events documented during the course of the trial should be included in the annual IND or IDE report and reported to the BARDA annually.

In case of problems or issues, the BARDA Project Officer or the Contracting Officer's Technical Representative will contact the Awardee within 10 working days by email or fax.

- *Safety reporting for research not performed under an IND or IDE*

Final decisions regarding ongoing safety reporting requirements for research not performed under an IND or IDE must be made by the Awardee in consultation with the BARDA Contracting Officer's Technical Representative.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF	PAGES
	1		1

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ NO.	5. PROECT NO. *(if applicable)*
0001	See Block 16C	N/A.	

6. ISSUED BY CODE ASPR-BARDA

ASPR-BARDA
200 Independence Ave., S.W.
Room 640-G
Washington, D.C. 20201

7. ADMINISTERED BY *(If other than Item 6)* CODE ASPR-BARDA02

ASPR-BARDA
330 Independence Ave, SW, Rm G640
Washington, DC 20201

8. NAME AND ADDRESS OF CONTRACTOR *(No. street, county, State and ZIP Code)*

CHIMERIX, INC. 1377270
CHIMERIX, INC. 2505 MERIDIAN P
2505 MERIDIAN PARKWAY, SUITE 340
DURHAM, NC 277135246

CODE 1377270 FACILITY CODE

x	9A. AMENDMENT OF SOLICITATION NO.
	9B. DATED *(SEE ITEM 11)*
x	10A MODIFICATION OF CONTRACT/ORDER NO. HHSO100201100013C
	10B. DATED *(SEE ITEM 13)* 02/16/2011

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

o The above numbered solicitatIon is amended as set forth in Item 14. The hour and date specified for receipt of Offers o is extended. o is not extended
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(if required)*
N/A.

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (*Specify authority*) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
x	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (*such as changes in paying office, appropriation date, etc.*) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (*Specify type of modification and authority)*

E. IMPORTANT: Contractor x is not. o is required to sign this document and return _____copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Tax ID Number: 33-0903395
DUNS Number: [...***...]
A. The purpose of this modification is to delete [...***...] to Article G.3. KEY PERSONNEL under contract number HHSO100201100013C.
B. This is a unilateral no cost modification. The total amount and all other terms and conditions of contract number HHSO100201100013C remain unchanged.

Period of Performance: 02/16/2011 to 02/15/2016

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME AND TITLE OF CONTRACTING OFFICER (*Type or print)*	
		ETHAN J. MUELLER	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
		/s/ Ethan J. Mueller	8/16/11
(Signature of person authorized to sign)		*(Signature of Contracting Officer)*	

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

*****Confidential Treatment Requested**

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE	PAGE 1 OF PAGES 2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ NO.	5. PROECT NO. *(if applicable)*
0002	See Block 16C	N/A.	

6. ISSUED BY	CODE ASPR-BARDA	7. ADMINISTERED BY *(If other than Item 6)*	CODE ASPR-BARDA02
ASPR-BARDA 200 Independence Ave., S.W. Room 640-G Washington, D.C. 20201		ASPR-BARDA 330 Independence Ave, SW, Rm G640 Washington, DC 20201	

8. NAME AND ADDRESS OF CONTRACTOR *(No. street, county, State and ZIP Code)*		
CHIMERIX, INC. 1377270 CHIMERIX, INC. 2505 MERIDIAN P 2505 MERIDIAN PARKWAY, SUITE 340 DURHAM, NC 277135246	x	9A. AMENDMENT OF SOLICITATION NO.
		9B. DATED *(SEE ITEM 11)*
	x	10A MODIFICATION OF CONTRACT/ORDER NO. HHSO100201100013C
		10B. DATED *(SEE ITEM 13)* 02/16/2011
CODE 1377270 FACILITY CODE		

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

o The above numbered solicitatIon is amended as set forth in Item 14. The hour and date specified for receipt of Offers o is extended. o is not extended

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(if required)*
N/A.

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (*Specify authority*) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
x	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (*such as changes in paying office, appropriation date, etc.*) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (*Specify type of modification and authority)*

E. IMPORTANT: Contractor x is not. o is required to sign this document and return _____copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Tax ID Number: 33-0903395
DUNS Number: [...***...]

A. The purpose of this modification is to correct an administrative error in Modification 0001 under Contract Number HHSO100201100013C. In Modification 0001 under Contract Number HHSO100201100013C under paragraph B, the incorrect Period of Performance was stated as “Period of Performance: 2/16/2011 to 2/15/2016.” The statement “Period of Performance: 2/16/2011 to 2/15/2016.” Under Modification 0001 under Contract Number HHSO100201100013C is hereby deleted. The correct Period of Performance for Contract Number HHSO100201100013C under this Modification is 2/16/2011 to 2/15/2012.

B. This is a no cost modification. The total amount and all other terms and conditions of

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME AND TITLE OF CONTRACTING OFFICER (*Type or print)*	
		ETHAN J. MUELLER	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
		/s/ Ethan J. Mueller	11/10/11
(Signature of person authorized to sign)		*(Signature of Contracting Officer)*	

*****Confidential Treatment Requested**

NAME OF OFFEROR OR CONTACTOR
CHIMERIX, INC. 1377270

ITEM NO. (A)	SUPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Contract number HHSO100201100013C remain unchanged. Period of Performance: 02/16/2011 to 02/15/2012				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF	PAGES
	1		2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ NO.	5. PROECT NO. *(if applicable)*
0003	See Block 16C	N/A.	

6. ISSUED BY CODE ASPR-BARDA

ASPR-BARDA
200 Independence Ave., S.W.
Room 640-G
Washington, D.C. 20201

7. ADMINISTERED BY *(If other than Item 6)* CODE ASPR-BARDA02

ASPR-BARDA
330 Independence Ave, SW, Rm G640
Washington, DC 20201

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*

CHIMERIX, INC. 1377270
CHIMERIX, INC. 2505 MERIDIAN P
2505 MERIDIAN PARKWAY, SUITE 340
DURHAM, NC 277135246

CODE 1377270 FACILITY CODE

x	9A. AMENDMENT OF SOLICITATION NO.
	9B. DATED *(SEE ITEM 11)*
x	10A MODIFICATION OF CONTRACT/ORDER NO. HHSO100201100013C
	10B. DATED *(SEE ITEM 13)* 02/16/2011

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

o The above numbered solicitatIon is amended as set forth in Item 14. The hour and date specified for receipt of Offers o is extended. o is not extended
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(if required)*
N/A.

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (*Specify authority*) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (*such as changes in paying office, appropriation date, etc.*) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
S	D. OTHER (*Specify type of modification and authority)* Bilateral: Mutual Agreement of the Parties.

E. IMPORTANT: Contractor £ is not. S is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Tax ID Number: 33-0903395
DUNS Number: [...***...]
A. The purpose of this modification is to incorporate the following changes into contract number HHSO100201100013C:

1. The period of performance for the base performance segment CLIN 0001 of contract number HHSO100201100013C is hereby changed from 16 February 2011 through 15 February 2012 to 16 February 2011 through 15 April 2012, at no additional cost to the Government.

2. The period of performance for the Option 1 performance segment CLIN 0002 of contract number HHSO100201100013C is hereby changed from 16 February 2012 through 15 February 2013
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME AND TITLE OF CONTRACTING OFFICER (*Type or print)*	
KENNETH I. MOCH, CHIEF EXECUTIVE OFFICER		ETHAN J. MUELLER	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
/s/ Kenneth I. Moch	11/30/11	/s/ Ethan J. Mueller	11/30/11
(Signature of person authorized to sign)		*(Signature of Contracting Officer)*	

*****Confidential Treatment Requested**

NAME OF OFFEROR OR CONTACTOR
CHIMERIX, INC. 1377270

ITEM NO. (A)	SUPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	to 16 April 2012 through 15 April 2013, at no additional cost to the Government. If exercised by a unilateral contract modification, the option exercise date for the Option 1 performance segment CLIN 0002 will be 16 April 2012. B. This is a no cost modification. The total amount and all other terms and conditions of contract number HHSO100201100013C remain unchanged. Period of Performance: 02/16/2011 to 04/15/2012				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF	PAGES
	1		2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ NO.	5. PROJECT NO. *(if applicable)*
0004	See Block 16C	N/A.	

6. ISSUED BY CODE ASPR-BARDA

ASPR-BARDA
200 Independence Ave., S.W.
Room 640-G
Washington, DC 20201

7. ADMINISTERED BY *(If other than Item 6)* CODE ASPR-BARDA02

ASPR-BARDA
330 Independence Ave, S.W., Rm G640
Washington, DC 20201

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*

CHIMERIX, INC. 1377270
CHIMERIX, INC. 2505 MERIDIAN P
2505 MERIDIAN PKWY, STE 340
DURHAM, NC 277135246

CODE 1377270 FACILITY CODE

x	9A. AMENDMENT OF SOLICITATION NO.
	9B. DATED *(SEE ITEM 11)*
x	10A MODIFICATION OF CONTRACT/ORDER NO. HHSO100201100013C
	10B. DATED *(SEE ITEM 13)* 02/16/2011

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

o The above numbered solicitatIon is amended as set forth in Item 14. The hour and date specified for receipt of Offers o is extended. o is not extended

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(if required)*
N/A.

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (*Specify authority*) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
x	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (*such as changes in paying office, appropriation date, etc.*) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (*Specify type of modification and authority)*

E. IMPORTANT: Contractor x is not. o is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Tax ID Number: 33-0903395
DUNS Number: [...***...]

A. The purpose of this modification is to change the Contracting Officer's Technical Representative (COTR) under Contract number HHSO100201100013C:

1. All references throughout Contract Number HHSO100201100013C concerning the COTR, Tyler Merkeley and all related information such as agency, address, telephone and email, etc. is hereby deleted and replaced with:

Claiborne O. Hughes
Contracting Officer's Technical Representative (COTR)
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME AND TITLE OF CONTRACTING OFFICER (*Type or print)*	
		ETHAN J. MUELLER	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
		/s/ Ethan J. Mueller	2/10/12
(Signature of person authorized to sign)		*(Signature of Contracting Officer)*	

*****Confidential Treatment Requested**

NAME OF OFFEROR OR CONTACTOR
CHIMERIX, INC. 1377270

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Biomedical Advanced Research and Development Authority (BARDA) Office of the Assistant Secretary for Preparedness and Response (ASPR) Department of Health and Human Services (HHS) 375 E Street, SW Patriot Plaza 2 Washington, D.C. 20024 Telephone: 202-260-1790 E-Mail: Claiborne.Hughes@hhs.gov 2. The Alternate COTR will remain Dr. Joseph Larsen. B. This is a no cost modification. The total amount and al1 other terms and conditions of Contract Number HHSO100201100013C remain unchanged. Period of Performance: 02/16/2011 to 04/15/2012				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE	PAGE 1 OF PAGES 2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ NO.	5. PROECT NO. *(if applicable)*
0005	See Block 16C	N/A.	

6. ISSUED BY	CODE	7. ADMINISTERED BY *(If other than Item 6)*	CODE
ASPR-BARDA 200 Independence Ave., S.W. Room 640-G Washington, D.C. 20201	ASPR-BARDA	ASPR-BARDA 330 Independence Ave, SW, Rm G640 Washington, DC 20201	ASPR-BARDA02

8. NAME AND ADDRESS OF CONTRACTOR *(No. street, county, State and ZIP Code)*		
CHIMERIX, INC. 1377270 CHIMERIX, INC. 2505 MERIDIAN 2505 MERIDIAN PARKWAY, SUITE 340 DURHAM, NC 277135246	x	9A. AMENDMENT OF SOLICITATION NO.
		9B. DATED *(SEE ITEM 11)*
	x	10A MODIFICATION OF CONTRACT/ORDER NO. HHSO100201100013C
		10B. DATED *(SEE ITEM 13)* 02/16/2011
CODE 1377270 FACILITY CODE		

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

o The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers o is extended. o is not extended

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(if required)*
N/A.

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (*Specify authority*) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
S	D. OTHER (*Specify type of modification and authority)* Bilateral: Mutual Agreement of the Parties.

E. IMPORTANT: Contractor £ is not. S is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Tax ID Number: 33-0903395
DUNS Number: [...***...]
A. The purpose of this modification is to incorporate the following changes into contract number HHSO100201100013C:

1. The period of performance for the base performance segment CLIN 0001 of contract number HHSO100201100013C is hereby changed from 16 February 2011 through 15 April 2012 to 16 February 2011 through 15 June 2012, at no additional cost to the Government.

2. The period of performance for the Option 1 performance segment CLIN 0002 of contract number HHSO100201100013C is hereby changed from 16 April 2012 through 15 April 2013 to 16

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME OF CONTRACTING OFFICER	
KENNETH I. MOCH, PRESIDENT AND CEO		ETHAN J. MUELLER	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
/s/ Kenneth I. Moch	2/24/12		
(Signature of person authorized to sign)		*(Signature of Contracting Officer)*	

*****Confidential Treatment Requested**

NAME OF OFFEROR OR CONTACTOR
CHIMERIX, INC. 1377270

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	June 2012 through 15 June 2013, at no additional cost to the Government. If exercised by a unilateral contract modification, the option exercise date for the Option 1 performance segment CLIN 0002 will be 16 June 2012. B. This is a no cost modification. The total amount and al1 other terms and conditions of contract number HHSO100201100013C remain unchanged. Period of Performance: 02/16/2011 to 06/15/2012				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF	PAGES
	1		2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ NO.	5. PROECT NO. *(if applicable)*
0006	See Block 16C	N/A.	

6. ISSUED BY CODE ASPR-BARDA

ASPR-BARDA
200 Independence Ave., S.W.
Room 640-G
Washington, D.C. 20201

7. ADMINISTERED BY *(If other than Item 6)* CODE ASPR-BARDA02

ASPR-BARDA
330 Independence Ave, S.W. Rm G640
Washington, D.C. 20201

8. NAME AND ADDRESS OF CONTRACTOR *(No. street, county, State and ZIP Code)*

CHIMERIX, INC. 1377270
CHIMERIX, INC. 2505 MERIDIAN
2505 MERIDIAN PARKWAY, SUITE 340
DURHAM, NC 277135246

CODE 1377270 FACILITY CODE

x	9A. AMENDMENT OF SOLICITATION NO.
	9B. DATED *(SEE ITEM 11)*
x	10A MODIFICATION OF CONTRACT/ORDER NO. HHSO100201100013C
	10B. DATED *(SEE ITEM 13)* 02/16/2011

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

o The above numbered solicitatIon is amended as set forth in Item 14. The hour and date specified for receipt of Offers o is extended. o is not extended
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment. and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(if required)*
N/A.

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (*Specify authority*) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
S	D. OTHER (*Specify type of modification and authority)* Bilateral: Mutual Agreement of the Parties.

E. IMPORTANT: Contractor £ is not. S is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Tax ID Number: 33-0903395
DUNS Number: [...***...]
A. The purpose of this modification is to delete [...***...] to Article G.3. KEY PERSONNEL under Contract Number HHSO100201100013C.

1. The period of performance for the base performance segment CLIN 0001 of contract number HHSO100201100013C is hereby changed from 16 February 2011 through 15 June 2012 to 16 February 2011 through 31 October 2012, at no additional cost to the Government.

2. The period of performance for the Option 1 performance segment CLIN 0002 of contract number HHSO100201100013C is hereby changed from 16 June 2012 through 15 June 2013 to 1

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME OF CONTRACTING OFFICER	
KENNETH I. MOCH, PRESIDENT AND CEO		ETHAN J. MUELLER	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
/s/ Kenneth I. Moch	5/4/12		
(Signature of person authorized to sign)		*(Signature of Contracting Officer)*	

*****Confidential Treatment Requested**

NAME OF OFFEROR OR CONTACTOR
CHIMERIX, INC. 1377270

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	November 2012 through 31 October 2013, at no additional cost to the Government. If exercised by a unilateral contract modification, the option exercise date for the Option 1 performance segment CLIN 0002 will be 16 June 2012. B. This is a no cost modification. The total amount and al1 other terms and conditions of contract number HHSO100201100013C remain unchanged. Period of Performance: 02/16/2011 to 10/31/2012				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE	PAGE 1 OF PAGES 1

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROECT NO. *(if applicable)*
0007	See Block 16C	N/A.	

6. ISSUED BY	CODE	7. ADMINISTERED BY *(If other than Item 6)*	CODE
ASPR-BARDA 200 Independence Ave., S.W. Room 640-G Washington, D.C. 20201	ASPR-BARDA	ASPR-BARDA 330 Independence Ave, S.W. Rm G640 Washington, D.C. 20201	ASPR-BARDA02

8. NAME AND ADDRESS OF CONTRACTOR *(No. street, county, State and ZIP Code)*		
CHIMERIX, INC. 1377270 CHIMERIX, INC. 2505 MERIDIAN 2505 MERIDIAN PARKWAY, SUITE 340 DURHAM, NC 277135246	x	9A. AMENDMENT OF SOLICITATION NO.
		9B. DATED *(SEE ITEM 11)*
	x	10A MODIFICATION OF CONTRACT/ORDER NO. HHSO100201100013C
		10B. DATED *(SEE ITEM 13)* 02/16/2011
CODE 1377270 FACILITY CODE		

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

o The above numbered solicitatIon is amended as set forth in Item 14. The hour and date specified for receipt of Offers o is extended. o is not extended

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(if required)*
N/A.

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (*Specify authority*) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
x	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (*Specify type of modification and authority)*

E. IMPORTANT: Contractor x is not. o is required to sign this document and return _____copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Tax ID Number: 33-0903395
DUNS Number: [...***...]

A. The purpose of this modification is to delete [...***...] to Article G.3. KEY PERSONNEL under contract number HHSO100201100013C.

B. This is a unilateral no cost modification. The total amount and all other terms and conditions of contract number HHSO100201100013C remain unchanged.

Period of Performance: 02/16/2011 to 10/31/2012

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME OF CONTRACTING OFFICER	
		ETHAN J. MUELLER	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
		/s/ Ethan J. Mueller	5/21/12
(Signature of person authorized to sign)		*(Signature of Contracting Officer)*	

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Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

*****Confidential Treatment Requested**

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE	PAGE 1 OF PAGES 17

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROECT NO. *(if applicable)*
0008	See Block 16C	N/A.	

6. ISSUED BY	CODE	7. ADMINISTERED BY *(If other than Item 6)*	CODE
ASPR-BARDA 200 Independence Ave., S.W. Room 640-G Washington, D.C. 20201	ASPR-BARDA	ASPR-BARDA 330 Independence Ave, S.W. Rm G640 Washington, D.C. 20201	ASPR-BARDA02

8. NAME AND ADDRESS OF CONTRACTOR *(No. street, county, State and ZIP Code)*		
CHIMERIX, INC. 1377270 CHIMERIX, INC. 2505 MERIDIAN 2505 MERIDIAN PARKWAY, SUITE 340 DURHAM, NC 277135246	x	9A. AMENDMENT OF SOLICITATION NO.
		9B. DATED *(SEE ITEM 11)*
	x	10A MODIFICATION OF CONTRACT/ORDER NO. HHSO100201100013C
		10B. DATED *(SEE ITEM 13)* 02/16/2011
CODE 1377270 FACILITY CODE		

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

o The above numbered solicitatIon is amended as set forth in Item 14. The hour and date specified for receipt of Offers o is extended. o is not extended

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(if required)* Net Increase: $4,638,693.00

See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (*Specify authority*) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
S	D. OTHER (Specify type of modification and authority) Bilateral: Mutual Agreement of the Parties.

E. IMPORTANT: Contractor ☐ is not. ☒ is required to sign this document and return ____1____copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Tax ID Number: 33-0903395
DUNS Number: [...***...]

A. The purpose of this modification is to add the following efforts into the base segment of Contract Number HHSO100201100013C and to replace the Principal Investigator:

1. Conduct the [...***...] in the [...***...].

2. Complete the [...***...].

3. Complete the [...***...] of the [...***...],

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME OF CONTRACTING OFFICER	
TIMOTHY W. TROST, CHIEF FINANCIAL OFFICER		ETHAN J. MUELLER	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
/s/ Timothy W. Trost	7/9/12		
(Signature of person authorized to sign)		*(Signature of Contracting Officer)*	

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NAME OF OFFEROR OR CONTACTOR
CHIMERIX, INC. 1377270

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	4. Support ongoing [...***...]. 5. Technical Management/Regulatory/Quality Support. As a result, Attachment 1, Statement of Work dated 10 February 2012, under PART III, LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS, SECTION J - LIST OF ATTACHMENTS is hereby deleted and replaced with the attached Statement of Work dated 19 June 2012. 1. Under Article F.2. DELIVERABLES, the attached changes are hereby incorporated into 2. WBS Milestones/Deliverables and Technical Deliverables. 2. The addition of these efforts to the base segment of Contract Number HHSO0100201100013C results in Contract Line Item Number (CLIN) 0001 being changed as follows: Total Estimated Cost: From[...***...] By [...***...]To [...***...] Total Fixed Fee: From [...***...] By [...***...] To [...***...] Total Estimated Cost Plus Fixed Fee: From $24,819,527.00 By $4,638,693.00 To $29,458,220.00 3. This modification hereby results in an increase in the total amount of the contract from $24,819,527.00 by $4,638,693.00 to $29,458,220.00. 4. Block 15G of the SF 26, the amount of $24,819,527.00 shall be changed to $29,458,220.00. Also in Block 14 of the SF 26, the following CAN Number is added as follows: Appropriation Year: 2012; Object Class: 25329; CAN 1992002 $4,638,693.00 5. The period of performance for the base segment CLIN 0001 of Contract Number HHSO100201100013C is hereby changed from 16 February 2011 through 31 October 2012 to 16 February 2011 through 31 March 2013. 6. The period of performance for the Option 1 performance segment CLIN 0002 of Contract Number HHSO100201100013C of 1 November 2012 through 31 October 2013 will remain unchanged. This bilateral modification does not authorize the performance of any Option segments under the contract. 7. Delete [...***...] to Article G.3. KEY PERSONNEL under contract Number HHSO100201100013C. B. All other terms and conditions of the contract remain unchanged. Delivery: 03/31/2013 Delivery Location Code: OS-BARDA-SWITZER OS-BARDA-SWITZER 330 Independence Ave, SW, Rm G644 Continued …				

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NAME OF OFFEROR OR CONTACTOR
CHIMERIX, INC. 1377270

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Washington DC 20201 US FOB: Destination Period of Performance: 02/16/2011 to 03/31/2013 Change Item 1 to read as follows(amount shown is the obligated amount):				
1	Research and development of CMXOOl for the Treatment of Smallpox to include [...***...]. Reports and Other Data Deliverables. Obligated Amount: $4,638,693.00 Amount: $24,819,527.00 Accounting Info: 2011.1992002.25329 Appr. Yr. : 2011 CAN: 1992002 Object Class: 25329 Funded: $0.00 Amount: $4,638,693.00 Accounting Info: 2012.1992002.25329 Appr. Yr. : 2012 CAN: 1992002 Object Class: 25329 Funded: $4,638,693.00				4,638,693.00

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BARDA Broad Agency Announcement (BAA)
(CBRN-BAA-10-100-SOL-00012)

Advanced Research and Development of Chemical, Biological, Radiological, and
Nuclear Medical Countermeasures

DEVELOPMENT OF CMX-001 FOR THE TREATMENT OF SMALLPOX

Topical Area of Interest No. 3, Antimicrobial Drugs

Contractual Statement of Work

1. PREAMBLE

Independently and not as an agency of the Government, the Contractor shall be required to furnish all the necessary services, qualified personnel, material, equipment, and facilities, not otherwise provided by the Government, as needed to perform the Statement of Work submitted in response to the BARDA Broad Agency Announcement (BAA) CBRN-BAA-1 0-1 00-SOL-00012.

In accordance with FAR 52.243-2, Changes-Cost Reimbursement (Alt. V), the Government reserves the right to modify the milestones, progress, schedule, budget, or deliverables to add or delete deliverables, process, or schedules if the need arises. Because of the nature of this research and development (R&D) contract and the complexities inherent in this and prior programs, at designated milestones the Government will evaluate whether work should be redirected, removed, or whether schedule or budget adjustments should be made.

1.0 Overall Objectives and Scope

The overall objective of this contract is to advance the development of CMX-001 as a broad-spectrum therapeutic antiviral for the treatment of smallpox infections and dsDNA viruses. The scope of work for this contract includes preclinical, clinical and manufacturing development activities that fall into the following areas: non-clinical efficacy studies; clinical activities; manufacturing activities; and all associated regulatory, quality assurance, management, and administrative activities. The Research and Development (R&D) effort for the antiviral will progress in specific stages that cover the base performance segment and four (4) option segments as specified in this contract. The Contractor must complete specific tasks required in each of the five discrete work segments. The scope of work has been broken into the following five phases which are discrete work segments:

I. [...***...]
II. [...***...]
III. [...***...]
IV. [...***...]
V. [...***...]

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2 PHASE 1: [...***...]

Research and development of CMX-001 for the treatment of smallpox and dsDNA viruses to include the following activities: [**...*****...**]. The contractor shall carry out the following tasks and subtasks and in accordance with an agreed upon Integrated Master Schedule and Integrated Master Plan (defined in 2.1.8 and 2.1.9 below) which shall further detail the conduct of the specific tasks and subtasks.

2.1 Program Management

The Contractor shall provide for the following as outlined below and in the contract deliverables list (Article F.2):

2.1.1 The overall management, integration and coordination of all contract activities, including a technical and administrative infrastructure to ensure the efficient planning, initiation, implementation, and direction of all contract activities;

2.1.2 A Principal Investigator (PI) responsible for project management, communication, tracking, monitoring and reporting on status and progress, and modification to the project requirements and timelines, including projects undertaken by subcontractors; The contract deliverables list (reference), identifies all contract deliverables and reporting requirements for this contract.

2.1.3 Project Manager(s) with responsibility for monitoring and tracking day-to-day progress and timelines, coordinating communication and project activities; costs incurred; and program management; The contract deliverables list (reference), identifies all contract deliverables and reporting requirements for this contract.

2.1.4 A BARDA Liaison with responsibility for effective communication with the Project Officer and Contracting Officer.

2.1.5 Administrative and legal staff to provide development of compliant subcontracts, consulting, and other legal agreements, and ensure timely acquisition of all proprietary rights, including IP rights, and reporting all inventions made in the performance of the project.

2.1.6 Administrative staff with responsibility for financial management and reporting on all activities conducted by the Contractor and any subcontractors.

2.1.7 Contract Review Meetings.

2.1.7.1 The Contractor shall participate in regular meetings to coordinate and oversee the contract effort as directed by the Contracting and Project Officers. Such meetings may include, but are not limited to, meeting of the Contractors and subcontractors to discuss clinical manufacturing progress, product development, product assay development, scale up manufacturing development, clinical sample assays development, preclinical/clinical study designs and regulatory issues; meetings with individual contractors and other HHS officials to discuss the technical, regulatory, and ethical aspects of the program; and meeting with technical consultants to discuss technical data provided by the Contractor.

2.1.7.2 The Contractor shall participate in teleconferences every two weeks between the Contractor and subcontractors and BARDA to review technical progress. Teleconferences or additional face-to-face meetings shall be more frequent at the request of BARDA.

2.1.8 Integrated Master Schedule

2.1.8.1 Within 30 calendar days of the effective date of the contract, the Contractor shall submit a first draft of an updated Integrated Master Schedule in a format agreed upon by BARDA to the Project Officer and the Contracting Officer for review and comment. The Integrated Master Schedule shall be incorporated into the contract, and will be used to monitor performance of the contract. Contractor shall include the key milestones and Go/No Go decision gates. The IMS for the period of performance will be mutually agreed upon at the PMBR

2.1.9 Integrated Master Plan

2.1.9.1 Work Breakdown Structure: The Contractor shall utilize a WBS template agreed upon by BARDA for reporting on the contact. The Contractor shall expand and delineate the Contract Work Breakdown Structure (CWBS) to a level agreed upon by BARDA as part of their Integrated Master Plan for contract reporting. The CWBS shall be discernable and consistent. BARDA may require Contractor to furnish WBS data at the work package level or at a lower level if there is significant complexity and risk associated with the task.

2.1.9.2 GO/NO-GO Decision Gates: The Integrated Master Plan outlines key milestones with "Go/No Go" decision criteria (entrance and exit criteria for each phase of the project). The project plan should include, but not be limited to, milestones in manufacturing, non-clinical and clinical studies, and regulatory submissions.

2.1.9.3 Earned Value Management System Plan: Subject to the requirements under HHSAR Clause 352.234-4, the Contractor shall use principles of Earned Value Management System (EVMS) in the management of this contract. The Seven Principles are:

I. Plan all work scope for the program to completion.

II. Break down the program work scope into finite pieces that can be assigned to a responsible person or organization for control of technical, schedule, and cost objectives.

III. Integrate program work scope, schedule, and cost objectives into a performance measurement baseline plan against which accomplishments may be measured. Control Changes to the baseline.

IV. Use actual cost incurred and recorded in accomplishing the work performed.

V. Objectively assess accomplishments at the work performance level.

VI. Analyze significant variances from the plan, forecast impacts, and prepare an estimate at completion based on performance to date and work to be performed.

VII. Use earned value information in the company's management processes.

Elements of EVMS shall be applied to all Cost Plus Fixed Fee CLINs as part of the Integrated Master Project Plan, the Contractor shall submit a written summary of the management procedures that it will establish, maintain and use to comply with EVMS requirements.

2.1.10 Decision Gate Reporting: On completion of a stage of the product development, as defined in the agreed upon Integrated Master Schedule and Integrated Master Plan, the Contractor shall prepare and submit to the Project Officer and the Contracting Officer a Decision Gate Report that contains (i) sufficient detail, documentation and analysis to support successful completion of the stage according to the predetermined qualitative and quantitative criteria that were established for Go/No Go decision making; and (ii) a description of the next stage of product development to be initiated and a request for approval to proceed to the next stage of product development.

2.1.11 Risk Management Plan: The Contractor shall develop a risk management plan within 90 days of contract award highlighting potential problems and/or issues that may arise during the life of the contract, their impact on cost, schedule and performance, and appropriate remediation plans. This plan should reference relevant WBS elements where appropriate. Updates to this plan shall be included every three months (quarterly) in the monthly Project Status Report.

2.1.12 Performance Measurement Baseline Review (PMBR): The Contractor shall submit a plan for a PMBR to occur within 90 days of contract award. At the PMBR, the Contractor and BARDA shall mutually agree upon the budget, schedule and technical plan baselines (Performance Measurement Baseline). These baselines shall be the basis for monitoring and reporting progress throughout the life of the contract. The PMBR is conducted to achieve confidence that the baselines accurately capture the entire technical scope of work, are consistent with contract schedule requirements, are reasonably and logically planned, and have adequate resources assigned. The goals of the PMBR are as **FOLLOWS**:

I. Jointly assess areas such as the Contractor's planning for complete coverage of the SOW, logical scheduling of the work activities, adequate resources, and identification of inherent risks
II. Confirm the integrity of the Performance Measurement Baseline (PMB)
III. Foster the use of EVM as a means of communication
IV. Provide confidence in the validity of Contractor reporting
V. Identify risks associated with the PMB
VI. Present any revised PMBs for mutual agreement
VII. Present an Integrated Master Schedule: The Contractor shall deliver an initial program level Integrated Master Schedule (IMS) that rolls up all time-phased WBS elements down to the activity level. This IMS shall include the dependencies that exist between tasks. This IMS will be agreed to and finalized at the PMBR. DI-MGMT-81650 may be referenced as guidance in creation of the IMS (see http://www.acq.osd.mil/pml).
VIII. Present the Risk Management Plan

2.1.13 Deviation Request: During the course of contract performance, in response to a need to change IMS activities as baselined at the PMBR, the Contractor shall submit a Deviation Report. This report shall request a change in the agreed-upon IMS and timelines. This report shall include: (i) discussion of the justification/rationale for the proposed change; (ii) options for addressing the needed changes from the agreed upon timelines, including a cost-benefit analysis of each option; and (iii) recommendations for the preferred option that includes a full analysis and discussion of the effect of the change on the entire product development program, timelines, and budget.

2.1.14 Monthly and Annual Reports: The Contractor shall deliver Project Status Reports on a monthly basis. The reports shall address the items below cross referenced to the WBS, SOW, IMS, and EVM:

I. Executive summary highlighting the progress, issues, and relevant activities in manufacturing, non-clinical, clinical, and regulatory;
II. Progress in meeting contract milestones, detailing the planned progress and actual progress during the reporting period, explaining any differences between the two and corrective steps;

III. Updated IMS;
IV. Updated EVM;
V. Updated Risk Management Plan (Every 3 months);
VI. Three month rolling forecast of planned activities;
VII. Progress of regulatory submissions;
VIII. Estimated and actual expenses;

2.1.15 Data Management: The Contractor shall develop and implement data management and quality control systems/procedures, including transmission, storage, confidentiality, and retrieval of all contract data;
2.1.15.1 Provide for the statistical design and analysis of data resulting from the research;
2.1.15.2 Provide raw data or specific analyses of data generated with contract funding to the Project Officer, upon request.

2.2 Non-Clinical Toxicology
2.2.1 N/A (no scope)

2.3 Non-Clinical
2.3.1 Develop and validate [**...***...**] to lower [**...***...**].
2.3.2 [**...***...**]: Conduct [**...***...**] studies including [**...***...**] studies, [**...***...**], and [**...***...**] studies in [**...***...**].
2.3.3 [**...***...**]
2.3.3.1 Conduct [**...***...**] study in [**...***...**].
2.3.3.2 Conduct [**...***...**] studies including [**...***...**] studies, [**...***...**] studies including [**...***...**] for CMX-001 and [**...***...**] in [**...***...**].
2.3.4 Use of [**...***...**] as a CMX-001 Surrogate in [**...***...**] Studies.
2.3.4.1 Dose [**...***...**] with [**...***...**] to identify the concentration of the [**...***...**] in [**...***...**] associated with [**...***...**] of [**...***...**].
2.3.5 Scaling of [**...***...**] to [**...***...**] by conducting studies with [**...***...**] to determine [**...***...**] in [**...***...**].
2.3.6 [**...***...**] determination of CMX00l, [**...***...**] and [**...***...**] in the [**...***...**].
2.3.7 Conduct [**...***...**] experiments to demonstrate [**...***...**] following effective [**...***...**] prior to [**...***...**].
2.3.8 Conduct studies to optimize [**...***...**] in [**...***...**].
2.3.9 Conduct CMX-001 [**...***...**] study in [**...***...**] at a dose of CMX001 equivalent or less than [**...***...**] with treatment beginning at the [**...***...**]

2.4 Clinical

2.4.1 Measurement of [**...***...**] levels in [**...***...**] and correlate the [**...***...**] to studies conducted in [**...***...**].

2.4.2 Conduct expanded access protocol ([**...***...**]).

2.4.3 Analyze data and provide a Final Report for [**...***...**] evaluation of CMX001 in patients ([**...***...**])

2.5 Regulatory

2.5.1 Engaging the FDA on a path to support the treatment of smallpox indication with CMX-001

2.5.2 Preparing materials for and requesting, scheduling and participating in all meetings with the FDA, including meetings to review EUA and/or all other data packages;

2.5.3 Providing BARDA with (i) the initial draft minutes and final draft minutes of any formal meeting with the FDA; (ii) final minutes of any informal meeting with the FDA;

2.5.4 Obtain FDA concurrence on the feasibility of the proposed [**...***...**] with CMX001/[**...***...**]/[**...***...**] in the [**...***...**] ([**...***...**]), including FDA feedback on [**...***...**] and review of data for the first [**...***...**] enrolled in the [**...***...**] sub-study

2.5.5 Develop and submit a revised [**...***...**] for CMX001 for Treatment of Smallpox, including [**...***...**] for FDA review and comment, and revise the [**...***...**] as requested by FDA

2.6 CMC

2.6.1 Validation of the [**...***...**] process: Validation of the process to demonstrate the [**...***...**] of a [**...***...**] of acceptable quality will be performed.

2.6.2 Validation of the [**...***...**] process to produce [**...***...**]: Validation of the process to demonstrate the [**...***...**] of a [**...***...**] of acceptable quality will be performed.

3. PHASE II: [...*...]**

Research and development of CMX-001 for the treatment of smallpox to include the following activities: [**...***...**]. The contractor shall carry out the following tasks and subtasks and in accordance with the agreed upon Integrated Master Schedule and Integrated Master Plan (defined in 2.1.8 and 2.1.9) which shall further detail the conduct of the specific tasks and subtasks.

3.1 Program Management (consistent with section 2.1)

3.1.1 Program management scope in BASE year is consistent with program management scope in each option year.

3.2 Non-toxicology

3.2.1 N/A (no scope)

3.3 Non-Clinical

3.3.1 Quantify [**...***...**] levels in [**...***...**] in [**...***...**].

3.3.2 Determine [**...***...**] for CMX-001, [**...***...**], and [**...***...**] in [**...***...**].

3.3.3 Scaling of [**...***...**] to [**...***...**] studies to determine scaling between [**...***...**] and [**...***...**] using [**...***...**] as well as comparisons of levels of [**...***...**] in the [**...***...**].

3.3.4 [**...***...**] in the [**...***...**]. This study will determine the [**...***...**] in [**...***...**] and the concentration of [**...***...**] in [**...***...**] when [**...***...**] are treated with [**...***...**] at the effective dose and regimen

3.3.5 [**...***...**]- (Final Report from Sections 2.3.2.). The initial study ([**...***...**]) will compare different regimens of [**...***...**] administered after the [**...***...**]. The studies will include [**...***...**] and [**...***...**], as well as [**...***...**] including [**...***...**].

3.4 Clinical

3.4.1 Conduct [**...***...**] study in [**...***...**] will be conducted as part of the scope of work to determine whether CMX00l has a [**...***...**], as detected by [**...***...**].

3.5 Regulatory

3.5.1 Engaging the FDA on a path to support the treatment of smallpox indication with CMX-001

3.5.2 Preparing materials for and requesting, scheduling and participating in all meetings with the FDA, including meetings to review EUA and/or all other data packages;

3.5.3 Providing BARDA with (i) the initial draft minutes and final draft minutes of any formal meeting with the FDA; (ii) final draft minutes of any informal meeting with the FDA;

3.6 CMC

3.6.1 N/A (NO SCOPE)

4. PHASE III: [...*...]**

Research and development of CMX-001 for the treatment of smallpox and dsDNA viruses to include the following activities: [**...*****...**].
The contractor shall carry out the following tasks and subtasks and in accordance with agreed upon Integrated Master Schedule and Integrated Master Plan (defined in 2.1.8 and 2.1.9) which shall further detail the conduct of the specific tasks and sub tasks.

4.1 Program Management (Consistent with section 2.1)

4.1.1 Program management scope in BASE year is consistent with program management scope in each option year.

4.2 Non-toxicology

4.2.1 N/ A (no scope)

4.3 Non-Clinical

4.3.1 [**...*****...**] studies: [**...*****...**] will be conducted with the [**...*****...**] of CMX001 identified in the [**...*****...**] studies. [**...*****...**] will be [**...*****...**] to receive [**...*****...**] beginning at the [**...*****...**]. These studies will include [**...*****...**] and [**...*****...**] as well as [**...*****...**] including [**...*****...**] in [**...*****...**]. The primary endpoint will be [**...*****...**]

4.3.2 [**...*****...**] studies: This study will determine the [**...*****...**] at the [**...*****...**]. [**...*****...**] and [**...*****...**] at the [**...*****...**]. The primary endpoint will be [**...*****...**]

4.3.3 Initiate [**...*****...**]: Conduct [**...*****...**] studies for [**...*****...**]. This study will determine the [**...*****...**] at doses selected based on [**...*****...**]. [**...*****...**] and [**...*****...**].

4.4 Clinical

4.4.1 Phases I [**...***...**] study, If acceptable to FDA, the [**...***...**] database will be supplemented by a study in [**...***...**]. The size of this study will be determined to ensure an adequate [**...***...**] database is available at the time of [**...***...**]

4.4.2 [**...***...**] study. This study will [**...***...**] doses of CMX001 to [**...***...**] to determine if the [**...***...**] of CMX001 are comparable to those observed for [**...***...**], and to determine if any dose adjustment is necessary in [**...***...**].

4.5 Regulatory

4.5.1 Generating all necessary data and preparing documentation for [**...***...**] submissions to regulatory agencies;

4.5.2 Preparing materials for and requesting, scheduling and participating in all meetings with the FDA, including meetings to review [**...***...**], EUA and/or all other data packages;

4.5.3 Providing BARDA with (i) the initial draft minutes and final draft minutes of any formal meeting with the FDA; (ii) final draft minutes of any informal meeting with the FDA;

4.5.4 Filing of [**...***...**]

4.6 CMC

4.6.1 Manufacture of [**...***...**] in sufficient quantities for use in non-clinical and late phase clinical studies. Develop [**...***...**].

5. PHASE IV: [...*...]**

Research and development of CMX-001 for the treatment of smallpox to include the following activities: [**...***...**]. [**...***...**] studies and phase I [**...***...**] study. The contractor shall carry out the following tasks and subtasks and in accordance with agreed upon Integrated Master Schedule and Integrated Master Plan (defined in 2.1.8 and 2.1.9) which shall further detail the conduct of the specific tasks and subtasks.

5.1 Program Management (Consistent with section 2.1)

5.1.1 Program management scope in BASE year is consistent with program management scope in each option year.

5.2 Non-toxicology

5.2.1 N/A (no scope)

5.3 Non-Clinical

5.3.1 [**...***...**] studies. [**...***...**] will be randomized to receive [**...***...**] beginning at the [**...***...**]. These studies will include [**...***...**] and [**...***...**] as well as [**...***...**] including [**...***...**]. The primary endpoint will be [**...***...**]

5.3.2 [**...***...**] Studies. This study will determine the [**...***...**] at the [**...***...**]. [**...***...**] and [**...***...**] at the [**...***...**]. The primary endpoint will be [**...***...**]. If FDA requires a [**...***...**] in the [**...***...**] studies, the [**...***...**] study may not be needed.

5.3.3 Conduct [**...***...**] Studies. This study will determine the [**...***...**] at the [**...***...**]. [**...***...**] and [**...***...**] at the [**...***...**].

5.4 Clinical

5.4.1 Phase 3 development including [**...***...**] study, [**...***...**] study, phases II [**...***...**] study. A [**...***...**] study will be conducted to compare the [**...***...**] of CMX001 in [**...***...**] to [**...***...**]. A [**...***...**] study will be conducted to compare the [**...***...**] of CMX001 when [**...***...**]. A [**...***...**] study will be conducted to [**...***...**] to support an NDA.

5.5 Regulatory

5.5.1 Generating all necessary data and preparing documentation for NDA submissions to regulatory agencies;

5.5.2 Preparing materials for and requesting, scheduling and participating in all meetings with the FDA, including meetings to review IND, EUA and/or all other data packages;

5.5.3 Providing BARDA with (i) the initial draft minutes and final draft minutes of any formal meeting with the FDA; (ii) final draft minutes of any informal meeting with the FDA;

5.6 CMC

5.6.1 [**...***...**]. [**...***...**] of the process to demonstrate the [**...***...**] of a [**...***...**] will be performed.

6. PHASE V: [...*...]**

Research and development of CMX-001 for the treatment of smallpox to include the following activities: [**...***...**]. The contractor shall carry out the following tasks and subtasks and in accordance with an agreed upon Integrated Master Schedule and Integrated Master Plan (defined in 2.1.8 and 2.1.9) which shall further detail the conduct of the specific tasks and subtasks.

6.1 Program Management (Consistent with section 2.1)

6.1.1 Program management scope in BASE year is consistent with program management scope in each option year.

6.2 Non-toxicology

6.2.1 N/A (no scope)

6.3 Non-Clinical

6.3.1 [**...***...**] Studies. This study replicates [**...***...**] if a [**...***...**] is necessary to achieve a [**...***...**] result.

6.4 Clinical

6.4.1 Compile [**...***...**]. A database of [**...***...**] data collected from all CMX001 clinical studies, irrespective of [**...***...**], will be populated and analyzed in order to support an [**...***...**] for smallpox.

6.5 Regulatory

6.5.1 Generating all necessary data and preparing documentation for NDA submissions to regulatory agencies;

6.5.2 Submitting NDA documentation to the FDA in a timely manner, consistent with timelines set out in the contract and by the FDA.

6.5.3 Preparing materials for and requesting, scheduling and participating in all meetings with the FDA, including meetings to review IND, EUA and/or all other data packages;

6.5.4 Providing BARDA with (i) the initial draft minutes and final draft minutes of any formal meeting with the FDA; (ii) final draft minutes of any informal meeting with the FDA;

6.6 CMC

6.6.1 [**...***...**]. [**...***...**] of the process to demonstrate the [**...***...**] of a [**...***...**] will be performed.

7. Other Items

7.1 Facilities, Equipment and Other Resources. (Contract: Section J)

The Contractor shall provide equipment; facilities and other resources required for implementation of the SOW dated January 11, 2011 to comply with all Federal

and HHS regulations in:

7.1.1 The [...***...] and use of [...***...];
7.1.2 The acquisition, handling, storage and shipment of [...***...], including [...***...] required for working with the [...***...];
7.1.3 The [...***...] of [...***...] under cGMP;
7.1.3.1 The design and conduct of [...***...]; and
7.1.3.2 The conduct of [...***...] studies to determine [...***...] of [...***...]
7.1.4 Design and conduct of [...***...] under GCP.

NEW BASE CONSIDERATION ACTIVITY TO BE ADDED TO ARTICLE F.2 DELIVERABLES						
Current Milestone #	Milestone Definition	Go Criteria	No-Go Criteria	Deliverable	WBS/SOW #	Date
NEW MILESTONE	[...***...]	[...***...]	[...***...]	[...***...]	[...***...][...***...]	[...***...]
OPTION 1 WORK SEGMENT ACTIVITIES MOVED TO BASE SEGMENT						
6.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...][...***...]	[...***...]
15.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...][...***...]	[...***...]
25.	[...***...]	[...***...]	[...***...]	[...***...]	[...***...][...***...]	[...***...]

*****Confidential Treatment Requested**

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF	PAGES
	1		1

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ NO.	5. PROECT NO. *(if applicable)*
0009	See Block 16C	N/A.	

6. ISSUED BY CODE ASPR-BARDA

ASPR-BARDA
200 Independence Ave., S.W.
Room 640-G
Washington, D.C. 20201

7. ADMINISTERED BY *(If other than Item 6)* CODE ASPR-BARDA02

ASPR-BARDA
330 Independence Ave, S.W. Rm G640
Washington, DC 20201

8. NAME AND ADDRESS OF CONTRACTOR *(No. street, county, State and ZIP Code)*

CHIMERIX, INC. 1377270
CHIMERIX, INC. 2505 MERIDIAN
2505 MERIDIAN PARKWAY, SUITE 340
DURHAM, NC 277135246

CODE 1377270 FACILITY CODE

x	9A. AMENDMENT OF SOLICITATION NO.
	9B. DATED *(SEE ITEM 11)*
x	10A MODIFICATION OF CONTRACT/ORDER NO. HHSO100201100013C
	10B. DATED *(SEE ITEM 13)* 02/16/2011

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

o The above numbered solicitatIon is amended as set forth in Item 14. The hour and date specified for receipt of Offers o is extended. o is not extended
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(if required)*
N/A.

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (*Specify authority*) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
x	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority) Bilateral: Mutual Agreement of the Parties.

E. IMPORTANT: Contractor x is not. o is required to sign this document and return _____copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Tax ID Number: 33-0903395
DUNS Number: [...***...]
A. The purpose of this no cost unilateral administrative modification is to make the following administrative correction under Contract Number HHSO100201100013C:

1. Under Article F.2. DELIVERABLES, under the NEW MILESTONE, under the column titled WBS/SOW#, the reference to WBS Number 1.3 is hereby deleted and replaced by WBS Number 1.8.

B. This is a no cost unilateral modification. All other terms and conditions of the contract remain unchanged.

Period of Performance: 02/16/2011 to 03/31/2013

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME OF CONTRACTING OFFICER ETHAN J. MUELLER	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA /s/ Ethan J. Mueller	16C. DATE SIGNED 7/25/12
(Signature of person authorized to sign)		*(Signature of Contracting Officer)*	

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

*****Confidential Treatment Requested**

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF	PAGES
	1		2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROECT NO. *(if applicable)*
0010	See Block 16C	N/A.	

6. ISSUED BY CODE ASPR-BARDA

ASPR-BARDA
200 Independence Ave., S.W.
Room 640-G
Washington, D.C. 20201

7. ADMINISTERED BY *(If other than Item 6)* CODE ASPR-BARDA02

ASPR-BARDA
330 Independence Ave, S.W. Rm G640
Washington, D.C. 20201

8. NAME AND ADDRESS OF CONTRACTOR *(No. street, county, State and ZIP Code)*

CHIMERIX, INC. 1377270
CHIMERIX, INC. 2505 MERIDIAN
2505 MERIDIAN PARKWAY, SUITE 340
DURHAM, NC 277135246

CODE 1377270 FACILITY CODE

x	9A. AMENDMENT OF SOLICITATION NO.
	9B. DATED *(SEE ITEM 11)*
x	10A MODIFICATION OF CONTRACT/ORDER NO. HHSO100201100013C
	10B. DATED *(SEE ITEM 13)* 02/16/2011

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

o The above numbered solicitatIon is amended as set forth in Item 14. The hour and date specified for receipt of Offers o is extended. o is not extended

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(if required)*
N/A.

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (*Specify authority*) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
x	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority) Bilateral: Mutual Agreement of the Parties.

E. IMPORTANT: Contractor ☐ is not. ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Tax ID Number: 33-0903395
DUNS Number: [...***...]
A. The purpose of this modification is to incorporate the following changes into contract number HHSO100201100013C:

1. The period of performance for the Option 1 performance segment CLIN 0002 of contract number HHSO100201100013C is hereby changed from 1 November 2012 through 31 October 2013 to 1 April 2013 through 31 March 2014, at no additional cost to the Government. If exercised by a contract modification,· the option exercise date for the Option 1 performance segment CLIN 0002 will be 1 April 2013.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME OF CONTRACTING OFFICER	
KENNETH I. MOCH, PRESIDENT AND CEO		ETHAN J. MUELLER	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
/s/ Kenneth I. Moch		/s/ Ethan J. Mueller	10/17/12
(Signature of person authorized to sign)		*(Signature of Contracting Officer)*	

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

*****Confidential Treatment Requested**

NAME OF OFFEROR OR CONTACTOR
CHIMERIX, INC. 1377270

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	B. This is a no cost modification . The total amount and all other terms and conditions of contract number HHSO100201100013C remain unchanged. Period of Performance: 02/16/2011 to 03/31/2013				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF	PAGES
	1		3

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ NO.	5. PROECT NO. *(if applicable)*
0011	See Block 16C	N/A.	

6. ISSUED BY CODE ASPR-BARDA

ASPR-BARDA
200 Independence Ave., S.W.
Room 640-G
Washington, D.C. 20201

7. ADMINISTERED BY *(If other than Item 6)* CODE ASPR-BARDA02

ASPR-BARDA
330 Independence Ave, SW, Rm G640
Washington, DC 20201

8. NAME AND ADDRESS OF CONTRACTOR *(No. street, county, State and ZIP Code)*

CHIMERIX, INC. 1377270
CHIMERIX, INC. 2505 MERIDIAN
2505 MERIDIAN PARKWAY, SUITE 340
DURHAM, NC 277135246

CODE 1377270 FACILITY CODE

x	9A. AMENDMENT OF SOLICITATION NO.
	9B. DATED *(SEE ITEM 11)*
x	10A MODIFICATION OF CONTRACT/ORDER NO. HHSO100201100013C
	10B. DATED *(SEE ITEM 13)* 02/16/2011

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

o The above numbered solicitatIon is amended as set forth in Item 14. The hour and date specified for receipt of Offers o is extended. o is not extended

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(if required)* *Net Increase:* $1,497,322.00
See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (*Specify authority*) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
S	D. OTHER (Specify type of modification and authority) Bilateral: Mutual Agreement of the Parties.

E. IMPORTANT: Contractor £ is not. S is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Tax ID Number: 33-0903395
DUNS Number: [...***...]
A. The purpose of this modification is to add funding in the amount of $1,497,322.00 for the purpose of funding a cost growth due to increases in indirect rates into the base segment ONLY of Contract Number HHSO100201100013C.

1. The addition of this cost growth to the base segment of Contract Number HHSO100201100013C results in Contract Line Item Number (CLIN) 0001 being changed as follows:

Total Estimated Cost: From $27,531,047.00 By $1,497,322.00 To $29,028,369.00

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME OF CONTRACTING OFFICER	
KENNETH I. MOCH, PRESIDENT AND CEO		ETHAN J. MUELLER	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
/s/ Kenneth I. Moch	11/7/12	/s/ Ethan J. Mueller	11/8/12
(Signature of person authorized to sign)		*(Signature of Contracting Officer)*	

*****Confidential Treatment Requested**

NAME OF OFFEROR OR CONTACTOR
CHIMERIX, INC. 1377270

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	No change to the Total Fixed Fee Amount of $1,927,173.00 Total Estimated Cost Plus fixed Fee: From $29,458,220.00 By $1,497,322.00 To $30,955,542.00 2. This modification hereby results in an increase in the total amount of the contract from $29,458,220.00 by $1,497,322.00 to $30,955,542.00. 3. Block 15G of the SF 26, the amount of $29,458,220.00 shall be changed to $30,955,542.00. Also in Block 14 of the SF 26, the following CAN Number is added as follows: Appropriation Year: 2013; Object Class: 25329; CAN 1992002 $1,497,322.00 4. The period of performance for the base segment CLIN 0001 of Contract Number HHSO100201100013C remains unchanged at 16 February 2011 through 31 March 2013. The Statement of Work also remains unchanged. This bilateral modification does not authorize the performance of any Option segments under the contract. 5. The second sentence in Article G.7. INDIRECT COST RATES of the contract is replaced with the following: FY 11 (Retroactive Adjustment ONLY) - Fringe Benefits at [...***...]% and Indirect at [...***...]%. FY 12 and FY 13 (Retroactive Adjustment and Billing) - Fringe Benefits at [...***...]% and Indirect at [...***...]%. 6. Under Article F.2., DELIVERABLES, under the NEW MILESTONE, under the column titled WBS/SOW#, the reference to WBS Number 1.8 is hereby deleted and replaced with 11.0 (Base Consideration Activities). B. All other terms and conditions of the contract remain unchanged. Delivery: 03/31/2013 FOB: Destination Period of Performance: 02/16/2011 to 03/31/2013 Change Item 1 to read as follows(amount shown is the obligated amount):				
1	Research and development of CMX001 for the Treatment of Smallpox to include [...***...]. Reports and Other Data Deliverables. Obligated Amount: $1,497,322.00 Delivery Location Code: OS-BARDA-SWITZER OS-BARDA-SWITZER Continued ...				1,497,322.00

*****Confidential Treatment Requested**

NAME OF OFFEROR OR CONTACTOR
CHIMERIX, INC. 1377270

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	330 Independence Ave, SW, Rm G644 Washington DC 20201 US Amount: $24,819, 527.00 Accounting Info: 2011.1992002.25329 Appr. Yr. : 2011 CAN: 1992002 Object Class: 25329 Funded: $0.00 Delivery Location Code: OS-BARDA-SWITZER OS-BARDA-SWITZER 330 Independence Ave, SW, Rm G644 Washington DC 20201 US Amount: $4,638,693.00 Accounting Info: 2012.1992002.25329 Appr. Yr. : 2012 CAN: 1992002 Object Class: 25329 Funded: $0.00 Delivery Location Code: HHS HHS 200 Independence Avenue, SW Washington DC 20201 US Amount: $1,497,322.00 Accounting Info: 2013.1992002.25329 Appr. Yr. : 2013 CAN: 1992002 Object Class: 25329 Funded: $1,497,322.00				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF	PAGES
	1		2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ NO.	5. PROECT NO. *(if applicable)*
0012	See Block 16C	N/A.	

6. ISSUED BY CODE ASPR-BARDA

ASPR-BARDA
200 Independence Ave., S.W.
Room 640-G
Washington, D.C. 20201

7. ADMINISTERED BY *(If other than Item 6)* CODE ASPR-BARDA02

ASPR-BARDA
330 Independence Ave, S.W. Rm G640
Washington, DC 20201

8. NAME AND ADDRESS OF CONTRACTOR *(No. street, county, State and ZIP Code)*

CHIMERIX, INC. 1377270
CHIMERIX, INC. 2505 MERIDIAN
2505 MERIDIAN PARKWAY, SUITE 340
DURHAM, NC 277135246

CODE 1377270 FACILITY CODE

x	9A. AMENDMENT OF SOLICITATION NO.
	9B. DATED *(SEE ITEM 11)*
x	10A MODIFICATION OF CONTRACT/ORDER NO. HHSO100201100013C
	10B. DATED *(SEE ITEM 13)* 02/16/2011

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

o The above numbered solicitatIon is amended as set forth in Item 14. The hour and date specified for receipt of Offers o is extended. o is not extended
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(if required)*
N/A.

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (*Specify authority*) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
S	D. OTHER (Specify type of modification and authority) Bilateral: Mutual Agreement of the Parties.

E. IMPORTANT: Contractor £ is not. S is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Tax ID Number: 33-0903395
DUNS Number: [...***...]
A. The purpose of this modification is to incorporate the following changes into contract number HHSO100201100013C:

1. Under Attachment 1, Statement of Work dated 19 June 2012, under PART III, LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS, SECTION J - LIST OF ATTACHMENTS, under 2.5.4 the word "8 patients" is hereby deleted and replaced with the word "7 patients."

2. Under Article G. 3. KEY PERSONNEL under contract number HHSO100201100013C, [...***...] is hereby deleted and replaced by [...***...]

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME OF CONTRACTING OFFICER	
KENNETH I. MOCH, PRESIDENT AND CEO		ETHAN J. MUELLER	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
/s/ Kenneth I. Moch		/s/ Ethan J. Mueller	11/26/12
(Signature of person authorized to sign)		*(Signature of Contracting Officer)*	

*****Confidential Treatment Requested**

NAME OF OFFEROR OR CONTACTOR
CHIMERIX, INC. 1377270

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	and [...***...] is hereby deleted and replaced with [...***...].				
	B. This is a no cost modification. The total amount and all other terms and conditions of contract number HHSO100201100013C remain unchanged.				
	Period of Performance: 02/16/2011 to 03/31/2013				

*****Confidential Treatment Requested**

Exhibit 10.17

*****Text Omitted and Filed Separately**
with the Securities and Exchange Commission.
Confidential Treatment Requested
Under 17 C.F.R. Sections 200.80(b)(4)
and 230.406

LICENSE AGREEMENT

BETWEEN

CHIMERIX, INC

AND

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

FOR

CASE NO [...*...]**
CASE NO [...*...]**
CASE NO [...*...]**

*****Confidential Treatment Requested**

LICENSE AGREEMENT

This agreement ("Agreement") is made by and between Chimerix, Inc. a Delaware corporation having an address at 14024 Rue Saint Raphael, Del Mar, CA 92014 ("LICENSEE") and The Regents Of The University of California, a California corporation having its statewide administrative offices at 1111 Franklin Street, Oakland, California 94607-5200 ("UNIVERSITY"), represented by its San Diego campus having an address at University of California, San Diego, Technology Transfer & Intellectual Property Services, Mail-code 0910, 9500 Gilman Drive, La Jolla, California 92093-0910 ("UCSD"). LICENSEE and UNIVERSITY may each be referred to herein as a "Party" or collectively as the "Parties."

This Agreement is effective on the date of the last signature ("Effective Date").

RECITALS

WHEREAS, the inventions disclosed in UCSD Case Docket No. [...***...] and titled "[...***...]" ("First Invention"), were made in the course of research at UCSD by [...***...] (hereinafter and collectively, the "First Inventors") and are covered by Patent Rights as defined below;

WHEREAS, the inventions disclosed in UCSD Case Docket No. [...***...] and titled "[...***...]" ("Second Invention"), were made in the course of research at UCSD by [...***...] (hereinafter and collectively, the "Second Inventors") and are covered by Patent Rights as defined below;

WHEREAS, the inventions disclosed in UCSD Case Docket No. [...***...] and titled "[...***...]" ("Third Invention"), were made in the course of research at UCSD by [...***...] (hereinafter and collectively, the "Third Inventors") and at Dana Farber Cancer Institute ("DFCI") with a business address at 44 Binney Street, Boston, MA 02215 by [...***...] ("DFCI Inventor") and are covered by Patent Rights as defined below;

Whereas LICENSEE is aware that UNIVERSITY is in negotiations with a Third Party for a license to the Second Invention for the field of osteoporosis and other metabolic bone diseases;

WHEREAS, the research from which the First, Second, and Third Inventions arose was sponsored in part by the Government of the United States of America and as a

consequence this license is subject to overriding obligations to the Federal Government under 35 U.S.C. §§ 200-212 and applicable regulations;

WHEREAS, the research from which the First Invention arose was sponsored in part by a commercial entity, and the right granted to this entity under this agreement to negotiate for a license to the First Invention has expired;

WHEREAS, the research from which the Second Invention arose was sponsored in part by a commercial entity under a Materials Transfer Agreement, and the right granted to this entity under this agreement to negotiate for a license to the Second Invention has expired;

WHEREAS, the First, Second, and Third Inventors are employee of UCSD, and they are obligated to assign all of their right, title and interest in the Invention to UNIVERSITY;

WHEREAS, the DFCI Inventors are employees of DFCI, and they are obligated to assign all of their right, title and interest in the Invention to DFCI;

WHEREAS, UNIVERSITY and DFCI have entered an Inter-Institutional Agreement ("DFCI/UC Agreement"; UC control number [...***...] with an effective date of October 16, 2001; Exhibit A) under which DFCI authorizes UNIVERSITY to have the exclusive right to prepare, file, prosecute and maintain patent applications and patents covering Third Inventions in which both parties have an interest, and the exclusive right to negotiate, execute and administer agreements for the commercialization of such inventions;

WHEREAS, [...***...] were also employees of the Veterans Administration Medical Center at the time the Inventions were made, and, in accordance with the policy of the U.S. Department of Veterans Affairs ("VA"), they have reported the Inventions to the VA for a determination of rights;

WHEREAS, the VA may decide that the U.S. Government should retain its undivided right, title and interest in and to the First, and Third Inventions, and the First and Third Inventors may be asked by the VA to assign all of their right, title and interest in and to the Inventions jointly to the U.S. Government and UNIVERSITY;

WHEREAS the VA has relinquished its rights to the Second Invention as stated in a letter to [...***...] (Exhibit B)

WHEREAS, the VA and UNIVERSITY entered into a Cooperative Technology Administration Agreement ("VA/UC Agreement"; Exhibit C) under which the VA authorizes UNIVERSITY to have the exclusive right to prepare, file, prosecute and maintain patent applications and patents covering the inventions in which either or both

parties have an interest and that arises from VA medical centers affiliated with UC campuses, and the exclusive right to negotiate, execute and administer agreements for the commercialization of such inventions;

WHEREAS, LICENSEE entered into secrecy agreements (UC Control No. [...***...] effective March 15, 2001 and UC control number [...***...], effective April 3, 2001) with UNIVERSITY, ("Secrecy Agreement"), for the purpose of evaluating the Invention;

WHEREAS, UNIVERSITY is desirous that the Invention be developed and utilized to the fullest possible extent so that its benefits can be enjoyed by the general public;

WHEREAS, LICENSEE is desirous of obtaining certain rights from UNIVERSITY for commercial development, use, and sale of the Invention, and the UNIVERSITY is willing to grant such rights; and

WHEREAS, LICENSEE understands that UNIVERSITY may publish or otherwise disseminate information concerning the Invention at any time and that LICENSEE is paying consideration thereunder for its early access to the Invention, not continued secrecy therein.

NOW, THEREFORE, the parties agree:

ARTICLE 1. DEFINITIONS

The terms, as defined herein, shall have the same meanings in both their singular and plural forms.

1.1 "Affiliate" means any corporation or other business entity in which LICENSEE owns or controls, directly or indirectly greater than fifty percent (50%) of the outstanding stock or other voting rights entitled to elect directors, or in which LICENSEE is owned or controlled directly or indirectly by greater than fifty percent (50%) of the outstanding stock or other voting rights entitled to elect directors; but in any country where the local law does not permit foreign equity participation of greater than fifty percent (50%), then an "Affiliate" includes any company in which LICENSEE owns or controls or is owned or controlled by, directly or indirectly, the maximum percentage of outstanding stock or voting rights permitted by local law.

1.2 "Sublicensee" means a Third Party to whom LICENSEE grants a sublicense of certain rights granted to LICENSEE under this Agreement.

1.3 "Field" means all human and veterinary uses with the exception that the Field specifically excludes uses of the Second Invention for osteoporosis and other metabolic bone diseases.

1.4 "Territory" means worldwide, but only in those countries where the Patent Rights exist at any time during the term of this Agreement, subject to Paragraph 3.2

1.5 "Term" means the period of time beginning on the Effective Date and ending on the later of (i) the expiration date of the longest-lived Patent Rights; or (ii) the twenty-first (21st) anniversary of Effective Date.

1.6 "First Patent Rights" means any of the following: the US patent application (serial number [...***...]) disclosing and claiming the First Invention, filed by First Inventors and assigned to UNIVERSITY; and continuing applications thereof including divisions, substitutions, and continuations-in-part (but only to extent the claims thereof are enabled by disclosure of the parent application); any patents issuing on said applications including reissues, reexaminations and extensions, First Patent Rights excludes corresponding foreign applications and patents related to First Invention, for which the UNIVERSITY has not pursued patent rights outside the United States.

1.7 "Second Patent Rights" means any of the following; the international patent application (serial number [...***...]) disclosing and claiming the Second Invention, filed by Second Inventors and assigned to UNIVERSITY; and continuing applications thereof including divisions, substitutions, and continuations-in-part (but only to extent the claims thereof are enabled by disclosure of the parent application); any patents issuing on said applications including reissues, reexaminations and extensions; and any corresponding foreign applications or patents.

1.8 "Third Patent Rights" means any of the following: the US patent application (serial number [...***...]) disclosing and claiming the Third Invention, filed by Third Inventors and assigned to UNIVERSITY and DFCI; and continuing applications thereof including divisions, substitutions, and continuations-in-part (but only to extent the claims thereof are enabled by disclosure of the parent application); any patents issuing on said applications including reissues, reexaminations and extensions; and any corresponding foreign applications or patents.

1.9 "Patent Rights'' means any and all or any combination of First, Second, Third and Fourth Patent Rights.

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1.10 "Sponsor Rights" means all the applicable provisions of any license to the United States Government executed by UNIVERSITY and the overriding obligations to the Federal Government under 35 U.S.C. §§ 200-212 and applicable governmental implementing regulations.

1.11 "Licensed Method" means any method that is covered by the claims of Patent Rights the use of which would constitute, but for the license granted to LICENSEE under this Agreement, an infringement of any pending or issued and unexpired claim within Patent Rights.

1.12 "Licensed Product" means any services, composition or product that is covered by the claims of Patent Rights, or that is produced by the Licensed Method, or the manufacture, use, sale, offer for sale, or importation of which would constitute, but for the license granted to LICENSEE by UNIVERSITY herein, an infringement of any pending or issued and unexpired claim within the Patent Rights.

1.13 "Net Sales" means the total of the gross invoice prices of Licensed Products sold by LICENSEE, its Sublicensee or an Affiliate, or any combination thereof, less the sum of the following actual and customary deductions where applicable and separately listed: [...***...] (except for [...***...]. For purposes of calculating Net Sales, transfers to a Sublicensee or an Affiliate of Licensed Product under this Agreement for (i) end use (but not resale) by the Sublicensee or Affiliate shall be treated as sales by LICENSEE at list price of LICENSEE, or (ii) resale by a Sublicensee or an Affiliate shall be treated as sales at the list price of the Sublicensee or Affiliate.

1.14 "Patent Costs" means all out-of-pocket expenses for the preparation, filing, prosecution, and maintenance of all United States and foreign patents and patent applications included in Patent Rights. Patent Costs shall also include reasonable out-of-pocket expenses for patentability opinions, inventorship determination, preparation and prosecution of patent application, re-examination, re-issue, interference, and opposition activities related to patents or applications in Patent Rights.

1.15 "VA" means the U.S. Department of Veterans Affairs.

1.16 "VA/UC Agreement" means the Cooperative Technology Administration Agreement with an effective date of May 19, 2000, which is attached hereto as Exhibit C and is incorporated herein by reference.

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1.17 "Combination Product" means any product which is a Licensed Product and contains other product(s) or product component(s) that (i) does not use Invention, or Patent Rights; (ii) the sale, use or import by itself does not contribute to or induce the infringement of Patent Rights; (iii) can be sold separately by LICENSEE, its Sublicensee or an Affiliate; and (iv) enhances the market price of the final product(s) sold, used or imported by LICENSEE, its Sublicensee, or an Affiliate.

1.18 "Third Party" means any individual or entity other than LICENSEE or UNIVERSITY or an Affiliate of LICENSEE or UNIVERSITY.

ARTICLE 2. GRANTS

2.1 License.

Subject to the limitations set forth in this Agreement, and the limitations set forth in the VA/UC Agreement, and Sponsor's Rights, UNIVERSITY hereby grants to LICENSEE, and LICENSEE hereby accepts, a license under Patent Rights to make, have made, use, sell, offer for sale, and import Licensed Products and to practice Licensed Methods, in the Field within the Territory and during the Term.

The license granted herein is exclusive for Patent Rights in the Field.

2.2 Sublicense.

(a) The license granted in Paragraph 2.1 includes the right of LICENSEE to grant sublicenses to Third Parties during the Term of this Agreement but only for as long as the license is exclusive.

(b) With respect to sublicense granted pursuant to Paragraph 2.2(a), LICENSEE shall;

(1) not receive, or agree to receive, anything of value in lieu of cash as considerations from a Third Party under a sublicense granted pursuant to Paragraph 2.2(a) without the express written consent of UNIVERSITY;

(2) to the extent applicable, include all of the rights of and obligations due to UNIVERSITY (and, if applicable, the Sponsor's Rights and the VA/UC Agreement) and contained in this Agreement;

(3) promptly provide UNIVERSITY with a copy of each sublicense issued; and

(4) collect and guarantee payment of all payments due, directly or indirectly, to UNIVERSITY from Sublicensees and summarize and deliver all reports due, directly or indirectly, to UNIVERSITY from Sublicensees.

(c) Upon termination of this Agreement for any reason, UNIVERSITY, at its sole discretion, shall determine whether LICENSEE shall cancel or assign to UNIVERSITY any and all sublicenses. However, if termination of this Agreement occurs due to the inability of LICENSEE to pay Patent Costs to UNIVERSITY, Sublicensee, by assuming payment of Patent Costs, may request that UNIVERSITY continue their Sublicense Agreement, wherein such request shall not be unreasonably denied.

2.3 Reservation of Rights.

UNIVERSITY reserves the right to:

(a) use the Invention and Patent Rights for educational and research purposes;

(b) publish or otherwise disseminate any information about the Invention at any time; and

(c) allow other nonprofit institutions to use Invention and Patent Rights for educational and research purposes in their facilities.

DFCI reserves the right to:

(a) use the Third Invention and associated technology for educational and research purposes.

2.4 Right to Expand Field of Use.

In the event that UNIVERSITY fails to execute a license for the excluded field of use for the Second Invention (osteoporosis and other metabolic bone diseases) with the Third Party currently negotiating with University, LICENSEE shall have the first right to negotiate a license to the excluded field of use. UNIVERSITY shall have no longer than twenty-four (24) months to execute a license with the Third Party negotiating with the University. LICENSEE shall have six (6) months from the date of notification by UNIVERSITY of availability of excluded field of use rights to conclude a license agreement with UNIVERSITY.

ARTICLE 3. CONSIDERATIONS

3.1 **Fees and Royalties**. The parties hereto understand that the fees and royalties payable by LICENSEE to UNIVERSITY under this Agreement are partial consideration for the licenses granted herein to LICENSEE under Patent Rights. LICENSEE shall pay UNIVERSITY:

(a) in recognition of LICENSEE being a startup business and in lieu of cash, a **license issue fee** in the form of one hundred and five thousand (105,000) shares of Chimerix, Inc. Common Stock, from the Three Million Five-Hundred Thousand (3,500,000) shares of Chimerix Common Stock authorized for issuance under LICENSEE's Articles of Incorporation dated April 6, 2000 (Exhibit D); and such stock shall be delivered to UNIVERSITY within sixty (60) days of notification of final approval by the UNIVERSITY Office of the President in the name of "Shellwater & Co.", a nominee of UNIVERSITY, provided however, that the acceptance of LICENSEE's common stock is subject to:

(i) the final approval of the Office of the President of UNIVERSITY. In the event that such approval is not granted, this Agreement shall remain in effect and LICENSEE and UNIVERSITY shall renegotiate in good faith for a substitution of similar value for consideration.

(ii) LICENSEE and UNIVERSITY entering into a shareholder agreement outlining the rights of UNIVERSITY as a shareholder that is no less favorable to the UNIVERSITY than to the common share-holding founders and is acceptable to the UNIVERSITY.

(b) milestone payments in the amounts payable according to the following schedule of events:

Amount	**Date or Event**
[...***...]	LICENSEE begins a Phase I clinical trial; payable for each of the first three Licensed Products to begin a Phase I clinical trial
[...***...]	LICENSEE begins a Phase III clinical trial; payable for each of the first three Licensed Products to begin a Phase III clinical trial

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[...***...]	LICENSEE receives the first US regulatory approval for the sale of the first Licensed Product for human therapeutic use
[...***...]	LICENSEE receives US regulatory approval for the sale of each subsequent Licensed Product(s) for human therapeutic use
[...***...]	LICENSEE receives regulatory approval for the sale of each Licensed Product in Europe
[...***...]	LICENSEE receives regulatory approval for the sale of each Licensed Product in Japan

(c) an **earned royalty** of [...***...] on Net Sales of Licensed Products by LICENSEE, or its Affiliate(s) (The "Royalty Rate"); provided however that:

(i) if LICENSEE is required to license the intellectual property of a Third Party to make, have made, use, sell, offer to sell or import Licensed Products, the earned royalty due hereunder shall be reduced in the proportion of [...***...] of royalty due to such Third Party; and

(ii) the earned royalty due on Net Sales of Combination Product by LICENSEE and/or its Affiliate(s) shall be calculated as below: Earned royalty due UNIVERSITY = A/(A+B+C . . .) x Royalty Rate on Net Sales of the Licensed Products, where: A is the separately listed sale price of the Licensed Product or Licensed Product components; and B and C . . . are the separately listed sale prices of the individual products or product components, respectively, that satisfied the requirements outlined in Paragraph 1.17. In the event that LICENSEE does not separately sell any of the B, C . . . products or product components used in Combination Product, the purchase price paid by LICENSEE in the procurement of said products or product components shall be used.

in Combination Product, the purchase price paid by LICENSEE in the procurement of said products or product components shall be used.

(iii) under no circumstances shall the royalty due to UNIVERSITY be less than [...***...] of the amount due without the deductions allowable under 3.1 (c) (i) or (ii), therefore the royalties due to UNIVERSITY shall never be less than [...***...] on Net Sales of Licensed Products by LICENSEE or its Affiliates.

(d) a percentage of **sublicense fees**, including, but not limited to option fees, license issue fees, license maintenance fees and milestone payments for specified Licensed Products and excluding research and development contract payments for specific research projects within the Field provided, however, that such research support shall not include executive and clerical salaries, legal costs, or other costs not directly related to research.

(i) The percentage of sublicense fees payable to UNIVERSITY by LICENSEE will be determined according to the following schedule:

Percentage to be paid	Date of Sublicensure
[...***...]	Prior to the first IND submission for a Licensed Product or prior to expenditure of [...***...] in research to identify, characterize or develop Licensed Products within the Field
[...***...]	Upon or after the expenditure of [...***...] in research to identify, characterize or develop Licensed Products within the Field; or on or after the first IND Submission for a Licensed Product, but prior to initiation of the first Phase III Clinical Study for a Licensed Product.
[...***...]	On or after initiation of the first Phase III Clinical Study for a Licensed Product

(e) on each and every **sublicense royalty** payment received by LICENSEE from its Sublicensees on sales of Licensed Product by Sublicensee, either (i) royalties based on the royalty rate in Paragraph 3.1(c) as applied to Net Sales of Sublicensee, or (ii) [...***...] of the royalties received by LICENSEE from Sublicensee; whichever amount is less.

(f) beginning in the first calendar year of commercial sales of the first Licensed Product by LICENSEE, its Sublicensee, or an Affiliate and if the total earned royalties paid by LICENSEE, or its Affiliates under Paragraph 3.1(c) and (e) to UNIVERSITY in any such year cumulatively amounts to less than [...***...] ("**minimum annual royalty**"), LICENSEE shall pay to UNIVERSITY a minimum annual royalty on or before February 28 following the last quarter of such year the difference between [...***...] and the sum of total, earned royalty paid by LICENSEE for such year under Paragraphs 3.1(c) and (e); provided, however, that for the first year of commercial sales of the first Licensed Product, the amount of minimum annual royalty payable shall be pro-rated for the number of months remaining in that calendar year.

(g) All fees and royalty payments specified in Paragraphs 3.1(b) through 3.1(f) shall be paid by LICENSEE pursuant to Paragraph 4.3 and shall be delivered by LICENSEE to UNIVERSITY pursuant to Paragraph 10.1.

3.2 Patent Costs.

LICENSEE shall reimburse UNIVERSITY all past (up to the Effective Date) and future (on or after the Effective Date) Patent Costs plus a [...***...] patent service fee. Future Patent Costs will be due within thirty (30) days following receipt by LICENSEE of an itemized invoice from UNIVERSITY. As of January 22, 2002, Past Patent Costs are approximately [...***...] and are due according to the following schedule:

Amount	Date or Event
[...***...] of the past patent costs which is approximately [...***...]	The earlier of the one (1) year anniversary of the Effective Date or receipt of equity funding of $8,000,000 (Eight Million dollars).
[...***...] of the past patent costs which is approximately [...***...]	The earlier of the two (2) year anniversary of the Effective Date or receipt of equity funding of $8,000,000 (Eight Million dollars).
[...***...] of the past patent costs which is approximately [...***...]	The earlier of the three (3) year anniversary of the Effective Date or receipt of equity funding of $8,000,000 (Eight Million dollars).

[...***...] of the past patent costs which is approximately [...***...]	The earlier of the four (4) year anniversary of the Effective Date or receipt of equity funding of $8,000,000 (Eight Million dollars).

If UNIVERSITY licenses to Third Parties uses of the Second Invention outside the Field, Patent costs for the Second Invention shall be prorated among LICENSEE and Third Parties who have obtained from UNIVERSITY a license outside the Field.

3.3 Due Diligence.

(a) LICENSEE, Affiliate or Sublicensee shall:

(1) diligently proceed with the development, manufacture and sale of Licensed Products; and

(2) beginning [...***...] from the Effective Date of this Agreement, annually spend not less than [...***...] for the development of Licensed Products during the next four (4) years of the Agreement. LICENSEE may, at its sole option, fund the research of any one of the Inventors and credit the amount of such funding actually paid to UCSD against its obligation under this paragraph.

(3) on or before the date ending [...***...] after the Effective Date, file an IND with the US FDA (or its equivalent in a foreign country) for a Licensed Product; and

(4) on or before the date ending [...***...] after the Effective Date, commence in the US a Phase II clinical trial (or its equivalent in a foreign country) for first Licensed Product; and

(5) on or before the date ending [...***...] after the Effective Date, commence a Phase III clinical trial (or its equivalent in a foreign country) for first Licensed Product; and

(6) on or before the date ending [...***...] after the Effective Date file with US FDA an NDA or PLA (or its equivalent in a foreign country) for first Licensed Product; and

(7) market a Licensed Product in the US within [...***...] after receiving regulatory approval to market such Licensed Product; and

(8) fill the market demand for Licensed Products following commencement of marketing at any time during the term of this Agreement; and

(9) obtain all necessary governmental approvals for the manufacture, use and sale of Licensed Products.

(b) LICENSEE may renegotiate the diligence criteria of Section 3.3(a) (the "Diligence Changes") pursuant to significant changes in the technological, regulatory or economic climate of the industry. LICENSEE must document these changes to UNIVERSITY. UNIVERSITY reserves the right and option to either approve these Diligence Changes, such approval not being unreasonably denied, or to terminate this Agreement or change LICENSEE's exclusive license to a nonexclusive license under commercially reasonable terms.

(c) If LICENSEE, Affiliate or Sublicensee fails to perform the obligations specified in Paragraphs 33(a) (1)-(9) hereof, then UNIVERSITY shall have the right and option to either terminate this Agreement or change LICENSEE's exclusive license to a nonexclusive license. This right, if exercised by UNIVERSITY, supersedes the rights granted in Paragraph 2.1 hereof, and is subject to provisions of Paragraph 3.3 (d) hereof.

(d) If LICENSEE, Affiliate or Sublicensee fails to perform the obligations specified in Paragraphs 3.3(a)(3)-(7), but has otherwise fulfilled the obligations specified in Paragraphs 3.3(a)(1), (2), (8) and (9) for a Licensed Product not to be used for human therapeutic use, LICENSEE will retain an exclusive license under this Agreement in a field and to the extent necessary to reasonably protect proprietary commercial rights of the LICENSEE, Affiliate or Sublicensee for such Licensed Product.

ARTICLE 4. REPORTS, RECORDS AND PAYMENTS

4.1 Reports.

(a) Progress Reports.

(1) Beginning January 1, 2003 and ending on the date of first commercial sale of a Licensed Product in the United States, LICENSEE shall submit to UNIVERSITY semi-annual progress reports covering LICENSEE's (and Affiliate's and Sublicensee's) activities to develop and test all Licensed Products and obtain governmental approvals necessary for marketing the same. Such reports shall include a summary of work completed; summary of work in progress; current schedule of anticipated events or milestones; market plans for introduction of

Licensed Products; and summary of resources (dollar value) spent in the reporting period.

(2) LICENSEE shall also report to UNIVERSITY, in its immediately subsequent royalty report, the date of first commercial sale of a Licensed Product in each country.

(b) Royalty Reports. After the first commercial sale of a Licensed Product anywhere in the world, LICENSEE shall submit to UNIVERSITY quarterly royalty reports on or before each February 28, May 31, August 31 and November 30 of each year. Each royalty report shall cover LICENSEE'S (and each Affiliate's and Sublicensee's) most recently completed calendar quarter and shall show:

(1) the gross sales, deductions as provided in paragraph 1.13, and Net Sales during the most recently completed calendar quarter and the royalties, in US dollars, payable with respect thereto;

(2) the number of each type of Licensed Product sold;

(3) sublicense fees and royalties received during the most recently completed calendar quarter in US dollars and the portion payable to UNIVERSITY with respect thereto;

(4) the method used to calculate the royalties and sublicense fees and the portion payable to UNIVERSITY thereto; and

(5) the exchange rates used.

(6) If no sales of Licensed Products have been made and no sublicense revenues have been received by LICENSEE during any reporting period, LICENSEE shall so report.

4.2 Records & Audits.

(a) LICENSEE shall keep, and shall require its Affiliates and Sublicensees to keep, accurate and correct records of all Licensed Products manufactured, used, and sold, and sublicense fees received under this Agreement. Such records shall be retained by LICENSEE for at least five (5) years following a given reporting period.

(b) Upon written request of UNIVERSITY, LICENSEE shall make such records available to UNIVERSITY as may be reasonably necessary to verify the accuracy of the reports and payments hereunder. The specific requests shall be for records from any year ending not more than five (5) years prior to the date

of such request. All records shall be available during normal business hours for inspection at the expense of UNIVERSITY by UNIVERSITY's Internal Audit Department or by a Certified Public Accountant selected by UNIVERSITY and in compliance with the other terms of this Agreement for the sole purpose of verifying reports and payments or other compliance issues. Such inspector shall not disclose to UNIVERSITY any information other than information relating to the accuracy of reports and payments made under this Agreement or other compliance issues. In the event that any such inspection shows an under reporting and underpayment in excess of [...***...] for any twelve (12) month period, then LICENSEE shall pay the cost of the audit as well as any additional sum that would have been payable to UNIVERSITY had the LICENSEE reported correctly, plus an interest charge at a rate of [...***...] per year. Such interest shall be calculated from the date the correct payment was due to UNIVERSITY up to the date when such payment is actually made by LICENSEE. For underpayment not in excess of [...***...] for any twelve (12) month period, LICENSEE shall pay the difference within thirty (30) days without interest charge or inspection cost.

(c) UNIVERSITY may provide the VA with all financial information obtained from LICENSEE under Paragraph 4.1 hereof to the extent required under VA/UC Agreement, and if such information is provided to the VA, UNIVERSITY will require that the VA not disclose it to third parties.

(d) Notwithstanding Paragraph 4.2(c) hereof, UNIVERSITY shall treat all financial information obtained from LICENSEE as confidential and shall cause its accounting firm to retain all such financial information in confidence.

4.3 Payments.

(a) All fees and royalties due UNIVERSITY shall be paid in United States dollars and all checks shall be made payable to "The Regents of the University of California", referencing UNIVERSITY taxpayer identification number, [...***...]. When Licensed Products are sold in currencies other than United States dollars, LICENSEE shall first determine the earned royalty in the currency of the country in which Licensed Products were sold and then convert the amount into equivalent United States funds, using the exchange rate quoted in the Wall Street Journal on the last business day of the applicable reporting period.

(b) Royalty Payments.

(1) Royalties shall accrue when Licensed Products are invoiced, or if not invoiced, when delivered by LICENSEE or Affiliate to a Third Party, or upon delivery to Affiliate if for end use by Affiliate.

(2) LICENSEE shall pay earned royalties quarterly on or before February 28, May 31, August 31 and November 30 of each calendar year, Each such payment shall be for earned royalties accrued within LICENSEE's most recently completed calendar quarter.

(3) Royalties earned on sales occurring or under sublicense granted pursuant to this Agreement in any country outside the United States shall not be reduced by LICENSEE for any taxes, fees, or other charges imposed by the government of such country on the payment of royalty income, except that all payments made by LICENSEE in fulfillment of UNIVERSITY'S tax liability in any particular country may be credited against earned royalties or fees due UNIVERSITY for that country. LICENSEE shall pay all bank charges resulting from the transfer of such royalty payments.

(4) If at any time legal restrictions prevent the prompt remittance of part or all royalties by LICENSEE with respect to any country where a Licensed Product is sold or a sublicense is granted pursuant to this Agreement, LICENSEE shall convert the amount owed to UNIVERSITY into US currency and shall pay UNIVERSITY directly from its US sources of funds for as long as the legal restrictions apply. If the royalty rate specified in this Agreement should exceed the permissible rate established in any country, the royalty rate for sales in such country shall be adjusted to the highest legally permissible or government-approved rate.

(5) LICENSEE shall not collect royalties otherwise due to UNIVERSITY, nor cause royalties to be paid to UNIVERSITY on Licensed Products sold to the account of the US Government or any agency thereof as provided for in the license to the US Government.

(6) In the event that any patent or patent claim within Patent Rights is held invalid in a final decision by a patent office from which no appeal or additional patent prosecution has been or can be taken, or by a court of competent jurisdiction and last resort and from which no appeal has or can be taken, all obligation to pay royalties based solely on that patent or claim or any claim patentably indistinct therefrom shall cease as of the date of such final decision. LICENSEE shall not, however, be relieved from paying any royalties that accrued before the date of such final decision, that are based on another patent or claim not involved in such final decision.

(c) Late Payments, In the event royalty, reimbursement and/or fee payments are not received by UNIVERSITY when due, LICENSEE shall pay to

UNIVERSITY interest charges at a rate of [...***...] or the maximum allowed by law, whichever is less. Such interest shall be calculated from the date payment was due until actually received by UNIVERSITY.

ARTICLE 5. PATENT MATTERS

5.1 Patent Prosecution and Maintenance.

(a) Provided that LICENSEE has reimbursed UNIVERSITY for Patent Costs pursuant to Paragraph 3.2, UNIVERSITY shall diligently prosecute and maintain the United States and, if available, foreign patents, and applications in Patent Rights using counsel of its choice. UNIVERSITY shall promptly provide LICENSEE with copies of all relevant documentation relating to such prosecution and LICENSEE shall keep this documentation confidential. The counsel shall take instructions only from UNIVERSITY, and all patents and patent applications in Patent Rights shall be assigned solely to UNIVERSITY.

(b) UNIVERSITY shall consider amending any patent application in Patent Rights to include claims reasonably requested by LICENSEE to protect the products contemplated to be sold by LICENSEE under this Agreement.

(c) UNIVERSITY shall apply for an extension of the term of any patent in Patent Rights if appropriate under the Drug Price Competition and Patent Term Restoration Act of 1984 and/or European, Japanese and other foreign counterparts of this law. LICENSEE shall prepare all documents and pay costs incurred for such application, and UNIVERSITY shall execute such documents and take any other additional action as LICENSEE reasonably requests in connection therewith.

(d) LICENSEE may elect to terminate its reimbursement obligations with respect to any patent application or patent in Patent Rights upon three (3) months' written notice to UNIVERSITY. UNIVERSITY shall use reasonable efforts to curtail further Patent Costs for such application or patent when such notice of termination is received from LICENSEE. UNIVERSITY, in its sole discretion and at its sole expense, may continue prosecution and maintenance of said application or patent, and LICENSEE shall then have no further license nor any obligations under this Agreement with respect thereto. UNIVERSITY shall give written notice of any non-payment of any portion of Patent Costs with respect to any application or patent to LICENSEE. If LICENSEE fails to cure the non-payment within sixty (60) days, UNIVERSITY may provide a second written notice ("Notice of Termination") to LICENSEE, indicating the specifics of the termination of the license for such application or patent. The University is not obligated to file, prosecute, or maintain Patent Rights outside of the

territory at any time or to file, prosecute, or maintain Patent Rights to which Licensee has terminated its license hereunder.

5.2 Patent Infringement.

(a) If LICENSEE learns of any substantial infringement of Patent Rights, LICENSEE shall so inform UNIVERSITY and provide UNIVERSITY with reasonable evidence of the infringement. Neither UNIVERSITY nor LICENSEE shall notify a Third Party of the infringement of Patent Rights without the consent of the other. Both UNIVERSITY and LICENSEE shall use reasonable efforts and cooperation to terminate infringement without litigation.

(b) LICENSEE may request UNIVERSITY to take legal action against such Third Party for the infringement of Patent Rights. Such request shall be made in writing and shall include reasonable evidence of such infringement and damages to LICENSEE. If the infringing activity has not abated ninety (90) days following LICENSEE's request, UNIVERSITY shall have the right to commence suit on its own account. UNIVERSITY shall give notice of its election to commence suit in writing to LICENSEE by the end of the one-hundredth (100th) day after receiving notice of such request from LICENSEE. LICENSEE may elect to join in that suit at its own expense. Should UNIVERSITY not commence suit on its own account, LICENSEE may thereafter bring suit for patent infringement at its own expense, if the infringement occurred in a jurisdiction where LICENSEE has an exclusive license under this Agreement. If LICENSEE elects to bring suit, UNIVERSITY may join that suit at its own expense.

(c) Recoveries from actions brought pursuant to Paragraph 5.2(b) shall belong to the party (UNIVERSITY or LICENSEE) bringing suit and bearing the expenses of the litigation. Legal actions brought jointly by UNIVERSITY and LICENSEE and fully participated in by both shall be at the joint expense of the parties and all recoveries shall be shared jointly by them in proportion to the share of expense paid by each party.

(d) UNIVERSITY and LICENSEE shall cooperate with each other in litigation proceedings at the expense of the party bringing suit. Litigation shall be controlled by the party bringing the suit, except that either party may be represented by counsel of its choice in any suit brought by the other party.

5.3 Patent Marking. LICENSEE shall mark all Licensed Products made, used or sold under the terms of this Agreement, or their containers, in accordance with the applicable patent marking laws.

ARTICLE 6. GOVERNMENTAL MATTERS

6.1 Governmental Approval or Registration. If this Agreement or any associated transaction is required by the law of any nation to be either approved or registered with any governmental agency, LICENSEE shall assume all legal obligations to do so. LICENSEE shall notify UNIVERSITY if it becomes aware that this Agreement is subject to a United States or foreign government reporting or approval requirement. LICENSEE shall make all necessary filings and pay all costs including fees, penalties, and all other out-of-pocket costs associated with such reporting or approval process.

6.2 Export Control Laws. LICENSEE shall observe all applicable United States and foreign laws with respect to the transfer of Licensed Products and related technical data to foreign countries, including, without limitation, the International Traffic in Arms Regulations and the Export Administration Regulations.

6.3 Preference for United States Industry. If LICENSEE sells a Licensed Product or Combination Product in the US, LICENSEE shall manufacture said Licensed Product substantially in the US.

ARTICLE 7. TERMINATION OF THE AGREEMENT

7.1 Termination by The Regents. If LICENSEE fails to perform or violates any term of this Agreement, then UNIVERSITY may give written notice of default ("Notice of Default") to LICENSEE. The Notice of Default shall state the asserted failure to perform or violation by LICENSEE. If LICENSEE fails to cure the default within sixty (60) days of the Notice of Default, UNIVERSITY may terminate this Agreement and the license granted herein by a second written notice ("Notice of Termination") to LICENSEE. If a Notice of Termination is sent to LICENSEE, this Agreement shall automatically terminate on the effective date of that notice. Termination shall not relieve LICENSEE of its obligation to pay any fees owed at the time of termination and shall not impair any accrued right of UNIVERSITY. The VA shall also have termination rights specified in Article 7 of the VA/UC Agreement under this Agreement.

7.2 Termination by Licensee.

(a) LICENSEE shall have the right at any time and for any reason to terminate this Agreement upon a ninety (90) day written notice to UNIVERSITY. Said notice shall state LICENSEE's reason for terminating this Agreement.

(b) Any termination under Paragraph 7.2(a) shall not relieve LICENSEE of any obligation or liability accrued under this Agreement prior to termination, or rescind any payment made to UNIVERSITY or action by LICENSEE prior to

time termination becomes effective. Termination shall not affect in any manner any rights of UNIVERSITY arising under this Agreement prior to termination.

7.3 Survival on Termination. The following Paragraphs and Articles shall survive the termination of this Agreement:

(a) Article 4 (REPORTS, RECORDS AND PAYMENTS);

(b) Paragraph 7.3 (Survival on Termination);

(c) Paragraph 7.4 (Disposition of Licensed Products on Hand);

(d) Paragraph 8.2 (Indemnification);

(e) Article 9 (USE OF NAMES AND TRADEMARKS);

(f) Paragraph 10.2 (Secrecy); and

(g) Paragraph 10.5 (Failure to Perform).

7.4 Disposition of Licensed Products on Hand. Upon termination of this Agreement, LICENSEE may dispose or all previously made or partially made Licensed Product within a period of one hundred and eighty (180) days of the effective date of such termination provided that the sale of such Licensed Product by LICENSEE, its Sublicensees, or Affiliates shall be subject to the terms of this Agreement, including but not limited to the rendering of reports and payment of royalties required under this Agreement.

ARTICLE 8. LIMITED WARRANTY AND INDEMNIFICATION

8.1 Limited Warranty.

(a) UNIVERSITY warrants that it has the lawful right to grant this license.

(b) The license granted herein is provided “AS IS” and without WARRANTY OF MERCHANTABILITY or WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE or any other warranty, express or implied. UNIVERSITY and VA makes no representation or warranty that the Licensed Product, Licensed Method or the use of Patent Rights will not infringe any other patent or other proprietary rights

(c) In no event shall UNIVERSITY or VA be liable for any incidental, special or consequential damages resulting from exercise of the license granted herein or the use of the Invention, Licensed Product, or Licensed Method.

(d) Nothing in this Agreement shall be construed as:

(1) a warranty or representation by UNIVERSITY or VA as to the validity or scope of any Patent Rights;

(2) a warranty or representation that anything made, used, sold or otherwise disposed of under any license granted in this Agreement is or shall be free from infringement of patents of third parties;

(3) an obligation of UNVERSITY or the VA to bring or prosecute actions or suits against Third Parties for patent infringement except as provided in Paragraph 5.2 hereof;

(4) conferring by implication, estoppel or otherwise any license or rights under any patents of UNIVERSITY or the U.S. Government or DFCI other than Patent Rights as defined in this Agreement regardless of whether these patents are dominant or subordinate to Patent Rights; or

(5) an obligation of UNIVERSITY or the VA to furnish any know-how not provided in Patent Rights.

8.2 Indemnification.

(a) LICENSEE shall indemnify, hold harmless and defend UNIVERSITY and the US Government, their officers, employees, and agents; the sponsors of the research that led to the Invention; and the Inventors of the patents and patent applications in Patent Rights and their employers against any and all claims, suits, losses, damage, costs, fees, and expenses resulting from or arising out of exercise of this license or any sublicense. This indemnification shall include, but not be limited to, any product liability.

(b) LICENSEE, at its sole cost and expense, shall insure its activities in connection with the work under this Agreement and obtain, keep in force and maintain insurance or an equivalent program of self insurance as follows:

(1) comprehensive or commercial general liability insurance (contractual liability included) with limits of at least: (i) each occurrence, $1,000,000; (ii) products/completed operations aggregate, $5,000,000; (iii) personal and advertising injury, $1,000,000; and (iv) general aggregate (commercial form only), $5,000,000; and

(2) the coverage and limits referred to above shall not in any way limit the liability of LICENSEE.

(c) LICENSEE shall furnish UNIVERSITY with certificates of insurance showing compliance with all requirements. Such certificates shall: (i) provide for thirty (30) day advance written notice to UNIVERSITY of any modification; (ii) indicate that UNIVERSITY has been endorsed as an additional insured under the coverage referred to above; and (iii) include a provision that the coverage shall be primary and shall not participate with nor shall be excess over any valid and collectable insurance or program of self-insurance carried or maintained by UNIVERSITY.

(d) UNIVERSITY shall notify LICENSEE in writing of any claim or suit brought against UNIVERSITY or the US Government in respect of which UNIVERSITY intends to invoke the provisions of this Article. LICENSEE shall keep UNIVERSITY informed on a current basis of its defense of any claims under this Article.

(e) With respect to the Third Invention and Third Patent Rights, the following Paragraphs 8.2(e)(1) and 8.2(e)(2) shall also be in effect:

(1) (i) LICENSEE shall indemnify, defend and hold harmless DFCI and its trustees officers, medical and professional staff, employees, and agents and their respective successors, heirs and assigns (the "Indemnitees"), against any liability, damage, loss or expense (including reasonable attorneys' fees and expenses of litigation) incurred by or imposed upon the Indemnitees, or any one of them, in connection with any claims, suits, actions, demands or judgments (a) arising out of the design, production, manufacture, sale, use in commerce, lease, or promotion by LICENSEE or by a Sulicensee, Affiliate or agent of LICENSEE, or any product, process or service relating to or developed pursuant to, this Agreement or (b) arising out of any other activities to be carried out pursuant to this Agreement.

(ii) LICENSEE'S indemnification under Section 8.2 (e) (1) (i) (a) applies to any liability, damage, loss or expense whether or not it is attributable to the negligent activities of the Indemnitees. Licensee's indemnification under 8.2 (e) (1) (i) (b) does not apply to any liability, damage, loss or expense to the extent that it is attributable to (a) the negligent activities of the Indemnitees, or (b) the intentional wrongdoing or intentional misconduct of the Indemnitees.

(iii) LICENSEE shall, at its own expense, provide attorneys reasonably acceptable to DFCI to defend against any actions brought or filed against any party indemnified hereunder with respect to the subject of indemnity contained herein, whether or not such actions are rightfully brought.

(iv) If any such action is commenced or claim made or threatened against DFCI or other Indemnitees as to which LICENSEE is obligated to indemnify it (them) or hold it (them) harmless, DFCI or the other Indemnitees shall promptly notify LICENSEE of such event. LICNESEE shall assume the defense of, and may settle, that part of any such claim or action commenced or made against DFCI (or other Indemnitees) which relates to LICENSEE's indemnification and LICENSEE may take such other steps as may be necessary to protect it. LICENSEE will not be liable to DFCI or other Indemnitees on account of any settlement of any such claim or litigation affected without LICENSEE'S consent. The right of LICENSEE to assume the defense of any action is limited to that part of the action commenced against DFCI and/or Indemnitees that relates to LICENSEE'S obligation of indemnification and holding harmless.

(v) LICENSEE shall require any Affiliates or Sublicensee(s) to indemnify, hold harmless and defend DFCI under the same terms set forth in Sections 8.2 (e) (1) (i) - (iv).

(2) (i) At such time as any product, process or service relating to, or developed pursuant to, this Agreement is being commercially distributed or sold (other than for the purpose of obtaining regulatory approvals) by LICENSEE or by a Sublicensee, Affiliate or agent of LICENSEE, LICENSEE shall, at its sole cost and expense, procure and maintain policies of commercial general liability insurance in amounts not less than $2,000,000 per incident and $2,000,000 annual aggregate and naming the Indemnitees as additional insureds. Such commercial general liability insurance must provide (a) product liability coverage and (b) contractual liability coverage for LICENSEE'S indemnification under Sections 8.2 (e) (1) (i)-(iii) of this Agreement. If LICENSEE elects to self-insure all or part of the limits described above (including deductibles or retentions which are in excess of $250,000 annual aggregate), such self-insurance program must be acceptable to the DFCI and the DFCI's associated Risk Management Foundation. The minimum amounts of insurance coverage required under these provisions may not be construed to create a limit of LICENSEE's liability with respect to its indemnification obligation under Sections 8.2 (e) (1) (i)-(iii) of this Agreement.

(ii) LICENSEE shall provide DFCI with written evidence of such insurance upon request of DFCI. LICENSEE shall provide DFCI with written notice at least fifteen (15) days prior to the cancellation, non-renewal or material change in such insurance; if LICENSEE does not obtain replacement insurance providing comparable coverage within such fifteen (15) day period, DFCI has the right to terminate this Agreement effective at the end of such fifteen (15) day period without any notice or additional waiting periods.

(iii) LICENSEE shall maintain such comprehensive general liability insurance beyond the expiration or termination of this Agreement during (a) the period that any product, process, or service, relating to, or developed pursuant to, this Agreement is being commercially distributed or sold (other than for the purpose of obtaining regulatory approvals) by LICNESEE or by a Sublicensee, Affiliate or agent of LICENSEE and (b) a reasonable period after the period referred to in 8.2 (e) (2) (iii) (a) above which in no event shall be less than fifteen (15) years.

(iv) LICENSEE shall require any Affiliates or Sublicensee(s) to maintain insurance in favor of DFCI and the Indemnitees under the same terms set forth in Sections 8.2 (e) (2) (i)-(iii).

ARTICLE 9. USE OF NAMES AND TRADEMARKS

9.1 Nothing contained in this Agreement confers any right to use in advertising, publicity, or other promotional activities any name, trade name, trademark, or other designation of either party hereto (including contraction, abbreviation or simulation of any of the foregoing). Unless required by law, the use by LICENSEE of the name, "The Regents Of The University Of California" or the name of any campus of the University Of California or the VA or DFCI is prohibited, without the express written consent of UNIVERSITY.

9.2 UNIVERSITY may disclose to the Inventors the terms and conditions of this Agreement upon their request. If such disclosure is made, UNIVERSITY shall give notice of its confidential nature and require that the Inventors not disclose such terms and conditions to others.

9.3 UNIVERSITY or the VA may acknowledge the existence of this Agreement and the extent of the grant in Article 2 to Third Parties, but UNIVERSITY shall not disclose the financial terms of this Agreement to Third Parties, except where UNIVERSITY or the VA is required by law to do so, such as under the California Public Records Act.

ARTICLE 10. MISCELLANEOUS PROVISIONS

10.1 **Correspondence**. Any notice or payment required to be given to either party under this Agreement shall be deemed to have been properly given and effective:

(a) on the date of delivery if delivered in person, or

(b) five (5) days after mailing if mailed by first-class or certified mail, postage paid, to the respective addresses given below, or to such other address as is designated by written notice given to the other party.

If sent to LICENSEE:

Chimerix, Inc.
14024 Rue Saint Raphael
Del Mar, CA 92014

Phone: (858) 755-7503
Attention: President

If sent to UNIVERSITY:

University of California, San Diego
Technology Transfer & Intellectual Property Services
9500 Gilman Drive
La Jolla, CA 92093-0910

Phone: (858) 534-5815
Attention: Director

10.2 Secrecy.

(a) "Confidential Information" shall mean information relating to the Invention and disclosed by UNIVERSITY to LICENSEE during the term of this Agreement, which if disclosed in writing shall be marked "Confidential", or if first disclosed otherwise, shall within thirty (30) days of such disclosure be reduced to writing by UNIVERSITY and sent to LICENSEE:

(b) Licensee shall:

(1) use the Confidential Information for the sole purpose of performing under the terms of this Agreement;

(2) safeguard Confidential Information against disclosure to others with the same degree of care as it exercises with its own data of a similar nature;

(3) not disclose Confidential Information to others (except to its employees, agents or consultants who are bound to LICENSEE by a like obligation of confidentiality) without the express written permission of

UNIVERSITY, except that LICENSEE shall not be prevented from using or disclosing any of the Confidential Information that:

(i) LICENSEE can demonstrate by written records was previously known to it;

(ii) is now, or becomes in the future, public knowledge other than through acts or omissions of LICENSEE; or

(iii) is lawfully obtained by LICENSEE from sources independent of UNIVERSITY.

(c) The secrecy obligations of LICENSEE with respect to Confidential Information shall continue for a period ending five (5) years after disclosure of Confidential Information.

10.3 **Assignability**. This Agreement may be assigned by UNIVERSITY, but is personal to LICENSEE and assignable by LICENSEE only with the written consent of UNIVERSITY, which shall not be unreasonably withheld; provided, however, that LICENSEE may assign this Agreement and all rights and obligations hereunder without the written consent of UNIVERSITY to any person or entity that acquires all or substantially all of LICENSEE'S assets or line of business to which this Agreement relates, whether by sale, merger or otherwise.

10.4 **No Waiver**. No waiver by either party of any breach or default of any covenant or agreement set forth in this Agreement shall be deemed a waiver as to any subsequent and/or similar breach or default.

10.5 **Failure to Perform**. In the event of a failure of performance due under this Agreement and if it becomes necessary for either party to undertake legal action against the other on account thereof, then the prevailing party shall be entitled to reasonable attorney's fees in addition to costs and necessary disbursements.

10.6 **Governing Laws**. THIS AGREEMENT SHALL BE INTERPRETED AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, without regard to the conflicts of law provisions thereof but the scope and validity of any patent or patent application shall be governed by the applicable laws of the country of the patent or patent application.

10.7 **Force Majeure**. UNIVERSITY or LICENSEE may be excused from any performance required herein if such performance is rendered impossible or unfeasible due to any catastrophe or other major event beyond its reasonable control, including, without limitation, war, riot, and Insurrection; laws, proclamations, edicts, ordinances, or regulations; strikes, lockouts, or other serious labor disputes; and floods, fires,

explosions, or other natural disasters. When such events have abated, the non-performing party's obligations herein shall resume.

10.8 Headings. The headings of the several sections are inserted for convenience of reference only and are not intended to be a part of or to affect the meaning or interpretation of this Agreement.

10.9 Entire Agreement. This Agreement embodies the entire understanding of the parties and supersedes all previous communications, representations or understandings, either oral or written, between the parties relating to the subject matter hereof.

10.10 Amendments. No amendment or modification of this Agreement shall be valid or binding on the parties unless made in writing and signed on behalf of each party.

10.11 Severability. In the event that any of the provisions contained in this Agreement is held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this Agreement, and this Agreement shall be construed as if the invalid, illegal, or unenforceable provisions had never been contained in it.

IN WITNESS WHEREOF, both UNIVERSITY and LICENSEE have executed this Agreement, in duplicate originals, by their respective and duly authorized officers on the day and year written.

CHIMERIX, INC.:	**THE REGENTS OF THE UNIVERSITY OF CALIFORNIA:**
By /s/ Karl Y. Hostetler (Signature)	By /s/ Alan S. Paau (Signature)
Name: Karl Y. Hostetler	Name: Alan S. Paau
Title: President and CEO	Director, Technology Transfer & Intellectual Property Services
Date May 13, 2002	Date May 13, 2002

Exhibit A

Copy of the

DFCI/UC AGREEMENT:

Inter-Institutional Agreement

With an Effective Date of October 16, 2001

Inter-Institutional Agreement

Between

The Regents of the University of California

and

Dana Farber Cancer Institute

for

The Management Of

Improved Lipid Prodrugs of Phosphonaoacid-Nucleoside Conjugates
([...***...])(DFCI [...***...])

*****Confidential Treatment Requested**

AGREEMENT

THIS AGREEMENT is effective on the date of the last signature of this Agreement by and between Dana Farber Cancer Institute ("DFCI"), a not-for-profit research institute having an address for official business at 44 Binney Street, Boston, MA, 02215 and The Regents of the University of California ("UNIVERSITY"), having a system-wide business address at 1111 Franklin St., Oakland, California 9007-5200, and represented by its San Diego campus ("UCSD") Technology Transfer & Intellectual Property Services ("TTIPS"), having an address at 9500 Gilman Drive, La Jolla, California 92093-0910.

BACKGROUND

Certain research performed at UCSD by [...***...] (collectively, "UCSD Inventor") and at DFCI by [...***...] (collectively "DFCI Inventor") resulted in the development of an invention titled "Improved Lipid Prodrugs of Phosphonaoacid-Nucleoside Conjugates" which is disclosed in UCSD Docket No. [...***...] ("Invention") and DFCI Disclosure [...***...].

The Invention is covered by Patent Rights (as later defined in this Agreement).

It is the mutual desire of UCSD and DFCI that, for the purposes of this Agreement, the Invention be administered and commercialized by UCSD on behalf of UCSD and DFCI; and DFCI agrees to forbear granting to any third party (other than to UCSD) any right, title, or interest in and to the Patent Rights.

UCSD and DFCI agree:

1. DEFINITIONS

1.1 "Patent Rights" means all right, title and interest in, to and under the US Patent Application [...***...] filed by UCSD Inventor and DFCI Inventor on 6/8/00 and claiming the Invention, and any other patent applications, including divisions, continuations, or continuations-in-part (but only to the extent such continuations-in-part are adequately supported in the parent application) thereof; any corresponding foreign applications thereof; and any US or joint foreign patents issued thereon or reissues or extensions thereof, assigned by each inventor to his respective institution.

1.2 "Net Revenues" means gross proceeds received by UCSD from the licensing of Patent Rights to third parties less a [...***...] administrative fee and less all reasonable and actual, past and future, out-of-pocket patent costs (exclusive of any salaries, administrative, or other indirect costs) incurred by UCSD and/or DFCI in the preparation, filing, prosecution, and maintenance of Patent Rights.

*****Confidential Treatment Requested**

1.3 “License Agreement” means any agreement, including but not limited to license agreement, option agreement, partnership agreement, and letter-of-intent, that is entered into by UCSD under this Agreement and grants to or reserves for a third party the right to make, have made, use, have used, sell, have sold, offer to sell, and/or import products covered by Patent Rights.

1.4 “Licensee” means any third party granted a License Agreement by UCSD.

2. PATENT PROSECUTION AND PROTECTION

2.1 UCSD shall promptly prepare and file appropriate United States patent applications covering the Invention and shall promptly provide to DFCI all serial numbers and filing dates, together with copies of all the applications, including copies of all Patent Office Actions, responses and all other Patent Office communications.

2.2 UCSD shall, after consulting with DFCI and within eight (8) months of any United States filing, make an election whether, when, and in what countries, to file foreign patent applications if countries where statutory protection is available. If any foreign patent applications are filed, UCSD shall promptly provide to DFCI all serial numbers and filing dates. UCSD also shall provide to DFCI copies of foreign patent applications and patent office actions as DFCI may request in the course of prosecution.

2.3 UCSD shall promptly record Assignments of domestic Patent Rights in the United States Patent and Trademark Office and shall provide DFCI with a photocopy of each recorded Assignment.

2.4 Notwithstanding any other provision of this Agreement, UCSD shall not abandon the prosecution of any patent application (except for purposes of provisional conversion, filing continuation or continuation-in-part applications) or the maintenance of any Patent Rights without prior written notice to DFCI.

2.5 UCSD shall promptly provide to DFCI copies of all patents issued under Patent Rights.

3. LICENSING

3.1 During the term of this Agreement, DFCI shall forbear granting to any third party (other than to UCSD) any right, title, or interest in, to or under the Patent Rights and grants to UCSD the sole responsibility for administering and commercializing the Invention.

3.2 UCSD shall diligently seek a Licensee for the commercial development of the Inventions and shall promptly provide to DFCI copies of all License Agreements issued on the Inventions.

3.3 Any License Agreement will include, but not be limited to, the following terms: a license issue fee, an earned royalty, payment of patent costs by the Licensee, minimum annual royalties, diligence terms, indemnification of UNIVERSITY and DFCI by Licensee, a limited warranty on the part of UNIVERSITY and a prohibition against the use of the name of The Regents of the University of California or any campus thereof and DFCI. The indemnification will include the language attached as Appendix A. Any changes to the language in Appendix A must be approved by DFCI and its insurer, the Risk Management Foundation. Any License Agreement will further stipulate that nothing in the License Agreement confers by estoppel implication or otherwise, any license or rights under any patents of UNIVERSITY or DFCI other than Patent Rights as defined herein, regardless of whether such patents are dominant or subordinate to the Patent Rights.

3.4 UCSD shall not issue any paid-up licenses or assign Patent Rights to any third party, notwithstanding any other provision of this Agreement, without the prior written consent of DFCI.

3.5 Unless under a License agreement the Licensee is required to pay directly to DFCI its pro rata share of any Net Revenues, UCSD shall distribute [...***...] of Net Revenues to DFCI within thirty (30) days of 30 December and 30 June of each year for the six-month period ending of those dates during the term of this Agreement.

3.6 Each party is solely responsible for calculating and distributing to its respective inventors any share of Net Revenues in accordance with its respective patent policy during the term of this Agreement. UCSD shall pay UCSD Inventor. DFCI shall pay DFCI Inventor.

3.7 UNIVERSITY and DFCI expressly reserve the right to use the Invention and associated technology for educational and research purposes.

4. RECORDS AND REPORTS

4.1 UCSD shall keep complete, true and accurate accounts of all expenses and of all proceeds received by it from each Licensee and shall permit DFCI to allow its own agents or a certified public accounting firm which is reasonably acceptable to UCSD (with regards to conflict of interest issues) to examine its books and records in order to verify the payments due or owing under this Agreement. Examinations will (i) occur not more than once per calendar year: (ii) be under an agreement of confidentiality; and (iii) be paid for by

*****Confidential Treatment Requested**

DFCI. In the event that any such examination shows an under reporting and underpayment in excess of [...***...] for any twelve (12) month period, then UCSD shall pay the cost of the examination as well as any additional sum that would have been payable to DFCI had UCSD reported correctly, plus an interest charge at a rate of [...***...] per year. Such interest shall be calculated from the date the correct payment was due to DFCI up to the date when such payment is actually made by UCSD. For underpayment not in excess of [...***...] for any twelve (12) month period, UCSD shall pay the difference within thirty (30) days without interest charge or examination costs.

4.2 UCSD shall submit to DFCI an annual report, setting forth the status of all patent prosecution, commercial development, and licensing activity relating to the Invention.

5. PATENT INFRINGEMENT

5.1 In the event that patent administrators responsible for Patent Rights at DFCI or UCSD learn of the substantial infringement of any patent covered by this agreement, the party who learned of the infringement shall call the attention of the other party to the infringement and provide written evidence of infringement. UCSD shall, in cooperation with DFCI, use its best efforts to terminate infringement without litigation.

5.2 If, however, the efforts of the parties are not successful in abating the infringement within ninety (90) days after the infringer has been notified of the infringement, then UCSD may:

5.2.1 continence suit on its own account; or
5.2.2 permit an exclusive licensee to commence suit on its own account, or with UCSD; or
5.2.3 UCSD may request that DFCI join as a party plaintiff in a patent infringement litigation,

DFCI has 90 (ninety) days to inform UCSD of its decision to join or not join in such litigation. In no event may DFCI be joined in such a suit without its prior written consent. In the event that UCSD chooses not to commence suit, or to allow an exclusive Licensee to do so, DFCI may do so at its own election.

5.3 Legal action to terminate infringement or recover damages, as is decided upon under paragraph 5.2, will be at the full expense of the party on account of whom suit is brought and all recoveries recovered thereby will belong to such party, provided, however, that legal action brought jointly by the parties and fully participated in by such parties shall be at the joint expense of the parties (in shares to be mutually agreed upon) and all recoveries shall be shared jointly by them in direct proportion to the share of expense paid by each party.

*****Confidential Treatment Requested**

5.4 Each party shall cooperate with the other in litigation proceedings instituted hereunder but at the expense of the party on account of whom suit is brought. The litigation will be controlled by the party bringing the suit, except that DFCI may be represented by counsel of its choice pursuant to DFCI's determination in any suit brought by UCSD or a Licensee.

6. GOVERNING LAW

THIS AGREEMENT IS GOVERNED BY AND INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, EXCEPT THAT THE SCOPE AND VALIDITY OF ANY PATENT OR PATENT APPLICATION IN PATENT RIGHTS ARE GOVERNED BY THE APPLICABLE LAWS OF THE COUNTRY OF THAT PATENT OR PATENT APPLICATION.

7. NOTICES

Any notice required or permitted to be given to the parties hereto is properly given if delivered, in writing, in person, or mailed by first-class certified mail to the following addresses, or to such other addresses as may be designated in writing by the parties from time to time during the term of this Agreement:

To DFCI:	Dana Farber Cancer Institute Attention: Director, Office of Technology Transfer 44 Binney Street Boston, MA 02115
To UNIVERSITY:	Technology Transfer and Intellectual Property Services Attention: Alan S. Paau, Director (Case No. [...***...]) University of California, San Diego 9500 Gilman Drive, MC - 0910 La Jolla, California 92093-0910
For Overnight Courier:	Technology Transfer and Intellectual Property Services Attn: Alan S. Paau, Director (Case No. [...***...]) University of California, San Diego 10300 Torrey Pines Road La Jolla, California 92093-0910

8. NO WAIVER

No waiver by either party hereto of any breach or default of any of the covenants or agreements herein set forth may be deemed a waiver as to any subsequent and/or similar breach or default.

9. ASSIGNABILITY

This Agreement is binding upon and inures to the benefit of the parties hereto, their successors or assigns, but this Agreement may not be assigned by either party without the prior written consent of the other party.

10. LIFE OF AGREEMENT

This Agreement is in full force and effect from the effective date recited on page one and remains in effect for the life of the last-to-expire patent in Patent Rights, unless otherwise terminated by operation of law or by acts of the parties in accordance with the terms of this Agreement.

11. TERMINATION

Unless a License Agreement is in effect or has been agreed upon as to all financial terms, either party hereto may terminate this Agreement for any reason upon at least sixty (60) days' written notice ("Notice of Termination") to the remaining party, but in any event not less than sixty (60) days prior to the date on which responses to any pending Patent Office actions need to be taken to preserve Patent Rights. After effective termination, each party may separately license its interest in the Patent Rights according to the licensing party's policy provided that each party pays one-half of all costs incurred thereafter in the preparation, prosecution, and maintenance of Patent Rights. Apart from the obligation to share patent costs and apart from obligations identified in Article 12 (Confidentiality) and specific obligations accrued prior to termination, the parties will have no further rights or obligations under this Agreement after effective termination.

12.1 Subject to The California Public Records Act and the right of each party to acknowledge the existence of this Agreement, UCSD and DFCI respectively shall hold the other party's proprietary business, patent prosecution, engineering, process and technical information, and other proprietary information in confidence using at least the same degree of care as that party uses to protect its own proprietary information of a like nature for a period from

12. CONFIDENTIALITY

the date of disclosure until five (5) years after the date of termination of this Agreement. The disclosing party shall label or mark confidential, or as otherwise appropriate, all proprietary information. If proprietary information is orally disclosed, the disclosing party shall reduce the proprietary information to writing or to some other physically tangible form and deliver it to the receiving party within 30 days of the oral disclosure, marked and labeled as set forth above. Manuscripts published in scientific journals, papers, and presentations at public meetings that relate to proprietary information are exempt from the provisions of this Article after their timely submission to and subsequent timely approval of the other party within 30 days of their submission. Notwithstanding the foregoing:

12.2 Nothing in this Agreement in any way restricts or impairs the right of DFCI or UCSD to use, disclose or otherwise deal with any information or data documented:

12.2.1 that recipient can demonstrate by written records was previously known to it;
12.2.2 that is now, or becomes in the future, public knowledge other than through acts or omissions of recipient;
12.2.3 that is lawfully obtained without restrictions by recipient from sources independent of the disclosing party; or
12.2.4 that was made independently without the use of proprietary information received hereunder.

12.3 The confidentiality obligations of the parties under these terms will remain in effect for five (5) years from the termination date of this Agreement.

13. USE OF NAMES AND TRADEMARKS

Except for acknowledging the existence of this Agreement, nothing in this Agreement confers any right to use any name, trade name, trademark, or other designation of either party to this Agreement (including contraction, abbreviation or simulation of any of the foregoing) in advertising, publicity, or other promotional activities. Unless required by law, the use of the name, “The Dana-Farber Cancer Institute,” “The Regents of the University of California,” or the name of any campus of the University of California is expressly prohibited.

14. NO IMPLIED LICENSE

This Agreement does not confer by implication, estoppel, or otherwise any license or rights under any patents of either party other than the specific Patent Rights, regardless of whether such patents are dominant or subordinate to Patent Rights.

15. COMPLETE AGREEMENT

This Agreement constitutes the entire agreement, both written and oral, between the parties, and all prior agreements respecting the subject matter hereof, either written or oral, expressed or implied, are canceled.

IN WITNESS WHEREOF; both UNIVERSITY and DFCI have executed this Agreement, by facsimile and/or in two (2) in duplicate originals, each of which shall be deemed an original and all of which together shall constitute but one and the same instrument, by their respective and duly authorized officers on the day and year written.

The Dana-Farber Cancer Institute:	**The Regents of the University of California:**
By: /s/ Ruth Emyanitoff, Ph.D.	By: /s/ Dr. Alan Paau
Name: Ruth Emyanitoff, Ph.D.	Name: Dr. Alan Paau
Title: Director, Officer of Technology Transfer	Title: Director, TTIPS
Date: October 11, 2001	Date: 10/16/2001

Appendix A

Indemnification and Insurance

1. Licensee shall indemnify, defend and hold harmless DFCI and its trustees officers, medical and professional staff, employees, and agents and their respective successors, heirs and assigns (the "Indemnitees"), against any liability, damage, loss or expense (including reasonable attorneys' fees and expenses of litigation) incurred by or imposed upon the Indemnitees, or any one of them, in connection with any claims, suits, actions, demands or judgments (a) arising out of the design, production, manufacture, sale, use in commerce, lease, or promotion by Licensee or by a Sublicensee, Affiliate or agent of Licensee, or any product, process or service relating to, or developed pursuant to, this Agreement or (b) arising out of any other activities to be carried out pursuant to this Agreement.

2. Licensee's indemnification under Section 9.1 (a) applies to any liability, damage, loss or expense whether or not it is attributable to the negligent activities of the Indemnitees. Licensee's indemnification under 9.1(b) does not apply to any liability, damage, loss or expense to the extent that it is attributable to (a) the negligent activities of the Indemnitees, or (b) the intentional wrongdoing or intentional misconduct of the Indemnitees.

3. Licensee shall, at its own expense, provide attorneys reasonably acceptable to DFCI to defend against any actions brought or filed against any party indemnified hereunder with respect to the subject of indemnity contained herein, whether or not such actions are rightfully brought.

4. If any such action is commenced or claim made or threatened against DFCI or other Indemnitees as to which Licensee is obligated to indemnify it (them) or hold it (them) harmless, DFCI or the other Indemnitees shall promptly notify Licensee of such event. Licensee shall assume the defense of, and may settle, that part of any such claim or action commenced or made against DFCI (or other Indemnitees) which relates to Licensee's indemnification and Licensee may take such other steps as may be necessary to protect it. Licensee will not be liable to DFCI or other Indemnitees on account of any settlement of any such claim or litigation affected without Licensee's consent. The right of Licensee to assume the defense of any action is limited to that part of the action commenced against DFCI and/or Indemnitees that relates to Licensee's obligation of indemnification and holding harmless.

5. Licensee shall require any Affiliates or Sublicensee(s) to indemnify, hold harmless and defend DFCI under the same terms set forth in Sections 9.1 – 9.4.

Insurance.

6. At such time as any product, process or service relating to, or developed pursuant to, this Agreement is being commercially distributed or sold (other than for the purpose of obtaining regulatory approvals) by Licensee or by a Sublicensee, Affiliate or agent of Licensee, Licensee shall, at its sole cost and expense, procure and maintain policies of commercial general liability insurance in amounts not less than $2,000,000 per incident and $2,000,000 annual aggregate and naming the Indemnitees as additional insureds. Such commercial general liability insurance must provide (a) product liability coverage and (b) contractual liability coverage for Licensee's indemnification under Sections 9.1 through 9.3 of this Agreement. If Licensee elects to self-insure all or part of the limits described above (including deductibles or retentions which are in excess of $250,000 annual aggregate), such self-insurance program must be acceptable to the DFCI and the DFCI's associated Risk Management Foundation. The minimum amounts of insurance coverage required under these provisions may not be construed to create a limit of Licensee's liability with respect to its indemnification obligation under Sections 9.1 through 9.3 of this Agreement.

7. Licensee shall provide DFCI with written evidence of such insurance upon request of DFCI. Licensee shall provide DFCI with written notice at least fifteen (15) days prior to the cancellation,

non-renewal or material change in such insurance; If Licensee does not obtain replacement insurance providing comparable coverage within such fifteen (15) day period, DFCI has the right to terminate this Agreement effective at the end of such fifteen (15) day period without any notice or additional waiting periods.

8. Licensee shall maintain such comprehensive general liability insurance beyond the expiration or termination of this Agreement during (a) the period that any product, process, or service, relating to, or developed pursuant to, this Agreement is being commercially distributed or sold (other than for the purpose of obtaining regulatory approvals) by Licensee or by a Sublicensee, Affiliate or agent of Licensee and (b) a reasonable period after the period referred to in 9.8 (a) above which in no event shall be less than fifteen (15) years.

9. Licensee shall require any Affiliates or Sublicensee(s) to maintain insurance in favor of DFCI and the Indemnitees under the same terms set forth in Sections 9.6 – 9.8.

Exhibit B

Copy of the

Letter from the Department of Veteran Affairs

To

[...*...]**

RE: Phosphonate Compounds

*****Confidential Treatment Requested**

DEPARTMENT OF VETERANS AFFAIRS
Office of the General Counsel
Washington DC 20420

SEP 28 2001

In Reply Refer To: 024F
GPB No.: 20-1003

[...***...]
Director (664/00)
VA Medical Center
3350 La Jolla Village Drive
San Diego, CA 92161

Re: Phosphonate Compounds

Dear [...***...]:

This refers to your report concerning the above-referenced invention which you submitted to this office pursuant to the provisions of 38 C.P.R, § 1.656. These regulations provide that it is the duty of the General Counsel to determine the respective ownership rights, as between the Government and the employee, in an employee invention. This letter constitutes such a determination within the meaning of these regulations.

With your Report, you provided a Summary of the invention. The invention provides analogs of certain phosphonate compounds which are antiviral or antiproliferative.

Concerning the circumstances surrounding the development of the invention, [...***...], you have indicated that you were employed as a staff physician at the VA Medical Center in San Diego, California. You certified that the invention was made with a contribution by the VA of facilities and equipment.

According to 37 C.F.R. § 501.6(a)(1), the Government is entitled to the entire right, title, and interest in and to any invention made by a Government employee (i) during working hours, or (ii) with a contribution of the Government of facilities, equipment, materials, funds or information, or of the time or services of other Government employees on official duty, or (iii) which bears a direct relation to or is made in consequence of the official duties of the inventor. However, subsection (a)(3) provides that the facts and circumstances surrounding the making of an invention do not preclude a determination that the Government may leave the entire right,

2.

[...***...]

title and interest in an invention to the Government employee subject to law, (i.e., without reservation to the Government of a nonexclusive, irrevocable, royalty-free license).

Based on the review and recommendation by officials in VHA and the Office of General Counsel, I find that the facts and circumstances surrounding development of the invention do not justify retention of any rights or license by the Government.

Consequently, I find that you are entitled to the entire right, title and interest in and to the invention, subject to law. 37 C.F.R. § 501.6(a)(4).

I am enclosing a copy of this determination which I request you sign (to acknowledge receipt) and return to this office.

I wish you the best of luck with your invention.

Sincerely yours,

John W. Klein
Assistant General Counsel

Enclosures

cc: Dr. Mindy Aisen (122)
University of California

Acknowledgment of Receipt: _____ Date: _____
[...***...]

*****Confidential Treatment Requested**

Exhibit C

Copy of the

VA/UC AGREEMENT:

Cooperative Technology Administration Agreement

with an Effective Date of May 19, 2000

U.S. DEPARTMENT OF VETERANS AFFAIRS

AND THE UNIVERSITY OF CALIFORNIA

COOPERATIVE TECHNOLOGY ADMINISTRATION AGREEMENT

This Cooperative Technology Administration Agreement ("Agreement") is made as of this 19th day of May, 2000, by and between the United States Department of Veterans Affairs (hereinafter referred to as "VA"), as represented by the Technology Transfer Program, Office of Research and Development, having an address at 810 Vermont Avenue N.W., Washington, D.C. 20420, and The Regents of the University of California, as represented by the Office of Technology Transfer, having an address at 1111 Franklin Street, 5th Floor, Oakland, California 94607-5200 ("University").

RECITALS

Whereas, VA and University through their employment relationship with certain faculty and staff, through 37 CFR Part 501, and/or through 35 U.S.C. 200-212, as well as state law and implementing policies, have an interest in inventions made by their employees;

Whereas, VA and University policies promote disclosure of research results for the public's use and benefit, as well as to define and protect the rights of inventors, provide for an equitable distribution of the rewards and responsibilities associated with the invention(s), and provide that income from such invention(s) be used for the purpose of promoting research and education;

Whereas, pursuant to their shared objectives, it is the mutual desire of VA and University that their respective interests in such inventions be administered and managed exclusively by University on behalf of both parties in a manner to ensure the timely commercialization of such inventions and to make their benefits widely available for society's use and benefit;

Whereas, VA is authorized to transfer to and to undertake all suitable steps to administer its rights in any such existing or future invention through contract with a nonprofit organization (including a university) under 35 U.S.C. 202(e) (to the maximum extent permitted by law), 35 U.S.C. 207(a)(3), or 35 U.S.C. 3710a;

Now, therefore, the parties hereto agree as follows:

1. DEFINITIONS

1.1 "Dual Appointment Personnel (DAP)" means any person who is employed by and has entered into and signed an employment or patent agreement with both VA and University.

1.2 "Patent Rights" means all United States patent applications and patents and corresponding patent applications and patents filed in countries other than the

United States that are assigned to VA and University, including any reissues, extensions, substitutions, divisions, continuations, and continuation-in-part applications (only to the extent, however, that claims in the continuations-in-part applications are entitled to the priority filing date of the parent patent application) based on the subject matter claimed in or covered by a Subject Invention.

1.3 "Property Rights" means all personal property rights covering the tangible personal property in biological materials directly associated with any Subject Invention.

1.4 "Made" in relation to any Subject Invention means the conception or first actual reduction to practice of such Subject Invention.

1.5 "Subject Invention" means Patent Rights and/or related Property Rights covering any existing or future disclosed invention in which both parties have an interest under their various policies, that is made either by a DAP or at least one inventor from each party, and that is not a Disclaimed Invention.

1.6 "Disclaimed Invention" means any Subject Invention for which University declines to pursue patenting, license or commercialization activities under Section 2.2 of this Agreement.

1.7 "License Agreement" means any executed agreement entered into by University under this Agreement that grants Licensee the right to make, use, sell, offer for sale, or import products covered by or claimed by the Subject Invention being licensed under such agreement or otherwise deals with administration of the Subject Invention, such as option or secrecy agreements.

1.8 "Licensee" means any party, not including the United States Government, that enters into a License Agreement with University.

1.9 "Government" means the Government of the United States of America.

1.10 "Fiscal Year" means July 1 through June 30.

1.11 "Gross Revenues" means consideration received by University from the licensing of any Subject Invention, but not including consideration in the form of research funding or other research support.

1.12 "Net Revenues" means Gross Revenues, less any prior contractual obligations to third party research supporters or joint owners, then less Administrative Fee, Expenses, Inventors Share, and Research Share for each Subject Invention.

1.13 "Inventors Share" means those revenues due under the applicable University of California policy to named inventors for each Subject Invention.

1.14 "Research Share" means those revenues to be allocated directly for research purposes, if any, under the applicable University of California Patent Policy for each Subject Invention.

1.15 "Expenses" means legal and other direct expenses incurred by University (that are not otherwise reimbursed from a third party) for patenting, protecting and preserving U.S. and foreign patent, copyright and related property rights, maintaining patents and such other costs, taxes, or reimbursements as may be necessary or required by law for each Subject Invention.

1.16 "Administrative Fee" means [...***...] fee of Gross Revenues retained by University in consideration of University's commercialization efforts for each for each Subject Invention.

1.17 "UC Site" means the campus or U.S. Department of Energy Laboratory managed by University at which a Subject Invention is made.

1.18 "Pooled Amount" means Net Revenues aggregated by UC site cumulatively over time beginning the effective date of this Agreement for all of that UC Site's Subject Inventions.

2. PATENT PROSECUTION AND PROTECTION

2.1 Disclosure. The parties agree to promptly and in confidence report to the other party each Subject Invention. VA agrees to provide to University a copy of its Determination of Rights letter to inventors regarding any Potential Subject Invention.

2.2 Disclaimed Inventions. University shall notify VA in writing of any Individual Subject Invention for which the University declines to pursue patenting, licensing or commercialization activities, and as of the date of such notice, that invention shall no longer be considered a Subject Invention under this Agreement.

2.3 VA authorizes University to have the exclusive right to prepare, file, prosecute, and maintain patent application(s) and patents covering any Subject Invention. University shall promptly provide to VA, upon request, all serial numbers and filing dates, together with copies of all such applications, including, on request copies of all Patent Office Actions, responses, and all other Patent Office communications. In addition, University shall be granted Power of Attorney for all such patent applications.

2.4 University shall make an election with respect to foreign filing including in which countries foreign filing will be done prior to the election, within ten (10) months of any United States filing. If any foreign patent applications are filed, University shall promptly, upon request, provide to VA all serial numbers and filing dates

*****Confidential Treatment Requested**

together with copies of all such foreign patent applications, including on request, copies of all Patent Office Actions.

2.5 University shall promptly record assignments of domestic patent rights covering a Subject Invention in the United States Patent and Trademark Office and shall promptly provide VA with a copy of each recorded assignment with respect to VA.

2.6 Notwithstanding any other provision of this Agreement, University shall not abandon the prosecution of any patent application including provisional patent applications (except for purposes of filing continuation application(s)) or the maintenance of any patent for a Subject Invention without prior written notice to VA. Upon receiving such written notice, VA may, at its sole option and expense, take over the prosecution of any such patent application, or the maintenance of any such patent, and such invention shall no longer be considered a Subject Invention under this Agreement.

2.7 University may decide to bail Property Rights as a more efficient commercialization method than patenting. If University so decides, then University will follow the guidelines issued by the U.S. National Institutes of Health on such commercialization approach.

3. LICENSING

3.1 VA authorizes University to have the exclusive right to negotiate, execute, and administer any License Agreement. VA shall not license to any third parties any Subject Invention unless this Agreement is terminated in accordance with Article 7 (Termination) and there are no License Agreements in effect or under negotiation. VA also agrees to not pre-commit any Subject Inventions or future inventions that would be Subject Inventions under this Agreement to a commercial research sponsor or other entity through prior agreements made by VA foundations or others.

3.2 VA authorizes University to have the sole right to diligently seek a Licensee and negotiate and enter into License Agreements for the commercial development of any Subject Invention and to administer all such License Agreements for the mutual benefit of the parties and in the public interest.

3.3 University shall have the final authority to enter into negotiations and execute License Agreements. In accordance with Section 5.2, University shall provide VA with a copy of all executed License Agreements. VA shall keep these documents and related documentation confidential, unless such disclosure is required by law, except that VA may disclose the existence of any License Agreement, but only to the extent of the granting clause. VA will not disclose the names of the Licensee or any other terms contained in the Licensee Agreement unless such disclosure is required under law.

3.4 University agrees to not enter into a License Agreement for commercial development of Subject Invention with a company who is identified on the current list of companies debarred from covered transactions as provided, and updated from time to time, by the VA.

3.5 Any respective License Agreement will include provisions that address the following:

3.5.1 The License Agreement will be subject to the overriding obligations to the U.S. Government, including those set forth in 35 U.S.C. §200-212 or 15 U.S.C. 3710a, and applicable governmental implementing regulations, whichever may be appropriate.

3.5.2 For a License Agreement granting an exclusive right to use or sell the Subject Invention in the United States, Licensee knowledges that any patent products embodying the Subject Invention or produced through the use thereof will be manufactured substantially in the United States.

3.5.3 The Government shall have the nonexclusive, nontransferable, irrevocable, royalty-free, paid-up right to practice or have practiced the Subject Invention throughout the world by or on behalf of the Government and on behalf of any foreign government or international organization pursuant to any existing or future treaty or agreement to which the Government is a signatory.

3.5.4 The Government sha1l retain the right to require University to grant to a responsible applicant a nonexclusive, partially exclusive, or exclusive license to use the invention in the applicant's licensed field of use on terms that are reasonable under the circumstances; or, if University fails to grant such a license, to grant the license itself. The Government may exercise its rights retained herein only in exceptional circumstances and only if the Government determines that (i) the action is necessary to meet health or safety needs that are not reasonably satisfied by University; (ii) the action is necessary to meet requirements for public use specified by Federal regulations, and such requirements are not reasonably satisfied by University; or (iii) University has failed to comply with an agreement containing provisions described in 35 U.S.C. 204 or 15 U.S.C. 3710a(c)(4)(B), whichever is appropriate.

4. REVENUES

4.1 Inventor Share. University shall be solely responsible for calculating and distributing Inventor Share pursuant to University of California policy. Inventor Share will be distributed equally among the named inventors unless mutually agreed in writing by all inventors.

4.2 Research Share. University shall be solely responsible for calculating and distributing Research Share. The Research Share will be pro-rated in proportion to the number of sole University, sole VA and DAP employee inventors. For financial calculation purposes under this section, any DAP will be considered to be [...***...] VA and [...***...] University, regardless of actual employment percentages.

Example: [...***...]

4.3 Net Revenues. University agrees to pay to VA an amount equivalent to [...***...] of the Pooled Amount for each UC Site less payments made by University to VA for previous Fiscal Years. University's obligation to make payments to VA shall commence from the date that the Pooled Amount calculation is positive for a UC Site. Such payments are payable in annual installments and are due no later than January 31 for Pooled Amount calculation made for the prior Fiscal Year.

4.4 All payments to VA, required under this Agreement shall be in U.S. Dollars and shall be made by University by check or bank draft drawn on United States banks and shall be payable, as appropriate, to the "Department of Veterans Affairs (royalty)." All such payments shall be sent to the following address:

Department of Veterans Affairs
Technology Transfer Financial Management Office (12TT)
810 Vermont Avenue NW
Washington, D.C. 20420

The payment under Section 4.3 will be accompanied with an itemized accounting of performance of each individual Subject Invention.

5. RECORDS AND REPORTS

5.1 University shall keep complete, true, and accurate accounts of all Expenses and of all Gross Revenues received by it under each License Agreement and shall permit VA, or VA's designated agent to examine its books and records in order to verify the payments due or owed under this Agreement.

5.2 University shall submit to VA at the address identified in Article 8 a semi-annual report, not later than January 31 covering the period through the prior June 30 and not later than April 30 covering the period through the prior December 31, setting forth the status of all patent prosecution, commercial development, and licensing activity concerning Subject Invention(s), and upon request of the VA, copies of patents issued and, in confidence, License Agreements executed during that period.

5.3 The report required under Section 5.2 shall also be made within sixty (60) days of the termination of this Agreement.

6. PATENT INFRINGEMENT

6.1 If the administrators responsible for this Agreement at VA or University learns of the substantial infringement of any Subject Invention, then the party who learns of the infringement will promptly call attention to the infringement in writing to the other party and provide the other party with reasonable evidence of the infringement. Neither party will notify a third party of infringement without first obtaining written consent of the other party, which consent will not be unreasonably withheld. University, in cooperation with VA, will use its best efforts to terminate the infringement without litigation. If the efforts of the parties are not successful in abating the infringement within 90 days after the infringement was formally brought to the attention of the parties, then either party will have the right to elect to:

6.1.1 commence suit on its own account;

6.1.2 permit an exclusive Licensee to bring suit separately, but only if University or VA elects not bring to bring suit;

6.1.3 join with the other party or an exclusive Licensee in the suit; or

6.1.4 refuse to participate in the suit;

and each party will give written notice of its election to the other party within 10 days after the 90-day period. University may permit an exclusive Licensee to bring suit on its own amount, either by formal notice or by failure to act within the period, but only if University or VA elects not to commence suit or join each other in any suit.

6.2 Such legal action as is decided upon will be at the expense of the party on account of whom suit is brought and all recoveries recovered thereby will belong to such party, provided, however, that legal action brought by VA, University, and/or an exclusive Licensee, and participated in by the parties bringing suit will be at the expense of such parties, and all recoveries will be allocated in the following order:

6.2.1 to each party reimbursement in equal amounts of the attorney's costs, fees, and other related expenses to the extent each party paid for such costs, fees, and expenses until all such cuts, fees, and expenses are consumed for each party; and

6.2.2 any remaining amount shared by them in proportion to the share of expenses paid by each party.

Each party will cooperate with the other in litigation proceedings instituted under this Agreement but at the expense of the party on account of whom suit is brought. This litigation (including settlement) will be controlled by the party bringing the suit, except that University will control the suit if brought jointly. Either party may be represented at its sole expense by counsel of its choice in any suit brought by the other party or an exclusive Licensee. VA's agreement in this paragraph is subject to U.S. Department of Justice approval on a case-by-case basis.

7. TERM AND TERMINATION

7.1 Term. This Agreement is effective when signed by both parties and shall extend until the expiration of the last-to-expire of the License Agreements or patents covering a Subject Invention included under this Agreement, whichever is later, unless otherwise terminated by operation of law or by acts of the parties in accordance with the terms of this Agreement.

7.2 Termination by Mutual Consent. University and VA may elect to terminate this Agreement, or portions thereof, at any time by mutual consent in writing. In such event, any outstanding commitments to third parties through License Agreements, options thereto, or research agreements concerning any Subject Invention(s) or future inventions that would be Subject Inventions under this Agreement that were entered into by University or were reliant on this Agreement prior to the effective termination date shall survive this Agreement.

7.3 Termination by Unilateral Action.

7.3.1 Written Notice. Either Party may unilaterally terminate this entire Agreement at any time by giving the other Party prior written notice, but not less than six (6) months prior to the desired termination date.

7.3.2 Commitments. In such event, any outstanding commitments to third parties through License Agreements, options thereto, or research agreements concerning any Subject Invention(s) or future inventions that would be Subject Inventions under this Agreement that were entered into by University or were reliant on this Agreement prior to the effective termination date shall survive this Agreement. All uncancelable obligations shall be included within Expenses.

7.4 Termination of License Agreement by VA. The VA may terminate a License Agreement if it is determined by VA that:

7.4.1 University or any of its Licensees substantially fail to meet the material obligations set forth in the License Agreement; or

7.4.2 The VA determines that such action is necessary to meet requirements for public use specified by federal regulations issued after the date of this Agreement and such requirements are not reasonably satisfied by University or any Licensees; or

7.4.3 University or any Licensees have willfully made a material false statement of, or willfully omitted, a material fact in any report required by this Agreement; or

7.4.4 University or any Licensees commit a substantial breach of covenant or agreement contained in the License Agreement; or

7.4.5 University or any Licensees materially defaults in making any payment or report required by this Agreement or a License Agreement; or

7.4.6 University or any Licensees is adjudged as bankrupt or has its assets placed in the hands of the receiver or makes any assignment or other accommodation for the benefit of creditors; or

7.4.7 University is held by a court of competent jurisdiction, without taking a further appeal, to have misused any patent rights covering a Subject Invention.

7.5 Prior to any termination of the License Agreement, VA shall furnish University and any Licensee of record a written notice of intention to terminate, and University and any notified Licensee shall be allowed 30 days after the date of such notice to remedy any breach or default of any covenant or agreement of the License Agreement or to show cause why the License Agreement should not be terminated.

7.6 The word termination' and cognate words, such as 'term' and 'terminate,' used in this Article 7 and elsewhere in this Agreement are to be read, except where the contrary is specifically indicated, as omitting from their effect the following rights and obligations all of which survive any termination to the degree necessary to permit their complete fulfillment or discharge;

7.6.1 University's obligation to supply a terminal report as specified in Section 5.3 of this Agreement.

7.6.2 VA's right to receive or recover and University's obligation to share Net Revenues or accruable for payment at the time of any termination as specified in Article 4 of this Agreement.

7.6.3 University's obligation to maintain records and VA's right to conduct a final audit pursuant to Section 5.1 of this Agreement.

7.6.4 Sublicenses, releases, and agreements of non-assertion running in favor of Licensees prior to any termination and on which royalties shall have been paid.

7.6.5 Any cause of action or claim VA accrued or to accrue, because of any breach or default by University.

7.7 In the event the termination of this Agreement or conversion of this Agreement, any Licensee of record granted pursuant to this Agreement may, at Licensee's option, be converted to a license directly between Licensee and VA.

7.8 After effective termination, each party may separately license its interests in Subject Inventions according to its own policy. Apart from specific obligations of the parties under this Agreement accrued prior to termination, the parties will have no further rights or obligations under this Agreement after such termination.

8. NOTICES

All notices required or permitted by this Agreement to be given to the parties thereto shall be deemed to have been properly given if delivered in writing, in person or mailed by prepaid, first class, registered or certified mail or by an express/overnight delivery service provided by a commercial carrier, properly addressed to the other Party. Notices shall be considered timely if such notices are received on or before the established deadline date or sent on or before the deadline date as verifiable by U.S. Postal Service postmark or dated receipt from a commercial carrier. Parties should request a legibly dated U.S. Postal Service postmark or obtain a dated receipt from a commercial carrier or the U.S. Postal Service. Private metered postmarks shall not be acceptable as proof of timely mailing.

Notices shall be sent to the mailing address below, or alternative address(es) for individual Subject Inventions as identified in writing by the VA Director, Technology Transfer Program or by the University Executive Director, Research Administration and Technology Transfer.

To VA:
Director (122)
Technology Transfer Program
Office of Research and Development
U.S. Department of Veterans Affairs
810 Vermont Avenue N.W.
Washington, D.C. 20420

To University:
The Regents of the University of California
Office of the President
Office of Technology Transfer (OTT)
1111 Franklin Street, 5th Floor
Oakland, California 94607-5200
Attention: Executive Director,
Research Administration and Technology Transfer

9. GOVERNING LAWS, SETTLING DISPUTES

9.1 This Agreement shall be construed in accordance with U.S. Federal law and the laws of the State of California when not in conflict with U.S. Federal law. Federal law and regulations will preempt any conflicting or inconsistent provisions in this Agreement. University shall have all defenses available to it under California law.

9.2 Any controversy or any disputed claim by either party against the other arising under or related to this Agreement shall be submitted jointly to University, Executive Director of Research Administration and Technology Transfer, and to the VA, Director, Technology Transfer Program, Office of Research and Development. University and VA will be free after written decisions are issued by those officials to pursue any and all administrative and/or judicial remedies that may be available.

10. MISCELLANEOUS

10.1 The Agreement or anything related thereto shall not be construed to confer on any person any immunity from or defenses under the antitrust laws or from a charge of patent misuse, and the acquisition and use of rights pursuant to this Agreement shall not be immunized from the operation of state or Federal law by reason of the source of the grant.

10.2 It is agreed that no waiver by either party hereto of any breach or default of any of the covenants or agreements herein set forth shall be deemed a waiver as to any subsequent and/or similar breach or default.

10.3 This Agreement is binding upon and shall inure to the benefit of the parties hereto, their successors or assigns, but this Agreement may not be assigned by either party without the prior written consent of the other party.

10.4 This Agreement confers no license or rights by implication, estoppel, or otherwise under any patent applications or patents of University or VA other than Subject Inventions regardless of whether such patents are dominant or subordinate to Subject Inventions.

10.5 Any modification to this Agreement must be in writing and agreed to by both parties.

10.6 It is understood and agreed by University and VA that this Agreement constitutes the entire agreement, both written and oral, between the parties, and that all prior agreements respecting the subject matter hereof, either written or oral, express or implied, shall be abrogated, canceled, and are null and void and of no effect.

10.7 Use of Name. Neither party may use the name of the other party in any way for advertising or publicity without the express written consent of the other party, provided, however, that while University may not allow a Licensee to use the name of VA for advertising or publicity, it does have the right to use the name of VA in connection with negotiating a License Agreement or sublicense agreement and where required by law.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives as follows:

U.S. DEPARTMENT OF VETERANS AFFAIRS	THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
By: /s/ John R. Feussner, M.D.	By: /s/ Alan B. Bennett
Name: John R. Feussner, M.D.	Name: Alan B. Bennett
Title: Chief Research and Development Officer	Title: Executive Director, Research Administration and Technology Transfer
Date: 5/19/00	Date: 5/18/00

Exhibit D

Copy of the Articles of Incorporation of Chimerix, Inc.

With an effective date of April 6, 2000

State of Delaware

Office of the Secretary of State

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF INCORPORATION OF "CHIMERIX, INC.", FILED IN THIS OFFICE ON THE SEVENTH DAY OF APRIL, A.D. 2000, AT 3:30 O'CLOCK P.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.

Edward J. Freel, Secretary of State

AUTHENTICATION: 0369302

DATE: 04-10-00

3195203 8100

001179286

CERTIFICATE OF INCORPORATION

OF

CHIMERIX, INC.

ARTICLE I

The name of the corporation is Chimerix, Inc.

ARTICLE II

The address of its registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle, Delaware 19801. The name of its registered agent at such address is The Corporation Trust Company.

ARTICLE III

The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of Delaware.

ARTICLE IV

A. Classes of Stock. The total number of shares of all classes of capital stock which this corporation shall have authority to issue is Five Million (5,000,000) of which Three Million Five Hundred Thousand (3,500,000) shares of the par value of One-Tenth of One Cent ($.001) each shall be Common Stock (the "Common Stock") and One Million Five Hundred Thousand (1,500,000) shares of the par value of One-Tenth of One Cent ($.001) each shall be Preferred Stock (the "Preferred Stock").

The Preferred Stock may be issued from time to time in one or more series. Except for the Series A Preferred Stock, the Board of Directors is authorized to fix the number of shares of any series of Preferred Stock and to determine the designation of any such shares. Subject to compliance with applicable protective and voting rights provisions that have been granted to outstanding series of Preferred Stock in a Certificate of Designation or this Certificate of Incorporation, the Board of Directors is also authorized to determine or alter the rights, preferences, privileges and restrictions granted to or imposed upon any wholly unissued series of Preferred Stock and, within the limits and restrictions stated in any resolution or resolutions of the Board of Directors originally fixing the number of shares constituting any series, to increase or decrease (but not below the number of shares of such series then outstanding) the number of shares of any such series subsequent to the issue of shares of that series unless a vote of the holders of such series is required pursuant to the certificate or certificates establishing the series of Preferred Stock.

B. Rights Preferences and Restrictions of the Preferred Stock. The Series A Preferred Stock shall consist of 1,500,000 shares. The Series A Preferred Stock shall have the voting power, preferences and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, as follows:

1. Dividend Provisions. The holders of shares of Series A Preferred Stock shall be entitled to receive dividends, out of any assets legally available therefor, prior and in preference to any declaration or payment of any dividend (payable other than in Common Stock of this corporation) on the Common Stock or any other junior equity security of this corporation, at the rate of $.08 per share of Series A Preferred Stock (as adjusted for any stock splits, stock dividends, recapitalizations and the like) per annum, or if greater the rate paid on the Common Stock, payable quarterly when, as and if declared by the Board of Directors. Dividends shall not be cumulative. Dividends, if declared, must be declared and paid with respect to all series of Preferred Stock contemporaneously, and if less than full dividends are declared, the same percentage of the dividend rate will be payable to each series of Preferred Stock.

2. Liquidation Preference.

(a) In the event of any liquidation, dissolution or winding up of this corporation, either voluntary or involuntary, the holders of Series A Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of this corporation to the holders of Common Stock or other junior equity security by reason of their ownership thereof, an amount per share equal to the sum of (i) $1.00 for each outstanding share of Series A Preferred Stock (the “Original Series A Issue Price”) and (ii) an amount equal to all declared but unpaid dividends on each such share. If upon the occurrence of such event, the assets and funds thus distributed among the holders of such series of Preferred Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts, then the entire assets and funds of this corporation legally available for distribution shall be distributed ratably among the holders of Series A Preferred Stock in proportion to the product of the liquidation preference of each such share, and the number of shares held by each such holder.

(b) After the distributions described in subsection (a) above have been paid, the remaining assets of this corporation available for distribution to stockholders shall be distributed among the holders of Common Stock and Series A Preferred Stock pro rata based on the number of shares of Common Stock held by each (assuming the full conversion of the outstanding Series A Preferred Stock).

(c) A liquidation, dissolution or winding up of this corporation shall be deemed to be occasioned by, or to include (unless the holders of a majority of the Series A Preferred Stock then outstanding shall determine otherwise), (A) the acquisition of this corporation by another entity by means of any transaction or series of related transactions (including, without limitation, any reorganization, merger or consolidation) that results in the transfer of fifty percent (50%) or more of that outstanding voting power of this corporation, or (B) a sale of all or substantially all of the assets of this corporation (any such event described in clause (A) or (B), a “Reorganization Event”).

(d) Any securities to be delivered to the holders of Preferred Stock and Common Stock pursuant to this Section 2 shall be valued as follows:

(i) Securities not subject to investment letter or other similar restrictions on free marketability:

(A) If traded on a securities exchange, the value shall be deemed to be the average of the closing prices of the securities on such exchange over the 30-dry period ending three days prior to the closing;

(B) If actively traded over-the-counter, the value shall be deemed to be the average of the closing bid prices over the 30-day period ending three days prior to the closing; and

(C) If there is no active public market, the value shall be the fair market value thereof, as mutually determined in good faith by the Board of Directors of this corporation.

(ii) The method of valuation of securities subject to investment letter or other restrictions on free marketability shall be to make an appropriate discount from the market value determined as above in (i)(A), (B) or (C) to reflect the approximate fair market value thereof, as mutually determined in good faith by the Board of Directors of this corporation.

(e) In the event the requirements of this Section 2 are not complied with, this corporation shall forthwith either:

(i) cause such closing to be postponed until such time as the requirements of this Section 2 have been complied with, or

(ii) cancel such transaction, in which event the rights, preferences and privileges of the holders of the Preferred Stock shall revert to and be the same as such rights, preferences and privileges existing immediately prior to the date of the first notice referred to in subsection 2(f) hereof.

(f) This corporation shall give each holder of record of Preferred Stock written notice of such impending transaction not later than 20 days prior to the stockholders' meeting called to approve such transaction, or 20 days prior to the closing of such transaction, whichever is earlier, and shall also notify such holders in writing of the final approval of such transaction. The first of such notices shall describe the material terms and conditions of the impending transaction and the provisions of this Section 2, and this corporation shall thereafter give such holders prompt notice of any material changes. The transaction shall in no event take place earlier than 20 days after this corporation has given the first notice provided for herein or earlier than ten days after this corporation has given notice of any material changes provided for herein; provided, however, that such periods may be shortened upon the written consent of the holders of a majority of the shares of the Preferred Stock then outstanding.

3. Conversion. The holders of Series A Preferred Stock shall have conversion rights as follows (the "Conversion Rights"):

(a) Right to Convert.

(i) Subject to subsection (c) below, each share of Series A Preferred Stock shall be convertible, at the option of the holder thereof, at any time after the date of issuance of such share and prior to the close of business on any Redemption Date as may have been fixed in any Redemption Notice with respect to such share, at the office of this corporation or any transfer agent for such series of Preferred Stock, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing the Original Series A Issue Price by the Conversion Price at the time in effect for such series. The initial Conversion Price per share for shares of Series A Preferred Stock shall be the Original Series A Issue Price; provided, however, that the Conversion Price for shares of such series of Preferred Stock shall be subject to adjustment as set forth in subsection (c) below.

(ii) Each share of Series A Preferred Stock shall automatically be converted into shares of Common Stock at the Conversion Price at the time in effect for such series immediately upon

(x) the consummation of this corporation's sale of its Common Stock in a bona fide firm commitment underwriting pursuant to a registration statement on Form S-1 (or successor form) under the Securities Act of 1933, as amended, which results in gross offering proceeds to this corporation of at least $5,000,000, the public offering price of which was not less than $3.00 per share (adjusted to reflect subsequent stock dividends, stock splits or recapitalizations); or

(y) the approval of holders of at least a majority of the outstanding shares of Series A Preferred Stock, voting together in accordance with Section 4 hereof.

(b) Mechanics of Conversion. Before any holder of shares of a series of Preferred Stock shall be entitled to convert the same into shares of Common Stock, such holder shall surrender the certificate or certificates therefor, duly endorsed, at the office of this corporation or of any transfer agent for such series of Preferred Stock, and shall give written notice by mail, postage prepaid, to this corporation at its principal corporate office, of the election to convert the same and shall state therein the name or names in which the certificate or certificates for shares of Common Stock are to be issued. This corporation shall, as soon as practicable thereafter, issue and deliver at such office to such holder of such series of Preferred Stock, or to the nominee or nominees of such holder, a certificate or certificates for the number of shares of Common Stock to which such holder shall be entitled as aforesaid. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the shares of such series of Preferred Stock to be converted and the person or

persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock as of such date. If the conversion is in connection with an underwritten offer of securities registered pursuant to the Securities Act of 1933, as amended, the conversion may, at the option of any holder tendering shares of such series of Preferred Stock for conversion, be conditioned upon the closing with the underwriter of the sale or securities pursuant to such offering, in which event the person(s) entitled to receive the Common Stock issuable upon such conversion of shares of such series of Preferred Stock shall not be deemed to have converted such shares of such series of Preferred Stock until immediately prior to the closing of such sale of securities.

(c) Conversion Price Adjustments of the Series A Preferred Stock. The Conversion Price of the Series A Preferred Stock shall be subject to adjustment from time to time as follows:

(i) (A) If this corporation shall issue any Additional Stock (as defined below) without consideration or for a consideration per share less than the Conversion Price for the Series A Preferred Stock, as the case may be, in effect immediately prior to the issuance of such Additional Stock, the new Conversion Price shall be determined by multiplying the Conversion Price for such series of Preferred Stock in effect immediately prior to the issuance of Additional Stock by a fraction:

(x) the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issuance (for purposes of this calculation only, including the number of shares of Common Stock then issuable upon the conversion of all outstanding shares of Preferred Stock at the Conversion Price for such shares in effect immediately prior to such issuance of Additional Stock and excluding the number of Shares of Common Stock then issuable upon conversion or exercise of outstanding warrants, options or other rights to purchase shares) plus the number of shares of Common Stock equivalents which the aggregate consideration received by this corporation for the shares of such Additional Stock so issued would purchase at the Conversion Price for the shares of the series of Preferred Stock with respect to which the adjustment is being made; and

(y) the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issuance (for purposes of this calculation only, including the number of shares of Common Stock then issuable upon the conversion of all outstanding shares of Preferred Stock at the Conversion Prices for such shares in effect immediately prior to

such issuance of Additional Stock and excluding the number of Shares of Common Stock then issuable upon conversion or exercise of outstanding warrants, options or other rights to purchase shares) plus the number of such shares of Additional Stock so issued.

Any series of issuances of Additional Stock consisting of Common Stock or the same series of Preferred Stock, issued at the same price and occurring within a three-month period, shall be treated as one issuance of Additional Stock for the purposes of this calculation.

(B) No adjustment of the Conversion Price for such series of Preferred Stock shall be made in an amount less than one cent per share, provided that any adjustments which are not required to be made by reason of this sentence shall be carried forward and shall be either taken into account in any subsequent adjustment made prior to three years from the date of the event giving rise to the adjustment being carried forward, or shall be made at the end of three years from the date of the event giving rise to the adjustment being carried forward. Except to the limited extent provided for in subsections (E)(3) and (E)(4), no adjustment of such Conversion Price for such series of Preferred Stock pursuant to this subsection 3(c)(i) shall have the effect of increasing the Conversion Price for such series of Preferred Stock above the Conversion Price for such series in effect immediately prior to such adjustment.

(C) In the case of the issuance of Common Stock for cash, the consideration shall be deemed to be the amount of cash paid therefor before deducting any reasonable discounts, commissions or other expenses allowed, paid or incurred by this corporation for any underwriting or otherwise in connection with the issuance and sale thereof.

(D) In the case of the issuance of the Common Stock for a consideration in whole or in part other than cash, the consideration other than cash shall be deemed to be the fair value thereof as determined by the Board of Directors irrespective of any accounting treatment.

(E) In the case of the issuance of options to purchase or rights to subscribe for Common Stock, securities by their terms convertible into or exchangeable for Common Stock or options to purchase or rights to subscribe for such convertible or exchangeable securities (which are not excluded from the definition of Additional Stock), the following provisions shall apply:

(1) The aggregate maximum number of shares of Common Stock deliverable upon exercise of such options to purchase or rights to subscribe for Common Stock shall be deemed to have been issued at the time such options or rights were issued and for a consideration equal to the consideration (determined in the manner provided in subsections 3(c)(i)(C) and (c)(i)(D)), if any, received by this corporation upon the issuance of such options or rights plus the minimum purchase price provided in such options or rights for the Common Stock covered thereby.

(2) The aggregate maximum number of shares of Common Stock deliverable upon conversion of or in exchange for any such convertible or exchangeable securities or upon the exercise of options to purchase or rights to subscribe for such convertible or exchangeable securities and subsequent conversion or exchange thereof shall be deemed to have been issued at the time such securities were issued or such options or rights were issued and for a consideration equal to the consideration, if any, received by this corporation for any such securities and related options or rights (excluding any cash received on account of accrued interest or accrued dividends), plus the additional consideration, if any, to be received by this corporation upon the conversion or exchange of such securities or the exercise of any related options or rights (the consideration in each case to be determined in the manner provided in subsections 3(c)(i)(C) and (c)(i)(D)).

(3) In the event of any change in the number of shares of Common Stock deliverable or any increase in the consideration payable to this corporation upon exercise of such options or rights or upon conversion of or in exchange for such convertible or exchangeable securities, including, but not limited to, a change resulting from the anti-dilution provisions thereof, the Conversion Price of the Series A Preferred Stock obtained with respect to the adjustment which was made upon the issuance of such options, rights or securities, and any subsequent adjustments based thereon, shall be recomputed to reflect such change, but no further adjustment shall be made for the actual issuance of Common Stock or any payment of such consideration upon the exercise of any such options or rights or the conversion or exchange of such securities; provided, however, that this section shall not have any effect on any conversion of such series of Preferred Stock prior to such change or increase.

(4) Upon the expiration of any such options or rights, the termination of any such rights to convert or exchange or the expiration of any options or rights related to such convertible or exchangeable securities, the Conversion Price of the Series A Preferred Stock obtained with respect to the adjustment which was made upon the issuance of such options, rights or securities or options or rights related to such securities, and any subsequent adjustments based thereon, shall be recomputed to reflect the issuance of only the number of shares of Common Stock actually issued upon the exercise of such options or rights upon the conversion or exchange of such securities or upon the exercise of the options or rights related to such securities; provided, however, that this section shall not have any effect on any conversion of such series of Preferred Stock prior to such expiration or termination.

(ii) "Additional Stock" shall mean any shares of Common Stock issued (or deemed to have been issued pursuant to subsection 3(c)(i)(E)) by this corporation after the date of the issuance of the Series A Preferred Stock, other than

(A) Common Stock issued pursuant to a transaction described in Subsection 3(c)(iii) hereof,

(B) shares of Common Stock issued or issuable to employees, directors, consultants or advisors under stock option and restricted stock purchase agreements approved by the directors of this corporation, or

(C) Common Stock issued or issuable upon conversion of the Preferred Stock.

(iii) In the event this corporation should at any time or from time to time after the date of the initial issuance of the Series A Preferred Stock fix a record date for the effectuation of a split or subdivision of the outstanding shares of Common Stock or the determination of holders of Common Stock entitled to receive a dividend or other distribution payable in additional shares of Common Stock or other securities or rights convertible into, or entitling the holder thereof to receive directly or indirectly, additional shares of Common Stock (hereinafter referred to as "Common Stock Equivalents") without payment of any consideration by such holder for the additional shares of Common Stock or the Common Stock Equivalents (including the additional shares of Common Stock issuable upon conversion or exercise thereof), then as of such record date (or the date of such dividend distribution split or subdivision if no record date is fixed), the Conversion Price of the Series A Preferred Stock shall be appropriately decreased so that the number of shares of Common Stock issuable on conversion

of each share of such series shall be increased in proportion to such increase of outstanding shares determined in accordance with subsection 3(c)(i)(E).

(iv) If the number of shares of Common Stock outstanding at any time after the effective date hereof is decreased by a combination of the outstanding shares of Common Stock, then, following the record date of such combination, the Conversion Price for the Series A Preferred Stock shall be appropriately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in outstanding shares.

(v) Notwithstanding anything herein to the contrary, the operation of, and any adjustment of the Conversion Prices pursuant to, the provisions of subsection 3(c)(i) may be waived with respect to any specific share or shares of Preferred Stock, either prospectively or retroactively and either generally or in a particular instance by a writing executed by the registered holder of such share or shares. Any waiver pursuant to this subsection 3(c)(v) shall bind all future holders of the shares of Preferred Stock for which rights have been waived. In the event that a waiver of adjustment of Conversion Price under this subsection 3(c)(v) results in different Conversion Prices for shares of a series of Preferred Stock, the Secretary of this corporation shall maintain a written ledger identifying the Conversion Price for each share of such series of Preferred Stock. Such information shall be made available to any person upon request.

(d) Other Distributions. In the event this corporation shall declare a distribution payable in securities of other persons, evidences of indebtedness issued by this corporation or other persons, assets (excluding cash dividends) or options or rights not referred to in subsection 3(c)(iii), then, in each such case for the purpose of this subsection 3(d), the holders of Series A Preferred Stock shall be entitled to a proportionate share of any such distribution as though they were the holders of the number of shares of Common Stock of this corporation into which their shares of such series of Preferred Stock, as the case may be, are convertible as of the record date fixed for the determination of the holders of Common Stock of this corporation entitled to receive such distribution.

(e) Recapitalizations. If at any time or from time to time there shall be a recapitalization of the Common Stock (other than a subdivision, combination or merger or sale of assets transaction provided for elsewhere in this Section 3 or in Section 2 hereof) provision shall be made so that the holders of Series A Preferred Stock shall thereafter be entitled to receive upon conversion of such series of Preferred Stock the number or shares of stock or other securities or property of this Corporation or otherwise, to which a holder of Common Stock deliverable upon conversion would have been entitled on such recapitalization. In any such case, appropriate adjustment shall be made in the application of the provisions of this Section 3 with respect to the rights of the holders of such series of Preferred Stock after the recapitalization to the end that the provisions of this Section 3 (including adjustment of the Conversion Price then in effect and the number of shares purchasable upon conversion of such

series of Preferred Stock) shall be applicable after that event as nearly equivalent as may be practicable.

(f) No Impairment. The corporation will not, by amendment of its Certificate of Incorporation or through any reorganization, recapitalization, transfer of assets, consolidation, merger, dissolution issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by this corporation, but will at all times in good faith assist in the carrying out of all the provisions of this Section 3 and in the taking of all such action as may be necessary or appropriate in order to protect the Conversion Rights of the holders of the Series A Preferred Stock against impairment.

(g) Fractional Shares and Certificate as to Adjustments.

(i) No fractional shares shall be issued upon conversion of shares of a series of Preferred Stock, and the number of shares of Common Stock to be issued shall be rounded to the nearest whole share. Whether or not fractional shares are issuable upon such conversion shall be determined on the basis of the total number of shares of such series of Preferred Stock the holder is at the time converting into Common Stock and the number of shares of Common Stock issuable upon such aggregate conversion.

(ii) Upon the occurrence of each adjustment or readjustment of the Conversion Price of Series A Preferred Stock, pursuant to this Section 3, this corporation, at its expense, shall promptly compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of such series of Preferred Stock a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. This corporation shall, upon the written request at any time of any holder of such series of Preferred Stock furnish or cause to be furnished to such holder a like certificate setting forth (A) such adjustment and readjustment, (B) the Conversion Price at the time in effect, and (C) the number of shares of Common Stock and the amount, if any, of other property which at the time would be received upon the conversion of a share of such series of Preferred Stock.

(h) Notices of Record Date. In the event of any taking by this corporation of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend (other than a cash dividend) or other distribution, any right to subscribe for, purchase or otherwise acquire any shares of stock of any class or any other securities or property, or to receive any other right, this corporation shall mail to each holder of Series A Preferred Stock at least 10 days prior to the date specified therein, a notice specifying the date on which any such record is to be taken for the purpose of such dividend, distribution or right, and the amount and character of such dividend, distribution or right.

(i) Reservation of Stock Issuable Upon Conversion. This corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock solely for the purpose of effecting the conversion of the shares of Series A Preferred Stock such number of its shares of Common Stock as shall from time to time be sufficient to affect the conversion of all outstanding shares of such series of Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of such series of Preferred Stock, in addition to such other remedies as shall be available to the holder of such series of Preferred Stock, this corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number or shares as shall be sufficient for such purposes.

(j) Notices. Any notice required by the provisions of this Section 3 to be given to the holders of shares of Series A Preferred Stock shall be deemed given if deposited in the United States mail, first class postage prepaid, and addressed to each holder of record at such holder's address appeasing on the books of this corporation.

4. Voting Rights.

(a) The holder of each share of Series A Preferred Stock shall have the right to one vote for each share of Common Stock into which such Preferred Stock could be converted on the record date for the vote or written consent of stockholders. In all cases any fractional share, determined on an aggregate conversion basis, shall be rounded to the nearest whole share. With respect to such vote, such holder shall have full voting rights and powers equal to the voting rights and powers of the holders of Common Stock, and shall be entitled, notwithstanding any provision hereof, to notice of any stockholders' meeting in accordance with the bylaws of this corporation, and shall be entitled to vote, together with holders of Common Stock, with respect to any question upon which holders of Common Stock have the right to vote.

5. Protective Provisions. In addition to any approvals required by law, so long as fifty percent (50%) of the original issued shares of Series A Preferred Stock are outstanding, this corporation shall not without first obtaining the approval (by vote or written consent, as provided by law) of the holders of at least, a majority of the then outstanding shares of Series A Preferred Stock:

(a) sell, convey, or otherwise dispose of or encumber all or substantially all of its property or business or merge with or into or consolidate with any other corporation (other than a wholly owned subsidiary corporation) or effect any transaction or series of related transactions in which more than 50% of the voting power of this corporation is disposed of; or

(b) alter or change the rights, preferences or privileges of the Series A Preferred Stock; or

(c) increase or decrease (other than by conversion) the authorized number of shares of Preferred Stock or the designated number of shares of Series A Preferred Stock; or

(d) authorize or issue, or obligate itself to authorize or issue (by reclassification or otherwise) any new class or series of stock (or other equity security including any other security convertible into or exercisable for any equity security) having a preference over, or being on a parity with, the Series A Preferred Stock with respect to voting, dividends or upon liquidation; or

(e) amend this corporation's Certificate of Incorporation or bylaws that would adversely affect the rights, preferences or privileges of the Series A Preferred Stock;

(f) repurchase or redeem shares of the Common Stock of the corporation, other than the repurchase of shares from en employee, consultant or advisor of the corporation pursuant to a stock purchase or stock option agreement between such person and the corporation providing for such repurchase upon termination of employment; or

(g) declare or pay any dividend or distribution with reaped to the Common Stock of the corporation.

6. Status of Converted Stock. In the event any shares of Series A Preferred Stock shall be converted pursuant to Section 3 hereof, the shares so converted shall be canceled and shall not be issuable by this corporation; and the Certificate of Incorporation of this corporation shall be appropriately amended to effect the corresponding reduction in this corporation's authorized capital stock.

C. Common Stock.

1. Relative Rights of Preferred Stock and Common Stock. All preferences, voting powers, relative, participating optional or other special rights and privileges, and qualifications, limitations, or restrictions of the Common Stock are expressly made subject and subordinate to those that may be fixed with respect to any shares of the Preferred Stock.

2. Voting Rights. Except as otherwise required by law or this Certificate of Incorporation, each holder of Common Stock shall have one vote in respect of each share of stock held by such holder of record on the books of this corporation for the election of directors and on all matters submitted to a vote of stockholders of this corporation.

3. Dividends. Subject to the preferential rights of the Preferred Stock, the holders of shares of Common Stock shall be entitled to receive, when and if declared by the Board of Directors, out of the assets of this corporation which are by law available therefor, dividends payable either in cash, in property or in shares of capital stock.

4. Dissolution, Liquidation or Winding Up. In the event of any dissolution, liquidation or winding up of the affairs of this corporation or any Reorganization Event, after distribution in full of the preferential amounts, if any, to be distributed to the holders of shares of the Preferred Stock, holders of Common Stock shall be entitled to participate in any distribution of the assets of this corporation in accordance with Section 2 of Article IV, Division B hereof.

ARTICLE V

This corporation is to have perpetual existence.

ARTICLE VI

In furtherance and not in limitation of the powers conferred by the laws of the State of Delaware:

A. The Board of Directors of this corporation is expressly authorized to adopt, amend or repeal the bylaws of this corporation; provided, however, that the bylaws may only be amended in accordance with the provisions thereof.

B. Elections of directors need not be by written ballot unless the bylaws of this corporation shall so provide.

C. The books of this corporation may be kept at such place within or without the State of Delaware as the bylaws of this corporation may provide or as may be designated from time to time by the Board of Directors of this corporation.

ARTICLE VII

To the fullest extent permitted by Delaware General Corporation Law as it now exists or as it may hereafter be amended, a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the Delaware General Corporation Law or (iv) for any transaction from which the director derived an improper personal benefit. If the Delaware General Corporation Law is hereafter amended to authorize further eliminating or limiting the personal liability of directors, then, after approval by the stockholders of this Article, the liability of a director of the Corporation, shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law as so amended.

Any amendment, repeal or modification of the foregoing provisions of this Article VII, or the adoption of any provision in an amended or Certificate of Incorporation inconsistent with this Article VII, by the stockholders of the Corporation shall be prospective only, and shall not adversely affect any right or protection of a director of the Corporation existing at the time of such amendment, repeal, modification or adoption.

ARTICLE VIII

To the fullest extent permitted by applicable law, this corporation is authorized to provide indemnification of (and advancement of expenses to) such agents of this Corporation

(and any other persons to which Delaware law permits this corporation to provide indemnification) through bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the Delaware General Corporation Law, subject only to limits created by applicable Delaware law (statutory or nonstatutory), with respect to actions for breach of duty to this corporation, its stockholders and others.

Any amendment, repeal or modification of the foregoing provisions of this Article VIII shall not adversely affect any right or protection of a director, officer, agent or other person existing at the time of, or increase the liability of any director of this corporation with respect to any acts or omissions of such director, officer or agent occurring prior to such amendment, repeal or modification.

ARTICLE IX

Subject to compliance with applicable protective voting rights that have been or may be granted to the Preferred Stock or series thereof in a Certificate of Designation or this Certificate of Incorporation, this corporation reserves the right to amend or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon a stockholder herein are granted subject to this reservation.

ARTICLE X

The name and mailing address of the incorporator is

Karl Y. Hostetler
[...***...]

I, THE UNDERSIGNED, being the sole incorporator hereinabove named, for the purpose of forming a corporation pursuant to the General Corporation Law of the State of Delaware, do make this certificate, hereby declaring and certifying that this is my act and deed and the facts herein stated are true, and accordingly have hereunto set my hand this 6th day of April, 2000.

/s/ Karl Y. Hostetler

Karl Y. Hostetler
Sole Incorporator

*****Confidential Treatment Requested**

TABLE OF CONTENTS

FIRST AMENDMENT TO THE LICENSE AGREEMENT
EFFECTIVE May 13, 2002
BETWEEN
CHIMERIX, INC.,
AND
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
FOR
DOCKET NOs. [...*...], [...***...] and [...***...]**

This amendment to the agreement ("Amendment") is made by and between Chimerix, Inc, a Delaware corporation having an address at 4401 Eastgate Mall, San Diego, CA 92121 ("Chimerix") and The Regents Of The University Of California, a California corporation having its statewide administrative offices at 1111 Franklin Street, Oakland, California 94607-5200 ("University"), as represented by its San Diego campus having an address at University of California, San Diego, Technology Transfer & Intellectual Property Services, Mail-code 0910, 9500 Gilman Drive, La Jolla, California 92093-0910 ("UCSD").

Capitalized terms used but not otherwise defined herein shall have the meanings given them in the License Agreement ("License Agreement") between Chimerix and the University effective May 13, 2002 (UC control No. [...***...]).

This Amendment is effective on the date of the last signature ("Effective Date").

Whereas, Chimerix has entered into the License Agreement wherein Chimerix was granted certain rights;

Whereas, the Field of the license granted to Chimerix under the License Agreement excludes uses of the Second Invention for osteoporosis and other metabolic bone diseases; and

Whereas, Chimerix and University wish to amend the License Agreement;

Now Therefore, Chimerix and University agree to amend the License Agreement to include certain modifications. These changes are to be substituted for those relevant portions in the License Agreement and are effective on the Effective Date. For these purposes, changes are made to the License Agreement as detailed below:

RECITALS

The fourth recital is deleted in its entirety.

ARTICLE 1. DEFINITIONS.

Paragraph 1.3 is amended and restated to read in its entirety: “Field” means all human and veterinary uses” .

Paragraph 1.9 is amended and restated to read in its entirety: “Patent Rights” means any and all or any combination of First, Second and Third Patent Rights.

ARTICLE 2. GRANTS.

Paragraph 2.4 is deleted in its entirety.

ARTICLE 3. CONSIDERATIONS.

The final sentence of Paragraph 3.2 is deleted in its entirety.

As consideration for the amendment of the Field provided in this Amendment, and in addition to the consideration paid or payable under Article 3 of the License Agreement, Chimerix shall:

(i) issue to University twenty five thousand (25,000) shares of Chimerix’ Common Stock (the “Additional Shares”) pursuant to a restricted common stock agreement between the parties in substantially the form of the Restricted Common Stock Agreement dated June 18, 2002 between the parties. The Additional Shares shall be issued in the name of “Shellwater & Co.”, as nominee for University, provided, however, that issuance of Additional Shares by Chimerix shall be subject to final approval by the Chimerix Board of Directors and acceptance of Additional Shares by University shall be subject to final approval by the Office of the President of the University. The Additional Shares shall be issued within forty-five (45) days of approval by the Chimerix Board of Directors or the University Office of the President, whichever occurs later. In the event that approval is not granted for issuance or acceptance of Additional Shares, this Agreement shall remain in effect and Chimerix and University shall renegotiate in good faith for a substitution of similar value for consideration. In the event that the parties can not agree on the substitution of similar value for consideration within sixty (60) days from the September 27th, 2002 meeting of the Chimerix Board of Directors, this Amendment shall be null and void; and

(ii) pay to University license maintenance fees of [...***...] US Dollars ($[...***...]) per year and payable on the first anniversary of the Effective Date and annually thereafter on each anniversary; provided however, that Chimerix’ obligation to pay this fee shall end on the date when Chimerix is commercially selling a Licensed Product.

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Except as specifically amended by this Amendment, all other terms and conditions in the License Agreement shall remain unchanged and in full force and effect. The parties agree that this Amendment may be executed in two (2) or more counterparts, each of which shall be deemed an original and all of which together shall constitute but one and the same instrument.

IN WITNESS WHEREOF, both University and Chimerix have executed this Amendment, in duplicate originals, by their respective and duly authorized officers on the day and year written.

CHIMERIX, INC.:	**THE REGENTS OF THE UNIVERSITY OF CALIFORNIA**
By: /s/ Kevin P. Anderson	By: /s/ Alan S. Paau
Name: Kevin P. Anderson	Alan S. Paau
Title: VP, Business Development	Assistant Vice Chancellor, Technology Transfer & Intellectual Property Services
Date: September 11, 2002	Date: September 9, 2002

SECOND AMENDMENT TO THE LICENSE AGREEMENT EFFECTIVE MAY 13, 2002

BETWEEN

CHIMERIX, INC.

AND

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

FOR

CASE NOS. […*…], […***…] AND […***…]**

This second amendment to the agreement ("Second Amendment") is made by and between Chimerix, Inc., a Delaware corporation having an address at 2505 Meridian Parkway, Suite 340, Durham, NC 27713 ("Chimerix"), and The Regents of the University of California, a California corporation having its statewide administrative offices at 1111 Franklin Street, Oakland, CA 94607-5200 ("University") as represented by its San Diego campus having an address at University of California San Diego, Technology Transfer Office, Mail Code 0910, 9500 Gilman Drive, La Jolla, CA 92093-0910 ("UCSD").

Capitalized terms used but not otherwise defined herein shall have the meaning given them in the license agreement effective May 13, 2002 (UC Control No. [...***...]) and the previously executed first amendment effective September 11, 2002 (UC Control No. [...***...]), (together, the "Agreement")

This Second Amendment is effective on the date of last signature ("Second Amendment Effective Date").

Whereas Chimerix has entered into the Agreement wherein Chimerix was granted certain rights;

Whereas, Chimerix has requested a renegotiation of certain terms of the Agreement in order to secure additional capital investment and partnering opportunities in order to complete development of Licensed Products as anticipated in the Agreement;

Whereas Chimerix and University wish to amend the Agreement;

Now Therefore, Chimerix and University agree to amend the Agreement. These changes will be substituted for or added to those relevant portions in the Agreement and are effective on the Second Amendment Effective Date. For these purposes, changes are made to the Agreement as described below. Terms and conditions not changed in this Second Amendment will remain as detailed in the Agreement.

ARTICLE 3, PARAGRAPH 3.1b - Milestone Payments. Previous versions are hereby deleted and replaced with the following:

Amount	Date or Event
[...***...]	LICENSEE begins a Phase I clinical trial; payable one time for each of the first three Licensed Products to begin a Phase I clinical trial

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Amount	Date or Event
[...***...]	LICENSEE begins a Phase III clinical trial; payable one time for each of the first three Licensed Products to begin a Phase III clinical trial
[...***...]	Six months after LICENSEE begins a Phase III clinical trial; payable one time for each of the first three Licensed Products to begin a Phase III clinical trial. For CMX001, this payment will be due on or before June 15, 2011.
[...***...]	[...***...] after LICENSEE begins a Phase III clinical trial; payable one time for each of the first three Licensed Products to begin a Phase III clinical trial
[...***...]	LICENSEE receives the first US regulatory approval for the sale of the first Licensed Product for human therapeutic use
[...***...]	LICENSEE receives the first US regulatory approval for the sale of each subsequent Licensed Product(s) for human therapeutic use
[...***...]	LICENSEE receives the first regulatory approval for the sale of each Licensed Product in Europe for human therapeutic use
[...***...]	LICENSEE receives the first regulatory approval for the sale of each Licensed Product in Japan for human therapeutic use
[...***...]*	This amount is owed to UNIVERSITY the [...***...] that Net Sales of a Licensed Product in the United States reach or exceed [...***...]. LICENSEE will pay one half of the amount due to UNIVERSITY within [...***...] of the end of [...***...] and the balance within [...***...] of the first payment.
[...***...]*	This amount is owed to UNIVERSITY the [...***...] that Net Sales of a Licensed Product in Europe reach or exceed [...***...]. LICENSEE will pay one half of the amount due to UNIVERSITY within [...***...] of the end of [...***...] and the balance within [...***...] of the first payment.
[...***...]*	This amount is owed to UNIVERSITY the [...***...] that Net Sales of a Licensed Product in the rest of the world reach or exceed [...***...]. LICENSEE will pay one half of the amount due to UNIVERSITY within [...***...] of the end of [...***...] and the balance within [...***...] of the first payment.

* If Net Sales of a Licensed Product in the applicable region (i.e., US, Europe, rest of world) reach the specified dollar level during a calendar year at a time prior to the expiration of the Patent Rights, and subsequently during the same calendar year, the Patent Rights expire, the applicable milestone event will be deemed to have occurred, and the milestone payment shall become due in full, at the time such Net Sales first reached the applicable dollar level (i.e., prior to expiration

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of the Patent Rights), provided that LICENSEE shall have sixty (60) days after the end of such calendar year in which to make payment.

ARTICLE 3, PARAGRAPH 3.1d(i) - Sublicense Fees. Previous versions are hereby deleted and replaced with the following:

(1) The percentage of sublicense fees payable to UNIVERSITY by LICENSEE will be determined according to the following schedule:

Percentage to be paid	Date of Sublicensure
[...***...]	Prior to the first to occur of (i) the first IND submission for a Licensed Product or (ii) expenditure of [...***...] in research to identify, characterize or develop Licensed Products within the Field.
[...***...]	On or after the first to occur of the events specified above, but prior to initiation of the first Phase III Clinical Study for a Licensed Product.
[...***...]	On or after the initiation of the first Phase Ill Clinical Study for a Licensed Product.

ADDITIONAL CONSIDERATION TO UNIVERSITY

Within the later of thirty (30) days of the Second Amendment Effective Date or receiving final approval of the Office of the President of UNIVERSITY, Chimerix shall issue to Shellwater & Co. an additional One Hundred Thousand (100,000) shares of Chimerix Common Stock, authorized for issuance under Chimerix's Amended and Restated Certificate of Incorporation.

Except as specified by this Second Amendment, all other terms and conditions in the Agreement shall remain unchanged and in full force and effect. The parties agree that this Second Amendment may be executed in two (2) or more counterparts, each of which shall be deemed an original and all of which together shall constitute but one and the same instrument.

IN WITNESS WHEREOF both University and Chimerix have executed this Amendment in duplicate originals, by their respective and duly authorized offices on the day and year written.

CHIMERIX, INC.:

By: /s/ Kenneth I. Moch

Name: Kenneth I. Moch

Title: President & CEO

Date: December 17, 2010

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

By: /s/ Jane C. Moores

Jane C. Moores, Assistant Vice Chancellor
Technology Transfer Office

Date: December 15, 2010

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THIRD AMENDMENT TO THE LICENSE AGREEMENT EFFECTIVE MAY 13, 2002

BETWEEN

CHIMERIX, INC.

AND

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

FOR

CASE NOS. […*…], […***…] AND […***…]**

This third amendment to the agreement ("Third Amendment") is made by and between Chimerix, Inc., a Delaware corporation having an address at 2505 Meridian Parkway, Suite 340, Durham, NC 27713 ("Chimerix"), and The Regents of the University of California, a California corporation having its statewide administrative offices at 1111 Franklin Street, Oakland, CA 94607-5200 ("University") as represented by its San Diego campus having an address at University of California San Diego, Technology Transfer Office, Mail Code 0910, 9500 Gilman Drive, La Jolla, CA 92093-0910 ("UCSD").

Capitalized terms used but not otherwise defined herein shall have the meaning given them in the license agreement between Chimerix and University effective May 13, 2002, having UC Control No. [...***...] ("Original Agreement"), as amended by the previously executed first amendment effective September 11, 2002, having UC Control No. [...***...] (the "First Amendment"), and second amendment effective December 17, 2010, having UC Control No. [...***...] (the "Second Amendment"), and supplemented by those certain email notifications regarding patent prosecution matters dated March 14, 2007, and October 9, 2009, and having UC Control Nos. [...***...] and [...***...], respectively (collectively, the "Patent Notices"). The Original Agreement, together with, and as amended or supplemented by, the First Amendment, the Second Amendment and the Patent Notices, are collectively referred to herein as the "Agreement".

This Amendment is effective on the date of last signature ("Third Amendment Effective Date").

Whereas, Chimerix has entered into the Agreement wherein Chimerix was granted certain rights;

Whereas, Chimerix wishes to amend the Agreement to include additional technology ("New Inventions") disclosed to University under UCSD Case Nos. [...***...] entitled "[...***...]" and its corresponding patent applications entitled "[...***...]" invented by [...***...], both of UCSD, and [...***...] entitled " [...***...]", and its corresponding patent applications entitled

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"[...***...]", invented by [...***...] of UCSD and [...***...] of Chimerix;

Whereas University is willing to amend the Agreement to include the additional technology;

Now Therefore, Chimerix and University agree to amend the Agreement. These changes will be substituted for or added to those relevant portions in the Agreement and are effective on the Third Amendment Effective Date. For these purposes, changes are made to the Agreement as described below. Terms and conditions not changed in this Amendment will remain as detailed in the Agreement.

Article 1. DEFINITIONS.

Paragraphs 1.11 and 1.12 are amended and restated to read in their entirety as follows:

1.11 **"Licensed Method"** means any method that is covered by the claims of Patent Rights the use of which would constitute, but for (a) the license granted to LICENSEE under this Agreement and/or (b) LICENSEE's joint ownership interest in Fifth Patent Rights, an infringement of any pending or issued claim within Patent Rights.

1.12 **"Licensed Product"** means any service, composition or product that is covered by the claims of Patent Rights, or that is produced by the Licensed Method, or the manufacture, use, sale, offer for sale, or importation of which would constitute, but for (a) the license granted to LICENSEE under this Agreement and/or (b) LICENSEE's joint ownership interest in Fifth Patent Rights, an infringement of any pending or issued claim within the Patent Rights.

Paragraph 1.9 is amended and restated to read in its entirety as follows:

"**Patent Rights**" means any and all or any combination of First Patent Rights, Second Patent Rights and Third Patent Rights (collectively, "**Original Patent Rights**") and Fourth Patent Rights and Fifth Patent Rights (collectively, "**New Patent Rights**").

The following new definitions are hereby added after Paragraph 1.18:

1.19 "**Fourth Patent Rights**" means any of the following: the US patent [...***...] issued 1/26/2010 and the US application [...***...] filed 12/10/2009; the PCT application no. [...***...] filed 2/4/2005, based on the priority of the provisional application [...***...] filed 2/5/2004 disclosing and claiming the New Invention of UCSD Case No. [...***...], assigned to University; and continuing applications thereof including divisional, substitutions and continuations-in-part (but only to the extent the claims thereof are enabled by disclosure of the parent application); any patents issuing on said applications including reissues, reexaminations and extensions; and any corresponding foreign applications or patents.

1.20 **"Fifth Patent Rights"** means the US patent [...***...] issued 7/6/2010 and the US application [...***...] filed 6/9/2010; the PCT application no. [...***...] filed 4/18/2007, based on the priority of the provisional application [...***...] (filed 5/3/2006) disclosing and claiming the New Invention of UCSD Case No. [...***...] assigned jointly to University and Licensee; and continuing applications thereof including divisional, substitutions and continuations-in-part (but only to the extent the claims thereof are enabled by disclosure of the parent application); any patents issuing on said applications including reissues, reexaminations and extensions; and any corresponding foreign applications or patents.

Article 2. GRANTS.

Paragraph 2.2 is amended to include the following new subparagraph (d):

(d) If LICENSEE grants a license to a third party under its own joint ownership interest in the Fifth Patent Rights, LICENSEE shall also concurrently grant a Sublicense under University's joint ownership interest in the Fifth Patent Rights to said third party.

Article 3. CONSIDERATIONS.

Subparagraph (ii) under the heading "ARTICLE 3. CONSIDERATIONS" in the First Amendment is amended and restated to read in its entirety as follows:

(ii) pay to University license maintenance fees of: (A) [...***...] US Dollars ($[...***...]) per year, payable on each anniversary of the Effective Date prior to the Third Amendment Effective Date; and (B) [...***...] US Dollars ($[...***...]) per year, payable on each anniversary of the Effective Date after the Third Amendment Effective Date; provided however that Licensee's obligation to pay this fee shall end on the date when Licensee is commercially selling a Licensed Product.

Paragraph 3.1b — Milestone Payments. The following shall be added at the end of Paragraph 3.1b (as amended by the Second Amendment):

(i) For any Licensed Product that uses either: 1) the New Patent Rights or 2) the Original Patent Rights (but not both in one Licensed Product): then the milestone payments above will apply.

(ii) For any Licensed Product that use both the Original Patent Rights and any New Patent Rights, the following additional milestones will apply:

(1) [...***...] at IND filing, payable one time for each of the first three such Licensed Products for which an IND is filed;

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(2) [...***...] at Initiation of Phase II clinical trial, payable one time for each of the first three such Licensed Products to begin a Phase II clinical trial.

(iii) The new milestone payment obligations specified in the foregoing subparagraph (ii) shall not apply to the Licensed Products CMX001 and CMX157, currently in development and already past initiation of Phase II clinical trials, which utilize the Original Patent Rights; *provided, however*, that if (A) a new Licensed Product that incorporates CMX001 and/or CMX157 is developed, and (B) the manufacture, use, sale, offer for sale or import of such new Licensed Product would constitute, but for the license granted under this Agreement, an infringement of any pending or issued and unexpired claim within the New Patent Rights, then the new milestones will apply to the extent that the regulatory process for the new Licensed Product includes the event described in the milestone. For example, if a new IND is required, the new milestone would apply. If the new Licensed Product does not require a new IND, then the revised milestone would not apply.

Paragraph 3.2 — Patent Costs. The following shall be added at the end of Paragraph 3.2:

Licensee will reimburse University for all past (prior to the Third Amendment Effective Date) and future (on or after the Third Amendment Effective Date) Patent Costs for Fourth Patent Rights as described in the Agreement; past patent costs for Fourth Patent Rights as of the Third Amendment Effective Date are approximately [...***...]. The
parties acknowledge that Licensee has prosecuted and maintained Fifth Patent Rights, and borne all associated Patent Costs, up to the Third Amendment Effective Date, and will continue to do so after the Third Amendment Effective Date. Accordingly, this Paragraph 3.2 shall not apply to Fifth Patent Rights unless and until such time (if ever) as University assumes responsibility for prosecuting and maintaining Fifth Patent Rights in accordance with Paragraph 5.1.

Article 5. PATENT MATTERS

Paragraph 5.1 — Patent Prosecution and Maintenance. The following shall be added at the end of Paragraph 5.1:

(e) Notwithstanding Paragraphs 5.1(a) through 5.1(d) to the contrary, Licensee shall be responsible for diligently prosecuting and maintaining Fifth Patent Rights, at Licensee's expense, using counsel of Licensee's choice. Licensee shall keep University reasonably informed of progress with regard to the prosecution and maintenance of Fifth Patent Rights, and shall consult with, and consider in good faith the requests and suggestions of, University with respect to prosecution and maintenance of Fifth Patent Rights. In the event that Licensee desires to abandon or cease prosecution or maintenance of any application or patent

within Fifth Patent Rights in any country, Licensee shall provide reasonable prior written notice to University of such intention to abandon (which notice shall, to the extent possible, be given no later than 60 days prior to the next deadline for any action that must be taken with respect to any such application or patent in the relevant patent office). In such case, at University's sole discretion, upon written notice to Licensee, University may elect to continue prosecution and/or maintenance of any such application or patent, at its sole cost and expense and by counsel of its own choice. If University elects to continue such prosecution and/or maintenance, then Licensee's exclusive license under University's joint ownership interest in such application or patent shall terminate, but Licensee shall retain its joint ownership interest in such application or patent.

Paragraph 5.2 — Patent Infringement. The following shall be added at the end of Paragraph 5.2:

(e) Notwithstanding Paragraphs 5.2(b) and 5.2(c) to the contrary, but subject to Paragraphs 5.2(a) and 5.2(d), Licensee shall have the first right to take legal action against a Third Party for infringement of Fifth Patent Rights, at Licensee's expense, using counsel of Licensee's choice. If Licensee fails to bring any such action or proceeding within (i) 120 days following the notice of alleged infringement, or (ii) 30 days before the time limit, if any, set forth in the appropriate laws and regulations for the filing of such actions, whichever comes first, then University shall have the right to bring and control any such action, at its own expense and by counsel of its own choice, and Licensee shall have the right, but not the obligation, at its own expense, to be represented in any such action by counsel of its own choice. Recoveries from actions brought pursuant to this Paragraph 5.2(e) shall first be applied to reimburse the litigation costs of the party (Licensee or University) bringing suit and bearing the expenses of the litigation, and then to reimburse the litigation costs of the other party. Any remaining recovery after such reimbursement shall be shared by the parties as follows: (1) [...***...]% to the party bringing suit; and (2) [...***...]% to the other party.

Article 7. TERMINATION OF THE AGREEMENT. The following shall be added at the end of Article 7:

7.5 Notwithstanding any termination of this Agreement, Licensee shall retain its joint ownership interest in Fifth Patent Rights.

ADDITIONAL CONSIDERATION TO UNIVERSITY
A one-time amendment fee of Five Thousand US Dollars ($5,000) payable within thirty (30) days of the Third Amendment Effective Date.

Except as specified by this Amendment, all other terms and conditions in the Agreement shall remain unchanged and in full force and effect. The parties agree that this Amendment may be

executed in two (2) or more counterparts, each of which shall be deemed an original and all of which together shall constitute but one and the same instrument.

IN WITNESS WHEREOF both University and Chimerix have executed this Amendment in duplicate originals, by their respective and duly authorized offices on the day and year written.

CHIMERIX, INC.:	**THE REGENTS OF THE UNIVERSITY OF CALIFORNIA**
By: /s/ Kenneth I. Moch	By: /s/ Jane C. Moores
Name: Kenneth I. Moch	Jane C. Moores, Assistant Vice Chancellor Technology Transfer Office
Title: President & CEO	
Date: September 14, 2011	Date: September 7, 2011

FOURTH AMENDMENT TO THE LICENSE AGREEMENT EFFECTIVE MAY 13, 2002

BETWEEN

CHIMERIX, INC.

AND

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

FOR

CASE NOS. […*…], […***…] AND […***…]**

This fourth amendment to the agreement ("Fourth Amendment") is made by and between Chimerix, Inc., a Delaware corporation having an address at 2505 Meridian Parkway, Suite 340, Durham, NC 27713 ("Chimerix"), and The Regents of the University of California, a California corporation having its statewide administrative offices at 1111 Franklin Street, Oakland, CA 94607-5200 ("University") as represented by its San Diego campus having an address at University of California San Diego, Technology Transfer Office, Mail Code 0910, 9500 Gilman Drive, La Jolla, CA 92093-0910 ("UCSD"),

Capitalized terms used but not otherwise defined herein shall have the meaning given them in the license agreement between Chimerix and University effective May 13, 2002, having UC Control No. [...***...] ("Original Agreement"), as amended by the previously executed first amendment effective September 11, 2002, having UC Control No. [...***...] (the "First Amendment"), and second amendment effective December 17, 2010, having UC Control No. [...***...] (the "Second Amendment"), and third amendment effective September 14, 2011, having UC Control No. [...***...] (the "Third Amendment"), and any other revisions regarding the Patent Rights previously made. The Original Agreement, together with, and as amended by, those revisions, the First Amendment the Second Amendment, and the Third Amendment are collectively referred to herein as the "Agreement".

This Amendment is effective on the date of last signature ("Fourth Amendment Effective Date").

Whereas, Chimerix has entered into the Agreement wherein Chimerix was granted certain rights;

Whereas, Chimerix and University wish to amend the Agreement to make certain corrections with respect to the recitals and to alter the rights and responsibilities of the parties in light of Chimerix's current business plans;

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Now Therefore, Chimerix and University agree to amend the Agreement. These changes will be substituted for or added to those relevant portions in the Agreement and are effective on the Fourth Amendment Effective Date. For these purposes, changes are made to the Agreement as described below. Terms and conditions not changed in this Amendment will remain as detailed in the Agreement.

RECITALS.

The second recital is amended and restated to read in its entirety as follows:

> WHEREAS, the inventions disclosed in UCSD Case Docket No. [...***...] and titled "[...***...]" ("Original Second Invention") were made in the course of research at UCSD by [...***...] (hereinafter and collectively, the "Second Inventors") and are covered by Patent Rights as defined below;

A new third recital is added to read in its entirety as follows:

> WHEREAS, the inventions originally disclosed in UCSD Case Docket No. [...***...] and titled "[...***...]" ("Additional Second Invention") were made in the course of research at UCSD by [...***...] and were later joined with the Original Second Invention (now collectively the "Second Invention") and are covered by Patent Rights as defined below;

The thirteenth recital is amended and restated to read in its entirety as follows:

> WHEREAS, the VA has relinquished its rights to the Additional Second Invention ("[...***...]") as stated in a letter to [...***...] (Exhibit B) and UNIVERSITY retains sole right, title and interest in the Additional Second Invention (subject to the license granted to the US Government), and the VA has retained its rights to the Original Second Invention ("[...***...]");

The following new recital is hereby added to the end of the recitals:

WHEREAS, subject to the VA/UC Agreement, and the VA's determination of their right in the Original Second Invention, the UNIVERSITY and the VA own certain rights, title and interest with respect to the Patent Rights for the Second Invention.

ARTICLE 2. GRANTS

Paragraph 2.2(c) is amended and restated to read in its entirety as follows;

Upon termination of this Agreement for any reason, UNIVERSITY will allow LICENSEE to assign to UNIVERSITY any Sublicense provided that: i) the applicable Sublicensee is in good standing under its sublicense agreement with LICENSEE upon termination of this Agreement; and ii) such Sublicensee is not currently involved in litigation as an adverse party to the UNIVERSITY. In no case, however, will UNIVERSITY be bound by duties and obligations contained in any Sublicense that extend beyond the duties and obligations of the UNIVERSITY set forth in this Agreement. The Sublicensee will promptly agree in writing to be bound by the terms of this Agreement, including, in lieu of the payment obligations under the applicable Sublicense agreement, but not necessarily limited to, payment to the UNIVERSITY of fees, royalties and reimbursements required under Article 3.

ARTICLE 3, CONSIDERATIONS

Paragraph 3.3(a)(6) is amended and restated to read in its entirety as follows:

On or before the date ending [...***...] after the Effective Date file with the US FDA an NDA or PLA (or Its equivalent in a foreign country) for the first Licensed Product; and

ARTICLE 5. PATENT MATTER*

Paragraph 5.2 is amended and restated to read in Its entirety as follows:

(a) If LICENSEE learns of any substantial infringement of Patent Rights, LICENSEE shall so inform UNIVERSITY and provide UNIVERSITY with reasonable evidence of the infringement. Neither UNIVERSITY nor LICENSEE shall notify a Third Party (other than a SUBLICENSEE) of the infringement of Patent Rights without the consent of the other. Both UNIVERSITY and LICENSEE shall use reasonable efforts and cooperation to terminate infringement without litigation.

(b) Except as provided for in Section 5.2(e) below, LICENSEE may request UNIVERSITY to take legal action against such Third Party for the infringement of Patent Rights. Such request shall be made in writing and shall include reasonable evidence of such infringement and damages to LICENSEE. If the infringing activity has not abated thirty (30) days following LICENSEE's request, UNIVERSITY shall have the right to commence suit on its own account. UNIVERSITY shall give notice of its election to commence suit in writing to LICENSEE by the end of the fourtieth (40^{th}) day after receiving notice of such request from LICENSEE. LICENSEE may elect to join in that suit at its own expense. Should UNIVERSITY not commence suit on its own account, LICENSEE may thereafter bring suit for patent infringement at its own expense, if the infringement occurred in a jurisdiction where LICENSEE has an exclusive license under this Agreement. If LICENSEE elects to bring suit, UNIVERSITY may join that suit at its own expense.

(c) Recoveries from actions brought pursuant to this Section 5.2 shall belong to the party (UNIVERSITY or LICENSEE) bringing suit and bearing the expenses of the litigation. Legal actions brought Jointly by UNIVERSITY and LICENSEE and fully participated in by both shall be at the joint expense of the parties and all recoveries shall be shared jointly by them in proportion to the share of expense paid by each party.

(d) UNIVERSITY and LICENSEE shall cooperate with each other in litigation proceedings at the expense of the party bringing suit. Litigation shall be controlled by the party bringing suit, except that either party may be represented by counsel of Its choice in any suit brought by the other party.

(e) A Party receiving any certification regarding the Patent Rights pursuant to either 21 U.S.C. §§355(b)(2)(A)(iv) or 21 U.S.C. §§355 (j)(2)(A)(vii)(IV), or its successor provisions, or any similar provisions in a country in the Territory, shall provide the other Party with a copy of such certification within fourteen (14) business days of receipt. In the case of UNIVERSITY, receipt of the certification shall mean when the UNIVERSITY's licensing representative has actual knowledge of the certification. Any notices served under this paragraph should be sent only to the UCSD Technology Transfer Office, 9500 Gilman Drive, MC 0910, La Jolla, CA 92093-0910; Attn: Asst, Vice Chancellor for Technology Transfer, in order to facilitate any action needed on the part of UNIVERSITY. Notwithstanding the UNIVERSITY's right to initiate action as described in section 5,2(b) above, under this paragraph 5.2(e), LICENSEE (or exclusive SUBLICENSEE) shall have the first right to initiate and prosecute any action, and LICENSEE shall inform UNIVERSITY of such decision within seven (7) days of receipt of the certification. If LICENSEE or exclusive SUBLICENSEE elects not to bring a suit, UNIVERSITY shall have the right to initiate and prosecute such action. Regardless of which Party has the right to initiate and prosecute such action, both Parties shall, as soon as practicable after receiving notice of such certification, convene and consult with each other regarding the appropriate course of conduct for such action. In all cases, the non-initiating Party shall have the

right to be kept fully informed and participate in decisions regarding the appropriate course of conduct for such action, and the right to join (at its own expense) and participate in such action.

Except as specified by this Amendment, all other terms and conditions in the Agreement shall remain unchanged and in full force and effect. The parties agree that this Amendment may be executed in two (2) or more counterparts, each of which shall be deemed an original and all of which together shall constitute but one and the same instrument.

IN WITNESS WHEREOF both University and Chimerix have executed this Amendment in duplicate originals, by their respective and duly authorized offices on the day and year written.

CHIMERIX, INC.:	**THE REGENTS OF THE UNIVERSITY OF CALIFORNIA**
By: /s/ Kenneth I. Moch	By: /s/ Jane C. Moores
Kenneth I. Moch President & CEO	Jane C. Moores Assistant Vice Chancellor Technology Transfer
Date: July 19, 2012	Date: July 18, 2012

LOAN AND SECURITY AGREEMENT

This **LOAN AND SECURITY AGREEMENT** (this "**Agreement**") dated as of January 27, 2012 (the "**Effective Date**") by and among (a) **MIDCAP FINANCIAL SBIC, LP**, a Delaware limited partnership ("**MidCap**"), as administrative agent (the "**Agent**"), (b) the Lenders listed on Schedule 1 hereto and otherwise party hereto from time to time, including, without limitation, MidCap and **SILICON VALLEY BANK**, a California Corporation ("**SVB**"), each a "**Lender**", and collectively the "**Lenders**", and (c) **CHIMERIX, INC**., a Delaware corporation ("**Borrower**"), provides the terms on which Lenders shall lend to Borrower and Borrower shall repay Lenders. The parties agree as follows:

1. ACCOUNTING AND OTHER TERMS

Accounting terms not defined in this Agreement shall be construed following GAAP. Calculations and determinations must be made following GAAP (other than non-compliance with FAS 123R in monthly reporting). Capitalized terms not otherwise defined in this Agreement shall have the meanings set forth in Section 14. All other terms contained in this Agreement, unless otherwise indicated, shall have the meaning provided by the Code to the extent such terms are defined therein.

2. LOAN AND TERMS OF PAYMENT

2.1 Promise to Pay. Borrower hereby unconditionally promises to pay Lenders the outstanding principal amount of all Credit Extensions and accrued and unpaid interest thereon as and when due in accordance with this Agreement.

2.2 Term Loans.

(a) Availability. Subject to the terms and conditions of this Agreement, the Lenders agree, severally and not jointly, to make one or more term loans to Borrower in an aggregate amount up to Fifteen Million Dollars ($15,000,000.00) according to each Lender's Term Loan Commitment as set forth on **Schedule 1** hereto (such term loans are hereinafter referred to singly as a "**Term Loan**", and collectively as the "**Term Loans**"). After repayment, no Term Loan may be re-borrowed. The Term Loans shall be available in two tranches. The first tranche ("**Tranche One**") shall be in an amount equal to Three Million Dollars ($3,000,000.00) (the Terms Loans made severally by each Lender in respect of Tranche One, collectively, the "**Tranche One Term Loan Advance**") and shall be advanced on the Effective Date. The second tranche ("**Tranche Two**") shall be in an amount equal to Twelve Million Dollars ($12,000,000.00) and shall be available to be advanced in no more than three (3) advances (each of the Term Loans made severally by each Lender in respect of each advance under Tranche Two, collectively, a "**Tranche Two Term Loan Advance**" and, all such Term Loans and all such Tranche Two Term Loan Advances, collectively, the "**Tranche Two Term Loan Advances**") during the Tranche Two Draw Period. In addition to and without limiting the foregoing, no single Tranche Two Term Loan Advance shall be in an amount of less than One Million Dollars ($1,000,000.00). The Tranche One Term Loan Advance and any and all Tranche Two Term Loan Advances are referred to herein collectively as the "**Term Loan Advances**" (and each individually as a "**Term Loan Advance**").

(b) Interest Payments and Repayment. Commencing on the first (1st) Payment Date following the Funding Date of each Term Loan Advance, respectively, and continuing on the Payment Date of each successive month thereafter, through and including the Maturity Date with respect to such Term Loan Advance, Borrower shall make monthly payments of interest to each Lender of all interest accrued and owing to such Lender in respect of such Lender's Term Loan under such Term Loan Advance, in arrears, and calculated with respect to each Lender and the Term Loans owing to such Lender as set forth in Section 2.3. Commencing on the Amortization Date of each Term Loan Advance, and continuing on the Payment Date of each successive month thereafter through and including the Maturity Date of such Term Loan Advance, Borrower shall make consecutive monthly payments of principal for such Term Loan to each Lender in respect of such Lender's Term Loan under such Term Loan Advance, with the amount of each principal payment being calculated as of the first such Payment Date as follows: (a) (i) the aggregate outstanding principal amount of such Term Loan owing to such Lender, and divided by (ii) the number of payments in a straight-line amortization schedule for such Term Loan beginning on the Amortization Date of such Term Loan and ending on the Maturity Date of such Term Loan. All unpaid principal and accrued interest (calculated with respect to each Lender and the Term Loans owing to such Lender as set forth in Section 2.3) with respect to each Term Loan is due and payable in full on its Maturity Date. The Term Loans may be prepaid only in accordance with Sections 2.2(c) and 2.2(d).

(c) Mandatory Prepayments. If the Term Loans are accelerated following the occurrence and during the continuance of an Event of Default, Borrower shall immediately pay to each Lender in accordance with its respective Pro Rata Share, an amount equal to the sum of: (i) all outstanding principal of the Term Loans and all other Obligations owed by Borrower to such Lender, and all accrued and unpaid interest thereon (calculated with respect to each Lender and the Term Loans owing to such Lender as set forth in Section 2.3), plus (ii) the Final Payment with respect to the Term Loans owing to such Lender, plus (iii) the Prepayment Premium with respect to the Term Loans owing to such Lender, plus (iv) all other sums and Obligations owing to such Lender that shall have become due and payable, including Lenders' Expenses.

(d) Permitted Prepayment of Loans. Borrower shall have the option to prepay all or a portion of the Term Loans advanced by the Lenders under this Agreement; provided, however, that Borrower (i) provides written notice to Agent of its election to prepay the Term Loans or a portion thereof at least five (5) Business Days prior to such prepayment, and (ii) (x) in the case of prepayment of the aggregate outstanding principal amount of any or all Term Loans, pays each Lender, on the date of such prepayment, an amount equal to the sum of: (A) all outstanding principal of such Term Loans and all other Obligations owed by Borrower to such Lender, and all accrued and unpaid interest thereon (calculated with respect to each Lender and the Term Loans owing to such Lender as set forth in Section 2.3), plus (B) the Final Payment with respect to the Term Loans owing to such Lender, plus (C) the Prepayment Premium with respect to the Term Loans owing to such Lender, plus (D) all other sums that shall have become due and payable to such Lender, including Lenders' Expenses, and (y) in the case of prepayment of a portion of any Term Loan, pays to each Lender, on the date of such prepayment, an amount equal to the sum of: (A) the outstanding principal of such Term Loan prepaid to such Lender, and all accrued and unpaid interest thereon, plus (B) the Partial Final Payment with respect to the amount of such Term Loan prepaid, plus (C) the Prepayment Premium with respect to the amount of such Term Loan prepaid, plus (D) all other sums that shall have become due and payable to such Lender, including Lenders' Expenses.

2.3 Payment of Interest on the Credit Extensions.

(a) Interest Rate. Subject to Section 2.3(b), (i) the aggregate outstanding principal amount of each Term Loan made by MidCap to Borrower shall accrue interest at a fixed per annum rate equal to eight and nine-tenths of one percent (8.90%), and (ii) the aggregate outstanding principal amount of each Term Loan made by SVB to Borrower shall accrue interest at a fixed per annum rate equal to seven and fifteen hundredths of one percent (7.15%).

(b) Default Rate. Immediately upon the occurrence and during the continuance of an Event of Default, the outstanding principal amount of the respective Term Loans made by each Lender shall bear interest at a rate per annum which is five percentage points (5.0%) above the rate that is otherwise applicable thereto (the "**Default Rate**"), unless Agent and Lenders otherwise elect from time to time in the sole discretion of each to impose a smaller increase. Fees, expenses and all other Obligations (including, without limitation, Lenders' Expenses) which are required to be paid by Borrower to Agent or the Lenders pursuant to the Loan Documents but are not paid when due (if a due date is specified under the Loan Documents with respect to such Obligations) or otherwise within ten (10) days after the date of any invoice provided by Agent or Lenders to the Borrower therefor, shall bear interest until paid at a rate equal to 13.25%. Payment or acceptance of the increased interest rate provided in this Section 2.3(b) is not a permitted alternative to timely payment and shall not constitute a waiver of any Event of Default or otherwise prejudice or limit any rights or remedies of Agent or Lenders.

(c) Computation; 360-Day Year. In computing interest, the date of the making of any Credit Extension shall be included and the date of payment shall be excluded; provided, however, that if any Credit Extension is repaid on the same day on which it is made, such day shall be included in computing interest on such Credit Extension. Interest shall be computed on the basis of a 360-day year for the actual number of days elapsed.

(d) Debit of Accounts. Agent and any Lender may debit the Designated Deposit Account (i) for principal and interest payments when due, or (ii) upon notice to Borrower for any other amounts Borrower owes Agent or any Lender when due. These debits shall not constitute a set-off.

(e) Interest Payment Date. Unless otherwise provided, interest is payable monthly on the Payment Date.

2.4 Fees. Borrower shall pay to each Lender:

(a) Closing Fee. Its Commitment Percentage of a non-refundable closing fee of (i) on the Effective Date, Fifteen Thousand Dollars ($15,000.00), and (ii) on the Funding Date of each Tranche Two Term Loan Advance, an amount equal to one-half of one percent (0.50%) of the original principal amount of such Tranche Two Term Loan Advance;

(b) Final Payment. The Final Payment with respect to its Term Loans, when due hereunder;

(c) Partial Final Payment. Any Partial Final Payment with respect to its Term Loans, when due hereunder;

(d) Prepayment Premium. The Prepayment Premium with respect to its Term Loans, when due hereunder;

(e) Unused Commitment Fee. Upon the earlier to occur of: (i) December 31, 2012, and (ii) the Funding Date of the third (3rd) Tranche Two Term Loan Advance, its Commitment Percentage of an unused commitment fee in an amount equal to (x) one percent (1.0%) *multiplied by* (y) Twelve Million Dollars ($12,000,000.00), *minus* the aggregate original principal amount of the Tranche Two Term Loan Advances (if any); and

(f) Lenders' Expenses. All Lenders' Expenses (including reasonable attorneys' fees and expenses, for documentation and negotiation of this Agreement) incurred by such Lender, including any such Lenders' Expenses incurred by such Lender in its capacity as agent, through and after the Effective Date, when due.

2.5 Payments. All payments (including prepayments) to be made by Borrower under any Loan Document shall be made in immediately available funds in Dollars, without setoff or counterclaim, before 12:00 noon Eastern time on the date when due. Payments of principal and/or interest received after 12:00 noon Eastern time are considered received at the opening of business on the next Business Day. When a payment is due on a day that is not a Business Day, the payment shall be due the next Business Day, and additional fees or interest, as applicable, shall continue to accrue until paid.

2.6 Secured Promissory Notes. Each Term Loan made by each Lender in connection with any Term Loan Advance shall be evidenced by a Secured Promissory Note in favor of each Lender for its Commitment Percentage of such Term Loan Advance in the form attached as Exhibit D hereto (each a "**Secured Promissory Note**"), and shall be repayable as set forth herein. Borrower irrevocably authorizes each Lender to make or cause to be made, on or about the Funding Date of any Term Loan or at the time of receipt of any payment of principal on such Lender's Secured Promissory Note, an appropriate notation on such Lender's Secured Promissory Note Record reflecting the making of such Term Loan or (as the case may be) the receipt of such payment. The failure to record, or any error in so recording, any such amount on such Lender's Secured Promissory Note Record shall not limit or otherwise affect the obligations of Borrower hereunder or under any Secured Promissory Note to make payments of principal of or interest on any Secured Promissory Note when due. Upon receipt of an affidavit of an officer of a Lender as to the loss, theft, destruction, or mutilation of its Secured Promissory Note, Borrower shall issue, in lieu thereof, a replacement Secured Promissory Note in the same principal amount thereof and of like tenor.

2.7 SBIC Acknowledgement. Borrower acknowledges that Agent is a Federal licensee under the Small Business Investment Act of 1958, as amended.

3. CONDITIONS OF LOANS

3.1 Conditions Precedent to Initial Credit Extension. Lenders' obligation to make the initial Credit Extension is subject to the condition precedent that Agent shall have received, in form and substance satisfactory to Agent and Lenders, such documents, and completion of such other matters, as Agent may reasonably deem necessary or appropriate, including, without limitation:

(a) duly executed original signatures to the Loan Documents;

(b) duly executed original signatures to the Control Agreement(s);

(c) Borrower's Operating Documents and a long form good standing certificate of Borrower certified by the Secretary of State of the State of Delaware as of a date no earlier than thirty (30) days prior to the Effective Date;

(d) certificates of foreign qualification for Borrower (as appropriate), certified by the applicable Secretary of State as of a date no earlier than thirty (30) days prior to the Effective Date;

(e) Secretary's Certificate with completed Borrowing Resolutions for Borrower and certifying Borrower's Operating Documents as of the Effective Date;

(f) certified copies, dated as of a recent date, of financing statement searches and other lien, judgment and/or litigations with such jurisdictions and/or courts, as Agent shall request, accompanied by written evidence (including any UCC termination statements) that the Liens indicated in any such searches either constitute Permitted Liens or have been or, in connection with the initial Credit Extension, will be terminated or released;

(g) duly executed original signatures to a payoff letter from SVB;

(h) evidence that (i) the Liens securing Indebtedness owed by Borrower to SVB (other than Indebtedness hereunder and Bank Services permitted under clause (b) of the definition of "Permitted Indebtedness") will be terminated and (ii) the documents and/or filings evidencing the perfection of such Liens, including without limitation any financing statements and/or control agreements, have or will, concurrently with the initial Credit Extension, be terminated.

(i) a landlord's consent executed by the applicable landlord in favor of Agent, for the ratable benefit of the Lenders, for each of Borrower's leased locations, together with the duly executed original signatures thereto;

(j) a copy of Borrower's Investor Rights Agreement, as currently amended and in effect;

(k) completed SBA Forms 480, 652 and 1031 by Borrower;

(l) evidence satisfactory to Agent that the insurance policies and endorsements required by Section 6.5 hereof are in full force and effect, together with appropriate evidence showing lender loss payable and/or additional insured clauses or endorsements in favor of Agent; and

(m) payment of the fees and Lenders' Expenses then due as specified in Section 2.3 hereof.

3.2 Conditions Precedent to all Credit Extensions. Lenders' obligations to make each Credit Extension, including the initial Credit Extension, are subject to the following conditions precedent:

(a) timely receipt of an executed Payment/Advance Form;

(b) the representations and warranties in this Agreement and in any other Loan Documents delivered in connection herewith, specifically including the Perfection Certificate (as such Perfection Certificate may be updated from time to time in accordance herewith) shall be true, accurate, and complete in all material respects on the date of the Payment/Advance Form and on the Funding Date of each Credit Extension; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date. Each Credit Extension is Borrower's representation and warranty on that date that the representations and warranties in this Agreement and in any other Loan Documents delivered in connection herewith, specifically including the Perfection Certificate (as such Perfection Certificate may be updated from time to time in accordance herewith) remain true, accurate, and complete in all material respects; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date;

(c) no Event of Default shall have occurred and be continuing or result from the Credit Extension; and

(d) in each Lender's sole discretion, there has not been any material impairment in the general affairs, management, results of operation, financial condition or the prospect of repayment of the Obligations, or any material adverse deviation by Borrower from the most recent business plan of Borrower presented to and accepted by Agent and Lenders.

3.3 Covenant to Deliver. Borrower agrees to deliver to Agent each item required to be delivered to Agent under this Agreement as a condition precedent to any Credit Extension. Borrower expressly agrees that a Credit Extension made prior to the receipt by Agent of any such item shall not constitute a waiver by Agent or Lenders of Borrower's obligation to deliver such item, and the making of any Credit Extension in the absence of a required item shall be in each Lender's sole discretion.

3.4 Procedures for Borrowing. Subject to the prior satisfaction of all other applicable conditions to the making a Term Loan, Borrower shall notify Agent and Lenders (which notice shall be irrevocable) by electronic mail, facsimile, or telephone by 12:00 p.m. Eastern time fifteen (15) Business Days prior to the Funding Date of such Term Loan. Together with any such electronic or facsimile notification, Borrower shall deliver to Agent and Lenders by electronic mail or facsimile a completed Payment/Advance Form executed by a Responsible Officer or his or her designee. Agent and Lenders may rely on any telephone notice given by a person whom Agent or Lenders believe is a Responsible Officer or designee. Each Lender shall credit its portion of such Term Loan to the Designated Deposit Account.

4. CREATION OF SECURITY INTEREST.

4.1 Grant of Security Interest. Borrower hereby grants to Agent, for the benefit of Agent and the ratable benefit of Lenders, to secure the payment and performance in full of all of the Obligations, a continuing security interest in, and pledges to Agent, for the benefit of Agent and the ratable benefit of Lenders, the Collateral, wherever located, whether now owned or hereafter acquired or arising, and all proceeds and products thereof.

4.2 Priority of Security Interest. Borrower represents, warrants, and covenants that the security interest granted herein is and shall at all times continue to be a first priority perfected security interest in the Collateral (subject only to Permitted Liens that may have superior priority to Agent's Lien under this Agreement). If Borrower shall acquire a commercial tort claim, Borrower shall promptly notify Agent in a writing signed by Borrower of the general details thereof and grant to Agent, for the benefit of Agent and the ratable benefit of Lenders, in such writing a security interest therein and in the proceeds thereof, all upon the terms of this Agreement, with such writing to be in form and substance reasonably satisfactory to Agent. If this Agreement is terminated, Agent's Lien in the Collateral shall continue until the Obligations (other than inchoate indemnity obligations) are satisfied, and at such time as Agent's and Lenders' obligation to make Credit Extensions under this Agreement has terminated, Agent shall, at Borrower's sole cost and expense, terminate its security interest in the Collateral and all rights therein shall revert to Borrower. In the event (a) all Obligations (other than inchoate indemnity obligations), are satisfied in full, and (b) this Agreement is terminated, Agent shall terminate the security interest granted herein.

4.3 Authorization to File Financing Statements. Borrower hereby authorizes Agent to file financing statements, without notice to Borrower, with all appropriate jurisdictions to perfect or protect Agent's Liens granted hereunder and under any other Loan Documents, including a notice that any disposition of the Collateral, by either Borrower or any other Person, shall be deemed to violate the rights of Agent and Lenders under the Code.

5. REPRESENTATIONS AND WARRANTIES

Borrower represents and warrants as follows:

5.1 Due Organization, Authorization; Power and Authority. Borrower and each of its Subsidiaries, if any, are duly existing and in good standing as Registered Organizations in their respective jurisdictions of formation and are qualified and licensed to do business and are in good standing in any jurisdiction in which the conduct of their business or their ownership of property requires that they be qualified except where the failure to do so could not reasonably be expected to have a material adverse effect on Borrower's business. In connection with this Agreement, Borrower has delivered to Agent and Lenders a completed certificate signed by Borrower entitled "Perfection Certificate" in form and substance acceptable to Agent and Lenders (the "**Perfection Certificate**"). Borrower represents and warrants to Agent and each Lender that (a) Borrower's exact legal name is that indicated on the Perfection Certificate and on the signature page hereof; (b) Borrower is an organization of the type and is organized in the jurisdiction set forth in the Perfection Certificate; (c) the Perfection Certificate accurately sets forth Borrower's organizational identification number or accurately states that Borrower has none; (d) the Perfection Certificate accurately sets forth Borrower's place of business, or, if more than one, its chief executive office as well as Borrower's mailing address (if different than its chief executive office); (e) Borrower (and each of its predecessors) has not, in the past five (5) years, changed its jurisdiction of formation, organizational structure or type, or any organizational number assigned by its jurisdiction; and (f) all other information set forth on the Perfection Certificate pertaining to Borrower and each of its Subsidiaries is accurate and complete (it being understood and agreed that Borrower may from time to time update certain information in the Perfection Certificate after the Effective Date to the extent permitted by one or more specific provisions in this Agreement). If Borrower is not now a Registered Organization but later becomes one, Borrower shall promptly notify Agent of such occurrence and provide Agent with Borrower's organizational identification number. The execution, delivery and performance by Borrower of the Loan Documents to which it is a party have been duly authorized, and do not (i) conflict with any of Borrower's Operating Documents, (ii) contravene, conflict with, constitute a default under or violate any material Requirement of Law, (iii) contravene, conflict or violate any applicable order, writ, judgment, injunction, decree, determination or award of any Governmental Authority by which Borrower or any of its Subsidiaries or any of their property or assets may be bound or affected, (iv) require any action by, filing, registration, or qualification with, or Governmental Approval from, any Governmental Authority (except such Governmental Approvals which have already been obtained and are in full force and effect), or (v) constitute an event of default under any material agreement by which Borrower is bound. Borrower is not in default under any agreement to which it is a party or by which it is bound in which the default could reasonably be expected to have a material adverse effect on Borrower's business.

5.2 Borrower Assets.

5.2.1 Collateral. Borrower has good title to, has rights in, and the power to transfer each item of the Collateral upon which it purports to grant a Lien hereunder, free and clear of any and all Liens except Permitted Liens. Borrower has no deposit accounts other than the deposit accounts, if any, described in the Perfection Certificate delivered to Agent and Lenders in connection herewith, or of which Borrower has given Agent notice and taken such actions as are necessary to give Agent and Lenders a perfected security interest therein. To Borrower's knowledge, the Accounts are bona fide, existing obligations of the Account Debtors. No Collateral in excess of Twenty-Five Thousand Dollars ($25,000.00) per location is in the possession of any third party bailee (such as a warehouse), except as otherwise provided in the Perfection Certificate. None of the components of the Collateral in excess of Twenty-Five Thousand Dollars ($25,000.00) per location shall be maintained at locations other than as provided in the Perfection Certificate or as permitted pursuant to Section 7.2. All Inventory is in all material respects of good and marketable quality, free from material defects.

5.2.2 Intellectual Property. Borrower is the sole owner of the Intellectual Property which it owns or purports to own and/or has the right to use or purports to have the right to use except for (a) non-exclusive licenses granted to its customers in the ordinary course of business, (b) over-the-counter software that is commercially available to the public, and (c) material Intellectual Property licensed to Borrower and noted on the Perfection Certificate. To the best knowledge of the Borrower, (i) each Patent which it owns or purports to own and/or has the right to use or purports to have the right to use and which is material to Borrower's business is valid and enforceable, and (ii) no part of the Intellectual Property which Borrower owns or purports to own and/or has the right to use or purports to have the right to use and which is material to Borrower's business has been judged invalid or unenforceable, in whole or in part. To the best of Borrower's knowledge, no claim has been made that any part of the Intellectual Property violates the rights of any third party except to the extent such claim would not reasonably be expected to have a material adverse effect on Borrower's business. Except as noted on the Perfection Certificate, Borrower is not a party to, nor is it bound by, any Restricted License.

5.3 Litigation. There are no actions or proceedings pending or, to the knowledge of the Responsible Officers, threatened in writing by or against Borrower or any of its Subsidiaries involving more than, individually or in the aggregate, Two Hundred Thousand Dollars ($200,000.00).

5.4 Financial Statements; Financial Condition. All consolidated financial statements for Borrower and any of its Subsidiaries delivered to Agent fairly present in all material respects Borrower's consolidated financial condition and Borrower's consolidated results of operations. There has not been any material deterioration in Borrower's consolidated financial condition since the date of the most recent financial statements submitted to Agent.

5.5 Solvency. The fair salable value of Borrower's assets (including goodwill minus disposition costs) exceeds the fair value of its liabilities; Borrower is not left with unreasonably small capital after the transactions in this Agreement; and Borrower is able to pay its debts (including trade debts) as they mature.

5.6 Regulatory Compliance. Borrower is not an "investment company" or a company "controlled" by an "investment company" under the Investment Company Act of 1940, as amended. Borrower is not engaged as one of its important activities in extending credit for margin stock (under Regulations X, T and U of the Federal Reserve Board of Governors). Borrower has complied in all material respects with the Federal Fair Labor Standards Act. Neither Borrower nor any of its Subsidiaries is a "holding company" or an "affiliate" of a "holding company" or a "subsidiary company" of a "holding company" as each term is defined and used in the Public Utility Holding Company Act of 2005. Borrower has not violated any laws, ordinances or rules, the violation of which could reasonably be expected to have a material adverse effect on its business. None of Borrower's or any of its Subsidiaries' properties or assets has been used by Borrower or any Subsidiary or, to the best of Borrower's knowledge, by previous Persons, in disposing, producing, storing, treating, or transporting any hazardous substance other than legally. Borrower and each of its Subsidiaries have obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all Government Authorities that are necessary to continue their respective businesses as currently conducted.

5.7 Subsidiaries; Investments. Borrower does not own any stock, partnership interest or other equity securities except for Permitted Investments.

5.8 Tax Returns and Payments; Pension Contributions. Borrower and each of its Subsidiaries has timely filed all required tax returns and reports, and Borrower and each of its Subsidiaries has timely paid all foreign, federal, state and local taxes, assessments, deposits and contributions owed by Borrower and each of its Subsidiaries, provided that Borrower and its Subsidiaries may defer payment of any contested taxes, provided that Borrower and/or the applicable Subsidiary (a) in good faith contests its obligation to pay the taxes by appropriate proceedings promptly and diligently instituted and conducted, (b) notifies Agent in writing of the commencement of, and any material development in, the proceedings, (c) posts bonds or takes any other steps required to prevent the governmental authority levying such contested taxes from obtaining a Lien upon any of the Collateral that is other than a "Permitted Lien". Borrower is unaware of any claims or adjustments proposed for any of Borrower's or any of its Subsidiaries' prior tax years which could result in additional taxes becoming due and payable by Borrower and/or any of its Subsidiaries. Borrower and each of its Subsidiaries has paid all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms, and Borrower has not , nor has any of its Subsidiaries, withdrawn from participation in, and has not permitted partial or complete termination of, or permitted the occurrence of any other event with respect to, any such plan which could reasonably be expected to result in any liability of Borrower or its Subsidiaries, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other governmental agency.

5.9 Use of Proceeds. Borrower shall use the proceeds of the Credit Extensions solely as working capital and to fund its general business requirements and not for personal, family, household or agricultural purposes. A portion of the proceeds of the initial Credit Extension shall be used on the Effective Date to repay in full the indebtedness of Borrower to SVB.

5.10 Full Disclosure. No written representation, warranty or other statement of Borrower in any certificate or written statement given to Agent or any Lender, as of the date such representation, warranty, or other statement was made, taken together with all such written certificates and written statements given to Agent or any Lender, contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements contained in the certificates or statements not misleading (it being recognized by Agent that the projections and forecasts provided by Borrower in good faith and based upon reasonable assumptions are not viewed as facts and that actual results during the period or periods covered by such projections and forecasts may differ from the projected or forecasted results).

5.11 Definition of "Knowledge." For purposes of the Loan Documents, whenever a representation or warranty is made to Borrower's knowledge or awareness, to the "best of Borrower's knowledge, or with a similar qualification, knowledge or awareness means the actual knowledge, after reasonable investigation, of the Responsible Officers.

6. AFFIRMATIVE COVENANTS

Borrower shall do all of the following:

6.1 Government Compliance.

(a) Maintain its and all its Subsidiaries' legal existence and good standing in their respective jurisdictions of formation and maintain qualification in each jurisdiction in which the failure to so qualify would reasonably be expected to have a material adverse effect on Borrower's business or operations. Borrower shall comply, and have each Subsidiary comply, with all laws, ordinances and regulations to which it is subject, noncompliance with which could reasonably be expected to have a material adverse effect on Borrower's business.

(b) Obtain all of the Governmental Approvals necessary for the performance by Borrower of its obligations under the Loan Documents to which it is a party and the grant of a security interest to Agent, for the ratable benefit of the Lenders, in the Collateral. Borrower shall promptly provide copies of any such obtained Governmental Approvals to Agent.

6.2 Financial Statements, Reports, Certificates. Deliver to Agent and Lenders:

(a) Monthly Financial Statements. As soon as available, but no later than thirty (30) days after the last day of each month, a company prepared consolidated balance sheet and income statement covering Borrower's consolidated operations for such month certified by a Responsible Officer and in a form acceptable to Agent in its reasonable discretion (the "**Monthly Financial Statements**");

(b) Monthly Compliance Certificate. Within thirty (30) days after the last day of each month and together with the Monthly Financial Statements, a duly completed Compliance Certificate signed by a Responsible Officer, certifying that as of the end of such month, Borrower was in full compliance with all of the terms and conditions of this Agreement and such other financial information as Agent shall reasonably request;

(c) Annual Audited Financial Statements. As soon as available, but no later than one hundred fifty (150) days after the last day of each of Borrower's fiscal years, audited consolidated financial statements prepared under GAAP, consistently applied, together with an unqualified opinion on the financial statements from an independent certified public accounting firm acceptable to Agent in its reasonable discretion (the "**Annual Financial Statements**");

(d) Annual Compliance Certificate. Within one hundred fifty (150) days after the last day of each of Borrower's fiscal years and together with the Annual Financial Statements, a duly completed Compliance Certificate signed by a Responsible Officer, certifying that as of the end of such fiscal year, Borrower was in full compliance with all of the terms and conditions of this Agreement and such other financial information as Agent shall reasonably request;

(e) Annual Operating Budgets and Projections. Within thirty (30) days after the end of each fiscal year of Borrower, and as promptly as practical after any material revisions thereto: (A) annual operating budgets (including, without limitation income statements and other annual operating budget materials provided to the Borrower's board of directors) for the current fiscal year of Borrower, and (B) annual financial projections for the current fiscal year of Borrower as approved by Borrower's Board of Directors, together with any related business forecasts used in the preparation of such annual financial projections, all prepared in a form satisfactory to Agent in its sole and absolute discretion, exercised in good faith;

(f) Other Statements. Within five (5) days of delivery, copies of all statements, reports and notices made generally available to Borrower's security holders or to any holders of Subordinated Debt;

(g) SEC Filings. In the event that Borrower becomes subject to the reporting requirements under the Exchange Act, within five (5) days of filing, copies of all periodic and other reports, proxy statements and other materials filed by Borrower with the SEC, any Governmental Authority succeeding to any or all of the functions of the SEC or with any national securities exchange, or distributed to its shareholders, as the case may be. Documents required to be delivered pursuant to the terms hereof (to the extent any such documents are included in materials otherwise filed with the SEC) may be delivered electronically and if so delivered, shall be deemed to have been delivered on the date on which Borrower posts such documents, or provides a link thereto, on Borrower's website on the internet at Borrower's website address;

(h) Legal Action Notice. A prompt report of any legal actions pending or threatened in writing against Borrower or any of its Subsidiaries that could result in damages or costs to Borrower or any of its Subsidiaries of, individually or in the aggregate, Two Hundred Thousand Dollars ($200,000.00) or more;

(i) SBA Requirements. Within ninety (90) days after the end of each fiscal year of Borrower, and at such other times as Agent may reasonably request to the extent related to SBA regulations, Borrower shall provide to Agent such forms and financial and other information with respect to any business or financial condition of Borrower or any of its Subsidiaries required by the SBA, including, but not limited to (i) forms and information with respect to Agent's or any Lender's reporting requirements under SBA Form 468 (attached hereto as Exhibit F) and (ii) information regarding the full-time equivalent jobs created or retained in connection with any Lender's investment in Borrower, the impact of the financing on Borrower's business in terms of revenues and profits and on taxes paid by Borrower and its employees.

(j) Regulatory Compliance. Upon request of Agent, the Borrower shall use commercially reasonable efforts to promptly (and in any event within twenty (20) days of such request) furnish to Agent all information reasonably requested, to the extent reasonably available to the Borrower in order for Agent or any Lender to comply with the requirements of 13 C.F.R. Section 107.620 or to prepare or file SBA Form 468 and any other information requested or required by the SBA.

(k) Other Financial Information. Other financial information reasonably requested by Agent.

6.3 Inventory; Returns. Keep all Inventory in good and marketable condition, free from material defects. Returns and allowances between Borrower and its Account Debtors shall follow Borrower's customary practices as they exist at the Effective Date. Borrower must promptly notify Agent of all returns, recoveries, disputes and claims that involve more than One Hundred Thousand Dollars ($100,000.00).

6.4 Taxes; Pensions. Timely file, and require each of its Subsidiaries to timely file, all required tax returns and reports and timely pay, and require each of its Subsidiaries to timely pay, all foreign, federal, state and local taxes, assessments, deposits and contributions owed by Borrower and each of its Subsidiaries, except for deferred payment of any taxes contested pursuant to the terms of Section 5.8 hereof, and shall deliver to Agent or any Lender, on demand, appropriate certificates attesting to such payments, and pay all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms.

6.5 Insurance. Keep its business and the Collateral, and the businesses and assets of its Subsidiaries, insured for risks and in amounts standard for companies in Borrower's industry and location and as Agent may reasonably request. Insurance policies shall be in a form, with companies, and in amounts that are reasonably satisfactory to Agent. All property policies shall have a lender's loss payable endorsement showing Agent as lender loss payee and waive subrogation against Agent and shall provide that the insurer must give Agent at least ten (10) days notice before canceling its policy due to Borrower's failure to pay the premium therefor, and thirty (30) days notice before canceling its policy for any other reason, and all such liability policies shall show, or have endorsements showing, Agent as an additional insured. All policies (or the lender's loss payable and additional insured endorsements) shall provide that the insurer shall give Agent on behalf of Lenders at least ten (10) days notice before canceling its policy due to Borrower's failure to pay the premium therefor, and thirty (30) days notice before canceling its policy for any other reason. At Agent's reasonable request, Borrower shall deliver certified copies of policies and evidence of all premium payments. Proceeds payable under any policy shall, at Agent's option, be payable to Agent for the ratable benefit of Lenders on account of the. Obligations. If Borrower fails to obtain insurance as required under this Section 6.5 or to pay any amount or furnish any required proof of payment to third persons and Agent, Agent may make all or part of such payment or obtain such insurance policies required in this Section 6.5, and take any action under the policies Agent deems prudent.

6.6 Operating Accounts.

(a) Maintain its, its Subsidiaries', and its Parent's operating, depository and securities accounts with SVB and SVB's Affiliates, which accounts shall represent at least ninety percent (90.0%) of the dollar value of Borrower's and such Subsidiaries' and Parent's accounts at all financial institutions.

(b) Provide Agent five (5) days prior written notice before establishing any Collateral Account at or with any bank or financial institution (including SVB). For each Collateral Account that Borrower at any time maintains, Borrower shall cause the applicable bank or financial institution at or with which any Collateral Account is maintained to execute and deliver a Control Agreement or other appropriate instrument with respect to such Collateral Account to perfect Agent's Lien in such Collateral Account in accordance with the terms hereunder which Control Agreement may not be terminated without the prior written consent of Agent. The provisions of the previous sentence shall not apply to deposit accounts exclusively used for payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of Borrower's employees and identified to Agent by Borrower as such.

6.7 Protection of Intellectual Property Rights.

(a) (i) Use commercially reasonable efforts to protect, defend and maintain the validity and enforceability of its Intellectual Property; (ii) promptly advise Agent in writing of material infringements of its Intellectual Property; and (iii) not allow any Intellectual Property material to Borrower's business to be abandoned, forfeited or dedicated to the public without Agent's written consent.

(b) Provide written notice to Agent within ten (10) days of entering or becoming bound by any Restricted License (other than over-the-counter software that is commercially available to the public). Borrower shall take such steps as Agent requests to obtain the consent of, or waiver by, any person whose consent or waiver is necessary for (i) any Restricted License to be deemed "Collateral" and for Agent, acting for the ratable benefit of Lenders, to have a security interest in it that might otherwise be restricted or prohibited by law or by the terms of any such Restricted License, whether now existing or entered into in the future, and (ii) Agent to have the ability in the event of a liquidation of any Collateral to dispose of such Collateral in accordance with Agent's and Lenders' rights and remedies under this Agreement and the other Loan Documents.

6.8 Litigation Cooperation. From the date hereof and continuing through the termination of this Agreement, make available to Agent, without expense to Agent, Borrower and its officers, employees and agents and Borrower's books and records, to the extent that Agent may deem them reasonably necessary to prosecute or defend any third-party suit or proceeding instituted by or against Agent and/or any Lender with respect to any Collateral or relating to Borrower.

6.9 Formation or Acquisition of Subsidiaries. At the time that Borrower forms any direct or indirect Subsidiary or acquires any direct or indirect Subsidiary after the Effective Date, Borrower shall (a) cause such new Subsidiary to become a Borrower hereunder, and to execute such joinder agreements, security agreements, authorizations for filing financing statements and/or Control Agreements, all in form and substance satisfactory to Agent and Lenders (including being sufficient to grant Agent a first priority Lien (subject to Permitted Liens that may expressly have superiority to Agent's Lien hereunder) in and to the assets of such newly formed or acquired Subsidiary), (b) provide to Agent appropriate certificates and powers and financing statements, pledging all of the direct or beneficial ownership interest in such new Subsidiary, in form and substance satisfactory to Agent and Lenders, and (c) provide to Agent all other documentation in form and substance satisfactory to Agent and Lenders, including one or more opinions of counsel satisfactory to Agent and Lenders, which in the opinion of Agent and Lenders is appropriate with respect to the execution and delivery of the applicable documentation referred to above. Any document, agreement, or instrument executed or issued pursuant to this Section 6.9 shall be a Loan Document.

6.10 Further Assurances. Execute any further instruments and take further action as Agent reasonably requests to perfect or continue Agent's and Lenders' Lien in the Collateral or to effect the purposes of this Agreement.

6.11 Post-Closing. Within five (5) days following the Effective Date, deliver to Agent a lenders' loss payable endorsement to Borrower's property insurance policy, and an additional insured endorsement to Borrower's liability insurance policy, in each case in form and substance satisfactory to Agent.

7. NEGATIVE COVENANTS

Borrower shall not do any of the following without Agent's prior written consent and the prior written consent of the Required Lenders:

7.1 Dispositions. Convey, sell, lease, transfer, assign, or otherwise dispose of (collectively, "**Transfer**"), or permit any of its Subsidiaries to Transfer, all or any part of its business or property, except for Transfers (a) of Inventory in the ordinary course of business; (b) of worn-out or obsolete Equipment; (c) in connection with Permitted Liens and Permitted Investments; (d) of non-exclusive licenses for the use of the property of Borrower or its Subsidiaries in the ordinary course of business; and (e) in the ordinary course of business, of exclusive licenses that could not result in a legal transfer of title of the licensed property, provided that at any time on or after the date that any portion of the Tranche Two Term Loan Advances have been made, without the prior written consent of Agent and Lenders, Borrower shall not enter into any exclusive license pertaining to CMX001 that is exclusive as to the territory of the United States and that results in a non-refundable cash upfront payment of less than $17,500,000 to Borrower upon entering into such license; provided further that any such cash upfront payment received and any and all royalties, milestone payments or other proceeds arising from such licensing agreement shall be paid to a deposit account that is subject to a Control Agreement.

7.2 Changes in Business, Management, Ownership, or Business Locations. (a) Engage in or permit any of its Subsidiaries to engage in any business other than the businesses currently engaged in by Borrower and such Subsidiary, as applicable, or reasonably related thereto; (b) liquidate or dissolve; or (c) (i) have a change in senior management such that a Key Person resigns, is terminated, or is no longer actively involved in the management of the Borrower in his/her current position and is not replaced with a person reasonably acceptable to Agent within ninety (90) days after departure from Borrower; or (ii) enter into any transaction or series of related transactions in which the stockholders of Borrower who were not stockholders immediately prior to the first such transaction own more than forty percent (40.0%) of the voting stock of Borrower immediately after giving effect to such transaction or related series of such transactions (other than by the sale of Borrower's equity securities in a public offering or to venture capital investors so long as Borrower identifies to Agent the venture capital investors prior to the closing of the transaction and provides to Agent a description of the material terms of the transaction). Borrower shall not, without at least thirty (30) days prior written notice to Agent: (1) add any new offices or business locations, including warehouses (unless such new offices or business locations contain less than Twenty-Five Thousand Dollars ($25,000.00) in Borrower's assets or property) or deliver any portion of the Collateral valued, individually or in the aggregate, in excess of Twenty-Five Thousand Dollars. ($25,000.00) to a bailee at a location other than to a bailee and at a location already disclosed in the Perfection Certificate, (2) change its jurisdiction of organization, (3) change its organizational structure or type, (4) change its legal name, or (5) change any organizational number (if any) assigned by its jurisdiction of organization. If Borrower intends to deliver any portion of the Collateral valued, individually or in the aggregate, in excess of Twenty-Five Thousand Dollars ($25,000.00) per location to a bailee, and Agent, for the benefit of Lenders, and such bailee are not already parties to a bailee agreement governing both the Collateral and the location to which Borrower intends to deliver the Collateral, then Borrower will first receive the written consent of Agent, and such bailee shall execute and deliver a bailee agreement in form and substance reasonably satisfactory to Agent.

7.3 Mergers or Acquisitions. Merge or consolidate, or permit any of its Subsidiaries to merge or consolidate, with any other Person, or acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the capital stock or property of another Person. A Subsidiary may merge or consolidate into another Subsidiary or into Borrower.

7.4 Indebtedness. Create, incur, assume, or be liable for any Indebtedness, or permit any Subsidiary to do so, other than Permitted Indebtedness.

7.5 Encumbrance. Create, incur, allow, or suffer any Lien on any of its property, or assign or convey any right to receive income, including the sale of any Accounts, or permit any of its Subsidiaries to do so, except for Permitted Liens, or permit any Collateral not to be subject to the first priority security interest granted herein (which Collateral may be subject to Permitted Liens), or enter into any agreement, document, instrument or other arrangement (except with or in favor of Agent for the benefit of Lenders) with any Person which directly or indirectly prohibits or has the effect of prohibiting Borrower or any Subsidiary from assigning, mortgaging, pledging, granting a security interest in or upon, or encumbering any of Borrower's or any Subsidiary's Intellectual Property, except as is otherwise permitted in Section 7.1 hereof and the definition of "Permitted Liens" herein.

7.6 Maintenance of Collateral Accounts. Maintain any Collateral Account except pursuant to the terms of Section 6.6(b) hereof.

7.7 Distributions; Investments. (a) Pay any dividends or make any distribution or payment or redeem, retire or purchase any capital stock, except for repurchases of the stock of terminated employees or consultants in accordance with the repurchase agreements and/or equity incentive plan and/or repurchases of stock pursuant to a right of first refusal in an aggregate amount not to exceed One Hundred Thousand Dollars ($100,000.00) per fiscal year, or (b) directly or indirectly make any Investment other than Permitted Investments, or permit any of its Subsidiaries to do so.

7.8 Transactions with Affiliates. Directly or indirectly enter into or permit to exist , or permit any Subsidiary of Borrower to directly or indirectly enter into or permit to exist, any material transaction with any Affiliate of Borrower or any Subsidiary of any Borrower, except as permitted in Section 7.2(c)(ii) and Section 7.7(a) and except for other transactions that are in the ordinary course of Borrower's or such Subsidiary's business, upon fair and reasonable terms that are no less favorable to Borrower or such Subsidiary than would be obtained in an arm's length transaction with a non-affiliated Person.

7.9 Subordinated Debt. (a) Make or permit any payment on any Subordinated Debt, except under the terms of the subordination, intercreditor, or other similar agreement to which such Subordinated Debt is subject, or (b) amend any provision in any document relating to the Subordinated Debt which would increase the amount thereof or adversely affect the subordination thereof to Obligations owed to Agent and/or Lenders.

7.10 Compliance. Become an "investment company" or a company controlled by an "investment company", under the Investment Company Act of 1940, as amended, or undertake as one of its important activities extending credit to purchase or carry margin stock (as defined in Regulation U of the Board of Governors of the Federal Reserve System), or use the proceeds of any Credit Extension for that purpose; fail to meet the minimum funding requirements of ERISA, permit a Reportable Event or Prohibited Transaction, as defined in ERISA, to occur; fail to comply with the Federal Fair Labor Standards Act or violate any other law or regulation, if the violation could reasonably be expected to have a material adverse effect on Borrower's business, or permit any of its Subsidiaries to do so; withdraw or permit any Subsidiary to withdraw from participation in, permit partial or complete termination of, or permit the occurrence of any other event with respect to, any present pension, profit sharing and deferred compensation plan which could reasonably be expected to result in any liability of Borrower, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other governmental agency.

8. EVENTS OF DEFAULT

Any one of the following shall constitute an event of default (an "**Event of Default**") under this Agreement:

8.1 Payment Default. Borrower fails to (a) make any payment of principal or interest on any Credit Extension on its due date, or (b) pay any other Obligations within three (3) Business Days after such Obligations are due and payable (which three (3) Business Day cure period shall not apply to payments due on the Maturity Date). During the cure period, the failure to make or pay any payment specified under clause (a) or (b) hereunder is not an Event of Default (but no Credit Extension will be made during the cure period);

8.2 Covenant Default.

(a) Borrower fails or neglects to perform any obligation in Sections 6.1(a) (with respect to Borrower's maintenance of legal existence set forth in first sentence only), 6.2, 6.4, 6.5, 6.6, or 6.9, or violates any covenant in Section 7; or

(b) Borrower fails or neglects to perform, keep, or observe any other term, provision, condition, covenant or agreement contained in this Agreement or any Loan Documents, and as to any default (other than those specified in this Section 8) under such other term, provision, condition, covenant or agreement that can be cured, has failed to cure the default within ten (10) days after the occurrence thereof; provided, however, that if the default cannot by its nature be cured within the ten (10) day period or cannot after diligent attempts by Borrower be cured within such ten (10) day period, and such default is likely to be cured within a reasonable time, then Borrower shall have an additional period (which shall not in any case exceed thirty (30) days) to attempt to cure such default, and within such reasonable time period the failure to cure the default shall not be deemed an Event of Default (but no Credit Extensions shall be made during such cure period). Cure periods provided under this section shall not apply, among other things, to financial covenants or any other covenants set forth in clause (a) above;

8.3 Material Adverse Change. A Material Adverse Change occurs;

8.4 Attachment; Levy; Restraint on Business.

(a) (i) The service of process seeking to attach, by trustee or similar process, any funds of Borrower or of any entity under the control of Borrower (including a Subsidiary) on deposit or otherwise maintained with Agent or any Lender or any Affiliate of Agent or any Lender, or (ii) a notice of lien or levy is filed against any of Borrower's assets by any government agency, and the same under subclauses (i) and (ii) hereof are not, within ten (10) days after the occurrence thereof, discharged or stayed (whether through the posting of a bond or otherwise); provided, however, no Credit Extensions shall be made during any ten (10) day cure period; or

(b) (i) any material portion of Borrower's assets is attached, seized, levied on, or comes into possession of a trustee or receiver, or (ii) any court order enjoins, restrains, or prevents Borrower from conducting any material part of its business;

8.5 Insolvency. (a) Borrower is unable to pay its debts (including trade debts) as they become due or otherwise becomes insolvent or Borrower fails to be solvent as described under Section 5.5 hereof; (b) Borrower begins an Insolvency Proceeding; or (c) an Insolvency Proceeding is begun against Borrower and not dismissed or stayed within forty-five (45) days (but no Credit Extensions shall be made while of any of the conditions described in clause (a) exist and/or until any Insolvency Proceeding is dismissed);

8.6 Other Agreements. There is, under any agreement to which Borrower is a party with a third party or parties, (a) any default resulting in a right by such third party or parties, whether or not exercised, to accelerate the maturity of any Indebtedness in an amount individually or in the aggregate in excess of Two Hundred Thousand Dollars ($200,000.00); or (b) any default by Borrower, the result of which could have a material adverse effect on Borrower's business;

8.7 Judgments. One or more final judgments, orders, or decrees for the payment of money in an amount, individually or in the aggregate, of at least Two Hundred Thousand Dollars ($200,000.00) (not covered by independent third-party insurance as to which liability has been accepted by such insurance carrier) shall be rendered against Borrower and the same are not, within ten (10) days after the entry thereof, discharged or execution thereof stayed or bonded pending appeal, or such judgments are not discharged prior to the expiration of any such stay (provided that no Credit Extensions will be made prior to the discharge, stay, or bonding of such judgment, order, or decree);

8.8 Misrepresentations. Borrower or any Person acting for Borrower makes any representation, warranty, or other statement now or later in this Agreement, any Loan Document or in any writing delivered to Agent and/or Lenders or to induce Agent and/or Lenders to enter this Agreement or any Loan Document, and such representation, warranty, or other statement is incorrect in any material respect when made; or

8.9 Subordinated Debt. Any document, instrument, or agreement evidencing, or any subordination agreement relating to, any Subordinated Debt shall for any reason be revoked or invalidated or otherwise cease to be in full force and effect, any Person shall be in breach thereof or contest in any manner the validity or enforceability thereof or deny that it has any further liability or obligation thereunder, or the Lien created hereunder shall at any time fail to constitute a valid and perfected Lien on the Collateral purported to be secured thereby, subject to no prior or equal Lien other than Permitted Liens having priority by operation of applicable law.

9. RIGHTS AND REMEDIES

9.1 Rights and Remedies. While an Event of Default occurs and continues Agent may, and at the written direction of any Lender shall, without notice or demand, do any or all of the following:

(a) declare all Obligations immediately due and payable (but if an Event of Default described in Section 8.5 occurs all Obligations are immediately due and payable without any action by Agent and/or Lenders);

(b) stop advancing money or extending credit for Borrower's benefit under this Agreement or under any other agreement between Borrower and Agent and/or Lenders (but if an Event of Default described in Section 8.5 occurs all commitments and obligations to advance money or extend credit to Borrower on the part of Agent or any Lender shall cease and terminate immediately without any action by Agent and/or Lenders);

(c) settle or adjust disputes and claims directly with Account Debtors for amounts on terms and in any order that Agent considers advisable, notify any Person owing Borrower money of Agent's and Lenders' security interest in such funds, and verify the amount of such account;

(d) make any payments and do any acts it considers necessary or reasonable to protect the Collateral and/or its security interest in the Collateral. Borrower shall assemble the Collateral if Agent requests and make it available as Agent designates. Agent may enter premises where the Collateral is located, take and maintain possession of any part of the Collateral, and pay, purchase, contest, or compromise any Lien which appears to be prior or superior to its security interest and pay all expenses incurred. Borrower grants Agent for the benefit of Lenders a license to enter and occupy any of its premises, without charge, to exercise any of Agent's rights or remedies;

(e) apply to the Obligations any (i) balances and deposits of Borrower it holds, or (ii) any amount held by Agent or Lenders owing to or for the credit or the account of Borrower;

(f) ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell the Collateral. Agent is hereby granted a non-exclusive, royalty-free license or other right to use, without charge, Borrower's labels, Patents, Copyrights, mask works, rights of use of any name, trade secrets, trade names, Trademarks, and advertising matter, or any similar property as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and, in connection with Agent's exercise of its rights under this Section, Borrower's rights under all licenses and all franchise agreements inure to Agent for its benefit and for the ratable benefit of Lenders;

(g) place a "hold" on any account maintained with Agent or Lenders and/or deliver a notice of exclusive control, any entitlement order, or other directions or instructions pursuant to any Control Agreement or similar agreements providing control of any Collateral;

(h) demand and receive possession of Borrower's Books; and

(i) exercise all rights and remedies available to Agent and/or Lenders under the Loan Documents or at law or equity, including all remedies provided under the Code (including disposal of the Collateral pursuant to the terms thereof).

All costs and expenses (including reasonable attorneys' fees and expenses) incurred by Agent in the course of the exercise by Agent of any or all of its rights or remedies under this Section 9.1 shall be considered Lenders' Expenses owing to Agent and immediately due and payable, bearing interest at the applicable rate specified in Section 2.3(b), and secured by the Collateral.

9.2 Power of Attorney. Borrower hereby irrevocably appoints Agent as its lawful attorney-in-fact, exercisable upon the occurrence and during the continuance of an Event of Default, to: (a) endorse Borrower's name on any checks or other forms of payment or security; (b) sign Borrower's name on any invoice or bill of lading for any Account or drafts against Account Debtors; (c) settle and adjust disputes and claims about the Accounts directly with Account Debtors, for amounts and on terms Agent determines reasonable; (d) make, settle, and adjust all claims under Borrower's insurance policies; (e) pay, contest or settle any Lien, charge, encumbrance, security interest, and adverse claim in or to the Collateral, or any judgment based thereon, or otherwise take any action to terminate or discharge the same; and (f) transfer the Collateral into the name of Agent for the ratable benefit of Lenders or a third party as the Code permits. Borrower hereby appoints Agent as its lawful attorney-in-fact to sign Borrower's name on any documents necessary to perfect or continue the perfection of Agent's and Lenders' security interests in the Collateral regardless of whether an Event of Default has occurred until all Obligations (other than inchoate indemnity obligations) have been satisfied in full and Agent and Lenders are under no further obligation to make Credit Extensions hereunder. Agent's foregoing appointment as Borrower's attorney in fact, and all of Agent's rights and powers, coupled with an interest, are irrevocable until all Obligations (other than inchoate indemnity obligations) have been fully repaid and performed and Agent's and Lenders' obligation to provide Credit Extensions terminates. All costs and expenses (including reasonable attorneys' fees and expenses) incurred by Agent in the course of the exercise by Agent of any or all of its rights or remedies as attorney-in-fact of Borrower under this Section 9.2 shall be considered Lenders' Expenses owing to Agent and immediately due and payable, bearing interest at the applicable rate specified in Section 2.3(b), and secured by the Collateral.

9.3 Protective Payments. If, at any time after the occurrence and during the continuance of an Event of Default, Borrower fails to obtain the insurance called for by Section 6.5, or fails to pay any premium thereon, or fails to pay any other amount which Borrower is obligated to pay under this Agreement or any other Loan Document or fails to pay any maintenance fees, extension fee or other fees or payments payable to any Governmental Authority necessary to continue, maintain, preserve or protect any Intellectual Property of Borrower and its Subsidiaries and/or any rights and remedies of Borrower and its Subsidiaries with respect to such Intellectual Property, Agent may obtain such insurance or make such payment, and all amounts so paid by Agent are Lenders' Expenses owing to Agent and immediately due and payable, bearing interest at the applicable rate specified in Section 2.3(b), and secured by the Collateral. Agent will make reasonable efforts to provide Borrower with notice of Agent obtaining such insurance at the time it is obtained or within a reasonable time thereafter. No payments by Agent are deemed an agreement to make similar payments in the future or Agent's or any Lender's waiver of any Event of Default.

9.4 Application of Payments and Proceeds Upon Default. If an Event of Default has occurred and is continuing, Agent and Lenders may apply any funds in their possession, whether from Borrower account balances, payments, proceeds realized as the result of any collection of Accounts or other disposition of the Collateral, or otherwise, to the Obligations in such order as Agent shall determine in its sole discretion, subject (as among Agent and Lenders only, without creating any rights or remedies in favor of Borrower) to any separate agreement regarding the application of such payments, proceeds or other funds entered into among Agent and Lenders. Any surplus shall be paid to Borrower or other Persons legally entitled thereto; Borrower shall remain liable to Agent and Lenders for any deficiency. If Agent and/or Lenders, in their its good faith business judgment, directly or indirectly enter into a deferred payment or other credit transaction with any purchaser at any sale of Collateral, Agent and each Lender shall have the option, exercisable at any time, of either reducing the Obligations by the principal amount of the purchase price or deferring the reduction of the Obligations until the actual receipt by Agent of cash therefor.

9.5 Agent's and Lenders' Liability for Collateral. So long as Agent and Lenders comply with reasonable banking practices regarding the safekeeping of the Collateral in the possession or under the control of Agent and Lenders, Agent and Lenders shall not be liable or responsible for: (a) the safekeeping of the Collateral; (b) any loss or damage to the Collateral; (c) any diminution in the value of the Collateral; or (d) any act or default of any carrier, warehouseman, bailee, or other Person. Borrower bears all risk of loss, damage or destruction of the Collateral.

9.6 No Waiver; Remedies Cumulative. Agent's and/or any Lender's failure, at any time or times, to require strict performance by Borrower of any provision of this Agreement or any other Loan Document shall not waive, affect, or diminish any right of Agent and/or Lenders thereafter to demand strict performance and compliance herewith or therewith. No waiver hereunder shall be effective unless signed by the party granting the waiver and then is only effective for the specific instance and purpose for which it is given. Agent's and Lenders' rights and remedies under this Agreement and the other Loan Documents are cumulative. Agent and Lenders have all rights and remedies provided under the Code, by law, or in equity. Agent's or any Lender's exercise of one right or remedy is not an election and shall not preclude any Agent and/or any Lender from exercising any other remedy under this Agreement or other remedy available at law or in equity, and Agent's and/or such Lender's waiver of any Event of Default is not a continuing waiver. Agent's and/or any Lender's delay in exercising any remedy is not a waiver, election, or acquiescence.

9.7 Demand Waiver. Borrower waives demand, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees held by Agent on which Borrower is liable.

10. NOTICES

All notices, consents, requests, approvals, demands, or other communication by any party to this Agreement or any other Loan Document must be in writing and shall be deemed to have been validly served, given, or delivered: (a) upon the earlier of actual receipt and three (3) Business Days after deposit in the U.S. mail, first class, registered or certified mail return receipt requested, with proper postage prepaid; (b) upon transmission, when sent by electronic mail or facsimile transmission; (c) one (1) Business Day after deposit with a reputable overnight courier with all charges prepaid; or (d) when delivered, if hand-delivered by messenger, all of which shall be addressed to the party to be notified and sent to the address, facsimile number, or email address indicated below. Each Lender, Agent or Borrower may change its mailing or electronic mail address or facsimile number by giving the other party written notice thereof in accordance with the terms of this Section 10.

If to Borrower:

Chimerix, Inc.
2505 Meridian Parkway, Suite 340
Durham, North Carolina 27713
Attention: Tim Trost
Fax: (919) 806-1146
Email: ttrost@chimerix.com

If to MidCap (as Agent or Lender):

MidCap Financial SBIC, LP
7255 Woodmont Avenue, Suite 200
Bethesda, Maryland 20814
Attention: Portfolio Management- Life Sciences
Fax: (301) 941-1450
Email: Iviera@midcapfinancial.com

with a copy to:

Midcap Financial, LLC
7255 Woodmont Avenue, Suite 200
Bethesda, Maryland 20814
Attention: General Counsel
Fax: (301) 941-1450
Email: rgoodridge@midcapfinancial.com

If to SVB:

Silicon Valley Bank Perimeter One
3005 Carrington Mill Boulevard, Suite 530
Morisville, North Carolina 27560
Attention: Mr. Chris Stoecker
Fax: (919) 442-2155
Email: cstoecker@svb.com

with a copy to:

Riemer & Braunstein, LLP
Three Center Plaza
Boston, Massachusetts 02108
Attn: David A. Ephraim, Esquire
Fax: (617) 880-3456
Email: dephraim@riemerlaw.com

11. CHOICE OF LAW, VENUE AND JURY TRIAL WAIVER

Massachusetts law governs the Loan Documents without regard to principles of conflicts of law. Borrower, Agent and each Lender each submit to the exclusive jurisdiction of the State and Federal courts in Boston, Massachusetts; provided, however, that nothing in this Agreement shall be deemed to operate to preclude Agent or Lenders from bringing suit or taking other legal action in any other jurisdiction to realize on the Collateral or any other security for the Obligations, or to enforce a judgment or other court order in favor of Agent or Lenders. Borrower expressly submits and consents in advance to such jurisdiction in any action or suit commenced in any such court, and Borrower hereby waives any objection that it may have based upon lack of personal jurisdiction, improper venue, or forum non conveniens and hereby consents to the granting of such legal or equitable relief as is deemed appropriate by such court. Borrower hereby waives personal service of the summons, complaints, and other process issued in such action or suit and agrees that service of such summons, complaints, and other process may be made by registered or certified mail addressed to Borrower at the address set forth in Section 10 of this Agreement and that service so made shall be deemed completed upon the earlier to occur of Borrower's actual receipt thereof or three (3) days after deposit in the U.S. mails, proper postage prepaid.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, BORROWER, LENDERS AND AGENT EACH WAIVE THEIR RIGHT TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION ARISING OUT OF OR BASED UPON THIS AGREEMENT, THE LOAN DOCUMENTS OR ANY CONTEMPLATED TRANSACTION, INCLUDING CONTRACT, TORT, BREACH OF DUTY AND ALL OTHER CLAIMS. THIS WAIVER IS A MATERIAL INDUCEMENT FOR BOTH PARTIES TO ENTER INTO THIS AGREEMENT. EACH PARTY HAS REVIEWED THIS WAIVER WITH ITS COUNSEL.

12. GENERAL PROVISIONS

12.1 Successors and Assigns. This Agreement binds and is for the benefit of the successors and permitted assigns of each party. Borrower may not assign this Agreement or any rights or obligations under it without Agent's and each Lender's prior written consent (which may be granted or withheld in Agent's and each Lender's discretion). Lenders and Agent have the right, without the consent of or notice to Borrower, to sell, transfer, assign, negotiate, or grant participation in all or any part of, or any interest in, Agent's and Lenders' obligations, rights, and benefits under this Agreement and the other Loan Documents (other than the Warrant, as to which assignment, transfer and other such actions are governed by the terms of the Warrant).

12.2 Indemnification. Borrower agrees to indemnify, defend and hold Agent and Lenders and their respective directors, officers, employees, agents, attorneys, or any other Person affiliated with or representing Agent or any Lender (each, an "**Indemnified Person**") harmless against: (a) all obligations, demands, claims, and liabilities (collectively, "**Claims**") claimed or asserted by any other party in connection with the transactions contemplated by the Loan Documents; and (b) all losses or expenses (including Lenders Expenses) in any way suffered, incurred, or paid by such Indemnified Person as a result of, following from, consequential to, or arising from transactions between Lenders and Borrower contemplated by the Loan Documents (including reasonable attorneys' fees and expenses), except for Claims, Lenders' Expenses and/or losses directly caused by such Indemnified Person's gross negligence or willful misconduct (collectively, the "**Indemnified Liabilities**").

12.3 Time of Essence. Time is of the essence for the performance of all Obligations in this Agreement.

12.4 Severability of Provisions. Each provision of this Agreement is severable from every other provision in determining the enforceability of any provision.

12.5 Amendments in Writing; Waiver; Integration. No purported amendment or modification of any Loan Document, or waiver, discharge or termination of any obligation under any Loan Document, shall be enforceable or admissible unless, and only to the extent, expressly set forth in a writing signed by the party against which enforcement or admission is sought. Without limiting the generality of the foregoing, no oral promise or statement, nor any action, inaction, delay, failure to require performance or course of conduct shall operate as, or evidence, an amendment, supplement or waiver or have any other effect on any Loan Document. Any waiver granted shall be limited to the specific circumstance expressly described in it, and shall not apply to any subsequent or other circumstance, whether similar or dissimilar, or give rise to, or evidence, any obligation or commitment to grant any further waiver. The Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of the Loan Documents merge into the Loan Documents.

12.6 Counterparts. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Agreement.

12.7 Survival. All covenants, representations and warranties made in this Agreement continue in full force until this Agreement has terminated pursuant to its terms and all Obligations (other than inchoate indemnity obligations and any other obligations which, by their terms, are to survive the termination of this Agreement) have been paid in full and satisfied. The obligation of Borrower in Section 12.2 to indemnify each Lender and Agent shall survive until the statute of limitations with respect to such claim or cause of action shall have run.

12.8 Confidentiality. In handling any confidential information of Borrower, Agent and Lenders shall exercise the same degree of care that they exercise for their own proprietary information, but disclosure of information may be made: (a) to Agent's and Lenders' Subsidiaries or Affiliates (such Subsidiaries and Affiliates, together with Agent and Lenders are, collectively, "**Lender Entities**"); (b) to prospective transferees or purchasers of any interest in the Credit Extensions (provided, however, Agent and Lenders shall use its best efforts to obtain any prospective transferee's or purchaser's agreement to the terms of this provision); (c) as required by law, regulation, subpoena, or other order; (d) to Agent's and Lenders' regulators or as otherwise required in connection with Agent's and Lenders' examination or audit; (e) as Agent and Lenders consider appropriate in exercising their respective remedies under the Loan Documents; and (f) to third-party service providers of Agent or any Lender so long as such service providers have executed a confidentiality agreement with such Agent or Lender with terms no less restrictive than those contained herein. Confidential information does not include information that is either: (i) in the public domain or in Agent's and/or Lenders' possession when disclosed to Agent and/or Lenders, or becomes part of the public domain after disclosure to Agent and/or Lenders through no fault of Agent and Lenders; or (ii) disclosed to Agent and/or Lenders by a third party, if Agent and/or Lenders does not know that the third party is prohibited from disclosing the information. Lender Entities may use confidential information for reporting purposes and the development and distribution of databases and market analyses so long as such confidential information is aggregated and anonymized prior to distribution unless otherwise expressly permitted by Borrower. The provisions of the immediately preceding sentence shall survive the termination of this Agreement.

12.9 Right of Set Off. Borrower hereby grants to Agent, for its benefit and for the ratable benefit of Lenders, and to each Lender, a lien, security interest and right of set off as security for all Obligations to Agent and each Lender, whether now existing or hereafter arising upon and against all deposits, credits, collateral and property, now or hereafter in the possession, custody, safekeeping or control of Agent or any entity under the control of Agent (including an Agent subsidiary) or in transit to any of them. At any time after the occurrence and during the continuance of an Event of Default, without demand or notice, Agent or Lenders, as appropriate, may set off the same or any part thereof and apply the same to any liability or obligation of Borrower even though unmatured and regardless of the adequacy of any other collateral securing the Obligations. ANY AND ALL RIGHTS TO REQUIRE AGENT OR ANY LENDER TO EXERCISE ITS RIGHTS OR REMEDIES WITH RESPECT TO ANY OTHER COLLATERAL WHICH SECURES THE OBLIGATIONS, PRIOR TO EXERCISING ITS RIGHT OF SETOFF WITH RESPECT TO SUCH DEPOSITS, CREDITS OR OTHER PROPERTY OF BORROWER ARE HEREBY KNOWINGLY, VOLUNTARILY AND IRREVOCABLY WAIVED.

12.10 Electronic Execution of Documents. The words "execution," "signed," "signature" and words of like import in any Loan Document shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity and enforceability as a manually executed signature or the use of a paper-based recordkeeping systems, as the case may be, to the extent and as provided for in any applicable law, including, without limitation, any state law based on the Uniform Electronic Transactions Act.

12.11 Captions. The headings used in this Agreement are for convenience only and shall not affect the interpretation of this Agreement.

12.12 Construction of Agreement. The parties mutually acknowledge that they and their attorneys have participated in the preparation and negotiation of this Agreement. In cases of uncertainty this Agreement shall be construed without regard to which of the parties caused the uncertainty to exist.

12.13 Relationship. The relationship of the parties to this Agreement is determined solely by the provisions of this Agreement. The parties do not intend to create any agency, partnership, joint venture, trust, fiduciary or other relationship with duties or incidents different from those of parties to an arm's-length contract.

12.14 Third Parties. Nothing in this Agreement, whether express or implied, is intended to: (a) confer any benefits, rights or remedies under or by reason of this Agreement on any persons other than the express parties to it and their respective permitted successors and assigns; (b) relieve or discharge the obligation or liability of any person not an express party to this Agreement; or (c) give any person not an express party to this Agreement any right of subrogation or action against any party to this Agreement.

12.15 Amendments.

(a) No amendment, modification, termination or waiver of any provision of this Agreement or any other Loan Document, no approval or consent thereunder, or any consent to any departure by Borrower therefrom, shall in any event be effective unless the same shall be in writing and signed by Borrower, Agent and Required Lenders. Except as set forth in clause (b) below, all such amendments, modifications, terminations or waivers requiring the consent of the "Lenders" shall require the written consent of Required Lenders.

(b) No amendment, modification, termination or waiver of any provision of this Agreement or any other Loan Document shall, unless in writing and signed by Agent and each Lender directly affected thereby: (i) increase or decrease the Commitment of any Lender (which shall be deemed to affect all Lenders), (ii) reduce the principal of or rate of interest on any Obligation or the amount of any fees payable hereunder (other than waiving the imposition of the Default Rate), (iii) postpone the date fixed for or waive any payment of principal of or interest on any Term Loan, or any fees or reimbursement obligation hereunder, (iv) release any of the Collateral, or consent to a transfer of any of the Intellectual Property, in each case, except as otherwise expressly permitted in the Loan Documents (which shall be deemed to affect all Lenders), (v) subordinate the Lien granted in favor of Agent, for its benefit and for the ratable benefit of Lenders, securing the Obligations (which shall be deemed to affect all Lenders), (vi) release Borrower from, or consent to Borrower's assignment or delegation of, Borrower's obligations hereunder and under the other Loan Documents (which shall be deemed to affect all Lenders) or (vii) amend, modify, terminate or waive Section 9.4, Section 12.10, the definitions entitled "Commitment Percentage" and "Pro Rata Share" appearing in Section 14.1, as well as any provision of this Agreement referencing such defined term, or this Section 12.15(b).

(c) Notwithstanding any provision in this Section 12.15 to the contrary, no amendment, modification, termination or waiver affecting or modifying the rights or obligations of Agent hereunder shall be effective unless signed by Borrower, Agent and Required Lenders.

Any amendment, modification, supplement, termination, waiver or consent pursuant to this Section 12.15 shall apply equally to, and shall be binding upon, all the Lenders and Agent.

13. AGENT

13.1 Appointment and Authorization of Agent. Each Lender hereby irrevocably appoints, designates and authorizes Agent to take such action on its behalf under the provisions of this Agreement and each other Loan Document and to exercise such powers and perform such duties as are expressly delegated to it by the terms of this Agreement or any other Loan Document, together with such powers as are reasonably incidental thereto. Notwithstanding any provision to the contrary contained elsewhere herein or in any other Loan Document, Agent shall not have any duties or responsibilities, except those expressly set forth herein, nor shall Agent have or be deemed to have any fiduciary relationship with any Lender or participant, and no implied covenants, functions, responsibilities, duties, obligations or liabilities shall be read into this Agreement or any other Loan Document or otherwise exist against Agent. Without limiting the generality of the foregoing sentence, the use of the term "agent" herein and in the other Loan Documents with reference to Agent is not intended to connote any fiduciary or other implied (or express) obligations arising under agency doctrine of any applicable Law. Instead, such term is used merely as a matter of market custom, and is intended to create or reflect only an administrative relationship between independent contracting parties.

13.2 Delegation of Duties. Agent may execute any of its duties under this Agreement or any other Loan Document by or through its, or its Affiliates', agents, employees or attorneys-in-fact and shall be entitled to obtain and rely upon the advice of counsel and other consultants or experts concerning all matters pertaining to such duties. Agent shall not be responsible for the negligence or misconduct of any agent or attorney-in-fact that it selects in the absence of gross negligence or willful misconduct.

13.3 Liability of Agent. Except as otherwise provided herein, no Agent-Related Person shall (a) be liable to any Lender for any action taken or omitted to be taken by any of them under or in connection with this Agreement or any other Loan Document or the transactions contemplated hereby (except for its own gross negligence or willful misconduct in connection with its duties expressly set forth herein), or (b) be responsible in any manner to any Lender or participant of any Lender for any recital, statement, representation or warranty made by Borrower or any officer thereof, contained herein or in any other Loan Document, or in any certificate, report, statement or other document referred to or provided for in, or received by Agent under or in connection with, this Agreement or any other Loan Document, or the validity, effectiveness, genuineness, enforceability or sufficiency of this Agreement or any other Loan Document, or for any failure of Borrower or any other party to any Loan Document to perform its obligations hereunder or thereunder. No Agent-Related Person shall be under any obligation to any Lender or participant to ascertain or to inquire as to the observance or performance of any of the agreements contained in, or conditions of, this Agreement or any other Loan Document, or to inspect the properties, books or records of Borrower or any Affiliate thereof.

13.4 Reliance by Agent. Agent shall be entitled to rely, and shall be fully protected in relying, upon any writing, communication, signature, resolution, representation, notice, consent, certificate, affidavit, letter, telegram, facsimile, telex or telephone message, electronic mail message, statement or other document or conversation believed by it to be genuine and correct and to have been signed, sent or made by the proper Person or Persons, and upon advice and statements of legal counsel (including counsel to Borrower), independent accountants and other experts selected by Agent. Agent shall be fully justified in failing or refusing to take any action under any Loan Document unless it shall first receive such advice or concurrence of all Lenders as it deems appropriate and, if it so requests, it shall first be indemnified to its satisfaction by the Lenders against any and all liability and expense which may be incurred by it by reason of taking or continuing to take any such action. Agent shall in all cases be fully protected in acting, or in refraining from acting, under this Agreement or any other Loan Document in accordance with a request or consent of all Lenders and such request and any action taken or failure to act pursuant thereto shall be binding upon all the Lenders.

13.5 Notice of Default. Agent shall not be deemed to have knowledge or notice of the occurrence of any Event of Default, unless Agent shall have received written notice from a Lender or Borrower, expressly stating that such Event of Default exists and describing such Event of Default. Agent will notify the Lenders of its receipt of any such notice. Agent shall take such action with respect to an Event of Default as may be directed in writing by the Required Lenders in accordance with Section 9(a); provided, however, that while an Event of Default has occurred and is continuing, Agent may (but shall not be obligated to) take such action, or refrain from taking such action, with respect to such Event of Default as Agent shall deem advisable or in the best interest of the Lenders, including without limitation, satisfaction of other security interests, liens or encumbrances on the Collateral not permitted under the Loan Documents, payment of taxes on behalf of Borrower, payments to landlords, warehouseman, bailees and other Persons in possession of the Collateral and other actions to protect and safeguard the Collateral, and actions with respect to insurance claims for casualty events affecting Borrower and/or the Collateral and payments to landlords, warehouseman, bailees and other Persons in possession of the Collateral, payments to Governmental Authorities to maintain, continue, preserve and protect the Intellectual Property of Borrower and its Subsidiaries and/or the rights and remedies of Borrower and its Subsidiaries with respect thereto . All costs and expenses (including reasonable attorneys' fees and expenses) incurrent by Agent in taking actions described in this Section 13.5 (including any and all such amounts so paid by Agent) are Lenders' Expenses owing to Agent and immediately due and payable, bearing interest at the then highest rate applicable to the Obligations, and secured by the Collateral.

13.6 Credit Decision; Disclosure of Information by Agent. Each Lender acknowledges that no Agent-Related Person has made any representation or warranty to it, and that no act by Agent hereafter taken, including any consent to and acceptance of any assignment or review of the affairs of Borrower or any Affiliate thereof, shall be deemed to constitute any representation or warranty by any Agent-Related Person to any Lender as to any matter, including whether Agent-Related Persons have disclosed material information in their possession. Each Lender represents to Agent that it has, independently and without reliance upon any Agent-Related Person and based on such documents and information as it has deemed appropriate, made its own appraisal of, and investigation into, the business, prospects, operations, property, financial and other condition and creditworthiness of Borrower and its respective Subsidiaries, and all applicable bank or other regulatory Laws relating to the transactions contemplated hereby, and made its own decision to enter into this Agreement and to extend credit to Borrower hereunder. Each Lender also represents that it will, independently and without reliance upon any Agent-Related Person and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit analysis, appraisals and decisions in taking or not taking action under this Agreement and the other Loan Documents, and to make such investigations as it deems necessary to inform itself as to the business, prospects, operations, property, financial and other condition and creditworthiness of Borrower. Except for notices, reports and other documents expressly required to be furnished to the Lenders by Agent herein, Agent shall not have any duty or responsibility to provide any Lender with any credit or other information concerning the business, prospects, operations, property, financial and other condition or creditworthiness of Borrower or any of its Affiliates which may come into the possession of any Agent-Related Person.

13.7 Indemnification of Agent. Whether or not the transactions contemplated hereby are consummated, each Lender shall, severally and pro rata based on its respective Pro Rata Share, indemnify upon demand each Agent-Related Person (to the extent not reimbursed by or on behalf of Borrower and without limiting the obligation of Borrower to do so), and hold harmless each Agent-Related Person from and against any and all Indemnified Liabilities incurred by it; *provided, however*, that no Lender shall be liable for the payment to any Agent-Related Person of any portion of such Indemnified Liabilities to the extent determined in a judgment by a court of competent jurisdiction to have resulted from such Agent-Related Person's own gross negligence or willful misconduct; *provided, however*, that no action taken in accordance with the directions of the Required Lenders shall be deemed to constitute gross negligence or willful misconduct for purposes of this Section 13.7. Without limitation of the foregoing, each Lender shall, severally and pro rata based on its respective Pro Rata Share, reimburse Agent upon demand for its ratable share of any costs or out-of-pocket expenses (including Lenders' Expenses incurred after the closing of the transactions contemplated by this Agreement) incurred by Agent (in its capacity as Agent, and not as a Lender) in connection with the preparation, execution, delivery, administration, modification, amendment or enforcement (whether through negotiations, legal proceedings or otherwise) of, or legal advice in respect of rights or responsibilities under, this Agreement, any other Loan Document, or any document contemplated by or referred to herein, to the extent that Agent is not reimbursed for such expenses by or on behalf of Borrower. The undertaking in this Section 13.7 shall survive the payment in full of the Obligations, the termination of this Agreement and the resignation of Agent.

13.8 Agent in its Individual Capacity. With respect to its Credit Extensions, MidCap shall have the same rights and powers under this Agreement as any other Lender and may exercise such rights and powers as though it were not Agent, and the terms "Lender" and "Lenders" include MidCap in its individual capacity.

13.9 Successor Agent.

(a) Agent may at any time assign its rights, powers, privileges and duties hereunder to (i) another Lender, or (ii) any Person to whom Agent, in its capacity as a Lender, has assigned (or will assign, in conjunction with such assignment of agency rights hereunder) fifty percent (50.0%) or more of the aggregate outstanding Credit Extensions to Agent, in its capacity as a Lender, in each case without the consent of the Lenders or Borrower. Following any such assignment, Agent shall give notice to the Lenders and Borrower. An assignment by Agent pursuant to this subsection (a) shall not be deemed a resignation by Agent for purposes of subsection (b) below.

(b) Without limiting the rights of Agent to designate an assignee pursuant to subsection (a) above, Agent may at any time give notice of its resignation to the Lenders and Borrower. Upon receipt of any such notice of resignation, Required Lenders shall have the right to appoint a successor Agent. If no such successor shall have been so appointed by Required Lenders and shall have accepted such appointment within ten (10) Business Days after the retiring Agent gives notice of its resignation, then the retiring Agent may, on behalf of the Lenders, appoint a successor Agent*; provided, however*, that if Agent shall notify Borrower and the Lenders that no Person has accepted such appointment, then such resignation shall nonetheless become effective in accordance with such notice from Agent that no Person has accepted such appointment and, from and following delivery of such notice, (i) the retiring Agent shall be discharged from its duties and obligations hereunder and under the other Loan Documents, and (ii) all payments, communications and determinations provided to be made by, to or through Agent shall instead be made by or to each Lender directly, until such time as Required Lenders appoint a successor Agent as provided for above in this subsection (b).

(c) Upon (i) an assignment permitted by subsection (a) above, or (ii) the acceptance of a successor's appointment as Agent pursuant to subsection (b) above, such successor shall succeed to and become vested with all of the rights, powers, privileges and duties of the Agent, and all the Liens in the Collateral securing the Obligations granted pursuant to this Agreement and the other Loan Documents to and/or held by, the assigning or retiring (or retired) Agent, and the assigning or retiring Agent shall be discharged from all of its duties and obligations hereunder and under the other Loan Documents (if not already discharged therefrom as provided above in this subsection (c)). The fees payable by Borrower to a an assignee or successor Agent shall be the same as those payable to its predecessor unless otherwise agreed between Borrower and such successor. After the assigning or retiring Agent's resignation hereunder and under the other Loan Documents, the provisions of this Section 13 shall continue in effect for the benefit of such assigning or retiring Agent and its sub-agents in respect of any actions taken or omitted to be taken by any of them while the assigning or retiring Agent was acting or was continuing to act as Agent.

13.10 Agent May File Proofs of Claim. In case of the pendency of any receivership, insolvency, liquidation, bankruptcy, reorganization, arrangement, adjustment, composition or other judicial proceeding relative to Borrower, Agent (irrespective of whether the principal of any Loan, shall then be due and payable as herein expressed or by declaration or otherwise and irrespective of whether Agent shall have made any demand on Borrower) shall be entitled and empowered, by intervention in such proceeding or otherwise:

(a) to file and prove a claim for the whole amount of the principal and interest owing and unpaid in respect of the Credit Extensions and all other Obligations that are owing and unpaid and to file such other documents as may be necessary or advisable in order to have the claims of the Lenders and Agent (including any claim for the reasonable compensation, expenses, disbursements and advances of the Lenders and Agent and their respective agents and counsel and all other amounts due the Lenders and Agent allowed in such judicial proceeding); and

(b) to collect and receive any monies or other property payable or deliverable on any such claims and to distribute the same;

and any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such judicial proceeding is hereby authorized by each Lender to make such payments to Agent and, in the event that Agent shall consent to the making of such payments directly to the Lenders, to pay to Agent any amount due for the reasonable compensation, expenses, disbursements and advances of Agent and its agents and counsel, and any other amounts due Agent under Section 2.4(0. To the extent that Agent fails timely to do so, each Lender may file a claim relating to such Lender's claim.

13.11 Collateral and Guaranty Matters. The Lenders irrevocably authorize Agent, at its option and in its discretion, to release any Lien on any Collateral granted to or held by Agent under any Loan Document (a) upon the date that all Obligations due hereunder have been fully and indefeasibly paid in full and no Term Loan Commitments or other obligations of any Lender to provide funds to Borrower under this Agreement remain outstanding, or (b) that is transferred or to be transferred as part of or in connection with any Transfer permitted hereunder or under any other Loan Document. Upon request by Agent at any time, all Lenders will confirm in writing Agent's authority to release its interest in particular types or items of Property, pursuant to this Section 13.11.

13.12 Cooperation of Borrower. If necessary, Borrower agrees to (a) execute any documents (including new Secured Promissory Notes) reasonably required to effectuate and acknowledge each assignment of a Term Loan Commitment or Loan to an assignee in accordance with Section 12.1, (b) make Borrower's management available to meet with Agent and prospective participants and assignees of Term Loan Commitments or Credit Extensions and (c) assist Agent or the Lenders in the preparation of information relating to the financial affairs of Borrower as any prospective participant or assignee of a Term Loan Commitment or Term Loan reasonably may request. Subject to the provisions of Section 12.8, Borrower authorizes each Lender to disclose to any prospective participant or assignee of a Term Loan Commitment, any and all information in such Lender's possession concerning Borrower and its financial affairs which has been delivered to such Lender by or on behalf of Borrower pursuant to this Agreement, or which has been delivered to such Lender by or on behalf of Borrower in connection with such Lender's credit evaluation of Borrower prior to entering into this Agreement.

14. DEFINITIONS

14.1 Definitions. As used in the Loan Documents, the word "shall" is mandatory, the word "may" is permissive, the word "or" is not exclusive, the words "includes" and "including" are not limiting, the singular includes the plural, and numbers denoting amounts that are set off in brackets are negative. As used in this Agreement, the following capitalized terms have the following meanings:

"**Account**" is any "account" as defined in the Code with such additions to such term as may hereafter be made, and includes, without limitation, all accounts receivable and other sums owing to Borrower.

"**Account Debtor**" is any "account debtor" as defined in the Code with such additions to such term as may hereafter be made.

"**Affiliate**" is, with respect to any Person, each other Person that owns or controls directly or indirectly the Person, any Person that controls or is controlled by or is under common control with the Person, and each of that Person's senior executive officers, directors, partners and, for any Person that is a limited liability company, that Person's managers and members.

"**Agent**" is defined in the preamble hereof.

"**Agent-Related Person**" means the Agent, together with its Affiliates, and the officers, directors, employees, agents, advisors, auditors and attorneys-in-fact of such Persons; provided, however, that no Agent-Related Person shall be an Affiliate of Borrower.

"**Agreement**" is defined in the preamble hereof.

"**Amortization Date**" is (a) with respect to the Tranche One Term Loan Advance, the eleventh (11th) Payment Date following the first (15t) Payment Date following the Funding Date of the Tranche One Term Loan Advance, and (b) with respect to each Tranche Two Term Loan Advance, the fifth (5th) Payment Date following the first (15) Payment Date following the Funding Date of such Tranche Two Term Loan Advance.

"**Annual Financial Statements**" is defined in Section 6.2(c).

"**Bank Services**" are any products, credit services, and/or financial accommodations previously, now, or hereafter provided to Borrower or any of its Subsidiaries by SVB or any of its Affiliates, including, without limitation, any letters of credit, cash management services (including, without limitation, merchant services, direct deposit of payroll, business credit cards, and check cashing services), interest rate swap arrangements, and foreign exchange services, as any such products or services may be identified in SVB's various agreements related thereto (each, a "**Bank Services Agreement**").

"**Bank Services Agreement**" is defined in the definition of "Bank Services" appearing alphabetically in this Section 14.1.

"**BARDA Contract**" means the Award/Contract numbered HHS0100201100013C and dated February 16, 2011 issued by Office of Acquisitions Management, Contracts, and Grants in favor of Borrower for the development of CMX001 for the treatment of smallpox.

"**BARDA Event**" is the United States government's exercise of its option to extend the term of the BARDA Contract for at least one (1) year pursuant to Part 1.3 of the BARDA Contract, as evidenced by documentation or other evidence reasonably satisfactory to Agent.

"**Borrower**" is defined in the preamble hereof.

"**Borrower's Books**" are all Borrower's books and records including ledgers, federal and state tax returns, records regarding Borrower's assets or liabilities, the Collateral, business operations or financial condition, and all computer programs or storage or any equipment containing such information.

"**Borrowing Resolutions**" are, with respect to any Person, those resolutions adopted by such Person's Board of Directors and delivered by such Person to Agent approving the Loan Documents to which such Person is a party and the transactions contemplated thereby, together with a certificate executed by its Secretary on behalf of such Person certifying that (a) such Person has the authority to execute, deliver, and perform its obligations under each of the Loan Documents to which it is a party, (b) that attached as Exhibit A to such certificate is a true, correct, and complete copy of the resolutions then in full force and effect authorizing and ratifying the execution, delivery, and performance by such Person of the Loan Documents to which it is a party, (c) the name(s) of the Person(s) authorized to execute the Loan Documents on behalf of such Person, together with a sample of the true signature(s) of such Person(s), and (d) that Agent and Lenders may conclusively rely on such certificate unless and until such Person shall have delivered to Agent a further certificate canceling or amending such prior certificate.

"**Business Day**" is any day that is not a Saturday, Sunday or a day on which Agent is closed.

"**Cash Equivalents**" means (a) marketable direct obligations issued or unconditionally guaranteed by the United States or any agency or any State thereof having maturities of not more than one (1) year from the date of acquisition; (b) commercial paper maturing no more than one (1) year after its creation and having the highest rating from either Standard & Poor's Ratings Group or Moody's Investors Service, Inc.; (c) SVB's certificates of deposit issued maturing no more than one (1) year after issue; and (d) money market funds at least ninety-five percent (95%) of the assets of which constitute Cash Equivalents of the kinds described in clauses (a) through (c) of this definition.

"**Claims**" is defined in Section 12.2.

"**CMX-157 Event**" is completion by Borrower of a biopharmaceutical partnership, collaboration or licensing agreement with a third party in connection with the development of CMX-157, which partnership, collaboration or licensing agreement results in an unconditional initial upfront payment to the Borrower of not less than $5,000,000 upon the consummation of such partnership.

"**Code**" is the Uniform Commercial Code, as the same may, from time to time, be enacted and in effect in the Commonwealth of Massachusetts; provided, that, to the extent that the Code is used to define any term herein or in any Loan Document and such term is defined differently in different Articles or Divisions of the Code, the definition of such term contained in Article or Division 9 shall govern; provided further, that in the event that, by reason of mandatory provisions of law, any or all of the attachment, perfection, or priority of, or remedies with respect to, Agent's and Lenders' Lien on any Collateral is governed by the Uniform Commercial Code in effect in a jurisdiction other than the Commonwealth of Massachusetts, the term "Code" shall mean the Uniform Commercial Code as enacted and in effect in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority, or remedies and for purposes of definitions relating to such provisions.

"**Collateral**" is any and all properties, rights and assets of Borrower described on Exhibit A.

"**Collateral Account**" is any Deposit Account, Securities Account, or Commodity Account.

"**Commitment Percentage**" means, with respect to each Lender, the percentage set forth opposite such Lender's name on Schedule 1.

"**Commodity Account**" is any "commodity account" as defined in the Code with such additions to such term as may hereafter be made.

"**Compliance Certificate**" is that certain certificate in the form attached hereto as Exhibit C.

"**Contingent Obligation**" is, for any Person, any direct or indirect liability, contingent or not, of that Person for (a) any indebtedness, lease, dividend, letter of credit or other obligation of another such as an obligation, in each case, directly or indirectly guaranteed, endorsed, co-made, discounted or sold with recourse by that Person, or for which that Person is directly or indirectly liable; (b) any obligations for undrawn letters of credit for the account of that Person; and (c) all obligations from any interest rate, currency or commodity swap agreement, interest rate cap or collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; but "Contingent Obligation" does not include endorsements in the ordinary course of business. The amount of a Contingent Obligation is the stated or determined amount of the primary obligation for which the Contingent Obligation is made or, if not determinable, the maximum reasonably anticipated liability for it determined by the Person in good faith; but the amount may not exceed the maximum of the obligations under any guarantee or other support arrangement.

"**Control Agreement**" is any control agreement entered into among the depository institution at which Borrower maintains a Deposit Account or the securities intermediary or commodity intermediary at which Borrower maintains a Securities Account or a Commodity Account, Borrower, and Agent pursuant to which Agent obtains control (within the meaning of the Code) for its benefit and for the benefit of Lenders over such Deposit Account, Securities Account, or Commodity Account.

"**Copyrights**" are any and all copyright rights, copyright applications, copyright registrations and like protections in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret.

"**Credit Extension**" is any Term Loan, or any other extension of credit by Lenders for Borrower's benefit under and pursuant to this Agreement.

"**Default Rate**" is defined in Section 2.3(b).

"**Deposit Account**" is any "deposit account" as defined in the Code with such additions to such term as may hereafter be made.

"**Designated Deposit Account**" is Borrower's asset management account, account number 173103198383, maintained with SVB.

"**Dollars,**" "dollars" or use of the sign "**$**" means only lawful money of the United States and not any other currency, regardless of whether that currency uses the "$" sign to denote its currency or may be readily converted into lawful money of the United States.

"**Dollar Equivalent**" is, at any time, (a) with respect to any amount denominated in Dollars, such amount, and (b) with respect to any amount denominated in a Foreign Currency, the equivalent amount therefor in Dollars as determined by SVB at such time on the basis of the then-prevailing rate of exchange in San Francisco, California, for sales of the Foreign Currency for transfer to the country issuing such Foreign Currency.

"**Effective Date**" is defined in the preamble hereof.

"**Equipment**" is all "equipment" as defined in the Code with such additions to such term as may hereafter be made, and includes without limitation all machinery, fixtures, goods, vehicles (including motor vehicles and trailers), and any interest in any of the foregoing.

"**Equity Event**" is the receipt by Borrower of unrestricted net cash proceeds in the aggregate amount of at least Five Million Dollars ($5,000,000.00), after the Effective Date but prior to December 31, 2012, from the closing of an equity round or equity rounds by Borrower with investors that are (a) existing investors in Borrower or their Affiliates or (b) acceptable to each Lender in its reasonable discretion.

"**ERISA**" is the Employee Retirement Income Security Act of 1974, and its regulations.

"**Event of Default**" is defined in Section 8.

"**Exchange Act**" is the Securities Exchange Act of 1934, as amended.

"**Final Payment**" is a payment (in addition to and not a substitution for the regular monthly payments of interest or principal and interest, as applicable) owing to each Lender, with respect to each Term Loan actually funded to or for the account of Borrower by such Lender, due on the earlier to occur of (a) the Maturity Date of such Term Loan, (b) the acceleration of such Term Loan or any event that would require the prepayment in full of a Term Loan pursuant to Section 2.2(c), or (c) any voluntary or involuntary prepayment in full of such Term Loan, equal to (x) (i) the aggregate original principal amount of such Term Loan, *minus* (ii) the aggregate principal amount of partial prepayments of such Term Loan made pursuant to Section 2.2(d) (for which Partial Final Payments have been made), *multiplied by* (y) the Final Payment Percentage.

"**Final Payment Percentage**" means two and one-quarter of one percent (2.25%).

"**Foreign Currency**" means lawful money of a country other than the United States.

"**Funding Date**" is any date on which a Credit Extension is made to or for the account of Borrower which shall be a Business Day.

"**FX Forward Contract**" is any foreign exchange contract by and between Borrower and SVB under which Borrower commits to purchase from or sell to SVB a specific amount of Foreign Currency on a specified date.

"**GAAP**" is generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other Person as may be approved by a significant segment of the accounting profession, which are applicable to the circumstances as of the date of determination.

"**General Intangibles**" is all "general intangibles" as defined in the Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation, all Intellectual Property, claims, income and other tax refunds, security and other deposits, payment intangibles, contract rights, options to purchase or sell real or personal property, rights in all litigation presently or hereafter pending (whether in contract, tort or otherwise), insurance policies (including without limitation key man, property damage, and business interruption insurance), payments of insurance and rights to payment of any kind.

"**Governmental Approval**" is any consent, authorization, approval, order, license, franchise, permit, certificate, accreditation, registration, filing or notice, of, issued by, from or to, or other act by or in respect of, any Governmental Authority.

"**Governmental Authority**" is any nation or government, any state or other political subdivision thereof, any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative functions of or pertaining to government, any securities exchange and any self-regulatory organization.

"**Indebtedness**" is (a) indebtedness for borrowed money or the deferred price of property or services, such as reimbursement and other obligations for surety bonds and letters of credit, (b) obligations evidenced by notes, bonds, debentures or similar instruments, (c) capital lease obligations, and (d) Contingent Obligations.

"**Indemnified Liabilities**" has the meaning given it in Section 12.2.

"**Indemnified Person**" is defined in Section 12.2.

"**Insolvency Proceeding**" is any proceeding by or against any Person under the United States Bankruptcy Code, or any other bankruptcy or insolvency law, including assignments for the benefit of creditors, compositions, extensions generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

"**Intellectual Property**" means all of Borrower's right, title, and interest in and to the following:

(a) its Copyrights, Trademarks and Patents;

(b) any and all trade secrets and trade secret rights, including, without limitation, any rights to unpatented inventions, know-how, operating manuals;

(c) any and all source code;

(d) any and all design rights which may be available to a Borrower;

(e) any and all claims for damages by way of past, present and future infringement of any of the foregoing, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the Intellectual Property rights identified above; and

(f) all amendments, renewals and extensions of any of the Copyrights, Trademarks or Patents.

"**Inventory**" is all "inventory" as defined in the Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation all merchandise, raw materials, parts, supplies, packing and shipping materials, work in process and finished products, including without limitation such inventory as is temporarily out of Borrower's custody or possession or in transit and including any returned goods and any documents of title representing any of the above.

"**Investment**" is any beneficial ownership interest in any Person (including stock, partnership interest or other securities), and any loan, advance or capital contribution to any Person.

"**Key Person**" is the Borrower's Chief Executive Officer (who is Kenneth Moch as of the Effective Date) and Chief Financial Officer (who is Tim Trost as of the Effective Date).

"**Laws**" means any and all federal, state, provincial, territorial, local and foreign statutes, laws, judicial decisions, regulations, guidances, guidelines, ordinances, rules, judgments, orders, decrees, codes, plans, injunctions, permits, concessions, grants, franchises, governmental agreements and governmental restrictions, whether now or hereafter in effect, which are applicable to any Borrower in any particular circumstance.

"**Lender**" and "**Lenders**" are defined in the preamble hereof.

"**Lender Entities**" is defined in Section 12.9.

"**Lenders' Expenses**" are all costs and expenses (including reasonable attorneys' fees and expenses) for preparing, amending, negotiating, administering, defending and enforcing the Loan Documents (including, without limitation, those incurred in connection with appeals or Insolvency Proceedings) or otherwise incurred with respect to Borrower in connection with the Loan Documents.

"**Letter of Credit**" is a standby or commercial letter of credit issued by SVB upon request of Borrower based upon an application, guarantee, indemnity or similar agreement.

"**Lien**" is a claim, mortgage, deed of trust, levy, charge, pledge, security interest or other encumbrance of any kind, whether voluntarily incurred or arising by operation of law or otherwise against any property.

"**Loan Documents**" are, collectively, this Agreement, the Perfection Certificate, any note, or notes, including, without limitation, the Secured Promissory Notes, security agreements or other collateral documents, and each other agreement, instrument, certificate, report and other document executed and delivered by Borrower in favor of Agent or any Lender in connection with this Agreement, together with all landlord waivers, licensor consent or waiver, subordination and intercreditor agreements or similar agreements executed and delivered by a third party in favor of Agent or any Lender in connection with this Agreement, the Credit Extensions and/or any security therefor , all as amended, restated, or otherwise modified.

"**Material Adverse Change**" is: (a) a material impairment in the perfection or priority of Agent's and Lenders' security interest in the Collateral or in the value of such Collateral; (b) a material adverse change in the business, operations, or condition (financial or otherwise) of Borrower; or (c) a material impairment of the prospect of repayment of any portion of the Obligations.

"**Maturity Date**" is (a) with respect to the Tranche One Term Loan Advance, the date that is twenty-nine (29) months following the Amortization Date of the Tranche One Term Loan Advance, and (b) with respect to each Tranche Two Term Loan Advance, the date that is thirty-one (31) months following the Amortization Date of such Tranche Two Term Loan Advance.

"**MidCap**" is defined in the preamble hereof.

"**Monthly Financial Statements**" is defined in Section 6.2(a).

"**Obligations**" are Borrower's obligations to pay when due any debts, principal, interest, Lenders' Expenses, the Prepayment Premium, the Final Payment and other amounts Borrower owes Agent and/or Lenders now or later under this Agreement and the other Loan Documents, including, without limitation, any interest accruing after Insolvency Proceedings begin and debts, liabilities, or obligations of Borrower assigned to Agent and/or Lenders, and the performance of Borrower's duties under the Loan Documents. Notwithstanding the foregoing, the term "Obligations" shall not include obligations of Borrower under the Warrant or any equity-related agreement executed solely in connection therewith.

"**Operating Documents**" are, for any Person, such Person's formation documents, as certified with the Secretary of State of such Person's state of formation on a date that is no earlier than thirty (30) days prior to the Effective Date, and, (a) if such Person is a corporation, its bylaws in current form, (b) if such Person is a limited liability company, its limited liability company agreement (or similar agreement), and (c) if such Person is a partnership, its partnership agreement (or similar agreement), each of the foregoing with all current amendments or modifications thereto.

"**Partial Final Payment**" means a payment (in addition to and not a substitution for the regular monthly payments of principal plus accrued interest) owing to each Lender, with respect to each Term Loan made by such Lender, due on the voluntary prepayment of a portion of any such Term Loan pursuant to Section 2.2(d), equal to the principal amount of such Term Loan so prepaid multiplied by the Final Payment Percentage.

"**Patents**" means all patents, patent applications and like protections including without limitation improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same.

"**Payment Date**" is the first calendar day of each month.

"**Payment/Advance Form**" is that certain form attached hereto as Exhibit B.

"**Perfection Certificate**" is defined in Section 5.1.

"**Permitted Indebtedness**" is:

(a) Borrower's Indebtedness to Lenders under this Agreement and the other Loan Documents with respect to the Obligations;

(b) Borrower's Indebtedness to SVB consisting of up to $50,000 of Bank Services which are cash collateralized;

(c) Indebtedness existing on the Effective Date and shown on the Perfection Certificate;

(d) Subordinated Debt;

(e) unsecured Indebtedness to trade creditors incurred in the ordinary course of business and consistent with past practices;

(f) Indebtedness incurred as a result of endorsing negotiable instruments received in the ordinary course of business;

(g) Indebtedness secured by Liens permitted under clauses (a) and (c) of the definition of "Permitted Liens" hereunder; and

(h) extensions, refinancings, modifications, amendments and restatements of any items of Permitted Indebtedness (a) through (g) above, provided that the principal amount thereof is not increased or the terms thereof are not modified to impose more burdensome terms upon Borrower or its Subsidiary, as the case may be.

"**Permitted Investments**" are:

(a) Investments (including, without limitation, Subsidiaries) existing on the Effective Date and shown on the Perfection Certificate; and

(b) (i) Cash Equivalents, and (ii) any Investments permitted by Borrower's investment policy as attached Exhibit E, as amended from time to time, provided such investment policy (and any such amendment thereto) has been provided to Agent and is acceptable to Agent in its reasonable discretion;

(c) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of Borrower;

(d) Investments consisting of deposit accounts in which Agent, for its benefit and the ratable benefit of Lenders, has a perfected security interest;

(e) Investments accepted in connection with Transfers permitted by Section 7.1;

(f) Investments of Subsidiaries in or to other Subsidiaries or Borrower and Investments by Borrower in Subsidiaries not to exceed One Hundred Thousand Dollars ($100,000.00) in the aggregate in any fiscal year;

(g) Investments consisting of (i) travel advances and employee relocation loans and other employee loans and advances in the ordinary course of business, and (ii) loans to employees, officers or directors relating to the purchase of equity securities of Borrower or its Subsidiaries pursuant to employee stock purchase plans or agreements approved by Borrower's Board of Directors;

(h) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of business; and

(i) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the ordinary course of business; provided that this paragraph (i) shall not apply to Investments of Borrower in any Subsidiary.

"**Permitted Liens**" are:

(a) Liens existing on the Effective Date and shown on the Perfection Certificate or arising under this Agreement and the other Loan Documents;

(b) Liens for taxes, fees, assessments or other government charges or levies, either (i) not due and payable or (ii) being contested in good faith and for which Borrower maintains adequate reserves on its Books, provided that no notice of any such Lien has been filed or recorded under the Internal Revenue Code of 1986, as amended, and the Treasury Regulations adopted thereunder;

(c) purchase money Liens or capital leases (i) on Equipment acquired or held by Borrower incurred for financing the acquisition of the Equipment securing no more than One Hundred Fifty Thousand Dollars ($150,000.00) in the aggregate amount outstanding, or (ii) existing on Equipment when acquired, if the Lien is confined to the property and improvements and the proceeds of the Equipment; and

(d) Liens of carriers, warehousemen, suppliers, or other Persons that are possessory in nature arising in the ordinary course of business so long as such Liens attach only to Inventory, securing liabilities in the aggregate amount not to exceed Fifty Thousand Dollars ($50,000) and which are not delinquent or remain payable without penalty or which are being contested in good faith and by appropriate proceedings which proceedings have the effect of preventing the forfeiture or sale of the property subject thereto;

(e) Liens to secure payment of workers' compensation, employment insurance, old-age pensions, social security and other like obligations incurred in the ordinary course of business (other than Liens imposed by ERISA);

(f) leases or subleases of real property granted in the ordinary course of business, and leases, subleases, non-exclusive licenses or sublicenses of property (other than real property or intellectual property) granted in the ordinary course of Borrower's business, if the leases, subleases, licenses and sublicenses do not prohibit granting Agent a security interest;

(g) non-exclusive license of intellectual property granted to third parties in the ordinary course of business;

(h) Liens arising from attachments or judgments, orders, or decrees in circumstances not constituting an Event of Default under Sections 8.4 and 8.7;

(i) Liens in favor of other financial institutions arising in connection with Borrower's deposit and/or securities accounts held at such institutions, provided that Agent, for the ratable benefit of Lenders, has a perfected security interest in the amounts held in such deposit and/or securities accounts;

(j) Liens incurred in the extension, renewal or refinancing of the indebtedness secured by Liens described in (a) through (i), but any extension, renewal or replacement Lien must be limited to the property encumbered by the existing Lien and the principal amount of the indebtedness may not increase; and

(k) Liens in cash collateral pledged to SVB to secure Indebtedness and other obligations owing to SVB in an amount not to exceed $50,000, which Liens in such cash collateral may be senior to the Lien in favor of Agent granted under this Agreement.

"**Person**" is any individual, sole proprietorship, partnership, limited liability company, joint venture, company, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or government agency.

"**Prepayment Premium**" shall be an additional fee payable to each Lender in an amount equal to:

(a) for a prepayment made or required to be made if otherwise due hereunder on or after the Effective Date through and including, but not after, the date which is twelve (12) months after the Effective Date in respect of any Term Loan owing to such Lender, three percent (3.0%) *multiplied by* the aggregate principal amount of such Term Loan so prepaid or required to be prepaid if otherwise due hereunder;

(b) for a prepayment made or required to be made if otherwise due hereunder after the date which is twelve (12) months after the Effective Date through and including, but not after, the date which is twenty-four (24) months after the Effective Date in respect of any Term Loan owing to such Lender, two percent (2.0%) *multiplied by* the aggregate principal amount of such Term Loan so prepaid or required to be prepaid if otherwise due hereunder; or

(c) for a prepayment made or required to be made if otherwise due hereunder after the date which is twenty-four (24) months after the Effective Date and prior to the applicable Maturity Date in respect of any Term Loan owing to such Lender, one percent (1.0%) *multiplied by* the aggregate principal amount of such Term Loan so prepaid or required to be prepaid if otherwise due hereunder.

"**Pro Rata Share**" means, as determined by Agent, with respect to each Lender, a percentage (expressed as a decimal, rounded to the ninth decimal place) determined by *dividing* the amount of Term Loans held by such Lender by the aggregate amount of all outstanding Term Loans.

"**Required Lenders**" means Lenders having (a) more than 60% of the Term Loan Commitments of all Lenders, or (b) if such Term Loan Commitments have expired or been terminated, more than 60% of the aggregate outstanding principal amount of the Term Loans; *provided*, *however*, that so long as a party that is a Lender hereunder on the Effective Date does not assign any portion of its Term Loan Commitment or Term Loan to any Person other than an Affiliate, the term "**Required Lenders**" shall include such Lender (and any Affiliate to which it assigns its interests).

"**Registered Organization**" is any "registered organization" as defined in the Code with such additions to such term as may hereafter be made "Requirement of Law" is as to any Person, the organizational or governing documents of such Person, and any law (statutory or common), treaty, rule or regulation or determination of an arbitrator or a court or other Governmental Authority, in each case applicable to or binding upon such Person or any of its property or to which such Person or any of its property is subject.

"**Responsible Officer**" is any of the Chief Executive Officer and Chief Financial Officer of Borrower.

"**Restricted License**" is any material license or other agreement with respect to which Borrower is the licensee (a) that prohibits or otherwise restricts Borrower from granting a security interest in Borrower's interest in such license or agreement or any other property, or (b) for which a default under or termination of could interfere with the Lender's right to sell any Collateral.

"**SBA**" is the United States Small Business Administration or any successor thereto, and any analogous Governmental Authority.

"**Secured Promissory Note**" is defined in Section 2.6.

"**Secured Promissory Note Record**" means a record maintained by each Lender with respect to the outstanding Obligations and credits made thereto.

"**Securities Account**" is any "securities account" as defined in the Code with such additions to such term as may hereafter be made.

"**Subordinated Debt**" is indebtedness incurred by Borrower subordinated to all of Borrower's now or hereafter indebtedness to Agent and Lenders (pursuant to a subordination, intercreditor, or other similar agreement in form and substance satisfactory to Agent and Lenders entered into among Agent, Lenders and the other creditor), on terms acceptable to Agent and Lenders.

"**Subsidiary**" is, as to any Person, a corporation, partnership, limited liability company or other entity of which shares of stock or other ownership interests having ordinary voting power (other than stock or such other ownership interests having such power only by reason of the happening of a contingency) to elect a majority of the board of directors or other managers of such corporation, partnership or other entity are at the time owned, or the management of which is otherwise controlled, directly or indirectly through one or more intermediaries, or both, by such Person. Unless the context otherwise requires, each reference to a Subsidiary herein shall be a reference to a Subsidiary of Borrower.

"**SVB**" is defined in the preamble hereof.

"**Term Loan**" or "**Term Loans**" has the meaning given it in Section 2.2(a).

"**Term Loan Commitment**" is, for any Lender, the obligation of such Lender to make a Term Loan, up to the principal amount shown on **Schedule 1**.

"**Term Loan Commitments**" is the aggregate amount of Term Loan Commitments of all Lenders.

"**Tranche One**" is defined in Section 2.2(a).

"**Tranche One Term Loan Advance**" is defined in Section 2.2(a).

"**Tranche Two**" is defined in Section 2.2(a).

"**Tranche Two Draw Period**" means the period of time commencing upon the Tranche Two Eligibility Date and continuing through the earlier to occur of (a) December 31, 2012, and (b) an Event of Default.

"**Tranche Two Eligibility Date**" means the date on which Agent and each Lender determine, in the sole discretion, exercised in good faith, of Agent and each Lender, that at least one (1) of the following has occurred: (a) the BARDA Event, (b) the CMX-157 Event, and (c) the Equity Event.

"**Tranche Two Term Loan Advance**" and "**Tranche Two Term Loan Advances**" are defined in Section 2.2.

"**Trademarks**" means any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower connected with and symbolized by such trademarks.

"**Transfer**" is defined in Section 7.1.

"**Warrant**" is that certain Warrant to Purchase Stock dated as of the Effective Date executed by Borrower in favor of SVB.

[Signature page follows.]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as a sealed instrument under the laws of the Commonwealth of Massachusetts as of the Effective Date.

BORROWER:

CHIMERIX, INC.

By: /s/ Timothy W. Trost
Name: Timothy W. Trost
Title: Senior Vice President and Chief Financial Officer

AGENT:

MIDCAP FINANCIAL SBIC, LP
By: MIDCAP FINANCIAL SBIC GP, LLC, its General Partner

By: /s/ Colleen S. Kovas
Name: Colleen S. Kovas
Title: Authorized Signatory

LENDERS:

MIDCAP FINANCIAL SBIC, LP

By: MIDCAP FINANCIAL SBIC GP, LLC, its General Partner

By: /s/ Colleen S. Kovas
Name: Colleen S. Kovas
Title: Authorized Signatory

SILICON VALLEY BANK

By: /s/ Chris T. Stoecker
Name: Chris T. Stoecker
Title: Vice President

EXHIBIT A

The Collateral consists of all of Borrower's right, title and interest in and to the following personal property:

All goods, Accounts (including health-care insurance receivables), Equipment, Inventory, contract rights or rights to payment of money, leases, license agreements, franchise agreements, General Intangibles (except as provided below), commercial tort claims, documents, instruments (including any promissory notes), chattel paper (whether tangible or electronic), cash, deposit accounts, certificates of deposit, fixtures, letters of credit rights (whether or not the letter of credit is evidenced by a writing), securities, and all other investment property, supporting obligations, and financial assets, whether now owned or hereafter acquired, wherever located; and all Borrower's Books relating to the foregoing, and any and all claims, rights and interests in any of the above and all substitutions for, additions, attachments, accessories, accessions and improvements to and replacements, products, proceeds and insurance proceeds of any or all of the foregoing.

Notwithstanding the foregoing, the Collateral shall not include any Intellectual Property (except as provided below), whether now owned or hereafter acquired, except to the extent that it is necessary under applicable law to have a Lien and security interest in any such Intellectual Property in order to have a perfected Lien and security interest in and to IP Proceeds (defined below), and for the avoidance of any doubt, the Collateral shall include, and Agent shall have a Lien and security interest in, (i) all IP Proceeds, and (ii) all payments with respect to IP Proceeds that are received after the commencement of a bankruptcy or insolvency proceeding. The term "IP Proceeds" means, collectively, all cash, Accounts, license and royalty fees, claims, products, awards, judgments, insurance claims, and other revenues, proceeds or income, arising out of, derived from or relating to any Intellectual Property of the Borrower, and any claims for damage by way of any past, present or future infringement of any Intellectual Property of the Borrower (including, without limitation, all cash, royalty fees, other proceeds, Accounts and General Intangibles that consist of rights of payment to or on behalf of the Borrower and the proceeds from the sale, licensing or other disposition of all or any part of, or rights in, any Intellectual Property by or on behalf of the Borrower).

Pursuant to the terms of a certain negative pledge arrangement with Agent and Lenders, Borrower has agreed not to encumber any of its Intellectual Property without Agent's prior written consent, except as permitted in the Loan and Security Agreement among Borrower, Agent and Lenders.

EXHIBIT B

DEADLINE FOR SAME DAY PROCESSING IS NOON EASTERN TIME

Fax To: Date:_____

LOAN PAYMENT:

CHIMERIX, INC.

From Account #_____ To Account #_____
(Deposit Account #) (Loan Account #)

Principal $ _____ and/or Interest $_____

Authorized Signature: _____ Phone Number:_____
Print Name/Title:_____

LOAN ADVANCE:

Complete *Outgoing Wire Request* section below if all or a portion of the funds this loan advance are for an outgoing wire.

From Account #_____ To Account #_____
(Loan Account #) (Deposit Account #)

Amount of Advance $_____

All Borrower's representations and warranties in the Loan and Security Agreement are true, correct and complete in all material respects on the date of the request for an advance; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date:

Authorized Signature:_____ Phone Number:_____
Print Name/Title:_____

OUTGOING WIRE REQUEST:
Complete only if all or a portion of funds from the loan advance above is to be wired.

Deadline for same day processing is noon, Eastern Time

Beneficiary Name:_____ Amount of Wire: $_____
Beneficiary Bank:_____ Account Number:_____
City and State:_____

Beneficiary Bank Transit (ABA) #:_____ Beneficiary Bank Code (Swift, Sort, Chip, etc.):_____
(For International Wire Only)

Intermediary Bank:_____ Transit (ABA) #:_____
For Further Credit to:_____

Special Instruction:_____

By signing below, I (we) acknowledge and agree that my (our) funds transfer request shall be processed in accordance with and subject to the terms and conditions set forth in the agreements(s) covering funds transfer service(s), which agreements(s) were previously received and executed by me (us).

Authorized Signature:_____ 2nd Signature (if required):_____
Print Name/Title:_____ Print Name/Title:_____
Telephone #:_____ Telephone #:_____

EXHIBIT C

COMPLIANCE CERTIFICATE

TO: MIDCAP FINANCIAL SBIC, LP, AS AGENT Date:_____
FROM: CHIMERIX, INC.

The undersigned authorized officer of Chimerix, Inc. ("Borrower") certifies that under the terms and conditions of the Loan and Security Agreement among Borrower, Lenders and Agent (the "Agreement"); (1) Borrower is in complete compliance for the period ending _____ with all required covenants except as noted below; (2) there are no Events of Default that have occurred and are continuing; (3) all representations and warranties in the Agreement and the other Loan Documents, including the Perfection Certificate, as updated from time to time as permitted by the Agreement, are true and correct in all material respects on this date except as noted below; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date; (4) Borrower, and each of its Subsidiaries, has timely filed all required tax returns and reports, and Borrower has timely paid all foreign, federal, state and local taxes, assessments, deposits and contributions owed by Borrower except as otherwise permitted pursuant to the terms of Section 5.8 of the Agreement; and (5) no Liens have been levied or claims made against Borrower or any of its Subsidiaries relating to unpaid employee payroll or benefits of which Borrower has not previously provided written notification to Agent. Attached are the required documents supporting the certification. The undersigned certifies that these are prepared in accordance with GAAP consistently applied from one period to the next except as explained in an accompanying letter or footnotes, except as otherwise permitted. The undersigned acknowledges that no borrowings may be requested at any time or date of determination that Borrower is not in compliance with any of the terms of the Agreement, and that compliance is determined not just at the date this certificate is delivered. Capitalized terms used but not otherwise defined herein shall have the meanings given them in the Agreement.

Please indicate compliance status by circling Yes/No under "Complies" column.

Reporting Covenant	Required	Complies
Monthly financial statements with Compliance Certificate	Monthly within 30 days	Yes No
Annual financial statement (CPA Audited) with Compliance Certificate	FYE within 150 days	Yes No
10-Q, 10-K and 8-K	Within 5 days after filing with SEC	Yes No
Board Projections	Within 30 days after FYE or as materially revised	Yes No
BA Form 468/Other Required Information	Annually within 90 days after FYE or as requested	Yes No

The following are the exceptions with respect to the certification above: (If no exceptions exist, state "No exceptions to note.")

CHIMERIX, INC.

By: _____
Name: _____
Title: _____

AGENT USE ONLY

Received by:_____
AUTHORIZED SIGNER
Date:
Verified_____
AUTHORIZED SIGNER

Date:_____
Compliance Status: Yes No

EXHIBIT D

SECURED PROMISSORY NOTE

$_____ **Dated:_____**, 2012

FOR VALUE RECEIVED, the undersigned, CHIMERIX, INC., a Delaware corporation ("Borrower") HEREBY PROMISES TO PAY to the order of _____ ("Lender") the principal amount of _____ DOLLARS ($_____) or such lesser amount as shall equal the outstanding principal balance of the Term Loan made to Borrower by Lender as part of the [Tranche One Term Loan Advance][Tranche Two Term Loan Advance] funded under the Loan Agreement referenced below on the date hereof, plus interest on the aggregate unpaid principal amount of the Term Loan, at the rates and in accordance with the terms of the Loan and Security Agreement by and between Borrower, MIDCAP FINANCIAL SBIC, LP, as Agent, and the Lenders as defined therein (as amended, restated, supplemented or otherwise modified from time to time, the "Loan Agreement"). If not sooner paid, the entire principal amount and all accrued interest hereunder and under the Loan Agreement shall be due and payable on applicable Maturity Date for such [Tranche One Term Loan Advance][Tranche Two Term Loan Advance] as set forth in the Loan Agreement.

Borrower agrees to pay any initial partial month interest payment from the date of this Secured Promissory Note (this "Note") to the first Payment Date ("Interim Interest") on the first Payment Date.

Principal, interest and all other amounts due with respect to the Term Loan, are payable in lawful money of the United States of America to Lender as set forth in the Loan Agreement and this Note. The principal amount of this Note and the interest rate applicable thereto, and all payments made with respect thereto, shall be recorded by Lender and, prior to any transfer hereof, endorsed on the grid attached hereto which is part of this Note.

The Loan Agreement, among other things, (a) provides for the making of a secured Term Loan to Borrower, and (b) contains provisions for acceleration of the maturity hereof upon the happening of certain stated events.

This Note may not be prepaid except as set forth in Section 2.2(c) and Section 2.2(d) of the Loan Agreement.

This Note and the obligation of Borrower to repay the unpaid principal amount of the Term Loan, interest on the Term Loan and all other amounts due Lender under the Loan Agreement is secured under the Loan Agreement.

Presentment for payment, demand, notice of protest and all other demands and notices of any kind in connection with the execution, delivery, performance and enforcement of this Note are hereby waived.

Borrower shall pay all reasonable fees and expenses, including, without limitation, reasonable attorneys' fees and costs, incurred by Lender in the enforcement or attempt to enforce any of Borrower's obligations hereunder not performed when due. This Note shall be governed by, and construed and interpreted in accordance with, the laws of the Commonwealth of Massachusetts. Terms used herein but not otherwise defined herein shall have the meaning given such terms in the Loan Agreement.

Note Register; Ownership of Note. The ownership of an interest in this Note shall be registered on a record of ownership maintained by Lender or its agent. Notwithstanding anything else in this Note to the contrary, the right to the principal of, and stated interest on, this Note may be transferred only if the transfer is registered on such record of ownership and the transferee is identified as the owner of an interest in the obligation. Borrower shall be entitled to treat the registered holder of this Note (as recorded on such record of ownership) as the owner in fact thereof for all purposes and shall not be bound to recognize any equitable or other claim to or interest in this Note on the part of any other person or entity.

IN WITNESS WHEREOF, Borrower has caused this Note to be duly executed as a sealed instrument under the laws of the Commonwealth of Massachusetts by one of its officers thereunto duly authorized on the date hereof.

BORROWER:

CHIMERIX, INC.

By: _____
Name: _____
Title: _____

SCHEDULE 1

LENDERS AND COMMITMENTS

Lender		Term Loan Commitment	Commitment Percentage
MidCap Financial SBIC, LP	$	9,500,000.00	63.33%
Silicon Valley Bank	$	5,500,000.00	36.67%
TOTAL	**$**	**15,000,000.00**	**100.0%**