As filed with the Securities and Exchange Commission on March 26, 2013

Registration No. 333-187145

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

Amendment No. 1
To
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:

Jason L. Kent, Esq.	**Timothy W. Trost**	**Richard D. Truesdell, Jr., Esq.**
Cooley LLP	**Senior Vice President, Chief Financial Officer and Corporate Secretary**	**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

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CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Proposed maximum aggregate offering price[(1)]	Amount of registration fee[(2)]
Common Stock, $0.001 par value per share	$ 85,000,000	$ 11,594

(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.

(2) Previously paid.

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.

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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 10.

PRICE $ A SHARE

	Price to Public	*Underwriting Discounts and Commissions*	*Proceeds to Company*[1]
Per Share	*$*	*$*	*$*
Total	*$*	*$*	*$*

(1) We have agreed to reimburse the underwriters for certain FINRA-related expenses. See "Underwriters."

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

Entities affiliated with certain of our existing stockholders and directors have indicated an interest in purchasing up to an aggregate of approximately $ million in shares of our common stock in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters could determine to sell more, less or no shares to any of these potential investors and any of these potential investors could determine to purchase more, less or no shares in this offering.

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

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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 orally administered drug that utilizes our proprietary lipid technology to deliver high intracellular concentrations of a potent antiviral compound, cidofovir-diphosphate (CDV-PP). Following oral dosing, CMX001 is absorbed through the gut, remains intact in the plasma, and is readily taken up by and delivered into cells. Once inside cells, CMX001 is converted into CDV-PP, which acts as an alternative substrate that interferes with the enzymes necessary for viral replication. When CDV-PP is selected by critical enzymes as a substrate over the normal cellular substrate (i.e. nucleotides), the result is diminished enzymatic activity and therefore diminished viral replication.

CMX001 is similar to the drug cidofovir in that both drugs are converted into CDV-PP once inside cells. Although cidofovir is approved for administration in an intravenous formulation, Vistide, it requires a high plasma concentration to deliver a therapeutic level of cidofovir into cells and its use is limited due to the risk of kidney damage. In contrast, oral administration of CMX001 results in significantly lower plasma concentrations, higher levels of drug inside cells, and a lower risk of kidney toxicity.

Double-stranded DNA viral infections such as CMV are commonly transmitted in childhood and early adulthood, and generally remain latent in individuals 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 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 an agreed population, endpoint and study design for which we have received a "Study May Proceed" letter. We remain in active discussions with the FDA regarding final protocol specifics and anticipate initiation of dosing in 2013. 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 pharmacoeconomic data 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 and equivalent applications outside the United States. We have received Fast Track designation from the FDA for the CMV, 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 compound 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

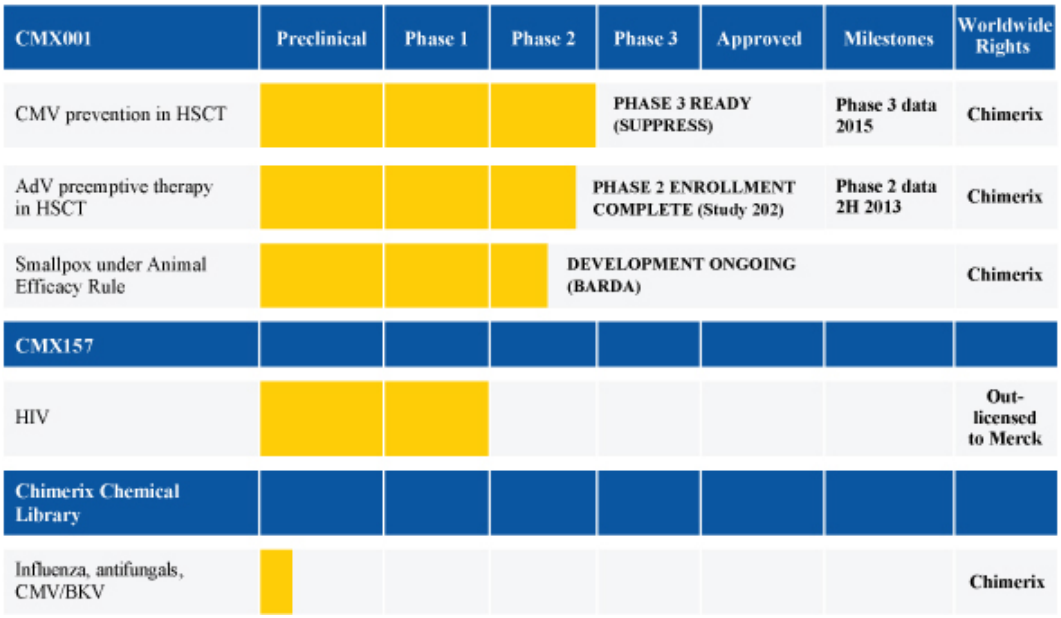
Our strategy is to discover, develop, and commercialize novel oral antiviral therapeutics in areas of significant unmet medical need. Key elements of our strategy include:

- 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 and patients receiving therapies which result in compromised immune systems;
- 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 ™ 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

Entities affiliated with certain of our existing stockholders and directors have indicated an interest in purchasing up to an aggregate of approximately $ million in shares of our common stock in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters could determine to sell more, less or no shares to any of these potential investors and any of these potential investors could determine to purchase more, less or no shares in this offering. Any shares purchased by our existing stockholders and directors will be subject to lock-up restrictions described in "Shares Eligible for Future Sale."

The number of shares of our common stock to be outstanding after this offering is based on 16,014,083 shares of common stock outstanding as of December 31, 2012, and excludes:

- 2,593,423 shares of common stock issuable upon the exercise of outstanding stock options as of December 31, 2012, at a weighted-average exercise price of $2.45 per share;
- 43,199 shares of common stock issuable pursuant to outstanding restricted stock units as of December 31, 2012, which will vest in connection with the consummation of this offering;
- 1,613,395 shares of common stock issuable upon the exercise of outstanding warrants as of December 31, 2012, at a weighted-average exercise price of $7.26 per share;
- 704,225 shares of common stock reserved for future issuance under our 2013 employee stock purchase plan (the ESPP), which will become effective upon the execution and delivery of the underwriting agreement for this offering; and
- 1,408,450 shares of common stock reserved for future issuance under our 2013 equity incentive plan (the 2013 plan) (plus 427,829 shares of common stock reserved for issuance under our 2012 equity incentive plan (the 2012 plan) as of December 31, 2012, which shares will be added to the shares

reserved under the 2013 plan upon its effectiveness), which will become effective upon the execution and delivery of the underwriting agreement for this offering.

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

- the conversion of all our outstanding preferred stock as of December 31, 2012, into an aggregate of 14,480,088 shares of common stock in connection with the closing of this offering;
- the issuance of 1,076,002 shares of common stock underlying shares of our Series F preferred stock issuable immediately prior to the closing of this offering in respect of the accumulated dividends on our Series F preferred stock through the date immediately preceding the date of this prospectus (based on an assumed prospectus date of April 10, 2013);
- the adjustment of outstanding warrants to purchase shares of our equity securities into warrants to purchase 1,613,395 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; and
- 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.

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, 2010, 2011 and 2012 from our audited financial statements and related notes appearing elsewhere in this prospectus.

	Year Ended December 31,		
Statement of Operations Data:	**2010**	**2011**	**2012**
	(in thousands, except share and per share data)		
Revenues:			
Collaboration and licensing revenues	$ —	$ 55	$ 17,445
Contract and grant revenues	1,715	12,046	16,275
Total revenues	1,715	12,101	33,720
Operating expenses:			
Research and development	19,413	27,695	27,821
General and administrative	7,606	9,398	8,682
Total operating expenses	27,019	37,093	36,503
Loss from operations	(25,304)	(24,992)	(2,783)
Interest income (expense), net	(154)	(212)	(776)
Fair value adjustment to warrant liability	—	(385)	(847)
Other income	1	—	—
Net loss	(25,457)	(25,589)	(4,406)
Accretion of redeemable convertible preferred stock	—	(9,565)	(4,357)
Net loss attributable to common stockholders	$ (25,457)	$ (35,154)	$ (8,763)
Basic and diluted net loss per common share[1]	$ (17.52)	$ (23.49)	$ (5.75)
Shares used to calculate net loss per common share[1]	1,453	1,496	1,525
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 December 31, 2012, into an aggregate of 14,480,088 shares of our common stock, and the issuance of 1,076,002 shares of common stock underlying shares of our Series F preferred stock issuable immediately prior to the closing of this offering in respect of the accumulated dividends on our Series F preferred stock through the date immediately preceding the date of this prospectus (based on an assumed prospectus date of April 10, 2013), as if such conversion and issuance had occurred at the beginning of the period presented, or the issuance date, if later.

	As of December 31, 2012		
	Actual	Pro Forma[3]	Pro Forma as Adjusted[4][5]
		(unaudited)	
		(in thousands)	
Balance Sheet Data:			
Cash and cash equivalents	$ 19,906	$ 19,906	$
Short-term investments, available-for-sale	9,849	9,849	
Working capital	23,931	23,931	
Total assets	32,031	32,031	
Loan payable[6]	14,620	14,620	
Redeemable convertible preferred stock warrant liability	7,512	—	
Redeemable convertible preferred stock	107,723	—	
Total stockholders' equity (deficit)	(101,031)	14,204	

(3) Pro forma amounts reflect the conversion of all our outstanding shares of preferred stock as of December 31, 2012, into an aggregate of 14,480,088 shares of our common stock, and the issuance of 1,076,002 shares of common stock underlying shares of our Series F preferred stock issuable immediately prior to the closing of this offering in respect of the accumulated dividends on our Series F preferred stock through the date immediately preceding the date of this prospectus (based on an assumed prospectus date of April 10, 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 $25.5 million, $25.6 million and $4.4 million for the fiscal years ended 2010, 2011 and 2012, respectively. As of December 31, 2012, we had an accumulated deficit of $101.0 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 December 31, 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 a Phase 2 clinical trial 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 and equivalent applications outside 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 characteristics 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 development, 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 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 to 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 the United States.

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.

We are currently transferring the drug substance manufacturing process to our selected contractor that will produce the commercial supply of drug substance and are currently evaluating manufacturers to optimize tablet and suspension formulation production to meet forecasted commercial demand. 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 a 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 depend on the continuation of our current collaboration with Merck, who will 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:

- does not devote sufficient time and resources to the development and commercialization of CMX157;
- develops, either alone or with others, products that compete with CMX157;
- fails to gain the requisite regulatory approvals for CMX157;
- does not successfully commercialize CMX157;
- does not conduct its activities in a timely manner;
- 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);
- 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.

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 contract research organizations (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.

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 may 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.

Building an internal sales force involves many challenges, including:

- recruiting and retaining talented people;
- training employees that we recruit;
- setting the appropriate system of incentives;
- managing additional headcount; and
- integrating a new business unit into an existing corporate architecture.

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 and we expect Valcyte to become generically available in the near-term. 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, scope or ownership, which may result in such patents, or our rights to 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. Entities affiliated with certain of our existing stockholders and directors have indicated an interest in purchasing up to an aggregate of approximately $ million in shares of our common stock in this offering at the initial public offering price. To the extent these potential investors are allocated and purchase shares in this offering, such purchases would reduce the available public float for our shares because these potential investors will be restricted from selling the shares under the lock-up agreements described in the "Shares Eligible for Future Sale" section of this prospectus. As a result, the liquidity of our common stock could be significantly reduced from what it would have been if these shares had been purchased by investors that were not affiliated with us. 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 December 31, 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 December 31, 2012, options to purchase 2,593,423 shares of our common stock at a weighted-average exercise price of $2.45 per share were outstanding, restricted stock units to acquire 43,199 shares of our common stock were outstanding and warrants to purchase 1,613,395 shares of our common stock at a weighted-average exercise price of $7.26 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 December 31, 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 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 other working capital purposes, including general operating expenses and regular debt service payments under our loan and security agreement with SVB and MidCap.

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 December 31, 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 December 31, 2012 into an aggregate of 14,480,088 shares of our common stock upon closing of this offering, (2) the issuance of 1,076,002 shares of common stock underlying shares of our Series F preferred stock issuable immediately prior to the closing of this offering in respect of the accumulated dividends on our Series F preferred stock through the date immediately preceding the date of this prospectus (based on an assumed prospectus date of April 10, 2013), (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 (4) the filing of our amended and restated certificate of incorporation, which will occur upon the closing of this offering; 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 December 31, 2012		
	Actual	Pro Forma	Pro Forma As Adjusted[1]
	(unaudited)		
	(in thousands, except per share amounts)		
Cash and cash equivalents	$ 19,906	19,906	$
Redeemable convertible preferred stock:			
Redeemable convertible preferred stock warrant liability	$ 7,512	$ —	$
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	107,723	—	
Stockholders' deficit:			
Preferred stock, $0.001 par value; no shares authorized, no shares issued and outstanding actual; 10,000,000 shares authorized, no shares issued and outstanding, pro forma and pro forma as adjusted	—	—	
Common stock, $0.001 par value; 89,700,000 shares authorized, 1,533,995 shares issued and outstanding, actual; 200,000,000 shares authorized, 16,955,584 shares issued and outstanding, pro forma; 200,000,000 shares authorized, shares issued and outstanding, pro forma as adjusted	3	17	
Additional paid-in capital	—	115,221	
Accumulated other comprehensive loss	(2)	(2)	
Accumulated deficit	(101,032)	(101,032)	
Total stockholders' equity (deficit)	(101,031)	14,204	
Total capitalization	$ 14,204	$ 14,204	$

(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 December 31, 2012, and excludes:

- 2,593,423 shares of common stock issuable upon the exercise of outstanding stock options as of December 31, 2012, at a weighted-average exercise price of $2.45 per share;
- 43,199 shares of common stock issuable pursuant to outstanding restricted stock units as of December 31, 2012, which will vest in connection with the consummation of this offering;
- 1,613,395 shares of common stock issuable upon the exercise of outstanding warrants as of December 31, 2012, at a weighted-average exercise price of $7.26 per share;
- 704,225 shares of common stock reserved for future issuance under the ESPP, which will become effective upon the execution and delivery of the underwriting agreement for this offering; and
- 1,408,450 shares of common stock reserved for future issuance under the 2013 plan (plus 427,829 shares of common stock reserved for issuance under the 2012 plan as of December 31, 2012, which shares will be added to the shares reserved under the 2013 plan upon its effectiveness), which will become effective upon the execution and delivery of the underwriting agreement for 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 December 31, 2012, was approximately $(101.0) million, or $(65.86) 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 December 31, 2012.

Our pro forma net tangible book value (deficit) as of December 31, 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 December 31, 2012, into an aggregate of 14,480,088 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 1,076,002 shares of common stock underlying shares of our Series F preferred stock issuable immediately prior to the closing of this offering in respect of the accumulated dividends on our Series F preferred stock through the date immediately preceding the date of this prospectus (based on an assumed prospectus date of April 10, 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 December 31, 2012	$ (65.86)	
Pro forma increase in net tangible book value per share as of December 31, 2012 attributable to the conversion of convertible preferred stock	6.97	
Pro forma increase in net tangible book value per share as of December 31, 2012 attributable to the issuance of 1,076,002 shares of common stock underlying shares of our Series F preferred stock issuable immediately prior to the closing of this offering in respect of the accumulated dividends on our Series F preferred stock through the date immediately preceding the date of this prospectus (based on an assumed prospectus date of April 10, 2013)	7.26	
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 December 31, 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 17,090,085 shares of common stock outstanding as of December 31, 2012, after giving effect to the conversion of our outstanding convertible preferred stock as of December 31, 2012, into an aggregate of 14,480,088 shares of common stock, and the issuance of 1,076,002 shares of common stock underlying shares of our Series F preferred stock issuable immediately prior to the closing of this offering in respect of the accumulated dividends on our Series F preferred stock through the date immediately preceding the date of this prospectus (based on an assumed prospectus date of April 10, 2013), and excludes:

- 2,593,423 shares of common stock issuable upon the exercise of outstanding stock options as of December 31, 2012, at a weighted-average exercise price of $2.45 per share;
- 43,199 shares of common stock issuable pursuant to outstanding restricted stock units as of December 31, 2012, which will vest in connection with the consummation of this offering;
- 1,613,395 shares of common stock issuable upon the exercise of outstanding warrants as of December 31, 2012, at a weighted-average exercise price of $7.26 per share;
- 704,225 shares of common stock reserved for future issuance under the ESPP, which will become effective upon the execution and delivery of the underwriting agreement for this offering; and
- 1,408,450 shares of common stock reserved for future issuance under the 2013 plan (plus 427,829 shares of common stock reserved for issuance under the 2012 plan as of December 31, 2012, which shares will be added to the shares reserved under the 2013 plan upon its effectiveness), which will become effective upon the execution and delivery of the underwriting agreement for this offering.

Effective immediately upon the execution and delivery of the underwriting agreement for this offering, an aggregate of 1,408,450 shares of our common stock will be reserved for issuance under the 2013 plan (plus 427,829 shares of common stock reserved for issuance under our 2012 plan as of December 31, 2012, which shares will be added to the shares reserved under the 2013 plan upon its effectiveness). 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 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.

Entities affiliated with certain of our existing stockholders and directors have indicated an interest in purchasing up to an aggregate of approximately $ million in shares of our common stock in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters could determine to sell more, less or no shares to any of these potential investors and any of these potential investors could determine to purchase more, less or no shares in this offering. The foregoing discussion and tables do not reflect any potential purchases by these potential investors.

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, 2010, 2011 and 2012 and the selected balance sheet data as of December 31, 2011 and 2012 are derived from our audited financial statements appearing elsewhere in this prospectus. 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 1,076,002 shares of common stock underlying shares of our Series F preferred stock issuable immediately prior to the closing of this offering in respect of the accumulated dividends on our Series F preferred stock through the date immediately preceding the date of this prospectus (based on an assumed prospectus date of April 10, 2013).

	Years Ended December 31,		
	2010	2011	2012
	(in thousands, except share and per share data)		
Statement of Operations:			
Revenues:			
Collaboration and licensing revenues	$ —	$ 55	$ 17,445
Contract and grant revenues	1,715	12,046	16,275
Total revenues	1,715	12,101	33,720
Operating expenses:			
Research and development	19,413	27,695	27,821
General and administrative	7,606	9,398	8,682
Total operating expenses	27,019	37,093	36,503
Loss from operations	(25,304)	(24,992)	(2,783)
Other (expense) income:			
Interest expense	(154)	(212)	(776)
Fair value adjustments to warrant liability	—	(385)	(847)
Other income	1	—	—
Net loss	(25,457)	(25,589)	(4,406)
Accretion of redeemable convertible preferred stock	—	(9,565)	(4,357)
Net loss attributable to common shareholders	$ (25,457)	$ (35,154)	$ (8,763)
Net loss per share, basic and diluted	$ (17.52)	$ (23.49)	$ (5.75)
Weighted-average shares outstanding:			
Basic and diluted	1,453	1,496	1,525
Pro forma net loss per share basic and diluted (unaudited):			
Weighted-average pro forma shares outstanding, basic and diluted (unaudited):			

	As of December 31,	
	2011	2012
	(in thousands, except share and per share data)	
Balance Sheet Data:		
Cash and cash equivalents	$ 13,607	$ 19,906
Short-term investments, available-for-sale	5,918	9,849
Working capital	18,010	23,931
Total assets	25,432	32,031
Loan payable(1)	2,601	14,620
Redeemable convertible preferred stock warrant liability	6,491	7,512
Redeemable convertible preferred stock	103,366	107,723
Accumulated deficit	(93,681)	(101,035)
Total stockholders' deficit	(93,680)	(101,031)

(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, Sharp & Dohme Corp. (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 December 31, 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 $65.7 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 $25.5 million, $25.6 million, and $4.4 million for the years ended December 31, 2010, 2011 and 2012, respectively. As of December 31, 2012, we had an accumulated deficit of approximately $101.0 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 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 Biomedical Advanced Research and Development Authority (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 on May 31, 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 $75.8 million in expense reimbursement and $5.3 million in 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 December 31, 2012, we had recognized revenue in aggregate of $28.3 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 oral nucleotide compound 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 December 31, 2012, we have incurred approximately $123.2 million in research and development expenses, of which we estimate $92.3 million relates to our development of CMX001. In the years ended December 31, 2010, 2011 and 2012, we spent $19.4 million, $27.7 million, and $27.8 million, respectively, on 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. 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 December 31, 2012, we have not generated any revenue from product sales. For the same period, we have generated $65.7 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 year ended December 31, 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 December 31, 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,		
	2010	2011	2012
		(in thousands)	
Research and development			
Employee	$ 299	$ 315	$ 336
Non-employee	—	—	80
General and administrative			
Employee	454	651	921
Non-employee	—	—	59
Total	$ 753	$ 966	$ 1,396

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, 2010, 2011, and 2012 are set forth below:

Employee Stock Options

	Years Ended December 31,		
	2010	2011	2012
Volatility	91.00%	82.00%	80.55%
Expected term (in years)	7.0	7.0	6.0
Risk-free interest rate	2.69%	2.85%	0.86%
Expected dividend yield	0%	0%	0%
Weighted-average option value per share	$ 1.75	$ 1.74	$ 1.93

Non-employee Stock Options

	Years Ended December 31,		
	2010	2011	2012
Volatility	—	77.80%	81.77%
Expected term (in years)	—	2.7	5.8
Risk-free interest rate	—	0.40%	0.78%
Expected dividend yield	—	0%	0%
Weighted-average option value per share	—	$ 3.38	$ 3.48

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, September 30, 2012, December 31, 2012 and March 1, 2013.

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 $3.16 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	41,547	$ 3.16	$ 3.16	—
February 5, 2010	1,492	$ 3.16	$ 3.16	—
April 14, 2010	234,771	$ 3.16	$ 3.16	—
April 20, 2010	56,338	$ 3.16	$ 3.16	—
May 11, 2010	7,125	$ 3.16	$ 3.16	—
May 24, 2010	39,436	$ 3.16	$ 3.16	—
July 6, 2010	39,436	$ 3.16	$ 3.16	—
July 20, 2010	52,672	$ 3.16	$ 3.16	—
August 12, 2010	14,084	$ 3.16	$ 3.16	—

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 $2.35 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	721,530	$ 2.35	$ 2.35	—
April 8, 2011	12,674	$ 2.35	$ 2.35	—
May 10, 2011	39,716	$ 2.35	$ 2.35	—
June 20, 2011	14,084	$ 2.35	$ 2.35	—
August 15, 2011	14,084	$ 2.35	$ 2.35	—
September 6, 2011	3,380	$ 2.35	$ 2.35	—
September 30, 2011	15,774	$ 2.35	$ 2.35	—
November 17, 2011	70,422	$ 2.35	$ 2.35	—
February 22, 2012[(1)]	1,690	$ 2.35	$ 2.49	$ 240
February 28, 2012[(1)]	4,225	$ 2.35	$ 2.49	$ 600
March 29, 2012[(1)]	14,084	$ 2.35	$ 2.49	$ 2,000
April 18, 2012[(1)]	14,084	$ 2.35	$ 2.49	$ 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 $2.38 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	1,408	$ 2.38	$ 3.38	$ 1,400
June 1, 2012	14,084	$ 2.38	$ 3.38	$ 14,100
June 13, 2012	123,019	$ 2.38	$ 3.38	$ 123,000
June 27, 2012	845	$ 2.38	$ 3.38	$ 840
July 16, 2012	14,084	$ 2.38	$ 3.38	$ 14,000
August 17, 2012	7,041	$ 2.38	$ 4.26	$ 13,250
September 17, 2012	2,816	$ 2.38	$ 4.26	$ 5,300
October 8, 2012(1)	4,224	$ 2.38	$ 4.26	$ 7,950
October 25, 2012(1)	4,507	$ 2.38	$ 4.26	$ 8,480

(1) The September 30, 2012 valuation analysis described below was not completed until January 2013, and therefore was not available at the time the October 8, 2012 and October 25, 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 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 $4.26 per share as of September 30, 2012.

Our board of directors, or a committee of our board of directors acting under delegated authority, granted stock options on the date set forth in the table below subject to the completion of the valuation analysis as of September 30, 2012, and the other objective and subjective factors described above:

Grant Date	Number of Common Shares Underlying Options Granted	Exercise Price per Common Stock	Fair Value per Common Share	Intrinsic Value per Grant
November 18, 2012	176,056	$ 4.26	$ 4.26	—

The December 31, 2012 Valuation

The valuation analysis at December 31, 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 the developments in our business, a 30% probability of an initial public offering was assigned. In particular, during the period from September 30, 2012, through December 31, 2012, the following events occurred which increased the likelihood of the occurrence of an initial public offering:

- in November 2012, we appointed M. Michelle Berrey, M.D., M.P.H. as our Chief Medical Officer;
- in December 2012, we completed the enrollment of our CMX001 Phase 2 study in AdV;
- in December 2012, agreement was reached with the FDA for timing and primary endpoints for our Phase 3 study with respect to CMX001 for the prevention of CMV infection in HSCT recipients; and

- in December 2012, we made significant progress with respect to our development of CMX001 for the treatment of smallpox.

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, 2012. The valuation analysis yielded a fair value of our common stock of $5.05 per share as of December 31, 2012.

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 subject to the completion of the valuation analysis as of December 31, 2012, and the other objective and subjective factors described above:

Grant Date	Number of Common Shares Underlying Options Granted	Exercise Price per Common Stock	Fair Value per Common Share	Intrinsic Value per Grant
February 4, 2013	84,507	$ 5.05	$ 5.05	—
February 21, 2013	1,408	$ 5.05	$ 5.05	—

The March 1, 2013 Valuation

The valuation analysis at March 1, 2013, 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 the developments in our business, a 45% probability of an initial public offering was assigned. In particular, during the period from December 31, 2012, through March 1, 2013, the following events occurred which increased the likelihood of the occurrence of an initial public offering:

- in February 2013, we appointed Ernest Mario, Ph.D. as the Chairman of our Board of Directors;
- in February 2013, our discussions with the FDA with respect to our Phase 3 study for CMX001 for the prevention of CMV infection in HSCT recipients resulted in an agreed population, endpoint and study design for which we received a “Study May Proceed” letter; and
- in February 2013, the FDA granted Fast Track designation for CMX001 for the prevention of CMV infection.

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 March 1, 2013. The valuation analysis yielded a fair value of our common stock of $7.57 per share as of March 1, 2013.

Our board of directors, or a committee of our board of directors acting under delegated authority, granted stock options on the date set forth in the table below subject to the completion of the valuation analysis as of March 1, 2013, and the other objective and subjective factors described above:

Grant Date	Number of common shares underlying options granted	Exercise price per common share	Fair value per common share	Intrinsic value per grant
March 13, 2013	98,591	$ 7.57	$ 7.57	—

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, and December 31, 2012, valuation reports, we concluded that certain 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 December 31, 2012, was as follows:

	Number of Options	Aggregate Intrinsic Value
		(in thousands)
Unvested	989,143	$ 1,471
Vested	1,604,280	$ 3,231

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 December 31, 2012, there were a total of 43,199 RSUs outstanding. The grant date fair value of the RSUs was $2.49 per unit. As of December 31, 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 and $847,000 for the year ended December 31, 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 2012. The key unobservable inputs used in the determination of the December 31, 2012 fair value are (i) volatility – 79%, (ii) range of implied fair value of the Series F redeemable convertible preferred stock – $2.19 to $2.85, (iii) time to liquidity – 8 months to 5 years, and (iv) range of probabilities of liquidity event outcomes – 2% to 31%.

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, 2011 and 2012, we had net operating loss carryforwards for federal and state tax purposes of approximately $80.2 million and $75.9 million and $83.4 million and $65.8 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, 2012, 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 or groups 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 pre-change net operating loss carryforwards before utilization and may be substantial. 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 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.

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	27,695	8,282	42.6%
General and administrative	7,606	9,398	1,792	23.6%
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 $27.7 million for the years ended December 31, 2010 and 2011, respectively. The increase in research and development expenses during this period of $8.3 million, or 42.6%, 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 $9.4 million for the years ended December 31, 2010 and 2011, respectively. The increase in general and administrative expenses during this period of $1.8 million, or 23.6%, 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, 2011 and 2012

	Years Ended December 31,		Increase (Decrease)	% Increase (Decrease)
	2011	2012		
	(in thousands, except percentages)			
Revenues:				
Collaboration and license revenue	$ 55	$ 17,445	$ 17,390	316.2%
Contract and grant revenue	12,046	16,275	4,229	35.1%
Operating expenses:				
Research and development	27,695	27,821	126	0.4%
General and administrative	9,398	8,682	(716)	(7.6%)
Income (loss) from operations	(24,992)	(2,783)	(22,209)	(88.9%)
Interest expense, net	(212)	(776)	564	266.0%
Fair value of warrant adjustment	(385)	(847)	462	120.0%
Net loss	$ (25,589)	$ (4,406)	$ (21,183)	(82.8%)

Collaboration and License Revenue

Collaboration and license fee revenue for the year ended December 31, 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 for the year ended December 31, 2011.

Contract and Grant Revenue

Contract and grant revenues for the years ended December 31, 2011 and 2012, were $12.0 million and $16.3 million, respectively, and consisted of revenue related to our BARDA contract. Revenue increased $4.2 million, or 35.1%, during the year due to the timing of our research activities and the level of services required to be performed under our BARDA contract. In the year ended December 31, 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 year ending December 31, 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 years ended December 31, 2011 and 2012, our research and development expenses were $27.7 million and $27.8 million, respectively, representing an increase of $126,000, or 0.4%. This increase in research and development expense primarily reflected:

- increased reimbursements for consulting expenses of $440,000; and
- increased compensation costs of $434,000 as we hired five additional employees.

The above costs were partially offset by a decrease of $530,000 in non-clinical development costs for CMX001 and an additional $186,000 decrease in clinical trial costs primarily driven by the status of our Phase 2 clinical trial for CMX001 that was completed in early 2012.

General and Administrative Expenses

During the years ended December 31, 2011 and 2012, our general and administrative expenses were $9.4 million and $8.7 million, respectively, representing a decrease of $716,000, or 7.6%. 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;
- decreased use taxes paid of $154,000 as a result of decreases in purchasing related to manufacturing.

Interest Expense, Net

During the years ended December 31, 2011 and 2012, our interest expense, net was $212,000 and $776,000, respectively, representing an increase of $564,000. During the year ended December 31, 2012, as compared to the year ended December 31, 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 $385,000 and $847,000 for the years ended December 31, 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 December 31, 2012, we had an accumulated deficit of $101.0 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 December 31, 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 $28.3 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 December 31, 2012, we had cash and cash equivalents of approximately $19.9 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,		
	2010	2011	2012
		(in thousands)	
Net cash used in operating activities	$ (21,681)	$ (26,279)	$ (1,876)
Net cash used in investing activities	(236)	(6,236)	(4,139)
Net cash provided by financing activities	4,603	42,816	12,314
Net increase (decrease) in cash and cash equivalents	$ (17,314)	$ 10,301	$ 6,299

Operating Activities

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 accounts 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 accounts receivable 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 $1.9 million during the year ended December 31, 2012, was primarily the result of our net loss of $4.4 million, offset by net changes in our operating assets and liabilities of $315,000 and the add-back non-cash items of $1.4 million for stock-based compensation, $847,000 increase in assets due to revaluation of our warrant liabilities, $280,000 for depreciation, and $322,000 of amortization for fees paid in connection with our loan. The net change in our operating assets and liabilities include decreases in our accounts receivable of $3.4 million offset by increases in accounts payable and accrued liabilities of $3.8 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, 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 year ended December 31, 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 ability to continue to receive government funding;
- 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]	16,873	6,042	10,831	—	—
Minimum royalties[3]	$ 1,550	—	50	500	1,000
Total	$ 18,610	$ 6,211	$ 10,899	$ 500	$ 1,000

(1) Consists of our corporate headquarters leases encompassing 14,500 square feet of office space that expire 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. In 2013, we extended two facility leases for the period beginning March 2013 and ending February 2015 and 2018. Future minimum payments under these extensions total $246,000 in less than 1 year, $804,000 in 1 – 3 years and $284,000 in 3 – 5 years.

(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. In connection with the development and commercialization of CMX001 and CMX157, in addition to royalties on product sales, we could be required to pay UC up to an aggregate of $3.4 million in milestone payments, assuming the achievement of all applicable milestone events under the license agreement. 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 6,781,550 shares, 11,034,134 and 11,259,579 shares for the years ended December 31, 2010, 2011 and 2012, 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 2011 or 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 orally administered drug that utilizes our proprietary lipid technology to deliver high intracellular concentrations of a potent antiviral compound, cidofovir-diphosphate (CDV-PP). Following oral dosing, CMX001 is absorbed through the gut, remains intact in the plasma, and is readily taken up by and delivered into cells. Once inside cells, CMX001 is converted into CDV-PP, which acts as an alternative substrate that interferes with the enzymes necessary for viral replication. When CDV-PP is selected by critical enzymes as a substrate over the normal cellular substrate (i.e. nucleotides), the result is diminished enzymatic activity and therefore diminished viral replication.

CMX001 is similar to the drug cidofovir in that both drugs are converted into CDV-PP once inside cells. Although cidofovir is approved for administration in an intravenous formulation, Vistide®, it requires a high plasma concentration to deliver a therapeutic level of cidofovir into cells and its use is limited due to the risk of kidney damage. In contrast, oral administration of CMX001 results in significantly lower plasma concentrations, higher levels of drug inside cells, and a lower risk of kidney toxicity.

Double-stranded DNA viral infections such as CMV are commonly transmitted in childhood and early adulthood, and generally remain latent in individuals 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 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 an agreed population, endpoint and study design for which we have received a "Study May Proceed" letter. We remain in active discussions with the FDA regarding final protocol specifics and anticipate initiation of dosing in 2013. 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 pharmacoeconomic data 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 and equivalent applications outside the United States. We have received Fast Track designation from the FDA for the CMV, 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 compound 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

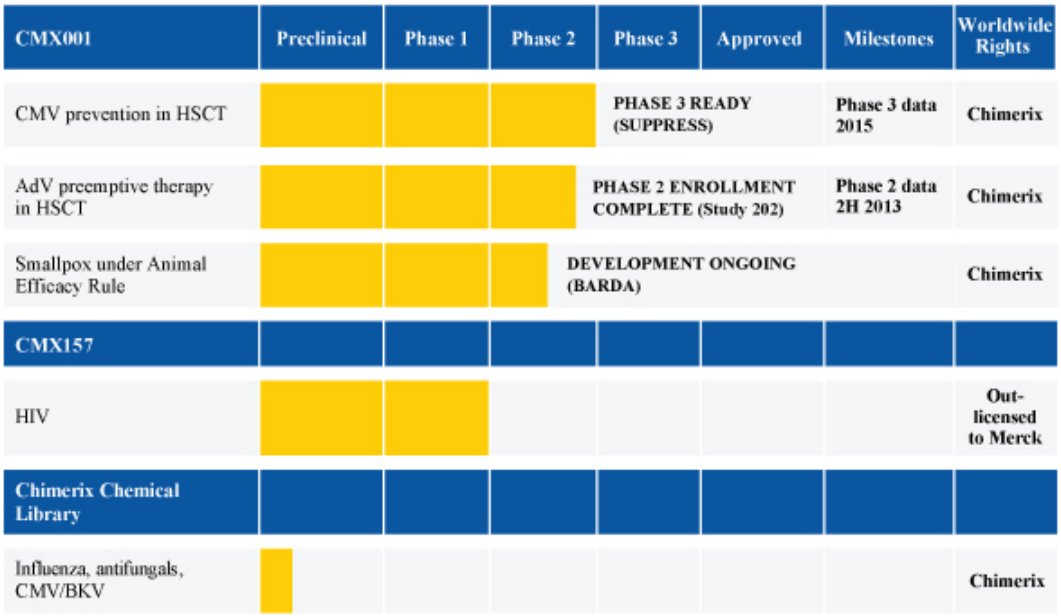
Our strategy is to discover, develop, and commercialize novel oral antiviral therapeutics in areas of significant unmet medical need. Key elements of our strategy include:

- 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 and patients receiving therapies which result in compromised immune systems;
- 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.

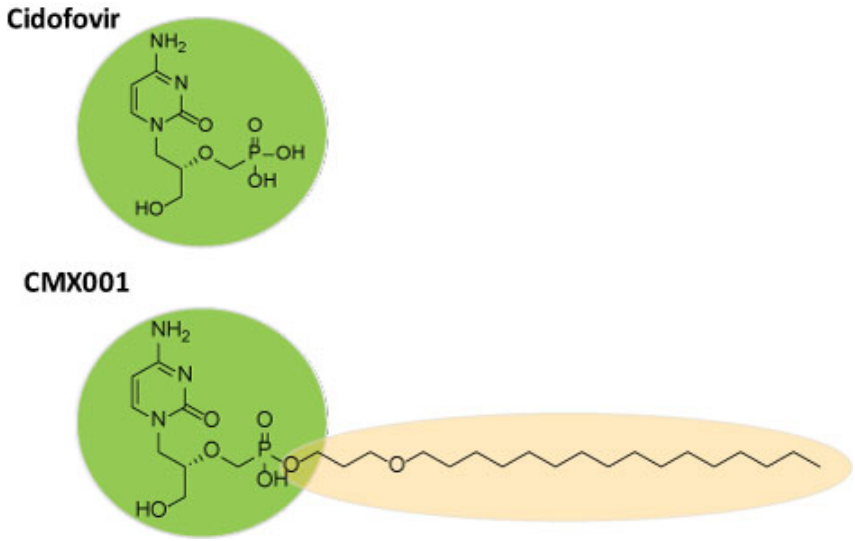
Our Product Candidates

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



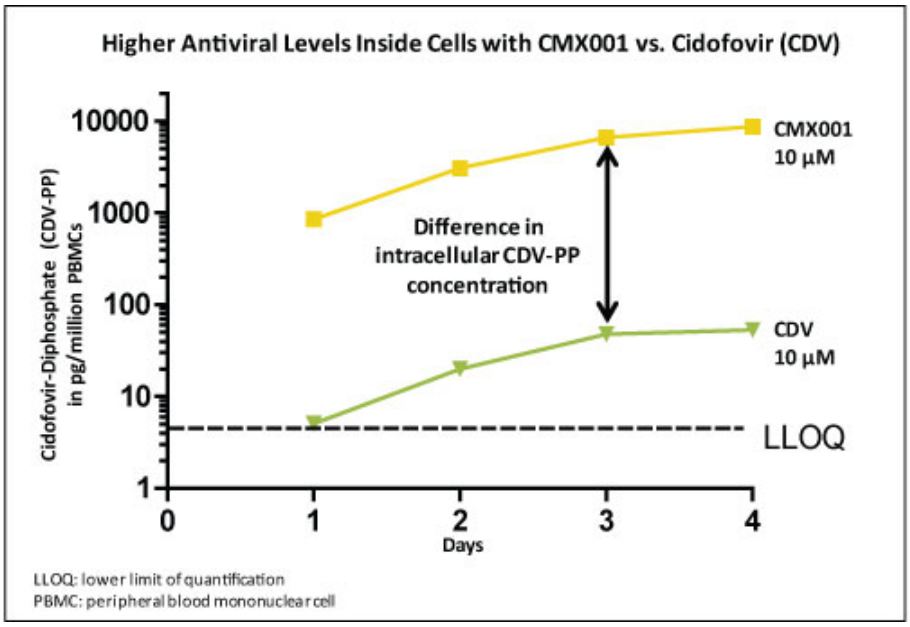
Advantages of CMX001

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 compound 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. The structures of cidofovir and CMX001 are graphically depicted below.



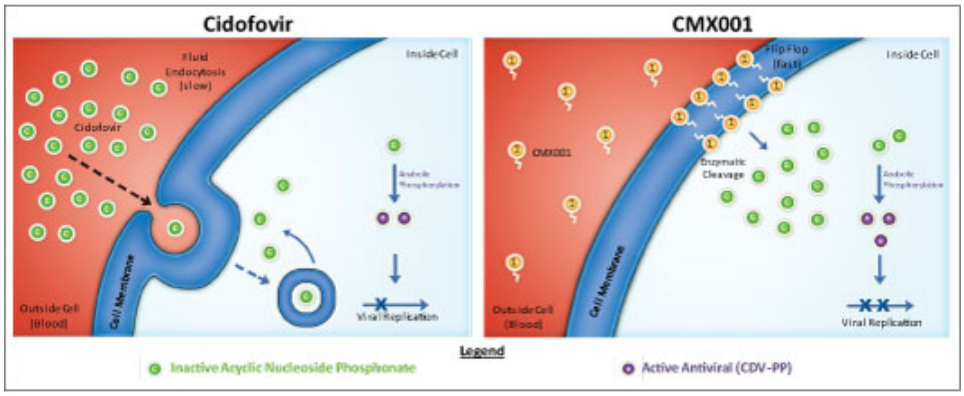
We believe CMX001 has the following advantages that support its rapid development:

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 2:1 to active CMX001 or placebo, will take study drug through Week 14, and will be monitored from enrollment through Week 24 post-transplant. As part of the SUPPRESS trial, we plan to put in place the SMMP that was developed during the conduct of our Phase 2 study which we believe will reduce the incidence of patient withdrawals due to diarrhea. The SMMP directs the investigators to interrupt study medication when the study subject presents with gastrointestinal symptoms possibly related to the use of CMX001. In our experience, such treatment interruptions allow the symptoms to subside, after which therapy can be resumed. We believe the following factors will also 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;
- CMX001 delivers the same active antiviral, CDV-PP, as intravenous cidofovir which has 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, as demonstrated in a prospective double-blind study of ganciclovir as preemptive therapy.

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 have received 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.
- Under the financial sponsorship of BARDA, we are developing CMX001 as a potential medical countermeasure against smallpox, an orthopoxvirus that is considered a Category A bioterror agent by the U.S. Centers for Disease Control and Prevention. 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 limited to 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 4% 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

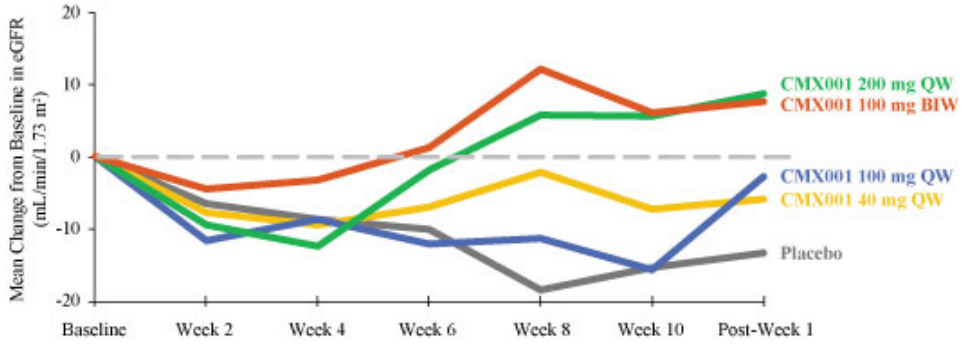
Although AdV infection is much less frequent than CMV in HSCT, disseminated AdV has a high mortality rate of 80%, and no approved therapies for prevention, preemptive therapy or treatment. AdV is more frequent in pediatric HSCT patients who have not been as widely exposed to the many AdV subspecies as 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. BKV rarely causes disease in healthy adults; however, in HSCT recipients with prolonged immunosuppression, BKV reactivation can lead to hemorrhagic cystitis (HC), a painful condition that often requires hospitalization for pain control or bladder irrigation. HC is associated with significant hematuria and clotting, and can result in impairment of kidney and/or bladder function. 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 enrolled in that trial and showed evidence of worsening renal function through a decrease in estimated glomerular filtration rate (eGFR) and an increase in serum creatinine for BKV-positive subjects randomized to placebo. These data are presented in the figures below.

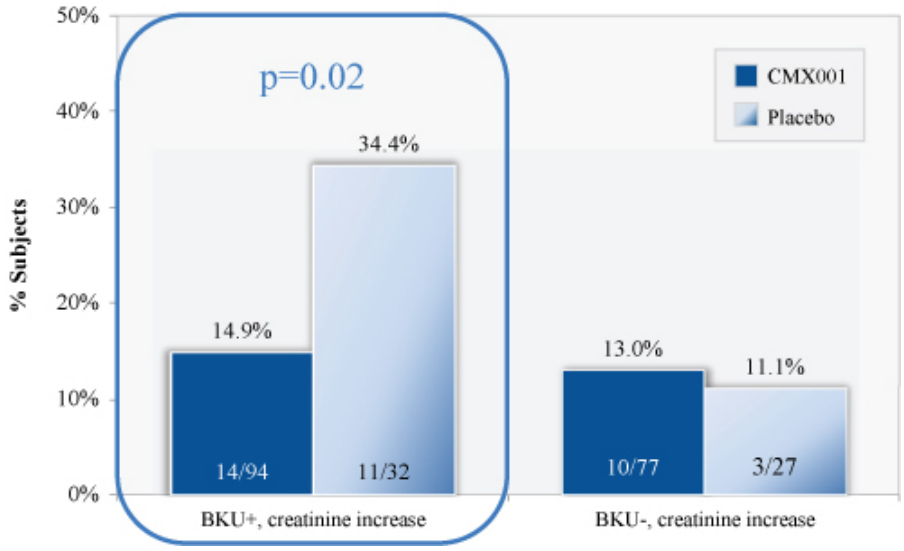
Study 201: CMX001 Demonstrated Statistically Significant Dose-Related Improvement in Renal Function (e.g., eGFR)

Mean (N) Change from Baseline in eGFR (mL/min/1.73 m^2) by Visit and Dose



eGFR: estimated glomerular filtration rate

Study 201: Subjects with BKV Demonstrated Greater Differential Change in Serum Creatinine Between CMX001 and Placebo



BKU+ = BK viruria positive; BKU- = BK viruria negative; creatinine increase = creatinine > 120 µM/L

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 viral 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" below.

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 a preferred paradigm. There are multiple precedents for prevention in other viral indications, including 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. For example, 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 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.

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 valganciclovir 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. Foscarnet is associated with significant renal toxicity, which limits its utility to patients who have ganciclovir resistance or treatment failure.

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, but 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)	Ganciclovir (GCV)[3]	Valganciclovir (vGCV)(3)	Foscarnet (FOS)	Acyclovir (ACV)	Maribavir	Letermovir	TransVax
Safety and Tolerability	**Diarrhea; managed through dose interruption**	Nephrotoxicity, myelotoxicity	Myelotoxicity	Myelotoxicity	Nephrotoxicity		Dysgeusia; unknown at current dose	No signal reported	Local reaction
Route of Administration	**Oral**	IV, hydration, probenecid	IV	Oral	IV, hydration	Oral, IV	Oral	Oral	Injection
Dosing Schedule and Duration	**Twice weekly**	Weekly	Twice weekly	Daily	Twice daily	Twice daily	Twice daily	Daily	Every 3 months
Potency[1] (EC_{50} against CMV *in vitro*, μM)	**0.001**	0.4	3.8	3.8	50-800	>200	0.31	0.05	No data
Resistance in CMV[2]	**None in Phase 2 study; difficult to generate *in vitro***	Rare	Up to 10%	Up to 10%	Rare	GCV cross resistance	None in Phase 3 study	None in Phase 2 study[4]	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	CMV, HSV, VZV, EBV	CMV, EBV	CMV specific	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.

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[1] 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	50-800	>200	0.31	0.0051
	Epstein-Barr Virus (EBV)	0.03	65.6	0.9	<500	6.2	0.63	>10
	Human Herpesvirus 6A (HHV-6A)	0.003	2.7	5.8	16	10	Inactive	>10
	Human Herpesvirus 8 (HHV-8)	0.02	2.6	8.9	177	>100	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	39.8	3.6	Inactive	>10
Adenovirus	Adenovirus 7 (AdV7)	0.02	1.3	4.5-33	Inactive (AdV2)	>100	No data	>10 (AdV2)
Polyoma	BK Virus (BKV)	0.13	115	>200	Inactive	>200	No data	No data
	JC Virus (JCV)	0.045	>0.1	No data	Inactive	No data	No data	No data
Papilloma	Human Papillomavirus 11 (HPV-11)	17	716	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	>392	Inactive	>144	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 planned 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 230 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. The protocol for the SUPPRESS trial has been submitted to the FDA under a CMV-specific IND held by us. We do not intend to request a Special Protocol Assessment from the FDA prior to commencing the SUPPRESS trial. Following the FDA's 30-day safety review after the submission of the SUPPRESS protocol, we received a "Study May Proceed" letter from the FDA with respect to SUPPRESS, as well as a Fast Track designation for the CMV prevention indication.

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.

We currently hold multiple individual INDs with respect to CMX001, including an IND for the treatment of AdV infection (submitted on November 18, 2010) and an IND for the prevention of clinically significant CMV infection in HSCT patients (submitted on January 22, 2013).

Study 201: Prevention of CMV Infection in HSCT Recipients

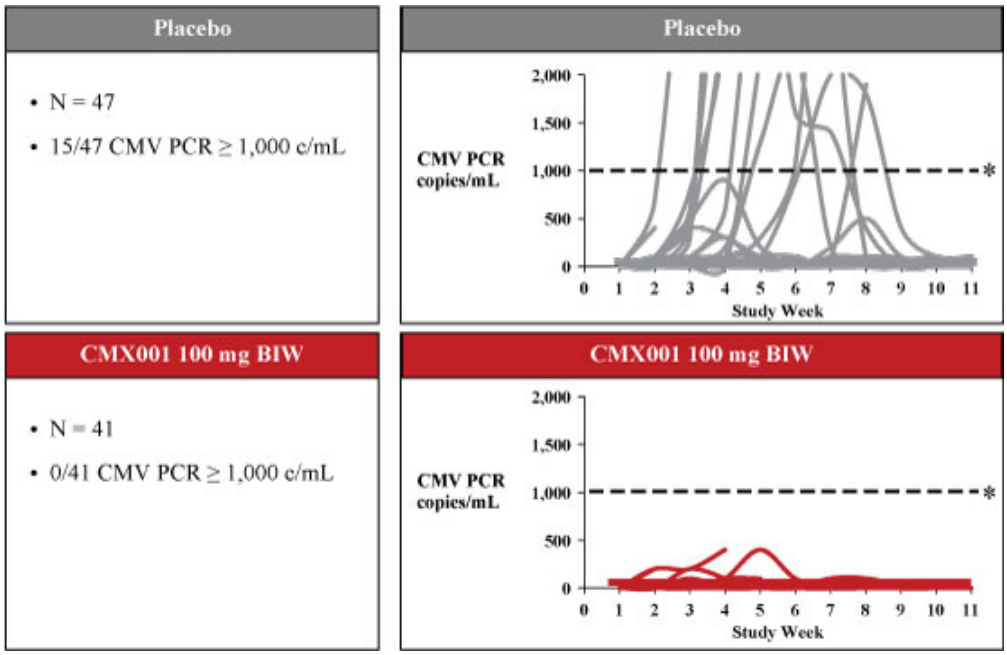
The key efficacy findings from our development program to date include the demonstration of superiority of CMX001 over placebo for the prevention of CMV in HSCT recipients in Study 201.

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, mITT population).

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.

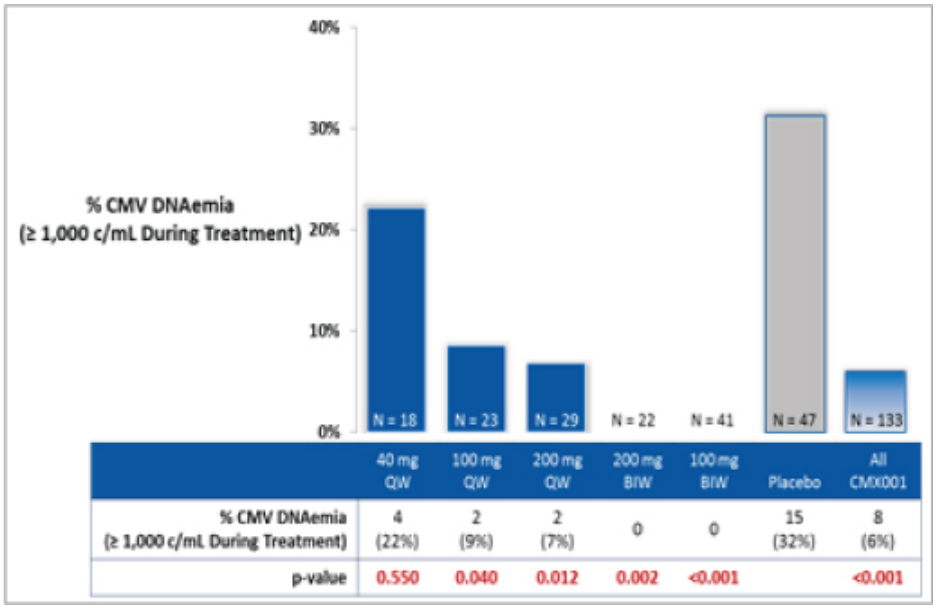
Study 201: CMV PCR for Individual Subjects Over Time



* Represents the clinically relevant threshold.

Subjects CMV negative at Baseline.

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. Overall, there was a similar frequency and severity of adverse events seen in these dosing groups compared to the placebo group. Regardless of dose and dosing frequency, there was no indication of myelotoxicity or nephrotoxicity associated with CMX001 or discontinuations from the study related to these events.

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 3% 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. At a dose of 100 mg BIW, approximately 30% of subjects experienced ALT increases greater than three times the upper limit of normal, compared to 16% in the placebo group. When present, the ALT increases follow a predictable pattern and return to baseline levels following completion of therapy. The CMX001-related increases in ALT were not

associated with increases in aspartate aminotransferase or bilirubin. 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 and safety 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 patients infected with BKV and receiving CMX001 as compared with subjects on placebo. These data provide a clinical correlate to the *in vitro* activity of CMX001 against BKV.

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 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.

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. While the majority of patients treated were HSCT or SOT recipients, we also provided CMX001 for patients with other diseases, including congenital deficiencies or HIV.

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 230 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. The average period of dosing with CMX001 was approximately 11 weeks. Over 80 international transplant centers have requested CMX001. In this EIND population, approximately one-third 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 142 adult and 68 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. Approximately 28% of patients were co-infected with two or more dsDNA viruses. 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.

In summary, across our Compassionate Use Program, approximately one-third of patients dosed with CMX001 were co-infected with two or more dsDNA viruses.

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.

Phase 2 Data Using SUPPRESS Endpoint and Inclusion Criteria

In order to assure adequate power for the Phase 3 SUPPRESS trial, we calculated the maximum estimated failure rates for subjects enrolled in Study 201 using the primary endpoint and inclusion criteria for SUPPRESS. This analysis includes subjects with negative or positive CMV PCR at baseline (first day of dosing) and excludes subjects who had any samples during screening that were CMV PCR positive. Using a conservative approach, failures included (i) subjects with CMV disease, (ii) subjects with CMV PCR values greater than 1,000 copies/mL, (iii) subjects with CMV PCR values greater than 100 copies/mL and defined as "high risk" in the SUPPRESS protocol or (iv) subjects that initiated anti-CMV preemptive therapy, independent of CMV PCR. Where insufficient data were available, subjects were considered as having met criteria for a "failure."

CMX001: Phase 2 Data Based on SUPPRESS Primary Endpoint and Inclusion Criteria

Cohort	Failures(1) ("Worst Case")	Included in Analysis (n)
CMX 40 mg QW	8 (40%)	20
CMX 100 mg QW	9 (38%)	24
CMX 200 mg QW	11 (34%)	32
CMX 200 mg BIW	9 (33%)	27
CMX 100 mg BIW	10 (22%)	45
Placebo	24 (46%)	52

(1) Failures = (i) CMV disease, (ii) CMV PCR > 1,000 copies/mL at local or central lab, (iii) CMV PCR > 100 copies/mL and "high risk" as defined in the SUPPRESS protocol, or (iv) initiation of anti-CMV preemptive therapy, independent of CMV PCR.

This analysis demonstrates that a 50% reduction (22% vs. 46%) in clinical risk, which is the assumed clinically relevant difference between CMX001 and placebo, would be achieved if similar prescriptions of subjects reach the failure endpoint in Study 301 as were observed in Study 201.

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 have received Fast Track designation from the FDA for the CMV, 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

Variola virus, the dsDNA virus that causes smallpox, is an orthopoxvirus that infects only humans. 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. Additionally, smallpox has been 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 development of CMX001 as a medical countermeasure for the treatment of smallpox from the NIAID. 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 order to supply CMX001 to the Strategic National Stockpile as a treatment for smallpox infection, FDA approval is ultimately required. We submitted an IND for CMX001 for the treatment of smallpox to FDA in 2005. The CMX001 development program for this indication was granted Fast Track Status at that time. Should we be successful with our development efforts, an NDA will be submitted to the FDA in order to obtain an approval for CMX001 for the treatment of smallpox.

Since smallpox is no longer a communicable disease in humans, the development of CMX001 for treatment of smallpox is occurring under the “Animal Efficacy Rule”. Under this Rule, the FDA can rely on the evidence from animal studies to provide substantial evidence of the effectiveness of these products in support of an NDA. Products evaluated for effectiveness under the “Animal Efficacy Rule” are evaluated for safety in clinical trials using the same regulations as exist for other drugs. Therefore, the safety data generated for CMX001 in the clinical trials described in the section titled “Clinical Development Program for CMX001” would provide the clinical safety data for the treatment of smallpox indication.

In February 2011, we were awarded a Broad Agency Announcement (BAA) contract by BARDA to fund development of CMX001 for the treatment of smallpox in the event of a smallpox outbreak. See “— Commercial Agreements” below for more information on this contract.

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. Additionally, as part of progressing the clinical development of CMX001 for the smallpox indication, the base performance segment of the BARDA contract supported Clinical Study CMX001-350. This study provided safety data for CMX001 relevant to the treatment of smallpox indication.

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, we and the FDA 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.

CMX001 has shown encouraging activity in relevant animal models of smallpox. *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.

The base performance segment of the BARDA contract has been extended from the initial targeted completion date on several occasions most recently to extend the completion date from March 31, 2013 until May 31, 2013. We will be presenting the results of our work during this base performance segment to a BARDA review committee, and subject to the outcome of this meeting, 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.

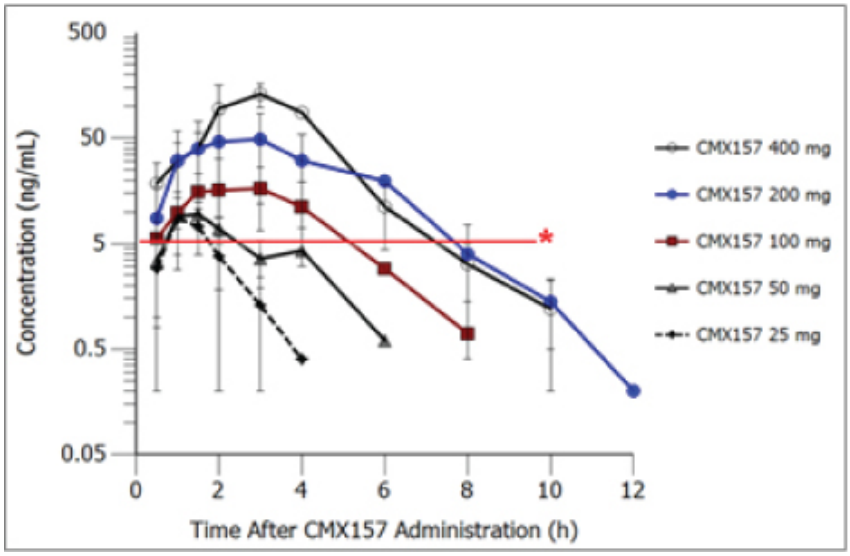
CMX157

CMX157, our second oral nucleotide compound, 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. We submitted an IND for CMX157 for the treatment of HIV infection on April 30, 2009. We are no longer the sponsor of record for this IND. Merck became the sponsor of this IND upon its licensing of CMX157 from us.

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 February 21, 2013 to extend the base performance segment through May 31, 2013.

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 $75.8 million in expense reimbursement and $5.3 million in 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 May 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, Chimerix and the U.S. government share the rights to any inventions made in the performance of our work under the contract. Specifically, 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 64,788 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 connection with the development and commercialization of CMX001 and CMX157, we could be required to pay UC up to an aggregate of $3.4 million in milestone payments, assuming the achievement of all applicable milestone events under the license agreement. 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 December 31, 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. Specifically, Section 3.3(a)(5) of the license agreement contains a due diligence requirement stating that we must commence a Phase III clinical trial for the first Licensed Product within 9 years of the Effective Date (as those terms are defined within the license agreement). On January 31, 2011 we received a letter from UC stating that we had satisfied the requirements of Section 3.3(a)(5), thereby waiving compliance with further due diligence obligations under Section 3.3(a)(5).

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, including off-the-shelf and made-to-order starting 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 a scale of 100 kilograms, which is an amount

that far exceeds our anticipated commercial requirements. We are currently transferring the drug substance manufacturing process to our selected contractor that will produce the commercial supply of drug substance. 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 tablets 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 pilot scale. We are currently evaluating manufacturers to optimize tablet and suspension formulation production to meet forecasted commercial demand.

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 2015 and 2018. 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.

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
Michael D. Rogers, Ph.D.	59	Chief Development Officer
Hervé Momméja-Marin, M.D.	42	Vice President, Clinical Research
Non-Employee Directors		
Ernest Mario, Ph.D.(1)	74	Chairman of the Board of Directors
Farah Champsi(1)(2)	51	Director
Martha J. Demski(2)	60	Director
Wende Hutton(3)	53	Director
James Niedel, M.D., Ph.D.(1)(3)	68	Director
Arthur M. Pappas(2)	65	Director
Timothy J. Wollaeger(3)	69	Director

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

(2) Member of the audit committee.

(3) Member of the compensation 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.

Michael D. Rogers, Ph.D. Dr. Rogers has served as our Chief Development Officer since March 2013. From 2007 to 2012, Dr. Rogers served as Chief Development Officer at Pharmasset, Inc., where his primary responsibility was to facilitate the design and implementation of development programs for HCV antiviral compounds. From 2004 to 2007, Dr. Rogers served as Vice President, Division of Viral Diseases at GlaxoSmithKline, where he was responsible for antiviral discovery activities directed toward HIV and hepatitis C virus indications. From 2001 to 2004, Dr. Rogers served as Vice President, Antiviral Discovery Medicine at GlaxoSmithKline. Dr. Rogers has over 29 years of industry experience and has participated in all phases of antiviral and anti-infective drug development, including discovery, preclinical development, and phase 1, 2, 3, and 3b/4 clinical development programs. Dr. Rogers received his doctorate in medical parasitology and a Master of Public Health degree in medical microbiology from the University of North Carolina, Chapel Hill. He completed a postdoctoral fellowship in clinical microbiology at St. Jude Children’s Research Hospital in Memphis, Tennessee.

Hervé Momméja-Marin, M.D. Dr. Momméja-Marin has served as our Vice President, Clinical Research since July 2010. From September 2006 to June 2010, Dr. Momméja-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. Momméja-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. Momméja-Marin received a medical degree from Paris VII University, France. Dr. Momméja-Marin received his French certifications in internal medicine and multiple subspecialties.

Non-Employee Directors

Ernest Mario, Ph.D. Dr. Mario has served as one of our directors and as Chairman of our board of directors since February 2013. Since August 2007, Dr. Mario has served as Chief Executive Officer of Capnia, Inc., a privately held pharmaceutical company. From April 2003 to August 2007, Dr. Mario served as Chief Executive Officer and Chairman of the board of directors of Reliant Pharmaceuticals, Inc., a privately held pharmaceutical company. From November 1997 to December 2001, Dr. Mario served as Chairman and Chief Executive Officer of ALZA Corporation, a research-based pharmaceutical company, and as Co-Chairman and Chief Executive Officer from August 1993 to November 1997. From January 1992 until March 1993, Dr. Mario served as Deputy Chairman of Glaxo Holdings plc., a pharmaceutical company, and as Chief Executive from May 1989 to March 1993. Dr. Mario has served as a director of XenoPort Inc., a biopharmaceutical company, since June 2012, Vivus, Inc., a biopharmaceutical company, since April 2012, TONIX Pharmaceuticals Holdings Corp., a specialty pharmaceutical company, since October 2011, Celgene Corporation, a biopharmaceutical company, since August 2007, Boston Scientific Corporation, a medical devices company, since October 2001, and Maxygen, Inc., a biotechnology company, since July 2001. Dr. Mario is the recipient of the 2007 Remington Medal, the American Pharmacists Association's highest honor. Dr. Mario earned a B.S. in Pharmacy from Rutgers University, and a M.S. and a Ph.D. in Physical Sciences

from the University of Rhode Island. Our board of directors believes that Dr. Mario's expertise and experience in the pharmaceutical 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. From December 1988 to June 2004, Ms. Demski served as Vice President, Chief Financial Officer, Treasurer and Secretary of Vical Incorporated, a biopharmaceutical company. 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.

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.

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. From 1993 to 2006, Mr. Wollaeger was the General Partner of Kingsbury Capital Partners, L.P., a healthcare-oriented venture capital firm. From 1990 to 1993, Mr. Wollaeger was Senior Vice President of Columbia Hospital Corporation, a hospital management company that merged into Hospital Corporation of America in 1993. From 1987 to 1993, Mr. Wollaeger was a General Partner and co-founder of Biovest Partners, L.P., an investment fund. From 1983 to 1986, Mr. Wollaeger served as Senior Vice President and Chief Financial Officer of Hybritech, Inc., a biotechnology company that was acquired by Eli Lilly & Co. in 1986. From 1972 to 1980, Mr. Wollaeger was employed by Baxter Healthcare Corporation, a global healthcare company, where he most recently served as Vice President and General Manager of Baxter's operations in Mexico. Mr. Wollaeger is Chairman of the Board of Sotera Wireless, Inc., a medical device company, and a director of Asteres, Inc., a creator of business and technology solutions, and CalciMedica, Inc., a drug development company, and is Chairman of Naviscan, Inc., a medical imaging company. Investment funds affiliated with Mr. Wollaeger were early stage investors in Pyxis Corporation, a technology developer for hospitals that was acquired by Cardinal Health, Inc. in 1996, Biosite, Inc., a medical diagnostic company that was acquired by Inverness Medical Innovations, Inc. in 2007, Amylin Pharmaceuticals, Inc., a biopharmaceutical company that was acquired by Bristol-Myers Squibb Company in 2012, and Vical Incorporated. Mr. Wollaeger earned a B.A. in Economics from Yale University 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 seven of our eight directors, Ms. Champsi, Ms. Demski, Ms. Hutton, Dr. Mario, 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 Dr. Mario, 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. Mario. 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. Mario 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;
- making recommendations to the full board of directors regarding the compensation and other terms of employment of our executive officers;
- reviewing and making recommendations to the full board of directors regarding 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 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 making recommendations to the full board of directors regarding 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. Mario and Dr. Niedel. 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 was paid in the form of restricted stock units. 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 83,009 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. In February 2013, we granted to Messrs. Moch and Trost a restricted stock unit award covering 30,102 and 12,104 shares of our common stock, respectively, which represented 50% of the performance bonus award to which they were entitled. The restricted stock unit awards vest according to the standard restricted stock unit vesting schedule described in the section below entitled "—Equity-Based Incentive Awards".

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 were granted to Messrs. Moch and Trost in February 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 117,386 shares of common stock with an exercise price of $2.38 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 14,084 shares of common stock to Dr. Margolskee in connection with her appointment as interim Chief Medical Officer, with an exercise price of $2.35 per share. On November 18, 2012, the board of directors granted an option to purchase 176,056 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 $4.26 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 granted restricted stock units to Messrs. Moch and Trost in February 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 83,009 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." The corporate performance goals that never occurred and resulted in the cancellation of the 2010 option award related to the execution of a qualified definitive agreement for a collaboration transaction that resulted in gross cash proceeds of at least $30,000,000 and our award of a grant from BARDA for the procurement of smallpox antiviral drug that resulted in gross cash proceeds of at least $100,000,000. 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 169,014 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 176,056 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 14,084 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 granted to Messrs. Moch and Trost in February 2013 that represented 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 14,084 shares for a period of 12 months following the termination of his continuous service.

In February 2013, our board of directors approved an Officer Change in Control Severance Benefit Plan (the severance plan). Under the severance plan, our officers, including Messrs. Moch, Trost and Dr. Berrey, are entitled to receive severance benefits upon a covered termination within the thirty days prior to or thirteen months following a change of control transaction (which generally has the same meaning as set forth in our 2013 plan). A covered termination means the officer's termination without cause or resignation with good reason (including resignation due to any material reduction in duties, authorities or responsibilities, base salary or relocation by more than fifty miles). Upon a covered termination and contingent upon delivery to us of an effective release of claims, Messrs. Moch, Trost and Dr. Berrey are entitled to (i) a payment equal to six months (or twelve months, for Mr. Moch) of base salary; (ii) accelerated vesting of all outstanding stock options and other stock awards; and (iii) payment of COBRA benefits for six months (or twelve months, for Mr. Moch). Payments triggered under the severance benefit plan will not affect the benefits an officer is entitled to under an individually negotiated employment contract or agreement; however, payments under the severance plan will generally be reduced by severance benefits also payable under any individually negotiated employment contract or agreement.

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	197,177	28,175[3]	1.57	6/19/2019
	8/12/2009	29,144	17,581[4]	3.16	8/11/2019
	8/12/2009	94,119[5][6][13]	—	3.16	8/11/2019
	4/14/2010	117,386[5][7][13]	—	3.16	4/13/2020
	4/7/2011	211,267[5][8][13]	—	2.35	4/6/2021
	6/13/2012	117,386[5][9][13]	—	2.38	6/12/2022
Timothy W. Trost	4/7/2011	169,014[5][8]	—	2.35	4/6/2021
M. Michelle Berrey	11/18/2012	—	176,056[10]	4.26	11/17/2022
Dorothy J. Margolskee	3/30/2012	14,084[11]	—	2.35	3/29/2022
J. Michael Grindel	11/17/2011	14,084[12]	—	2.35	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) 64,020 shares were vested on June 8, 2009 and 1,707 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) 21,522 shares were vested on June 8, 2010; 316 shares vest on the eighth day of each month commencing on January 8, 2011 and

ending on and including December 8, 2012; and 2,939 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) 13,689 shares vested on June 8, 2010; 2,933 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; 2,618 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) 2,816 shares vested immediately on the date of grant. The remainder of the shares vested at a rate of 1,408 per month during the time Dr. Margolskee served as our interim CMO, and at the rate of 704 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) 14,084 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: 94,119 shares subject to the option covering 94,119 shares granted on August 12, 2009; 78,257 shares subject to the option covering 117,386 shares granted on April 14, 2010; 88,028 shares subject to the option covering 211,267 shares granted on April 7, 2011; and 14,673 shares subject to the option covering 117,386 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 February 2013, 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) 1,408,450 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 outstanding stock options or other stock awards 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, 2014 (assuming the 2013 plan becomes effective before such date) and continuing through and including January 1, 2023, by 2.5% 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 2,816,901 shares.

No person may be granted stock awards covering more than 704,225 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 704,225 shares or a performance cash award having a maximum value in excess of $5,000,000. 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 427,829 shares remaining available for the grant of stock awards under our 2012 plan and there were outstanding stock awards covering a total of 425,366 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) 450,041 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 6,197,183 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 2,211,256 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.

2013 Employee Stock Purchase Plan

Our board of directors adopted the ESPP in February 2013 and we expect our stockholders will approve the ESPP prior to the execution and delivery of the underwriting agreement for this offering. The ESPP will become effective immediately upon the execution and delivery of the underwriting agreement related to this offering. The purpose of the ESPP is to retain the services of new employees and secure the services of new and existing employees while providing incentives for such individuals to exert maximum efforts toward our success and that of our affiliates.

Share Reserve. Following this offering, the ESPP authorizes the issuance of 704,225 shares of our common stock pursuant to purchase rights granted to our employees or to employees of any of our designated affiliates. The number of shares of our common stock reserved for issuance will automatically increase on January 1 of each calendar year, from January 1, 2014 (assuming the ESPP becomes effective before such date) through January 1, 2023 by the least of (a) 1% of the total number of shares of our common stock outstanding on December 31 of the preceding calendar year, (b) 422,535 shares, or (c) a number determined by our board of directors that is less than (a) and (b). The ESPP is intended to qualify as an "employee stock purchase plan" within the meaning of Section 423 of the Code. As of the date hereof, no shares of our common stock have been purchased under the ESPP.

Administration. Our board of directors has delegated its authority to administer the ESPP to our compensation committee. The ESPP is implemented through a series of offerings of purchase rights to eligible employees. Under the ESPP, we may specify offerings with durations of not more than 27 months, and may specify shorter purchase periods within each offering. Each offering will have one or more purchase dates on which shares of our common stock will be purchased for employees participating in the offering. An offering may be terminated under certain circumstances.

Payroll Deductions. Generally, all regular employees, including executive officers, employed by us or by any of our designated affiliates, may participate in the ESPP and may contribute, normally through payroll deductions, up to 15% of their earnings for the purchase of our common stock under the ESPP. Unless otherwise determined by our board of directors, common stock will be purchased for accounts of employees participating in the ESPP at a price per share equal to the lower of (a) 85% of the fair market value of a share of our common stock on the first date of an offering or (b) 85% of the fair market value of a share of our common stock on the date of purchase.

Limitations. Employees may have to satisfy one or more of the following service requirements before participating in the ESPP, as determined by our board of directors: (a) customarily employed for more than 20 hours per week, (b) customarily employed for more than five months per calendar year or (c) continuous employment with us or one of our affiliates for a period of time (not to exceed two years). No employee may purchase shares under the ESPP at a rate in excess of $25,000 worth of our common stock based on the fair market value per share of our common stock at the beginning of an offering for each year such a purchase right is outstanding. Finally, no employee will be eligible for the grant of any purchase rights under the ESPP if immediately after such rights are granted, such employee has voting power over 5% or more of our outstanding capital stock measured by vote or value pursuant to Section 424(d) of the Code.

Changes to Capital Structure. In the event that there occurs a change in our capital structure through such actions as a stock split, merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or similar transaction, the board of directors will make appropriate adjustments to (a) the number of shares reserved under the ESPP, (b) the maximum number of shares by which the share reserve may increase automatically each year and (c) the number of shares and purchase price of all outstanding purchase rights.

Corporate Transactions. In the event of certain significant corporate transactions, including: (i) a sale of all our assets, (ii) the sale or disposition of 90% of our outstanding securities, (iii) the consummation of a merger or consolidation where we do not survive the transaction, and (iv) the consummation of a merger or consolidation where we do survive the transaction 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, any then-outstanding rights to purchase our stock under the ESPP may be assumed, continued or substituted for by any surviving or acquiring entity (or its parent company). If the surviving or acquiring entity (or its parent company) elects not to assume, continue or substitute for such purchase rights, then the participants' accumulated payroll contributions will be used to purchase shares of our common stock within 10 business days prior to such corporate transaction, and such purchase rights will terminate immediately.

Plan Amendments, Termination. Our board of directors has the authority to amend or terminate our ESPP, provided that except in certain circumstances any such amendment or termination may not materially impair any outstanding purchase rights without the holder's consent. We will obtain stockholder approval of any amendment to our ESPP as required by applicable law or listing requirements.

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	—	—	—
Ernest Mario, Ph.D	—	—	—
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, 61,265 outstanding and unexercised.

In connection with Dr. Mario's appointment as the Chairman of our board of directors, we granted Dr. Mario an option to purchase 84,507 shares of our common stock in February 2013. The option has an exercise price equal to $5.05 and vests over a four year period, subject to Dr. Mario's continued service with us. In

addition, Dr. Mario has agreed to forego receiving the first four annual cash retainers that would otherwise be payable to him under the compensation policy applicable to our non-employee directors following the completion of this offering.

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 $25,000 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 $6,000 for service as chairman of the audit committee, $3,000 for service as chairman of the compensation committee and $2,500 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 $50,000 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 $25,000 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 $10,000 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. Additionally, each option will vest in full upon a change in control (as defined under our 2013 plan). 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

Participation in Offering

Entities affiliated with certain of our existing stockholders and directors have indicated an interest in purchasing up to an aggregate of approximately $ million in shares of our common stock in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters could determine to sell more, less or no shares to any of these potential investors and any of these potential investors could determine to purchase more, less or no shares in this offering.

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 310,432 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 2,816 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 176,056 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 16,014,083 shares of common stock outstanding as of December 31, 2012, assuming conversion of all outstanding shares of our preferred stock into 14,480,088 shares of common stock, and excludes the issuance of 1,076,002 shares of common stock underlying shares of our Series F preferred stock issuable immediately prior to the closing of this offering in respect of the accumulated dividends on our Series F preferred stock through the date immediately preceding the date of this prospectus. The percentage ownership information under the column entitled “After Offering” includes the issuance of 1,076,002 shares of common stock underlying shares of our Series F preferred stock issuable immediately prior to the closing of this offering in respect of the accumulated dividends on our Series F preferred stock through the date immediately preceding the date of this prospectus and is based on the sale of shares of common stock in this offering.

Entities affiliated with certain of our existing stockholders and directors have indicated an interest in purchasing up to an aggregate of approximately $ million in shares of our common stock in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters could determine to sell more, less or no shares to any of these potential investors and any of these potential investors could determine to purchase more, less or no shares in this offering. The information set forth below does not reflect any potential purchases by these potential investors.

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 March 1, 2013, which is 60 days after December 31, 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	4,316,345	26.6%	
Canaan VII L.P.[2] 285 Riverside Avenue, Suite 250 Westport, CT 06880	3,112,707	19.2%	
New Leaf Ventures II, L.P.[3] Time Square Tower 7 Times Square, Suite 3502 New York, NY 10036	3,013,188	18.1%	
Alta Biopharma Partners III, L.P. and its affiliated entities[4] One Embarcadero Center, 37th Floor San Francisco, CA 94111	2,203,929	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	1,115,737	6.9%	
Directors and named executive officers			
Timothy J. Wollaeger[1]	4,316,345	26.6%	
Wende S. Hutton[6]	3,125,104	19.3%	
James Niedel, M.D., Ph.D.[3]	3,013,188	18.1%	
Farah Champsi[4]	2,203,929	13.6%	
Arthur M. Pappas[5]	1,115,737	6.9%	
Kenneth I. Moch[7]	812,235	4.8%	
Ernest Mario, Ph.D	—	*	
Timothy W. Trost[8]	169,014	1.0%	
Martha J. Demski[9]	61,265	*	
Michael Grindel, Ph.D.[10]	14,084	*	
Dorothy J. Margolskee, M.D.[11]	14,084	*	
M. Michelle Berrey, M.D., M.P.H.	—	*	
All current executive officers and directors as a group (11 persons)[12]	14,816,817	80.5%	

* Represents beneficial ownership of less than one percent.

(1) Includes 1,116,596 shares of common stock held by Sanderling Venture Partners V, L.P., 273,434 shares of common stock held by Sanderling V Biomedical, L.P., 155,143 shares of common stock held by Sanderling V Limited Partnership, 138,046 shares of common stock held by Sanderling V Beteiligungs GmbH & Co. KG, 88,963 shares of common stock held by Sanderling V Ventures Management, 281,053 shares of common stock held by Sanderling V Biomedical Co-Investment Fund, L.P., 463,582 shares of common stock held by Sanderling Venture Partners V Co-Investment Fund, L.P., 759,370 shares of common stock and a warrant to purchase 189,842 shares of common stock held by Sanderling V Strategic Exit Fund, L.P. (collectively, the Sanderling V Shares), 797,346 shares of common stock held by Sanderling Venture Partners VI Co-Investment Fund, L.P., 15,431 shares of common stock held by Sanderling VI Beteiligungs GmbH & Co. KG, 18,384 shares of common stock held by Sanderling VI Limited Partnership, 7,543 shares of common stock and a warrant to purchase 8,166 shares of common stock held by Sanderling Ventures Management VI (collectively, the Sanderling VI Shares) and 3,446 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 2,900,924 shares of common stock and a warrant to purchase 211,783 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 2,410,551 shares of common stock and a warrant to purchase 602,637 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 1,892,453 shares of common stock and a warrant to purchase 126,163 shares of common stock held by Alta Biopharma Partners III, L.P., 127,095 shares of common stock and a warrant to purchase 8,472 shares of common stock held by Alta Biopharma Partners III GmbH & Co. Beteiligungs KG and 46,637 shares of common stock and a warrant to purchase 3,109 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 657,437 shares of common stock and a warrant to purchase 164,359 shares of common stock held by A.M. Pappas Life Science Ventures IV, L.P., 31,291 shares of common stock and a warrant to purchase 7,822 shares of common stock held by PV IV CEO Fund, L.P., 191,931 shares of common stock and a warrant to purchase 47,982 shares of common stock held by A.M. Pappas Life Science Ventures III, L.P. and 11,932 shares of common stock and a warrant to purchase 2,983 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 2,900,924 shares of common stock and a warrant to purchase 211,783 shares of common stock held by Canaan VII L.P. (the Canaan VII Shares), and 12,397 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 781,713 shares which Mr. Moch has the right to acquire from us within 60 days of December 31, 2012 pursuant to the exercise of stock options, 248,939 of which will be unvested but exercisable as of March 1, 2013, and 275,077 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 169,014 shares which Mr. Trost has the right to acquire from us within 60 days of December 31, 2012 pursuant to the exercise of stock options, 51,645 of which will be unvested but exercisable as of March 1, 2013.

(9) Includes 14,788 shares held by Ms. Demski, 11,091 of which are held by the Martha J. Demski Trust u/a 10/01/94, and 46,477 shares which Ms. Demski has the right to acquire from us within 60 days of December 31, 2012 pursuant to the exercise of stock options, 7,201 of which will be unvested but exercisable as of March 1, 2013.

(10) Represents 14,084 shares which Dr. Grindel has the right to acquire from us within 60 days of December 31, 2012 pursuant to the exercise of stock options.

(11) Represents 14,084 shares which Dr. Margolskee has the right to acquire from us within 60 days of December 31, 2012 pursuant to the exercise of stock options.

(12) Includes 12,415,773 shares held by all current executive officers and directors as a group and 2,390,239 shares that all current executive officers and directors as a group have the right to acquire from us within 60 days of December 31, 2012 pursuant to the exercise of stock options and warrants, 338,307 of which will be unvested but exercisable as of March 1, 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 December 31, 2012, there were 1,533,995 shares of common stock outstanding, held of record by 45 stockholders. Based on such number of shares of common stock outstanding as of December 31, 2012, and assuming (1) the conversion of all outstanding shares of our preferred stock which, at December 31, 2012, will convert into 14,480,088 shares of common stock upon the closing of this offering, (2) the issuance of 1,076,002 shares of common stock underlying shares of our Series F preferred stock issuable immediately prior to the closing of this offering in respect of the accumulated dividends on our Series F preferred stock through the date immediately preceding the date of this prospectus (based on an assumed prospectus date of April 10, 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 December 31, 2012, there were 2,593,423 shares of common stock subject to outstanding options under our equity incentive plans, 43,199 shares of common stock issuable pursuant to outstanding restricted stock units under our equity incentive plans and 1,613,395 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 December 31, 2012, we had outstanding an aggregate of 14,480,088 shares of preferred stock held of record by 40 stockholders.

In addition, as of December 31, 2012, we had outstanding warrants to purchase an aggregate of 1,613,395 shares of preferred stock, as described under "— Warrants" below.

Upon closing of this offering, all outstanding shares of preferred stock at December 31, 2012, will convert into 14,480,088 shares of our common stock, and we will issue 1,076,002 shares of common stock underlying shares of our Series F preferred stock issuable immediately prior to the closing of this offering in respect of the accumulated dividends on our Series F preferred stock through the date immediately preceding the date of this prospectus (based on an assumed prospectus date of April 10, 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 December 31, 2012, 2,593,423 shares of common stock were issuable upon the exercise of outstanding stock options, at a weighted-average exercise price of $2.45 per share, and 43,199 shares of common stock were issuable pursuant to outstanding restricted stock units.

Warrants

As of December 31, 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 5,915 shares of our common stock at an exercise price of $5.33 per share of common stock.

As of December 31, 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 16,529 shares of our common stock at an exercise price of $7.26 per share of common stock.

As of December 31, 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 41,323 shares of our common stock at an exercise price of $7.26 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 1,549,628 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 Computershare Trust Company, N.A. The transfer agent and registrar's address is P.O. Box 43078, Providence, Rhode Island 02940.

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 December 31, 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. In addition, any shares sold in this offering to entities affiliated with our existing stockholders and directors will be subject to 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 December 31, 2012, options to purchase a total of 2,593,423 shares of common stock were outstanding, of which 2,481,216 were vested. In addition, as of December 31, 2012, 43,199 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.

Entities affiliated with certain of our existing stockholders and directors have indicated an interest in purchasing up to an aggregate of approximately $ million in shares of our common stock in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters could determine to sell more, less or no shares to any of these potential investors and any of these potential investors could determine to purchase more, less or no shares in this offering. Any shares not so purchased will be offered by the underwriters to the general public on the same basis as other shares offered pursuant to this prospectus.

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 $. We have agreed to reimburse the underwriters for expenses relating to clearance of this offering with the Financial Industry Regulatory Authority, Inc. up to $50,000. The underwriters have agreed to reimburse us for certain fees and expenses related to this offering.

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, 2012 and 2011, and for each of the three years in the period ended December 31, 2012, 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 2012 and the related statements of operations and comprehensive loss, redeemable convertible preferred stock and stockholders' deficit and cash flows for each of the three years in the period ended December 31, 2012. 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 2012 and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2012, in conformity with U.S. generally accepted accounting principles.

/s/ Ernst & Young LLP

Raleigh, North Carolina
March 8, 2013, except for Note 14,
as to which the date is March 26, 2013

Chimerix, Inc.

Balance Sheets
(in thousands, except share and per share data)

	December 31,		Pro Forma Stockholders' Equity at December 31, 2012
	2011	2012	(unaudited)
Assets			
Current assets:			
Cash and cash equivalents	$ 13,607	$ 19,906	$ 19,906
Short-term investments, available-for-sale	5,918	9,849	9,849
Accounts receivable	4,187	783	783
Prepaid and other current assets	1,048	983	983
Deferred financing costs, current portion	64	33	33
Total current assets	24,824	31,554	31,554
Property and equipment, net of accumulated depreciation	561	407	407
Deposits	22	22	22
Deferred financing costs, less current portion	25	48	48
Total assets	$ 25,432	$ 32,031	$ 32,031
Liabilities, redeemable convertible preferred stock and stockholders' deficit			
Current liabilities:			
Accounts payable	$ 4,120	$ 1,964	$ 1,964
Accrued liabilities	2,534	906	906
Loan payable, current portion	160	4,753	4,753
Total current liabilities	6,814	7,623	7,623
Other long-term liabilities	—	337	337
Loan payable, less current portion	2,441	9,867	9,867
Redeemable convertible preferred stock warrant liability	6,491	7,512	—
Total liabilities	15,746	25,339	17,827
Redeemable convertible preferred stock	103,366	107,723	—
Stockholders' deficit:			
Common stock, $0.001 par value; 89,700,000 shares authorized at December 31, 2011 and 2012; 1,517,465 and 1,533,995 shares issued and outstanding at December 31, 2011 and 2012, respectively and 16,955,584 shares issued and outstanding pro forma (unaudited)	2	3	17
Additional paid-in capital	—	—	115,221
Accumulated other comprehensive loss	(4)	(2)	(2)
Accumulated deficit	(93,678)	(101,032)	(101,032)
Total stockholders' deficit	(93,680)	(101,031)	14,204
Total liabilities, redeemable convertible preferred stock and stockholders' deficit	$ 25,432	$ 32,031	$ 32,031

See accompanying notes.

Chimerix, Inc.

Statements of Operations and Comprehensive Loss
(in thousands, except per share data)

	Year Ended December 31,		
	2010	2011	2012
Revenues:			
Collaboration and licensing revenue	$ —	$ 55	$ 17,445
Contract and grant revenue	1,715	12,046	16,275
Total revenues	1,715	12,101	33,720
Operating expenses:			
Research and development	19,413	27,695	27,821
General and administrative	7,606	9,398	8,682
	27,019	37,093	36,503
Loss from operations	(25,304)	(24,992)	(2,783)
Other (expense) income:			
Interest expense, net	(154)	(212)	(776)
Fair value adjustments to warrant liability	—	(385)	(847)
Other income	1	—	—
Net loss	(25,457)	(25,589)	(4,406)
Other comprehensive loss:			
Unrealized gain (loss) on securities available-for-sale	—	(4)	2
Comprehensive loss	$ (25,457)	$ (25,593)	$ (4,404)
Net loss	$ (25,457)	$ (25,589)	$ (4,406)
Accretion of redeemable convertible preferred stock	—	(9,565)	(4,357)
Net loss attributable to common stockholders	$ (25,457)	$ (35,154)	$ (8,763)
Per share information:			
Net loss, basic and diluted	$ (17.52)	$ (23.49)	$ (5.75)
Weighted-average shares outstanding, basic and diluted	1,453	1,496	1,525
Pro forma net loss, basic and diluted (unaudited)			$ (0.47)
Weighted-average pro forma shares outstanding, basic and diluted (unaudited)			9,369

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, 2009	$ 55,131	$ 2	$ 1,117	$ —	$ (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	2	1,895	—	(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	—	(2,980)	—	(255)	(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	2	—	(4)	(93,678)	(93,680)
Share-based compensation	—	—	1,396	—	—	1,396
Exercise of stock options	—	1	13	—	—	14
Dividends on redeemable preferred stock	3,600	—	(1,409)	—	(2,191)	(3,600)
Adjustment of redeemable preferred stock to redemption value	757	—	—	—	(757)	(757)
Comprehensive loss:						
Unrealized gain on investments, net	—	—	—	2	—	2
Net loss	—	—	—	—	(4,406)	(4,406)
Total comprehensive loss						(4,404)
Balance, December 31, 2012	$ 107,723	$ 3	$ —	$ (2)	$ (101,032)	$ (101,031)

See accompanying notes.

Chimerix, Inc.

Statements of Cash Flows
(in thousands)

	Year Ended December 31,		
	2010	2011	2012
Operating activities			
Net loss	$ (25,457)	$ (25,589)	$ (4,406)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:			
Depreciation	213	270	280
Non-cash interest expense	38	50	238
Amortization/accretion of premium/discount on investments	119	118	84
Share-based compensation costs	753	1,055	1,396
Deferred lease obligation	(19)	(4)	—
Fair value measurement of redeemable convertible preferred stock warrant liability	—	385	847
Net change in:			
Accounts receivable	937	(4,187)	3,404
Prepaid and other current assets and deposits	181	(442)	65
Accounts payable and accrued liabilities	1,554	2,065	(3,784)
Net cash used in operating activities	(21,681)	(26,279)	(1,876)
Investing activities			
Purchase of property and equipment	(117)	(321)	(126)
Purchase of short-term investments	(12,094)	(13,640)	(9,907)
Sales of short-term investments	2,925	500	—
Maturities of short-term investments	9,050	7,100	5,894
Repayment of loan to officer	—	125	—
Net cash used in investing activities	(236)	(6,236)	(4,139)
Financing activities			
Proceeds from issuance of redeemable convertible preferred stock and warrants	—	45,000	—
Proceeds from exercise of stock options	25	30	14
Proceeds from loan payable	6,000	—	15,000
Debt discount	—	—	(75)
Repayment of loan payable	(1,434)	(1,965)	(2,601)
Stock offering and deferred financing costs	12	(249)	(24)
Net cash provided by financing activities	4,603	42,816	12,314
Increase (decrease) in cash and cash equivalents	(17,314)	10,301	6,299
Cash and cash equivalents:			
Beginning of period	20,620	3,306	13,607
End of period	$ 3,306	$ 13,607	$ 19,906
Supplemental schedule of cash flow information			
Interest payments	$ 180	$ 186	$ 448

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 years ended December 31, 2010, 2011 and 2012 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 2012, was $18.0 million and $23.9 million, respectively. The Company expects to continue to incur losses for the foreseeable future. At December 31, 2012, the Company had capital resources consisting of cash, cash equivalents and short-term investments of $29.8 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 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 closing of this offering, the Company will issue shares of common stock underlying shares of the Company's Series F preferred stock in respect of the accumulated dividends on the Company's Series F preferred stock through the date immediately preceding the date of this prospectus. 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, 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.

Chimerix, Inc.

Notes to Financial Statements

2. Significant Accounting Policies – (continued)

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.

Reclassifications

In certain instances, amounts, previously reported in the 2011 financial statements have been reclassified to conform with the 2012 financial statement presentation. Such reclassifications had no effect on net loss or stockholders' deficit as previously reported.

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 years ended December 31, 2010, 2011 and 2012.

Chimerix, Inc.

Notes to Financial Statements

2. Significant Accounting Policies – (continued)

Accounts Receivable

Accounts receivable at December 31, 2011 and 2012, 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 December 31, 2011 and 2012, 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 December 31, 2011 and 2012. The key unobservable inputs used in the determination of the December 31, 2012 fair value are (i) volatility – 79%, (ii) range of implied fair value of the Series F redeemable convertible preferred stock – $2.19 to $2.85, (iii) time to liquidity – 8 months to 5 years, and (iv) range of probabilities of liquidity event outcomes – 2% to 31%.

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)

	December 31, 2012	Fair Value Measurements at December 31, 2012		
		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	$ 17,687	$ 16,381	$ 1,306	$ —
Short-term investments	9,849	—	9,849	—
Redeemable convertible preferred stock warrant liability	7,512	—	—	7,512

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)	847
Fair value at December 31, 2012	$ 7,512

Prepaid and Other Current Assets

Prepaid and other current assets consist of the following:

	December 31,	
	2011	2012
	(in thousands)	
Prepaid development expenses	$ 816	$ 486
Other prepaid and other current assets	232	497
	$ 1,048	$ 983

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.

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

Chimerix, Inc.

Notes to Financial Statements

2. Significant Accounting Policies – (continued)

(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 Public Offering Costs

Deferred public offering costs totaling $0.3 million at December 31, 2012 are included in prepaid and other current assets. These costs represents legal and accounting costs related to the Company's efforts to raise capital through a public sale of the Company's common stock. There were no IPO costs incurred prior to 2012. Future costs related to the Company's IPO activities will be deferred until the completion of the IPO, at which time they will be reclassified to additional paid-in capital as a reduction of the IPO proceeds. If the Company terminates its plan for an IPO, any costs deferred will be expensed immediately.

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,	
	2011	2012
	(in thousands)	
Accrued compensation	$ 693	$ 560
Accrued development expenses	1,459	98
Other accrued liabilities	382	248
	$ 2,534	$ 906

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

Chimerix, Inc.

Notes to Financial Statements

2. Significant Accounting Policies – (continued)

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.

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 year ended December 31, 2010, contract and grant revenue was derived from research grants with the NIAID. The activities related to the NIAID grant have been completed and there are no further performance obligations. In the years ended December 31, 2011 and 2012, contract and grant revenue consisted only of revenue from the BARDA contract as there was no grant revenue. 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

Chimerix, Inc.

Notes to Financial Statements

2. Significant Accounting Policies – (continued)

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 the Company reporting amounts that are too high or too low for any particular period. Through December 31, 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 December 31, 2012, 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.

Chimerix, Inc.

Notes to Financial Statements

2. Significant Accounting Policies – (continued)

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 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, 2010, 2011 and 2012.

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 6,781,550, 11,034,134 and 11,259,579 for the years ended December 31, 2010, 2011 and 2012, 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

Chimerix, Inc.

Notes to Financial Statements

3. Investments – (continued)

	December 31, 2012			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
	(in thousands)			
Corporate bonds	$ 8,353	$ —	$ (2)	$ 8,351
Commercial paper	1,498	—	—	1,498
Total	$ 9,851	$ —	$ (2)	$ 9,849

All of the Company's investments as of December 31, 2011 and 2012 had maturities of one year or less.

4. Property and Equipment

Property and equipment consist of the following:

	December 31,	
	2011	2012
	(in thousands)	
Lab equipment	$ 900	$ 958
Leasehold improvements	74	78
Computer equipment	340	393
Office furniture and equipment	201	212
	1,515	1,641
Less accumulated depreciation	(954)	(1,234)
	$ 561	$ 407

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

Chimerix, Inc.

Notes to Financial Statements

5. Loans Payable – (continued)

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 year ended December 31, 2012.

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 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 $22,000 for the year ended December 31, 2012.

The future payments under the LSA are as follows (in thousands):

Years ending December 31,	
2013	$ 6,042
2014	6,323
2015	4,508
	16,873
Less: amount representing interest	(1,873)
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, 2012, future minimum payments under noncancelable operating leases are as follows (in thousands):

Years Ending December 31,	
2013	$ 169
2014	18
	$ 187

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, and $0.4 million for the years ended December 31, 2010, 2011 and 2012, 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. 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, 2010, 2011 and 2012.

Chimerix, Inc.

Notes to Financial Statements

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 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, 2011 and 2012:

	December 31, 2011		December 31, 2012	
	Authorized Shares	Issued and Outstanding Shares	Authorized Shares	Issued and Outstanding Shares
Series A	800,000	800,000	800,000	800,000
Series B	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
Series C	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
Series E	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	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 for a period ending on the date immediately prior to the date that a registration statement covering the offer and sale of the common stock is declared effective, and shall be payable in shares of Series F preferred stock concurrently with any liquidation, dissolution or winding up of the Company, or any asset transfer or acquisition, or immediately prior to the closing of an initial public offering of the Company's common stock in which all series of the Company's preferred stock is converted into the Company's common stock. After the event described above, 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 2012, dividends in the amount of $3.2 million and $6.8 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 2012, 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 2012 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 $52.6 million at December 31, 2011 and 2012, 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 December 31, 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 and $0.8 for the years ended December 31, 2011 and 2012, respectively.

8. Stockholders' Deficit

Common Stock

The Company's common stock consists of 89.7 million authorized shares at December 31, 2011 and 2012 and 1.5 million shares issued and outstanding at December 31, 2011 and 2012, respectively.

Shares Reserved for Future Issuance

The following shares of common stock are reserved for future issuances are as follows:

	December 31, 2011	December 31, 2012
Conversion of preferred stock and preferred stock warrants	16,052,159	16,093,483
Stock options issued and outstanding	2,630,951	2,593,423
Restricted Stock units outstanding	—	43,199
Authorized for future grants under the 2012 Equity Incentive Plan	450,041	427,829
	19,133,151	19,157,934

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 3,567,835 shares of the Company's common stock as of December 31, 2011 and 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.

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

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Notes to Financial Statements

8. Stockholders' Deficit – (continued)

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,		
	2010	2011	2012
Dividend yield	0.00%	0.00%	0.00%
Weighted-average risk-free interest rate	2.69%	2.85%	0.86%
Volatility	91.00%	82.00%	80.55%
Expected term (in years)	7.0	7.0	6.0
Weighted-average fair value per option	$ 1.75	$ 1.74	$ 1.93

	Non-Employees		
	Year Ended December 31,		
	2010	2011	2012
Dividend yield	—	0.00%	0.00%
Weighted-average risk-free interest rate	—	0.40%	0.78%
Volatility	—	77.80%	81.77%
Expected term (in years)	—	2.7	5.8
Weighted-average fair value per option	—	$ 3.38	$ 3.48

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 December 31, 2010, 2011 and 2012, the Company applied a forfeiture rate based on the Company's historical forfeitures.

Chimerix, Inc.

Notes to Financial Statements

8. Stockholders' Deficit – (continued)

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	2,039,982	$ 2.21	—
Granted	878,990	2.34	—
Exercised	(21,126)	1.42	—
Forfeited	(266,431)	2.37	—
Balance, December 31, 2011	2,631,415	2.24	7.69
Granted	382,167	3.24	—
Exercised	(16,530)	0.82	
Expired	(102,228)	2.63	—
Forfeited	(301,401)	1.69	—
Balance, December 31, 2012	2,593,423	$ 2.45	7.36
Exercisable at December 31, 2012	1,604,280	$ 2.25	6.64
Vested or expected to vest at December 31, 2012	2,481,216	$ 2.45	7.31

At December 31, 2012, the aggregate intrinsic value of options outstanding and exercisable was $3.2 million. The total intrinsic value of options exercised was $0.1 million, $16,000 and $18,000 for the years ended December 31, 2010, 2011 and 2012, respectively.

In 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,		
	2010	2011	2012
	(in thousands)		
Research and development:			
Employee	$ 299	$ 315	$ 336
Non-employee	—	—	80
General and administrative:			
Employee	454	651	921
Non-employee	—	—	59
	$ 753	$ 966	$ 1,396

Cash received from option exercises under all share-based payment arrangements for 2011 and 2012, was $30,000 and $14,000, 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 December 31, 2012, there was approximately $1.7 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 2.26 years.

Chimerix, Inc.

Notes to Financial Statements

8. Stockholders' Deficit – (continued)

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	48,226
Forfeited	(5,027)
Balance, December 31, 2012	43,199

The grant date fair value of the RSUs was $2.49 per unit. As of December 31, 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 and December 31, 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 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.

Chimerix, Inc.

Notes to Financial Statements

8. Stockholders' Deficit – (continued)

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 year ended December 31, 2012.

9. Related-Party Transactions

The Company paid consulting fees related to research and development activities in the amount of $0.1 million and $6,250 to the relatives of officers of the Company during the years ended December 31, 2010 and 2011, respectively. No related party fees were paid during the year ended December 31, 2012.

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 December 31, 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 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 evaluated Section 382 ownership changes subsequent to 2007 and concluded no additional change in ownership occurred.

Chimerix, Inc.

Notes to Financial Statements

10. Income Taxes – (continued)

The components of deferred tax assets and liabilities at December 31, 2011 and 2012 are as follows:

	December 31,	
	2011	2012
	(in thousands)	
Deferred tax assets:		
Net operating loss carryforwards	$ 30,723	$ 31,431
Research and development expenses	562	34
Capitalized Section 174 expenses	97	80
Research and development credits	941	941
Accrued bonuses	133	54
Other	411	445
Total gross deferred tax assets	32,867	32,985
Valuation allowance	(32,721)	(32,841)
	146	144
Deferred tax liabilities:		
Other	(146)	(144)
Total deferred tax liabilities	(146)	(144)
Net deferred tax assets	$ —	$ —

At December 31, 2011, the Company has net operating loss carryforwards for federal and state tax purposes of approximately $80.2 million and $75.9 million, respectively. At December 31, 2012, the Company has net operating loss carryforwards for federal and state purposes of approximately $83.4 million and $65.8 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, 2012, 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, 2010, 2011 and 2012 are as follows:

	December 31,		
	2010	2011	2012
		(in thousands)	
Deferred	$ 9,559	$ 9,115	$ 120
Valuation allowance	(9,559)	(9,115)	(120)
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, 2010, 2011, and 2012:

	2010		2011		2012	
	Amount	% of Pretax Earnings	Amount	% of Pretax Earnings	Amount	% of Pretax Earnings
	(in thousands)					
Income tax benefit at statutory rate	$ (8,655)	34.0%	$ (8,700)	34.0%	$ (1,499)	34.0%
State income taxes	(1,464)	5.8%	(1,164)	4.6%	(100)	2.3%
Research and development credits	(14)	0.1%	(1,169)	4.6%	—	0.0%
Permanent items	246	(1.0%)	964	(3.8%)	868	(19.7)%
Provision to return adjustments	328	(1.3%)	12	0.0%	2	0.0%
Effect of change in state tax rate	—	0.0%	630	(2.5%)	609	(13.9)%
Increase in unrecognized tax benefits	—	0.0%	314	(1.2%)	—	0.0%
Valuation allowance	9,559	(37.6%)	9,115	(35.7%)	120	(2.7)%
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, 2012, as follows (in thousands):

Balance at December 31, 2011	$ 314
Increase related to 2012	—
Balance at December 31, 2012	$ 314

The Company has determined that it had no other material uncertain tax benefits for the year ended December 31, 2012. As of January 1, 2013, 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 2012. 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, 2013.

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. As partial consideration for the rights granted to the Company under the license agreement, the Company is

Chimerix, Inc.

Notes to Financial Statements

11. Significant Agreements – (continued)

required to pay certain cash milestone payments in connection with the development and commercialization of compounds that are covered by the UC Patent Rights. In connection with the development and commercialization of CMX001 and CMX157, the Company could be required to pay UC up to an aggregate of $3.4 million in milestone payments, assuming the achievement of all applicable milestone events under the license agreement.

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 64,788 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 $0.2 million and $0.9 million, for the years ended December 31, 2011 and 2012, 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 February 21, 2013, to extend the period of performance through May 31, 2013.

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 $75.8 million in expense reimbursement and $5.3 million in 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 May 31, 2013. BARDA must notify the Company at least 30 days before the end of the current base performance segment if

Chimerix, Inc.

Notes to Financial Statements

11. Significant Agreements – (continued)

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.

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 year ended December 31, 2012.

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 years ended December 31, 2010, 2011 and 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 December 31, 2012, and events which occurred subsequently but were not recognized in the financial statements.

Chimerix, Inc.

Notes to Financial Statements

13. Subsequent Events – (continued)

In 2013, the Company extended two facility leases for the period beginning March 2013 and ending February 2015 and 2018. Future minimum payments under these extensions total $0.2 million, $0.3 million, $0.3 million, $0.2 million, $0.2 million and $40,686 in 2013, 2014, 2015, 2016, 2017 and 2018, respectively.

14. Reverse Stock Split

On March 25, 2013, the Company's Board of Directors approved a 3.55-for-1 reverse stock split of the Company's outstanding common stock. The reverse stock split was effected on March 25, 2013, which resulted in an adjustment to the preferred stock conversion price to reflect a proportional decrease in the number of shares of common stock to be issued upon conversion. The accompanying financial statements and notes to financial statements give retroactive effect to the reverse stock split for all periods presented.


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 paid or to be paid
SEC registration fee	$ 11,594
FINRA filing fee	13,250
Nasdaq Global Market listing fee	25,000
Blue sky qualification fees and expenses	15,000
Printing and engraving expenses	100,000
Legal fees and expenses	850,000
Accounting fees and expenses	600,000
Transfer agent and registrar fees and expenses	10,000
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 2,223,897 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 6,198,551 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 1,549,628 shares of common stock at an exercise price of $7.26 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 57,852 shares of common stock at an exercise price of $7.26 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 2,303,319 shares of common stock to its employees, directors and consultants, having exercise prices ranging from $1.57 to $3.16 per share. Of these, options to purchase 19,770 shares of common stock have been exercised through December 31, 2012, for aggregate consideration of $34,188.

(6) From February 16, 2012 to February 21, 2013, the Registrant issued restricted stock units under its 2012 Equity Incentive Plan (the 2012 Plan) pursuant to which 107,574 shares of common stock are issuable to its employees, directors and consultants.

(7) From February 22, 2012 to March 13, 2013, the Registrant granted stock options under the 2012 Plan to purchase 566,673 shares of common stock to its employees, directors and consultants, having exercise prices ranging from $2.35 to $7.57 per share. None of these options to purchase shares of common stock have been exercised through March 26, 2013.

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(1)	Form of Amended and Restated Certificate of Incorporation to become effective upon closing of this offering.
3.3(1)	Amended and Restated Bylaws, as currently in effect.
3.4(1)	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(1)	Form of Warrant to Purchase Stock issued to participants in the Registrant's Series F Preferred Stock financing dated February 7, 2011.
4.3(1)	Warrant to Purchase Series F Preferred Stock issued to Silicon Valley Bank on January 27, 2012.
4.4(1)	Warrant to Purchase Series D Preferred Stock issued to Silicon Valley Bank on November 24, 2008.
4.5(1)	Warrant to Purchase Series B-1 Preferred Stock issued to General Electric Capital Corporation on November 5, 2003.
4.6(1)	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+(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. 2013 Employee Stock Purchase Plan.
10.6+(1)	Chimerix, Inc. Non-Employee Director Compensation Policy.
10.7+(1)	Chimerix, Inc. Officer Change in Control Severance Benefit Plan.
10.8+(1)	Employment Agreement by and between the Registrant and Kenneth I. Moch dated October 20, 2009, as amended and clarified.
10.9+(1)	Employment Offer Letter to Timothy W. Trost dated March 16, 2011.
10.10+(1)	Employment Offer Letter to M. Michelle Berrey, M.D., M.P.H. dated November 7, 2012.
10.11+(1)	Employment Offer Letter to Michael D. Rogers, Ph.D. dated March 4, 2013.
10.12+(1)	Consulting Agreement by and between the Registrant and EPD Pharma Solutions, LLC dated August 12, 2011, as amended.
10.13+(1)	Consulting Agreement by and between the Registrant and EPD Pharma Solutions, LLC dated January 1, 2013.
10.14+(1)	Consulting Agreement by and between the Registrant and Synergee, LLC dated February 7, 2012, as amended.
10.15+(1)	Directorship Offer Letter to Ernest Mario, Ph.D. dated January 31, 2013.
10.16(1)	Office Lease by and between the Registrant and ACP 2505 Meridian LLC dated September 1, 2007, as amended.
10.17(1)	Lease Agreement by and between the Registrant and Biopharm Properties, LLC dated September 1, 2008, as amended.
10.18(1)	Deed of Sublease Agreement by and between the Registrant and MDxHealth, Inc. dated March 7, 2011, as amended.
10.19*(1)	Collaboration and Exclusive License Agreement by and between the Registrant and Merck Sharp & Dohme Corp. dated July 23, 2012.
10.20*(1)	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.
10.21*(1)	License Agreement by and between the Registrant and The Regents of the University of California dated May 13, 2002, as amended.
10.22(1)	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(1)	Power of Attorney.

† To be filed by amendment.

+ Indicates management contract or compensatory plan.

* Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the SEC.

(1) Previously filed.

(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 26th day of March, 2013.

CHIMERIX, INC.

By: /s/ Kenneth I. Moch
Kenneth I. Moch
President and Chief Executive Officer

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
/s/ Kenneth I. Moch Kenneth I. Moch	President, Chief Executive Officer and Member of the Board of Directors *(Principal Executive Officer)*	March 26, 2013
/s/ Timothy W. Trost Timothy W. Trost	Senior Vice President, Chief Financial Officer and Corporate Secretary *(Principal Financial and Accounting Officer)*	March 26, 2013
/s/ Ernest Mario, Ph.D.* Ernest Mario, Ph.D.	Chairman of the Board of Directors	March 26, 2013
/s/ Farah Champsi* Farah Champsi	Member of the Board of Directors	March 26, 2013
/s/ Martha J. Demski* Martha J. Demski	Member of the Board of Directors	March 26, 2013
/s/ Wende Hutton* Wende Hutton	Member of the Board of Directors	March 26, 2013
/s/ James Niedel, M.D., Ph.D.* James Niedel, M.D., Ph.D.	Member of the Board of Directors	March 26, 2013
/s/ Arthur M. Pappas* Arthur M. Pappas	Member of the Board of Directors	March 26, 2013
/s/ Timothy J. Wollaeger* Timothy J. Wollaeger	Member of the Board of Directors	March 26, 2013

* Pursuant to Power of Attorney

By: /s/ Kenneth I. Moch
Kenneth I. Moch

EXHIBIT INDEX

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(1)	Form of Amended and Restated Certificate of Incorporation to become effective upon closing of this offering.
3.3(1)	Amended and Restated Bylaws, as currently in effect.
3.4(1)	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(1)	Form of Warrant to Purchase Stock issued to participants in the Registrant's Series F Preferred Stock financing dated February 7, 2011.
4.3(1)	Warrant to Purchase Series F Preferred Stock issued to Silicon Valley Bank on January 27, 2012.
4.4(1)	Warrant to Purchase Series D Preferred Stock issued to Silicon Valley Bank on November 24, 2008.
4.5(1)	Warrant to Purchase Series B-1 Preferred Stock issued to General Electric Capital Corporation on November 5, 2003.
4.6(1)	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+(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.
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. 2013 Employee Stock Purchase Plan.
10.6+(1)	Chimerix, Inc. Non-Employee Director Compensation Policy.
10.7+(1)	Chimerix, Inc. Officer Change in Control Severance Benefit Plan.
10.8+(1)	Employment Agreement by and between the Registrant and Kenneth I. Moch dated October 20, 2009, as amended and clarified.
10.9+(1)	Employment Offer Letter to Timothy W. Trost dated March 16, 2011.
10.10+(1)	Employment Offer Letter to M. Michelle Berrey, M.D., M.P.H. dated November 7, 2012.
10.11+(1)	Employment Offer Letter to Michael D. Rogers, Ph.D. dated March 4, 2013.
10.12+(1)	Consulting Agreement by and between the Registrant and EPD Pharma Solutions, LLC dated August 12, 2011, as amended.
10.13+(1)	Consulting Agreement by and between the Registrant and EPD Pharma Solutions, LLC dated January 1, 2013.
10.14+(1)	Consulting Agreement by and between the Registrant and Synergee, LLC dated February 7, 2012, as amended.
10.15+(1)	Directorship Offer Letter to Ernest Mario, Ph.D. dated January 31, 2013.
10.16(1)	Office Lease by and between the Registrant and ACP 2505 Meridian LLC dated September 1, 2007, as amended.

Exhibit Number	Description of Document
10.17(1)	Lease Agreement by and between the Registrant and Biopharm Properties, LLC dated September 1, 2008, as amended.
10.18(1)	Deed of Sublease Agreement by and between the Registrant and MDxHealth, Inc. dated March 7, 2011, as amended.
10.19*(1)	Collaboration and Exclusive License Agreement by and between the Registrant and Merck Sharp & Dohme Corp. dated July 23, 2012.
10.20*(1)	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.
10.21*(1)	License Agreement by and between the Registrant and The Regents of the University of California dated May 13, 2002, as amended.
10.22(1)	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(1)	Power of Attorney.

† To be filed by amendment.

+ Indicates management contract or compensatory plan.

* Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the SEC.

(1) Previously filed.

[·] Shares

CHIMERIX, INC.

COMMON STOCK, PAR VALUE $0.001 PER SHARE

UNDERWRITING AGREEMENT

[·], 2013

[·], 2013

Morgan Stanley & Co. LLC
Cowen and Company, LLC

c/o Morgan Stanley & Co. LLC
1585 Broadway
New York, New York 10036

c/o Cowen and Company, LLC
599 Lexington Avenue, 27th Floor
New York, New York 10022

Ladies and Gentlemen:

CHIMERIX, INC., a Delaware corporation (the "**Company**"), proposes to issue and sell to the several Underwriters named in Schedule I hereto (the "**Underwriters**") [·] shares of its common stock, par value $0.001 per share (the "**Firm Shares**"). The Company also proposes to issue and sell to the several Underwriters (the "**Underwriters**"), for whom you are acting as representatives (the "**Representatives**"), not more than an additional [·] shares of its common stock, par value $0.001 per share (the "**Additional Shares**") if and to the extent that you, as managers of the offering, shall have determined to exercise, on behalf of the Underwriters, the right to purchase such shares of common stock granted to the Underwriters in Section 2 hereof. The Firm Shares and the Additional Shares are hereinafter collectively referred to as the "**Shares**." The shares of common stock, par value $0.001 per share, of the Company to be outstanding after giving effect to the sales contemplated hereby are hereinafter referred to as the "**Common Stock**."

The Company has filed with the Securities and Exchange Commission (the "**Commission**") a registration statement, including a prospectus, relating to the Shares. The registration statement as amended at the time it becomes effective, including the information (if any) deemed to be part of the registration statement at the time of effectiveness pursuant to Rule 430A under the Securities Act of 1933, as amended (the "**Securities Act**"), is hereinafter referred to as the "**Registration Statement**"; the prospectus in the form first used to confirm sales of Shares (or in the form first made available to the Underwriters by the Company to meet requests of purchasers pursuant to Rule 173 under the Securities Act) is hereinafter referred to as the "**Prospectus**." If the Company has filed an abbreviated registration statement to register additional shares of Common Stock pursuant to Rule 462(b) under the Securities Act (the "**Rule 462 Registration Statement**"), then any reference herein to the term "**Registration Statement**" shall be deemed to include such Rule 462 Registration Statement.

For purposes of this Agreement, "**free writing prospectus**" has the meaning set forth in Rule 405 under the Securities Act, "**Time of Sale Prospectus**" means the preliminary prospectus contained in the Registration Statement together with the documents[and pricing information] set forth in Schedule II hereto, and "**broadly available road show**" means a "bona fide electronic road show" as defined in Rule 433(h)(5) under the Securities Act that has been made available without restriction to any person. As used herein, the terms "Registration Statement," "preliminary prospectus," "Time of Sale Prospectus" and "Prospectus" shall include the documents, if any, incorporated by reference therein as of the date hereof.

1. *Representations and Warranties*. The Company represents and warrants to and agrees with each of the Underwriters that:

(a) The Registration Statement has become effective; no stop order suspending the effectiveness of the Registration Statement is in effect, and no proceedings for such purpose are pending before or, to the Company's knowledge, are threatened by the Commission.

(a) (i) The Registration Statement, when it became effective, did not contain and, as amended or supplemented, if applicable, as of the date of such amendment or supplement will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii)the Registration Statement and the Prospectus comply and, as amended or supplemented, if applicable, will comply in all material respects with the Securities Act and the applicable rules and regulations of the Commission thereunder, (iii) the Time of Sale Prospectus does not, and at the time of each sale of the Shares in connection with the offering when the Prospectus is not yet available to prospective purchasers and at the Closing Date (as defined in Section 4), the Time of Sale Prospectus, as then amended or supplemented by the Company, if applicable, will not, contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, (iv) each broadly available road show, if any, when considered together with the Time of Sale Prospectus, does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading and (v) the Prospectus does not contain and, as amended or supplemented, if applicable, will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, except that the representations and warranties set forth in this paragraph do not apply to statements or omissions in the Registration Statement, the Time of Sale Prospectus or the Prospectus based upon information relating to any Underwriter furnished to the Company in writing by such Underwriter through you expressly for use therein.

(c) The Company is not an "ineligible issuer" in connection with the offering pursuant to Rules 164, 405 and 433 under the Securities Act. Any free writing prospectus that the Company is required to file pursuant to Rule 433(d) under the Securities Act has been, or will be, filed with the Commission in accordance with the requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder. Each free writing prospectus that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act or that was prepared by or on behalf of or used or referred to by the Company complies or will comply in all material respects with the requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder. Except for the free writing prospectuses, if any, identified in Schedule II hereto, and electronic road shows, if any, each furnished to you before first use, the Company has not prepared, used or referred to, and will not, without your prior consent, prepare, use or refer to, any free writing prospectus.

(d) The financial statements (including the related notes thereto) of the Company included in the Registration Statement, the Time of Sale Prospectus and the Prospectus comply as to form in all material respects with the applicable requirements of the Securities Act and present fairly in all material respects the financial position of the Company as of the dates indicated and the results of its operations and the changes in its cash flows for the periods specified; such financial statements have been prepared in conformity with generally accepted accounting principles in the United States ("**U.S. GAAP**") applied on a consistent basis throughout the periods covered thereby, except as otherwise noted therein and except in the case of unaudited, interim financial statements, which do not contain certain footnotes as permitted by the rules of the Commission, and any supporting schedules included in the Registration Statement present fairly in all material respects the information required to be stated therein; and the other financial information included in the Registration Statement, the Time of Sale Prospectus and the Prospectus has been derived from the accounting records of the Company and, in the case of the financial information under the headings "Prospectus Summary—Summary Financial Data," Capitalization" and "Selected Financial Data," presents fairly in all material respects the information shown thereby.

(e) The Company has been duly incorporated, is validly existing as a corporation in good standing under the laws of the jurisdiction of its incorporation, has the corporate power and authority to own its property and to conduct its business as described in the Time of Sale Prospectus and is duly qualified to transact business and is in good standing in each jurisdiction in which the conduct of its business or its ownership or leasing of property requires such qualification, except to the extent that the failure to be so qualified or be in good standing would not be reasonably expected to have a material adverse effect on the Company.

(f) The Company does not have any subsidiaries (as defined in Regulation S-X).

(g) This Agreement has been duly authorized, executed and delivered by the Company.

(h) As of each Closing Date, the authorized capital stock of the Company will conform as to legal matters to the description thereof contained in each of the Time of Sale Prospectus and the Prospectus.

(i) The Company has an authorized capitalization as set forth in the Registration Statement, the Time of Sale Prospectus and the Prospectus under the heading "Capitalization"; the shares of Common Stock outstanding prior to the issuance of the Shares have been duly authorized and are validly issued, fully paid and non-assessable and are not subject to any pre-emptive or similar rights; except as described in or expressly contemplated by the Registration Statement, the Time of Sale Prospectus and the Prospectus, there are no outstanding rights (including, without limitation, pre-emptive rights), warrants or options to acquire from the Company, or instruments convertible into or exchangeable for, any shares of capital stock or other equity interest in the Company, or any contract, commitment, agreement, understanding or arrangement of any kind to which the Company is a party relating to the issuance of any capital stock of the Company, any such convertible or exchangeable securities or any such rights, warrants or options. Except as described in the Time of Sale Prospectus, the issuance and sale of the Shares as contemplated hereby will not cause any holder of any shares of capital stock, securities convertible into or exchangeable or exercisable for capital stock or options, warrants or other rights to purchase capital stock or any other securities of the Company to have any right to acquire any shares of capital stock of the Company, in each case from the Company.

(j) With respect to the stock options (the "**Stock Options**") granted pursuant to the stock-based compensation plans of the Company (the "**Company Stock Plans**"), (i) each Stock Option intended to qualify as an "incentive stock option" under Section 422 of the United States Internal Revenue Code of 1986, as amended (the "**Code**"), so qualifies to the maximum extent permitted by law, (ii) each grant of a Stock Option was duly authorized no later than the date on which the grant of such Stock Option was by its terms to be effective (the "**Grant Date**") by all necessary corporate action, including, as applicable, approval by the board of directors of the Company (or a duly constituted and authorized committee thereof) and any required stockholder approval by the necessary number of votes or written consents and each such grant was timely and appropriately communicated to the grant recipient, (iii) each such grant was made in accordance with the terms of the Company Stock Plans and all other applicable laws and regulatory rules or requirements, and (iv) each such grant was properly accounted for in accordance with U.S. GAAP in the financial statements (including the related notes) of the Company.

(k) The Shares have been duly authorized and, when issued and delivered and paid for in accordance with the terms of this Agreement, will be validly issued, fully paid and non-assessable, and the issuance of such Shares will not be subject to any preemptive or similar rights.

(l) The Company is not (i) in violation of its certificate of incorporation or by-laws or similar organizational documents, (ii) in default, and no event has occurred that, with notice or lapse of time or both, would constitute a default, in the due performance or observance of any term, covenant or condition contained in any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company is a party or by which the Company is bound or to which any of the property or assets of the Company is subject, in each case that is material to the Company, or (iii) in violation of any law or statute or any judgment, order, rule or regulation of any court or arbitrator or governmental or regulatory authority, except in the case of clauses (ii) and (iii) for any such default, event or violation that would not be reasonably expected to have a material adverse effect on the Company.

(m) The execution and delivery by the Company of, and the performance by the Company of its obligations under, this Agreement will not contravene any provision of applicable law or the certificate of incorporation or by-laws of the Company, or any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company is a party or by which the Company is bound or to which any of the property or assets of the Company is subject, in each case that is material to the Company, or any judgment, order or decree of any governmental body, agency or court having jurisdiction over the Company, and no consent, approval, authorization or order of, or qualification with, any governmental body or agency is required for the performance by the Company of its obligations under this Agreement, except such as may be required by the securities or Blue Sky laws of the various states or the Financial Industry Regulatory Authority, Inc. ("**FINRA**") in connection with the offer and sale of the Shares.

(n) There has not occurred any material adverse change, or any development involving a prospective material adverse change, in the condition, financial or otherwise, or in the earnings, business or operations of the Company from that set forth in the Time of Sale Prospectus.

(a) There are no legal or governmental proceedings pending or to the knowledge of the Company, threatened to which the Company is a party or to which any of the properties of the Company is subject (i) other than proceedings accurately described in all material respects in the Time of Sale Prospectus and proceedings that would not reasonably be expected to have a material adverse effect on the Company, or on the power or ability of the Company to perform its obligations under this Agreement or to consummate the transactions contemplated by the Time of Sale Prospectus or (ii) that are required to be described in the Registration Statement or the Prospectus and are not so described; and there are no statutes, regulations, contracts or other documents that are required to be described in the Registration Statement or the Prospectus or to be filed as exhibits to the Registration Statement that are not described or filed as required.

(p) Each preliminary prospectus filed as part of the registration statement as originally filed or as part of any amendment thereto, or filed pursuant to Rule 424 under the Securities Act, complied when so filed in all material respects with the Securities Act and the applicable rules and regulations of the Commission thereunder.

(q) The Company is not, and after giving effect to the offering and sale of the Shares and the application of the proceeds thereof as described in the Prospectus will not be, required to register as an "investment company" as such term is defined in the Investment Company Act of 1940, as amended (the "**Investment Company Act**").

(r) No relationship, direct or indirect, exists between or among the Company, on the one hand, and the directors, officers, stockholders or suppliers of the Company, on the other, that is required by the Securities Act to be described in the Registration Statement and the Prospectus and that is not so described in such documents and in the Time of Sale Prospectus.

(s) The Company (i) is in compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants ("**Environmental Laws**"), (ii) has received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (iii) is in compliance with all terms and conditions of any such permit, license or approval, except where such noncompliance with Environmental Laws, failure to receive required permits, licenses or other approvals or failure to comply with the terms and conditions of such permits, licenses or approvals would not, singly or in the aggregate, reasonably be expected to have a material adverse effect on the Company.

(t) There are no costs or liabilities associated with Environmental Laws (including, without limitation, any capital or operating expenditures required for clean-up, closure of properties or compliance with Environmental Laws or any permit, license or approval, any related constraints on operating activities and any potential liabilities to third parties) which would, singly or in the aggregate, reasonably be expected to have a material adverse effect on the Company.

(u) (i) Each employee benefit plan, within the meaning of Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended ("**ERISA**"), for which the Company or any member of its "Controlled Group" (defined as any organization which is a member of a controlled group of corporations within the meaning of Section 414 of the Code, and, for the avoidance of doubt, when any provision of this Agreement relates to a past event or period of time, such definition shall include an organization that was, as of the time of such past event or period of time, a member of such group) would have any liability (each, a "**Plan**") has been maintained in compliance with its terms and the requirements of any applicable statutes, orders, rules and regulations, including but not limited to ERISA and the Code, except for noncompliance that would not reasonably be expected to result in a material adverse effect on the Company, (ii) no prohibited transaction, within the meaning of Section 406 of ERISA or Section 4975 of the Code, has occurred with respect to any Plan, excluding transactions effected pursuant to a statutory or administrative exemption, that would reasonably be expected to result in a material adverse effect on the Company, (iii) no Plan is subject to Section 412 of the Code or Section 302 of ERISA, (iv) no "reportable event" (within the meaning of Section 4043(c) of ERISA) has occurred or is reasonably expected to occur that either has resulted, or would reasonably be expected to result, in material liability to the Company, (v) neither the Company nor any member of the Controlled Group has incurred, nor reasonably expects to incur, any liability under Title IV of ERISA, and (vi) there is no pending audit or investigation by the Internal Revenue Service, the U.S. Department of Labor, the Pension Benefit Guaranty Corporation or any other governmental agency or any foreign regulatory agency with respect to any Plan that would reasonably be expected to result in a material adverse effect on the Company. None of the following events has occurred or is reasonably likely to occur: (A) a material increase in the aggregate amount of contributions required to be made to all Plans by the Company in the current fiscal year of the Company compared to the amount of such contributions made in the Company's most recently completed fiscal year; or (B) a material increase in the "accumulated post-retirement benefit obligations" (within the meaning of Statement of Financial Accounting Standards 106) of the Company compared to the amount of such obligations in the Company's most recently completed fiscal year.

(v) Except as described in the Time of Sale Prospectus, there are no contracts, agreements or understandings between the Company and any person granting such person the right to require the Company to file a registration statement under the Securities Act with respect to any securities of the Company or to require the Company to include such securities with the Shares registered pursuant to the Registration Statement.

(w) Neither the Company, nor any director, officer, or employee of the Company, nor, to the Company's knowledge, any agent or representative of the Company or of any of its affiliates, has taken any action in furtherance of an offer, payment, promise to pay, or authorization or approval of the payment or giving of money, property, gifts or anything else of value, directly or indirectly, to any "government official" (including any officer or employee of a government or government-owned or controlled entity or of a public international organization, or any person acting in an official capacity for or on behalf of any of the foregoing, or any political party or party official or candidate for political office) to illegally influence official action or secure an improper advantage; and the Company and its affiliates have conducted their businesses in compliance with applicable anti-corruption laws and have instituted and maintain policies and procedures designed to promote and achieve compliance with such laws.

(x) The operations of the Company are and have been conducted at all times in material compliance with all applicable financial recordkeeping and reporting requirements, including those of the Bank Secrecy Act, as amended by Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT Act), and the applicable anti-money laundering statutes of jurisdictions where the Company conducts business, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "**Anti-Money Laundering Laws**"), and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company with respect to the Anti-Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(y) (i) Neither the Company, nor any director, officer, or employee of the Company, nor, to the Company's knowledge, any agent, affiliate or representative of the Company, is an individual or entity ("**Person**") that is, or is owned or controlled by a Person that is:

(A) the subject of any sanctions administered or enforced by the U.S. Department of Treasury's Office of Foreign Assets Control ("**OFAC**"), the United Nations Security Council ("**UNSC**"), the European Union ("**EU**"), Her Majesty's Treasury ("**HMT**"), or other relevant sanctions authority (collectively, "**Sanctions**"), nor

(B) located, organized or resident in a country or territory that is the subject of Sanctions (including, without limitation, Burma/Myanmar, Cuba, Iran, Libya, North Korea, Sudan and Syria).

(ii) The Company will not, directly or indirectly, use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any future subsidiary, joint venture partner or other Person:

(A) to fund or facilitate any activities or business of or with any Person or in any country or territory that, at the time of such funding or facilitation, is the subject of Sanctions; or

(B) in any other manner that will result in a violation of Sanctions by any Person (including any Person participating in the offering, whether as underwriter, advisor, investor or otherwise).

(iii) For the past five years, the Company has not knowingly engaged in, is not now knowingly engaged in, and will not knowingly engage in, any dealings or transactions with any Person, or in any country or territory, that at the time of the dealing or transaction is or was the subject of Sanctions.

(z) Subsequent to the respective dates as of which information is given in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, (i) the Company has not incurred any material liability or obligation, direct or contingent, nor entered into any material transaction; (ii) the Company has not purchased any of its outstanding capital stock, nor declared, paid or otherwise made any dividend or distribution of any kind on its capital stock other than as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus; and (iii) there has not been any material change in the capital stock, short-term debt or long-term debt of the Company, except in each case as described in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, respectively.

(aa) The Company has good and marketable title in fee simple to all real property and good and marketable title to all personal property owned by it which is material to the business of the Company, in each case free and clear of all liens, encumbrances and defects except such as are described in the Time of Sale Prospectus or such as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company; and any real property and buildings held under lease by the Company are held by it under valid, subsisting and, to the Company's knowledge, enforceable leases with such exceptions as are not material and do not materially interfere with the use made and proposed to be made of such property and buildings by the Company, in each case except as described in the Time of Sale Prospectus.

(bb) The Company owns or possesses, or can acquire on commercially reasonable terms, valid and enforceable rights to use all inventions, patents, trademarks, service marks, trade names, trade dress, domain names, goodwill associated with the foregoing, copyrights, know-how, trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures (including all registrations and applications for registration of the foregoing, as applicable) (collectively, "**Intellectual Property**") used in or necessary for the conduct of its business as currently conducted or as currently proposed to be conducted. To the Company's knowledge, the conduct of the Company's business as currently conducted does not infringe, misappropriate or otherwise violate any Intellectual Property rights of others in any material respect, and to the knowledge of the Company, the conduct of its business as proposed to be conducted will not infringe, misappropriate or otherwise violate any Intellectual Property rights of others in any material respect. Except as described in the Time of Sale Prospectus or as would not reasonably be expected, individually or in the aggregate, to have a material adverse effect, there is no pending or, to the Company's knowledge, threatened, action, suit, proceeding or claim by others (i) that the Company infringes, misappropriates or otherwise violates the Intellectual Property of others, or (ii) challenging the validity, enforceability, scope or ownership of any Intellectual Property owned by or licensed to the Company or the Company's rights therein. To the knowledge of the Company, no third party has infringed, misappropriated or otherwise violated any Intellectual Property owned by or exclusively licensed to the Company in any material respect. None of the Intellectual Property used by the Company in the conduct of its business has been obtained or is being used by the Company in material violation of any contractual obligation binding on the Company. The patents and patent applications relating to CMX001 and CMX157 described in the Time of Sale Prospectus under "Business – Intellectual Property" are all solely owned by the Company or exclusively licensed to the Company from the sole owners, subject to the rights of the U.S. federal government as described in the Time of Sale Prospectus. The Company is not aware of any specific facts that would support a finding that any of the issued or granted patents owned by or licensed to the Company is invalid or unenforceable and, to the knowledge of the Company, all such issued or granted patents are valid and enforceable. The Company is not subject to any judgment, order, writ, injunction or decree of any court or any federal, state, local, foreign or other governmental department, commission, board, bureau, agency or instrumentality, domestic or foreign, or any arbitrator, nor has it entered into or is it a party to any agreement made in settlement of any pending or threatened litigation, which materially restricts or impairs its use of any Intellectual Property. The Company has taken reasonable steps in accordance with normal industry practice to maintain the confidentiality of all Intellectual Property the value of which to the Company is contingent upon maintaining the confidentiality thereof, and no such Intellectual Property has been disclosed other than to employees, representatives, independent contractors, collaborators, licensors, licensees, agents and advisors of the Company, all of whom are bound by written obligations to maintain the confidentiality thereof. All founders, key employees and any other employees involved in the development of Intellectual Property for the Company have signed confidentiality and invention assignment agreements with the Company pursuant to which the Company either (I) has obtained ownership of and is the exclusive owner of, or (II) has obtained a valid and unrestricted right to exploit, sufficient for the conduct of its business, such Intellectual Property.

(cc) No material labor dispute with the employees of the Company exists, except as described in the Time of Sale Prospectus, or, to the knowledge of the Company, is imminent; and the Company is not aware of any existing, threatened or imminent labor disturbance by the employees of any of its principal suppliers, manufacturers or contractors that would reasonably be expected to have a material adverse effect on the Company.

(dd) The Company is insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are reasonably prudent and customary in the businesses in which it is engaged; since January 1, 2010, the Company has not been refused any insurance coverage sought or applied for; and the Company does not have any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a material adverse effect on the Company, except as described in the Time of Sale Prospectus.

(ee) Except as would not reasonably be expected to have a material adverse effect on the Company, the Company possesses all licenses, certificates, permits and other authorizations (collectively, "**Permits**") issued by, and has made all declarations, filings, listings, registrations, reports and submissions with, the appropriate federal, state, local or foreign governmental or regulatory authorities that are necessary for the ownership or lease of its properties or the conduct of its businesses as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, or to permit all clinical and pre-clinical studies and trials previously conducted or currently being conducted by or on behalf of the Company, or that are otherwise required with respect to the Company's product candidates, including, without limitation, all necessary U.S. Food and Drug Administration ("**FDA**") and applicable foreign regulatory agency approvals; the Company is not in violation of, or in default under, any such Permit; all such filings, declarations, listings, registrations, reports or submissions were in material compliance with all applicable laws when filed; no deficiencies regarding compliance with applicable law have been asserted by any applicable regulatory authority with respect to any such filings, declarations, listings, registrations, reports or submissions; and the Company has not received notice of any revocation or modification of any such Permit and does not have any reason to believe that any such Permit will not be renewed in the ordinary course. The Company (i) is, and at all times has been, in compliance in all material respects with all statutes, rules and regulations applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, storage, import, export or disposal of any of its product candidates or any product manufactured or distributed by the Company, including, without limitation, requirements governing investigational drugs and devices under the U.S. Federal Food, Drug and Cosmetic Act and rules and regulations thereunder, regulations relating to Good Clinical Practices and Good Laboratory Practices, and the U.S. Animal Welfare Act and rules and regulations thereunder (collectively, "**Applicable Laws**"), and (ii) has not received any FDA Form 483, written notice of adverse finding, warning letter, untitled letter or other correspondence or written notice from any court or arbitrator or governmental or regulatory authority alleging or asserting non-compliance with (A) any Applicable Laws or (B) any Permits required by any such Applicable Laws.

(ff) To the Company's knowledge, the manufacturing facilities and operations of its suppliers are operated in compliance in all material respects with all applicable statutes, rules, regulations and policies of the FDA and comparable regulatory agencies outside of the United States to which the Company is subject (collectively, the "**Regulatory Authorities**").

(gg) None of the Company's product candidates have received marketing approval from any Regulatory Authority. All clinical and pre-clinical studies and trials conducted by or on behalf of or sponsored by the Company, or in which the Company has participated, with respect to the Company's product candidates, including any such studies and trials that are described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, or the results of which are referred to in the Registration Statement, the Time of Sale Prospectus and the Prospectus, as applicable (collectively, "**Company Trials**"), were, and if still pending are, being conducted in all material respects in accordance with all applicable statutes, rules, regulations and policies of the Regulatory Authorities and current Good Clinical Practices and Good Laboratory Practices; the descriptions in the Registration Statement, the Time of Sale Prospectus or the Prospectus of the results of any Company Trials are accurate and complete descriptions in all material respects and fairly present the data derived therefrom; the Company has no knowledge of any other studies or trials not described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, the results of which are inconsistent with or call into question the results described or referred to in the Registration Statement, the Time of Sale Prospectus and the Prospectus; the Company has operated at all times and is currently in compliance in all material respects with all applicable statutes, rules, regulations and policies of the Regulatory Authorities; the Company has not received, nor does it have knowledge after due inquiry that any of its collaboration partners has received, any written notices, correspondence or other communications from the Regulatory Authorities or any other governmental agency requiring or threatening the termination, material modification or suspension of Company Trials, other than ordinary course communications with respect to modifications in connection with the design and implementation of such studies or trials, and, to the Company's best knowledge, there are no reasonable grounds for the same. The Company has obtained (or caused to be obtained) informed consent by or on behalf of each human subject who participated in a Company Trial. In using or disclosing patient information received by the Company in connection with a Company Trial, the Company has complied in all material respects with all applicable laws and regulatory rules or requirements, including, without limitation, the Health Insurance Portability and Accountability Act of 1996 and the rules and regulations thereunder. To the Company's knowledge, none of the Company Trials involved any investigator who has been disqualified as a clinical investigator or has been found by the FDA to have engaged in scientific misconduct.

(hh) The Company has not received any written notices, correspondence or other communications from any Regulatory Authority alleging any violation by the Company of any Applicable Laws with respect to any of the Company's product candidates.

(ii) Ernst & Young LLP, who have certified certain financial statements of the Company, is an independent registered public accounting firm with respect to the Company within the applicable rules and regulations adopted by the Commission and the Public Company Accounting Oversight Board (United States) and as required by the Securities Act.

(jj) The Company maintains a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with U.S. GAAP and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Except as described in the Time of Sale Prospectus, since the end of the Company's most recent audited fiscal year, there has been (A) no material weakness in the Company's internal control over financial reporting (whether or not remediated) and (B) no change in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

(kk) The Company maintains an effective system of "disclosure controls and procedures" (as defined in Rule 13a-15(e) of the Exchange Act) that complies with the requirements of the Exchange Act and that has been designed to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms, including controls and procedures designed to ensure that such information is accumulated and communicated to the Company's management as appropriate to allow timely decisions regarding required disclosure.

(ll) Except as described in the Time of Sale Prospectus, the Company has not sold, issued or distributed any shares of Common Stock during the six-month period preceding the date hereof, including any sales pursuant to Rule 144A under, or Regulation D or S of, the Securities Act, other than shares issued pursuant to employee benefit plans, equity incentive plans or other employee compensation plans or pursuant to outstanding options, rights or warrants.

(mm) The Company has filed all federal, state, local and foreign tax returns required to be filed through the date of this Agreement or have requested extensions thereof (except where the failure to file would not, individually or in the aggregate, reasonably be expected to have a material adverse effect on the Company) and have paid all taxes required to be paid thereon (except for cases in which the failure to pay would not reasonably be expected to have a material adverse effect, or, except as currently being contested in good faith and for which reserves required by U.S. GAAP have been created in the financial statements of the Company), and no tax deficiency has been determined adversely to the Company which has had (nor does the Company have any notice or knowledge of any tax deficiency which would reasonably be expected to be determined adversely to the Company and which would reasonably be expected to have) a material adverse effect.

(nn) All of the information provided to the Underwriters or to counsel for the Underwriters by or on behalf of the Company in connection with information provided to FINRA pursuant to FINRA's rules is true, complete and correct in all material respects.

(oo) From the time of initial confidential submission of the Registration Statement to the Commission (or, if earlier, the first date on which the Company engaged directly or through any person authorized to act on its behalf in any Testing-the-Waters Communication) through the date hereof, the Company has been and is an "emerging growth company," as defined in Section 2(a) of the Securities Act (an "**Emerging Growth Company**"). "**Testing-the-Waters Communication**" means any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the Securities Act.

(pp) The Company (i) has not alone engaged in any Testing-the-Waters Communication, except as disclosed to the Representatives, and (ii) has not authorized anyone other than the Representatives to engage in Testing-the-Waters Communications. The Company reconfirms that the Representatives have been authorized to act on its behalf in undertaking Testing-the-Waters Communications. The Company has not distributed any Written Testing-the-Waters Communications other than those listed on Schedule III hereto. "**Written Testing-the-Waters Communication**" means any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Securities Act.

(qq) As of the time of each sale of the Shares in connection with the offering when the Prospectus is not yet available to prospective purchasers, none of (A) the Time of Sale Prospectus, (B) any free writing prospectus, when considered together with the Time of Sale Prospectus, and (C) any individual Written Testing-the-Waters Communication, when considered together with the Time of Sale Prospectus, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(rr) The Company is not a party to any contract, agreement or understanding with any person (other than this Agreement) that would give rise to a valid claim against the Company or any Underwriter for a brokerage commission, finder's fee or like payment in connection with the offering and sale of the Shares.

(ss) The Company has not taken, directly or indirectly, any action designed to or that would reasonably be expected to cause or result in any stabilization or manipulation of the price of the Shares.

(tt) The application of the proceeds received by the Company from the issuance, sale and delivery of the Shares as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus will not violate Regulation T, U or X of the Board of Governors of the Federal Reserve System or any other regulation of such Board of Governors.

(uu) No forward-looking statement (within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act) contained in the Registration Statement, the Time of Sale Prospectus or the Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith.

(vv) The statistical, industry and market-related data included in the Registration Statement, the Time of Sale Prospectus and the Prospectus are based on or derived from sources that the Company believes, after reasonable inquiry, to be reliable and accurate. To the Company's knowledge, after reasonable investigation, it does not require the consent of any third party for the use of any such data.

(ww) The Company has not sent or received any communication regarding termination of, or intent not to renew, any of the contracts or agreements that are currently effective and that are referred to or described in the Registration Statement, the Time of Sale Prospectus or the Prospectus, or filed as an exhibit to the Registration Statement, and no such termination or non-renewal has been threatened by the Company or, to the Company's knowledge, any other party to any such contract or agreement, which threat of termination or non-renewal has not been rescinded as of the date hereof.

(xx) There is and has been no failure on the part of the Company or any of the Company's directors or officers, in their capacities as such, to comply with any provision of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated in connection therewith (the "**Sarbanes-Oxley Act**") applicable to the Company as of the date hereof, including Section 402 related to loans.

2. *Agreements to Sell and Purchase.* The Company hereby agrees to sell to the several Underwriters, and each Underwriter, upon the basis of the representations and warranties herein contained, but subject to the conditions hereinafter stated, agrees, severally and not jointly, to purchase from the Company the respective numbers of Firm Shares set forth in Schedule I hereto opposite its name at $[·] a share (the "**Purchase Price**").

On the basis of the representations and warranties contained in this Agreement, and subject to its terms and conditions, the Company agrees to sell to the Underwriters the Additional Shares, and the Underwriters shall have the right to purchase, severally and not jointly, up to [·] Additional Shares at the Purchase Price; *provided, however*, that the amount paid by the Underwriters for any Additional Shares shall be reduced by an amount per share equal to any dividends declared by the Company and payable on the Firm Shares but not payable on such Additional Shares. You may exercise this right on behalf of the Underwriters in whole or from time to time in part by giving written notice not later than 30 days after the date of this Agreement. Any exercise notice shall specify the number of Additional Shares to be purchased by the Underwriters and the date on which such shares are to be purchased. Each purchase date must be at least one business day after the written notice is given and may not be earlier than the closing date for the Firm Shares nor later than ten business days after the date of such notice. Additional Shares may be purchased as provided in Section 4 hereof solely for the purpose of covering over-allotments made in connection with the offering of the Firm Shares. On each day, if any, that Additional Shares are to be purchased (an "**Option Closing Date**"), each Underwriter agrees, severally and not jointly, to purchase the number of Additional Shares (subject to such adjustments to eliminate fractional shares as you may determine) that bears the same proportion to the total number of Additional Shares to be purchased on such Option Closing Date as the number of Firm Shares set forth in Schedule I hereto opposite the name of such Underwriter bears to the total number of Firm Shares.

3. *Terms of Public Offering*. The Company is advised by you that the Underwriters propose to make a public offering of their respective portions of the Shares as soon after the Registration Statement and this Agreement have become effective as in your judgment is advisable. The Company is further advised by you that the Shares are to be offered to the public initially at $[·] a share (the "**Public Offering Price**") and to certain dealers selected by you at a price that represents a concession not in excess of $[·] a share under the Public Offering Price, and that any Underwriter may allow, and such dealers may reallow, a concession, not in excess of $[·] a share, to any Underwriter or to certain other dealers.

4. *Payment and Delivery.* Payment for the Firm Shares shall be made to the Company in Federal or other funds immediately available in New York City against delivery of such Firm Shares for the respective accounts of the several Underwriters at 10:00 a.m., New York City time, on [·], 2013,[1] or at such other time on the same or such other date, not later than [·], 2013,[2] as shall be designated in writing by you. The time and date of such payment are hereinafter referred to as the "**Closing Date**."

Payment for any Additional Shares shall be made to the Company in Federal or other funds immediately available in New York City against delivery of such Additional Shares for the respective accounts of the several Underwriters at 10:00 a.m., New York City time, on the date specified in the corresponding notice described in Section 2 or at such other time on the same or on such other date, in any event not later than [·], 2013,[3] as shall be designated in writing by you.

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[1] Insert date 3 business days or, in the event the offering is priced after 4:30 p.m. Eastern Time, 4 business days after date of Underwriting Agreement.

[2] Insert date 5 business days after the date inserted in accordance with previous footnote.

[3] Insert date 10 business days after the expiration of the green shoe option.

The Firm Shares and Additional Shares shall be registered in such names and in such denominations as you shall request in writing not later than one full business day prior to the Closing Date or the applicable Option Closing Date, as the case may be. The Firm Shares and Additional Shares shall be delivered to you on the Closing Date or an Option Closing Date, as the case may be, for the respective accounts of the several Underwriters, with any transfer taxes payable in connection with the transfer of the Shares to the Underwriters duly paid by the Company, against payment of the Purchase Price therefor.

5. *Conditions to the Underwriters' Obligations*. The obligations of the Company to sell the Shares to the Underwriters and the several obligations of the Underwriters to purchase and pay for the Shares on the Closing Date are subject to the condition that the Registration Statement shall have become effective not later than [·] (New York City time) on the date hereof.

The several obligations of the Underwriters are subject to (x) the accuracy as of the date hereof and as of the Closing Date or the applicable Option Closing Date, as the case may be, of the representations and warranties of the Company contained herein or in certificates of any officer of the Company delivered pursuant to the provisions hereof, (y) the performance by the Company of its covenants and other obligations to be performed or satisfied hereunder on or before the Closing Date or such Option Closing Date, as the case may be, and (z) the following further conditions:

(a) Subsequent to the execution and delivery of this Agreement and prior to the Closing Date:

(i) there shall not have occurred any downgrading, nor shall any notice have been given of any intended or potential downgrading or of any review for a possible change that does not indicate the direction of the possible change, in the rating accorded any of the securities of the Company by any "nationally recognized statistical rating organization," as such term is defined in Section 3(a)(62) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"); and

(ii) there shall not have occurred any change, or any development involving a prospective change, in the condition, financial or otherwise, or in the earnings, business or operations of the Company from that set forth in the Time of Sale Prospectus that, in your judgment, is material and adverse and that makes it, in your judgment, impracticable to market the Shares on the terms and in the manner contemplated in the Time of Sale Prospectus.

(b) The Underwriters shall have received on the Closing Date a certificate, dated the Closing Date and signed by the chief financial officer or chief accounting officer of the Company and one additional senior executive officer of the Company satisfactory to the Representatives, to the effect set forth in Section 5(a) and to the effect that the representations and warranties of the Company contained in this Agreement are true and correct as of the Closing Date and that the Company has complied with all of the agreements and satisfied all of the conditions on its part to be performed or satisfied hereunder on or before the Closing Date.

The officer signing and delivering such certificate may rely upon the best of his or her knowledge as to proceedings threatened.

(c) The Underwriters shall have received on the Closing Date an opinion and negative assurance letter of Cooley LLP, outside counsel for the Company, in each case dated the Closing Date, and in each case in form and substance reasonably satisfactory to the Representatives.

(d) The Underwriters shall have received on the Closing Date an opinion and negative assurance letter of Davis Polk & Wardwell LLP, counsel for the Underwriters, in each case dated the Closing Date, and in each case in form and substance reasonably satisfactory to the Representatives.

(e) The Underwriters shall have received on the Closing Date an opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., special counsel to the Company with respect to intellectual property matters, dated the Closing Date, and in form and substance reasonably satisfactory to the Representatives.

(f) The Underwriters shall have received, on each of the date hereof and the Closing Date, a letter dated the date hereof or the Closing Date, as the case may be, in form and substance satisfactory to the Underwriters, from Ernst & Young LLP, independent public accountants, containing statements and information of the type ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement, the Time of Sale Prospectus and the Prospectus; *provided* that the letter delivered on the Closing Date shall use a "cut-off date" not earlier than the date hereof.

(g) No action shall have been taken and no statute, rule, regulation or order shall have been enacted, adopted or issued by any federal, state or foreign governmental or regulatory authority that would, as of the Closing Date, prevent the issuance or sale of the Shares; and no injunction or order of any federal, state or foreign court of competent jurisdiction shall have been issued that would, as of the Closing Date, prevent the issuance or sale of the Shares.

(h) The Representatives shall have received on and as of the Closing Date satisfactory evidence of the good standing of the Company in its jurisdiction of incorporation, and its good standing as a foreign entity in such other jurisdictions as the Representatives may reasonably request, in each case in writing or any standard form of telecommunication from the appropriate governmental authorities of such jurisdictions.

(i) The Shares to be delivered on the Closing Date shall have been approved for listing on the NASDAQ Global Market, subject to official notice of issuance.

(j) The "lock-up" agreements, each substantially in the form of Exhibit A hereto, between you and certain shareholders, officers and directors of the Company relating to sales and certain other dispositions of shares of Common Stock or certain other securities, delivered to you on or before the date hereof, shall be in full force and effect on the Closing Date.

The several obligations of the Underwriters to purchase Additional Shares hereunder are subject to the delivery to you on the applicable Option Closing Date of such documents as you may reasonably request with respect to the good standing of the Company, the due authorization and issuance of the Additional Shares to be sold on such Option Closing Date and other matters related to the issuance of such Additional Shares.

6. *Covenants of the Company*. The Company covenants with each Underwriter as follows:

(a) To furnish to you, without charge, two signed copies of the Registration Statement (including exhibits thereto) and for delivery to each other Underwriter a conformed copy of the Registration Statement (without exhibits thereto) and to furnish to you in New York City, without charge, prior to 10:00 a.m. New York City time on the business day next succeeding the date of this Agreement and during the period mentioned in Section 6(e) or 6(f) below, as many copies of the Time of Sale Prospectus, the Prospectus and any supplements and amendments thereto or to the Registration Statement as you may reasonably request.

(b) Before amending or supplementing the Registration Statement, the Time of Sale Prospectus or the Prospectus, to furnish to you a copy of each such proposed amendment or supplement and not to file any such proposed amendment or supplement to which you reasonably object, and to file with the Commission within the applicable period specified in Rule 424(b) under the Securities Act any prospectus required to be filed pursuant to such Rule.

(c) To furnish to you a copy of each proposed free writing prospectus to be prepared by or on behalf of, used by, or referred to by the Company and not to use or refer to any proposed free writing prospectus to which you reasonably object.

(d) Not to take any action that would result in an Underwriter or the Company being required to file with the Commission pursuant to Rule 433(d) under the Securities Act a free writing prospectus prepared by or on behalf of the Underwriter that the Underwriter otherwise would not have been required to file thereunder.

(e) If the Time of Sale Prospectus is being used to solicit offers to buy the Shares at a time when the Prospectus is not yet available to prospective purchasers and any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Time of Sale Prospectus in order to make the statements therein, in the light of the circumstances, not misleading, or if any event shall occur or condition exist as a result of which the Time of Sale Prospectus conflicts with the information contained in the Registration Statement then on file, or if, in the opinion of counsel for the Underwriters, it is necessary to amend or supplement the Time of Sale Prospectus to comply with applicable law, forthwith to prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to any dealer upon request, either amendments or supplements to the Time of Sale Prospectus so that the statements in the Time of Sale Prospectus as so amended or supplemented will not, in the light of the circumstances when the Time of Sale Prospectus is delivered to a prospective purchaser, be misleading or so that the Time of Sale Prospectus, as amended or supplemented, will no longer conflict with the Registration Statement, or so that the Time of Sale Prospectus, as amended or supplemented, will comply with applicable law.

(f) If, during such period after the first date of the public offering of the Shares as in the opinion of counsel for the Underwriters the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) of the Securities Act) is required by law to be delivered in connection with sales by an Underwriter or dealer, any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Prospectus in order to make the statements therein, in the light of the circumstances when the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) of the Securities Act) is delivered to a purchaser, not misleading, or if, in the opinion of counsel for the Underwriters, it is necessary to amend or supplement the Prospectus to comply with applicable law, forthwith to prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to the dealers (whose names and addresses you will furnish to the Company) to which Shares may have been sold by you on behalf of the Underwriters and to any other dealers upon request, either amendments or supplements to the Prospectus so that the statements in the Prospectus as so amended or supplemented will not, in the light of the circumstances when the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) of the Securities Act) is delivered to a purchaser, be misleading or so that the Prospectus, as amended or supplemented, will comply with applicable law.

(g) To endeavor to qualify the Shares for offer and sale under the securities or Blue Sky laws of such jurisdictions as you shall reasonably request.

(h) To make generally available to the Company's security holders and to you as soon as practicable an earning statement covering a period of at least twelve months beginning with the first fiscal quarter of the Company occurring after the date of this Agreement which shall satisfy the provisions of Section 11(a) of the Securities Act and the rules and regulations of the Commission thereunder.

(i) Whether or not the transactions contemplated in this Agreement are consummated or this Agreement is terminated, to pay or cause to be paid all expenses incident to the performance of its obligations under this Agreement, including: (i) the fees, disbursements and expenses of the Company's counsel and the Company's accountants in connection with the registration and delivery of the Shares under the Securities Act and all other fees or expenses in connection with the preparation and filing of the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, the Prospectus, any free writing prospectus prepared by or on behalf of, used by, or referred to by the Company and amendments and supplements to any of the foregoing, including all printing costs associated therewith, and the mailing and delivering of copies thereof to the Underwriters and dealers, in the quantities hereinabove specified, (ii) all costs and expenses related to the transfer and delivery of the Shares to the Underwriters, including any transfer or other taxes payable thereon, (iii) the cost of printing or producing any Blue Sky or Legal Investment memorandum in connection with the offer and sale of the Shares under state securities laws and all expenses in connection with the qualification of the Shares for offer and sale under state securities laws as provided in Section 6(g) hereof, including filing fees and the reasonable fees and disbursements of counsel for the Underwriters in connection with such qualification and in connection with the Blue Sky or Legal Investment memorandum, (iv) all filing fees and the reasonable fees and disbursements of counsel to the Underwriters incurred in connection with the review and qualification of the offering of the Shares by the FINRA, *provided* that the amount of such fees and disbursements of counsel to be paid by the Company shall not exceed $50,000 without the Company's prior written consent, (v) all fees and expenses in connection with the preparation and filing of the registration statement on Form 8-A relating to the Common Stock and all costs and expenses incident to listing the Shares on the NASDAQ Global Market, (vi) the cost of printing certificates representing the Shares, (vii) the costs and charges of any transfer agent, registrar or depositary, (viii)the costs and expenses of the Company relating to investor presentations on any "road show" undertaken in connection with the marketing of the offering of the Shares, including, without limitation, expenses associated with the preparation or dissemination of any electronic road show, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations with the prior approval of the Company, travel and lodging expenses of the representatives and officers of the Company and any such consultants, and 50% of the cost of any aircraft chartered in connection with the road show (with the remaining 50% of the cost of such aircraft to be paid by the Underwriters), (ix) the document production charges and expenses associated with printing this Agreement and (x) all other costs and expenses incident to the performance of the obligations of the Company hereunder for which provision is not otherwise made in this Section. It is understood, however, that except as provided in this Section, Section 8 entitled "Indemnity and Contribution" and the last paragraph of Section 10 below, the Underwriters will pay all of their costs and expenses, including fees and disbursements of their counsel, stock transfer taxes payable on resale of any of the Shares by them and any advertising expenses connected with any offers they may make.

(j) The Company will promptly notify the Representatives if the Company ceases to be an Emerging Growth Company at any time prior to the later of (a) completion of the distribution of the Shares within the meaning of the Securities Act and (b) completion of the Restricted Period (as defined in this Section 6).

(k) If at any time following the distribution of any Written Testing-the-Waters Communication there occurred or occurs an event or development as a result of which such Written Testing-the-Waters Communication included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company will promptly notify the Representatives and will promptly amend or supplement, at its own expense, such Written Testing-the-Waters Communication to eliminate or correct such untrue statement or omission.

(l) The Company also covenants with each Underwriter that, without the prior written consent of the Representatives on behalf of the Underwriters, it will not, during the period ending 180 days after the date of the Prospectus (the "**Restricted Period**"), (1) 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 Common Stock or (2) 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 in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise or (3) file any registration statement (other than on Form S-8 with respect to the Company's equity incentive plans described in the Time of Sale Prospectus) with the Commission relating to the offering of any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock.

The restrictions contained in the preceding paragraph shall not apply to (a) the Shares to be sold hereunder, (b) the issuance by the Company of shares of Common Stock or securities convertible into or exercisable for shares of Common Stock upon (i) the exercise of an option or warrant or the conversion of a security outstanding on the date hereof, or (ii) in satisfaction of the accrued but unpaid dividends, if any, payable to holders of the Series F preferred stock of the Company outstanding on the date hereof in connection with completion of the transactions contemplated by this Agreement; *provided* that, prior to the issuance of any such shares of Common Stock within the Restricted Period, the Company shall cause each recipient of such shares to execute and deliver to you a lock-up agreement substantially in the form of Exhibit A hereto (unless such recipient has previously executed and delivered to you a lock-up agreement substantially in such form), (c) the issuance by the Company of shares of Common Stock or other securities convertible into or exercisable for shares of Common Stock pursuant to the Company's equity incentive plans described in the Time of Sale 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, the Company shall cause each recipient of such grant or issuance to execute and deliver to you a lock-up agreement substantially in the form of Exhibit A hereto, (d) the entry into an agreement providing for the issuance by the Company of shares of Common Stock or any security convertible into or exercisable for shares of Common Stock in connection with the acquisition by the Company or any of its subsidiaries of the securities, business, or other assets of another person or entity or pursuant to an employee benefit plan assumed by the Company in connection with such acquisition, and the issuance of any such securities pursuant to any such agreement, and (e) the entry into an agreement providing for the issuance of shares of Common Stock or any security convertible into or exercisable for shares of 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 in the case of clauses (d) and (e), the aggregate number of shares of Common Stock that the Company may sell or issue or agree to sell or issue, or that may be issuable upon conversion or exercise of all other securities that the Company may sell or issue or agree to sell or issue, pursuant to clauses (d) and (e) shall not exceed 5% of the total number of shares of Common Stock issued and outstanding immediately following the completion of the transactions contemplated by this Agreement; and *provided further*, that each recipient of shares or other securities issued pursuant to clause (d) or (e) shall execute a lock-up agreement substantially in the form of Exhibit A hereto, and the Company shall enter stop transfer instructions with the Company's transfer agent and registrar on such shares or other securities, which the Company agrees it will not waive or amend without the prior written consent of the Representatives.

If the Representatives, in their sole discretion, agree to release or waive the restrictions set forth in a lock-up letter described in Section 5(j) hereof for an officer or director of the Company and provides the Company with notice of the impending release or waiver at least three business days before the effective date of the release or waiver, the Company agrees to announce the impending release or waiver by a press release substantially in the form of Exhibit B hereto through a major news service at least two business days before the effective date of the release or waiver.

7. *Covenants of the Underwriters*. Each Underwriter severally covenants with the Company not to (i) take any action that would result in the Company being required to file with the Commission under Rule 433(d) a free writing prospectus prepared by or on behalf of such Underwriter that otherwise would not be required to be filed by the Company thereunder, but for the action of the Underwriter or (ii) distribute any Written Testing-the-Waters Communication other than those listed on Schedule III hereto.

8. *Indemnity and Contribution.* (a) The Company agrees to indemnify and hold harmless each Underwriter, each person, if any, who controls any Underwriter within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act and each affiliate of any Underwriter within the meaning of Rule 405 under the Securities Act from and against any and all losses, claims, damages and liabilities (including, without limitation, any legal or other expenses reasonably incurred in connection with defending or investigating any such action or claim) caused by any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or any amendment thereof, any preliminary prospectus, the Time of Sale Prospectus or any amendment or supplement thereto, any issuer free writing prospectus as defined in Rule 433(h) under the Securities Act, any Company information that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act, any road show as defined in Rule 433(h) under the Securities Act (a “road show”), or the Prospectus or any amendment or supplement thereto, or any Written Testing-the-Waters Communication caused by any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, except insofar as such losses, claims, damages or liabilities are caused by any such untrue statement or omission or alleged untrue statement or omission based upon information relating to any Underwriter furnished to the Company in writing by such Underwriter through you expressly for use therein.

(b) Each Underwriter agrees, severally and not jointly, to indemnify and hold harmless the Company, its directors, its officers who sign the Registration Statement and each person, if any, who controls the Company within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act to the same extent as the foregoing indemnity from the Company to such Underwriter, but only with reference to information relating to such Underwriter furnished to the Company in writing by such Underwriter through you expressly for use in the Registration Statement, any preliminary prospectus or any amendment or supplement thereto, the Time of Sale Prospectus, any issuer free writing prospectus, any road show or the Prospectus or any amendment or supplement thereto, or any Written Testing-the-Waters Communication.

(c) In case any proceeding (including any governmental investigation) shall be instituted involving any person in respect of which indemnity may be sought pursuant to Section 8(a) or 8(b), such person (the "**indemnified party**") shall promptly notify the person against whom such indemnity may be sought (the "**indemnifying party**") in writing and the indemnifying party, upon request of the indemnified party, shall retain counsel reasonably satisfactory to the indemnified party to represent the indemnified party and any others the indemnifying party may designate in such proceeding and shall pay the reasonable fees and disbursements of such counsel related to such proceeding. In any such proceeding, any indemnified party shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such indemnified party unless (i) the indemnifying party and the indemnified party shall have mutually agreed to the retention of such counsel or (ii) the named parties to any such proceeding (including any impleaded parties) include both the indemnifying party and the indemnified party and representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them. It is understood that the indemnifying party shall not, in respect of the legal expenses of any indemnified party in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonable fees and expenses of more than one separate firm (in addition to any local counsel) for all such indemnified parties and that all such fees and expenses shall be reimbursed as they are incurred. Such firm shall be designated in writing by Morgan Stanley & Co. LLC, in the case of parties indemnified pursuant to Section 8(a), and by the Company, in the case of parties indemnified pursuant to Section 8(b). The indemnifying party shall not be liable for any settlement of any proceeding effected without its written consent, but if settled with such consent or if there be a final judgment for the plaintiff, the indemnifying party agrees to indemnify the indemnified party from and against any loss or liability by reason of such settlement or judgment. Notwithstanding the foregoing sentence, if at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel as contemplated by the second and third sentences of this paragraph, the indemnifying party agrees that it shall be liable for any settlement of any proceeding effected without its written consent if (i) such settlement is entered into more than 30 days after receipt by such indemnifying party of the aforesaid request and (ii) such indemnifying party shall not have reimbursed the indemnified party in accordance with such request prior to the date of such settlement. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement of any pending or threatened proceeding in respect of which any indemnified party is or could have been a party and indemnity could have been sought hereunder by such indemnified party, unless such settlement includes an unconditional release of such indemnified party from all liability on claims that are the subject matter of such proceeding.

(d) To the extent the indemnification provided for in Section 8(a) or 8(b) is unavailable to an indemnified party or insufficient in respect of any losses, claims, damages or liabilities referred to therein, then each indemnifying party under such paragraph, in lieu of indemnifying such indemnified party thereunder, shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other hand from the offering of the Shares or (ii) if the allocation provided by clause 8(d)(i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause 8(d)(i) above but also the relative fault of the Company on the one hand and of the Underwriters on the other hand in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other hand in connection with the offering of the Shares shall be deemed to be in the same respective proportions as the net proceeds from the offering of the Shares (before deducting expenses) received by the Company and the total underwriting discounts and commissions received by the Underwriters, in each case as set forth in the table on the cover of the Prospectus, bear to the aggregate Public Offering Price of the Shares. The relative fault of the Company on the one hand and the Underwriters on the other hand shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or by the Underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Underwriters' respective obligations to contribute pursuant to this Section 8 are several in proportion to the respective number of Shares they have purchased hereunder, and not joint.

(e) The Company and the Underwriters agree that it would not be just or equitable if contribution pursuant to this Section 8 were determined by *pro rata* allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation that does not take account of the equitable considerations referred to in Section 8(d). The amount paid or payable by an indemnified party as a result of the losses, claims, damages and liabilities referred to in Section 8(d) shall be deemed to include, subject to the limitations set forth above, any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 8, no Underwriter shall be required to contribute any amount in excess of the amount by which the total price at which the Shares underwritten by it and distributed to the public were offered to the public exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The remedies provided for in this Section 8 are not exclusive and shall not limit any rights or remedies which may otherwise be available to any indemnified party at law or in equity.

(f) The indemnity and contribution provisions contained in this Section 8 and the representations, warranties and other statements of the Company contained in this Agreement shall remain operative and in full force and effect regardless of (i) any termination of this Agreement, (ii) any investigation made by or on behalf of any Underwriter, any person controlling any Underwriter or any affiliate of any Underwriter or by or on behalf of the Company, its officers or directors or any person controlling the Company and (iii) acceptance of and payment for any of the Shares.

9. *Termination*. The Underwriters may terminate this Agreement by notice given by you to the Company, if after the execution and delivery of this Agreement and prior to the Closing Date (i) trading generally shall have been suspended or materially limited on, or by, as the case may be, any of the New York Stock Exchange, the NYSE MKT, the NASDAQ Global Market, the Chicago Board of Options Exchange, the Chicago Mercantile Exchange or the Chicago Board of Trade, (ii) trading of any securities of the Company shall have been suspended on any exchange or in any over-the-counter market, (iii) a material disruption in securities settlement, payment or clearance services in the United States shall have occurred, (iv) any moratorium on commercial banking activities shall have been declared by Federal or New York State authorities or (v) there shall have occurred any outbreak or escalation of hostilities, or any change in financial markets or any calamity or crisis that, in your judgment, is material and adverse and which, singly or together with any other event specified in this clause (v), makes it, in your judgment, impracticable or inadvisable to proceed with the offer, sale or delivery of the Shares on the terms and in the manner contemplated in the Time of Sale Prospectus or the Prospectus.

10. *Effectiveness; Defaulting Underwriters*. This Agreement shall become effective upon the execution and delivery hereof by the parties hereto.

If, on the Closing Date or an Option Closing Date, as the case may be, any one or more of the Underwriters shall fail or refuse to purchase Shares that it has or they have agreed to purchase hereunder on such date, and the aggregate number of Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase is not more than one-tenth of the aggregate number of the Shares to be purchased on such date, the other Underwriters shall be obligated severally in the proportions that the number of Firm Shares set forth opposite their respective names in Schedule I bears to the aggregate number of Firm Shares set forth opposite the names of all such non-defaulting Underwriters, or in such other proportions as you may specify, to purchase the Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase on such date; *provided* that in no event shall the number of Shares that any Underwriter has agreed to purchase pursuant to this Agreement be increased pursuant to this Section 10 by an amount in excess of one-ninth of such number of Shares without the written consent of such Underwriter. If, on the Closing Date, any Underwriter or Underwriters shall fail or refuse to purchase Firm Shares and the aggregate number of Firm Shares with respect to which such default occurs is more than one-tenth of the aggregate number of Firm Shares to be purchased on such date, and arrangements satisfactory to you and the Company for the purchase of such Firm Shares are not made within 36 hours after such default, this Agreement shall terminate without liability on the part of any non-defaulting Underwriter or the Company. In any such case either you or the Company shall have the right to postpone the Closing Date, but in no event for longer than seven days, in order that the required changes, if any, in the Registration Statement, in the Time of Sale Prospectus, in the Prospectus or in any other documents or arrangements may be effected. If, on an Option Closing Date, any Underwriter or Underwriters shall fail or refuse to purchase Additional Shares and the aggregate number of Additional Shares with respect to which such default occurs is more than one-tenth of the aggregate number of Additional Shares to be purchased on such Option Closing Date, the non-defaulting Underwriters shall have the option to (i) terminate their obligation hereunder to purchase the Additional Shares to be sold on such Option Closing Date or (ii) purchase not less than the number of Additional Shares that such non-defaulting Underwriters would have been obligated to purchase in the absence of such default. Any action taken under this paragraph shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

If this Agreement shall be terminated by the Underwriters, or any of them, because of any failure or refusal on the part of the Company to comply with the terms or to fulfill any of the conditions of this Agreement, or if for any reason the Company shall be unable to perform its obligations under this Agreement, the Company will reimburse the Underwriters or such Underwriters as have so terminated this Agreement with respect to themselves, severally, for all out-of-pocket expenses (including the fees and disbursements of their counsel) reasonably incurred by such Underwriters in connection with this Agreement or the offering contemplated hereunder.

11. *Entire Agreement*. (a)This Agreement, together with any contemporaneous written agreements and any prior written agreements (to the extent not superseded by this Agreement) that relate to the offering of the Shares, represents the entire agreement between the Company and the Underwriters with respect to the preparation of any preliminary prospectus, the Time of Sale Prospectus, the Prospectus, the conduct of the offering, and the purchase and sale of the Shares.

(b) The Company acknowledges that in connection with the offering of the Shares: (i) the Underwriters have acted at arm’s length, are not agents of, and owe no fiduciary duties to, the Company or any other person, (ii) the Underwriters owe the Company only those duties and obligations set forth in this Agreement and prior written agreements (to the extent not superseded by this Agreement), if any, and (iii) the Underwriters may have interests that differ from those of the Company. The Company waives to the full extent permitted by applicable law any claims it may have against the Underwriters arising from an alleged breach of fiduciary duty in connection with the offering of the Shares.

12. *Counterparts*. This Agreement may be signed in two or more counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

13. *Applicable Law*. This Agreement shall be governed by and construed in accordance with the internal laws of the State of New York.

14. *Headings*. The headings of the sections of this Agreement have been inserted for convenience of reference only and shall not be deemed a part of this Agreement.

15. *Notices*. All communications hereunder shall be in writing and effective only upon receipt and if to the Underwriters shall be delivered, mailed or sent to you at Morgan Stanley & Co. LLC, 1585 Broadway, New York, New York 10036, Attention: Equity Syndicate Desk, with a copy to the Legal Department, and Cowen and Company, LLC, 599 Lexington Avenue, 27th Floor, New York, New York 10022; and if to the Company shall be delivered, mailed or sent to Chimerix, Inc., 2505 Meridian Parkway, Suite 340, Durham, North Carolina 27713, Attention: Chief Executive Officer, with a copy to Cooley LLP, 4401 Eastgate Mall, San Diego, California 92121, Attention: Jason Kent.

Very truly yours,

CHIMERIX, INC.

By: _____
Name:
Title:

Accepted as of the date hereof

Morgan Stanley & Co. LLC
Cowen and Company, LLC

Acting severally on behalf of themselves and
the several Underwriters named in
Schedule I hereto.

By: Morgan Stanley & Co. LLC

By: _____
Name:
Title:

By: Cowen and Company, LLC

By: _____
Name:
Title:

SCHEDULE I

Underwriter	Number of Firm Shares To Be Purchased
Morgan Stanley & Co. LLC	[·]
Cowen and Company, LLC	[·]
William Blair & Company, L.L.C.	[·]
Lazard Capital Markets LLC	[·]
Total:	[·]

SCHEDULE II

Time of Sale Prospectus

1. Preliminary Prospectus issued [·], 2013

2. [Free writing prospectuses, if applicable, to be listed]

4. [Orally communicated pricing information, if applicable, to be listed]

SCHEDULE III

Written Testing-the-Waters Communications

1. [To be listed]

EXHIBIT A

[FORM OF LOCK-UP LETTER]

_____, 2013

Morgan Stanley & Co. LLC
Cowen and Company, LLC

c/o Morgan Stanley & Co. LLC
1585 Broadway
New York, New York 10036

c/o Cowen and Company, LLC
599 Lexington Avenue, 27th Floor
New York, New York 10022

Ladies and Gentlemen:

The undersigned understands that Morgan Stanley & Co. LLC and Cowen and Company, LLC (the "**Representatives**") propose to enter into an Underwriting Agreement (the "**Underwriting Agreement**") with Chimerix, Inc., a Delaware corporation (the "**Company**"), providing for the public offering (the "**Public Offering**") by the several Underwriters, including the Representatives (the "**Underwriters**"), of common stock, par value $0.001 per share of the Company (the "**Common Stock**").

To induce the Underwriters that may participate in the Public Offering to continue their efforts in connection with the Public Offering, the undersigned hereby agrees that, without the prior written consent of the Representatives on behalf of the Underwriters, it will not, during the period commencing on the date hereof and ending 180 days after the date of the final prospectus (the "**Restricted Period**") relating to the Public Offering (the "**Prospectus**"), (1) 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 beneficially owned (as such term is used in Rule 13d-3 of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**")), by the undersigned or any other securities so owned convertible into or exercisable or exchangeable for Common Stock or (2) 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 in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise.

The immediately preceding paragraph shall not apply to (a) transfers 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 the undersigned and/or the immediate family of the undersigned, or distributions of shares of Common Stock or any security convertible into Common Stock to partners, members, stockholders or holders of similar equity interests in the undersigned, *provided* that in the case of any transfer or distribution pursuant to this clause (a), (i) each donee, transferee or distributee shall sign and deliver a lock-up letter substantially in the form of this letter 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; (b) transactions relating to shares of Common Stock acquired in open market transactions after the completion of the Public 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 Common Stock acquired in such open market transactions during the Restricted Period; (c) the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of Common Stock, *provided* that such plan does not provide for the transfer of shares of 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 the undersigned or the Company during the Restricted Period; or (d) transfers to the Company of shares of Common Stock or other securities convertible into or exercisable or exchangeable for Common Stock (i) upon a vesting event of the Company's securities or the exercise of options issued pursuant to the Company's 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 the Company's right to repurchase or reacquire the undersigned's securities pursuant to agreements that permit the Company to repurchase or reacquire such securities upon termination of the undersigned's services to the Company, *provided* that in the case of any transfer pursuant to this clause (d), 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.

In addition, the undersigned agrees that, without the prior written consent of the Representatives on behalf of the Underwriters, it 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 undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of the undersigned's shares of Common Stock except in compliance with the foregoing restrictions.

If the undersigned is an officer or director of the Company, (i) the Representatives agree that, at least three business days before the effective date of any release or waiver of the foregoing restrictions in connection with a transfer of shares of Common Stock, Representatives will notify the Company of the impending release or waiver, and (ii) the Company has agreed in the Underwriting Agreement to announce the impending release or waiver by press release through a major news service at least two business days before the effective date of the release or waiver. Any release or waiver granted by Representatives hereunder to any such officer or director shall only be effective two business days after the publication date of such press release. The provisions of this paragraph will not apply if (a) the release or waiver is effected solely to permit a transfer not for consideration and (b) the transferee has agreed in writing to be bound by the same terms described in this letter to the extent and for the duration that such terms remain in effect at the time of the transfer.

The undersigned understands that the Company and the Underwriters are relying upon this agreement in proceeding toward consummation of the Public Offering. The undersigned further understands that this agreement is irrevocable and shall be binding upon the undersigned's heirs, legal representatives, successors and assigns.

This agreement shall terminate automatically upon the earlier to occur, if applicable, of (a) the date the Company advises the Representatives, in writing, prior to the execution of the Underwriting Agreement, that it has determined not to proceed with the Public Offering and (b) September 30, 2013 if, and only if, the Public Offering has not been completed by such date.

Whether or not the Public Offering actually occurs depends on a number of factors, including market conditions. Any Public Offering will only be made pursuant to an Underwriting Agreement, the terms of which are subject to negotiation between the Company and the Underwriters.

Very truly yours,

_____

(Name)

_____

(Address)

EXHIBIT B

FORM OF WAIVER OF LOCK-UP

_____, 2013

[Name and Address of
Officer or Director
Requesting Waiver]

Dear Mr./Ms. [Name]:

This letter is being delivered to you in connection with the offering by Chimerix, Inc. (the "**Company**") of [·] shares of common stock, $0.001 par value per share, of the Company (the "**Common Stock**") and the lock-up letter dated _____, 2013 (the "**Lock-up Letter**"), executed by you in connection with such offering, and your request for a [waiver][release] dated _____, 2013, with respect to _____ shares of Common Stock (the "**Shares**").

Morgan Stanley & Co. LLC and Cowen and Company, LLC hereby agree to [waive] [release] the transfer restrictions set forth in the Lock-up Letter, but only with respect to the Shares, effective _____, 2013; *provided, however*, that such [waiver] [release] is conditioned on the Company announcing the impending [waiver] [release] by press release through a major news service at least two business days before effectiveness of such [waiver] [release]. This letter will serve as notice to the Company of the impending [waiver] [release].

Except as expressly [waived] [released] hereby, the Lock-up Letter shall remain in full force and effect.

Very truly yours,

Morgan Stanley & Co. LLC
Cowen and Company, LLC
Acting severally on behalf of themselves and the several Underwriters named in Schedule I to the Underwriting Agreement

By: Morgan Stanley & Co. LLC

By: _____
Name:
Title:

By: Cowen and Company, LLC

By: _____
Name:
Title:

cc: Company

FORM OF PRESS RELEASE

Chimerix, Inc.
[·], 2013

Chimerix, Inc. (the "**Company**") announced today that Morgan Stanley & Co. LLC and Cowen and Company, LLC, the joint book-running managers in the Company's recent public sale of [·] shares of common stock are [waiving][releasing] a lock-up restriction with respect to [·] shares of the Company's common stock held by [certain officers or directors] [an officer or director] of the Company. The [waiver][release] will take effect on [·], 2013, and the shares may be sold on or after such date.

This press release is not an offer for sale of the securities in the United States or in any other jurisdiction where such offer is prohibited, and such securities may not be offered or sold in the United States absent registration or an exemption from registration under the United States Securities Act of 1933, as amended.

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]

CERTIFICATE OF AMENDMENT
OF THE
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
CHIMERIX, INC.

CHIMERIX, INC. (the ***"Corporation"***), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the ***"DGCL"***), does hereby certify:

FIRST: The name of the Corporation is Chimerix, Inc.

SECOND: The date on which the Certificate of Incorporation of the Corporation was originally filed with the Secretary of State of the State of Delaware is April 7, 2000.

THIRD: The Board of Directors of the Corporation, acting in accordance with the provisions of Sections 141 and 242 of the DGCL, adopted resolutions amending the Corporation's Amended and Restated Certificate of Incorporation as follows:

1. The first paragraph of Article IV of the Corporation's Amended and Restated Certificate of Incorporation is hereby amended to add the following at the end of such paragraph:

> "Effective at the time of filing of this Certificate of Amendment with the Secretary of State of the State of Delaware, every 3.55 shares of Common Stock issued and outstanding shall, automatically and without any action on the part of the respective holders thereof, be combined and converted into one share of Common Stock without increasing or decreasing the par value of each share of Common Stock (the ***"Reverse Split"***); *provided*, *however*, that this Corporation shall issue no fractional shares of Common Stock as a result of the Reverse Split, but shall instead pay to any stockholder who would be entitled to receive a fractional share as a result of the actions set forth herein a sum in cash equal to the fair market value of the shares constituting such fractional share as determined by the Board of Directors of the Corporation. The Reverse Split shall occur whether or not the certificates representing such shares of Common Stock are surrendered to the Corporation or its transfer agent. The Reverse Split shall be effected on a record holder-by-record holder basis, such that any fractional shares of Common Stock resulting from the Reverse Split and held by a single record holder shall be aggregated."

2. Article IV, Section B.1(a) of the Corporation's Amended and Restated Certificate of Incorporation is hereby amended and restated in its entirety to read as follows:

"**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 date immediately prior to the date that a registration statement under the Securities Act of 1933, as amended, covering the offer and sale of Common Stock for the account of the Corporation is declared effective for an initial public offering approved by the Board or a Pricing Committee duly appointed by the Board (the ***"Accruing Dividends Outside Date"***). Such dividends shall be payable 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, concurrently with any liquidation, dissolution or winding up of the Corporation or any Asset Transfer or Acquisition (as such terms are defined below), or immediately prior to the closing of an initial public offering of the Common Stock in which all of the Series Preferred is converted to Common Stock. After the Accruing Dividends Outside Date, 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."

3. Article IV, Section B.4(l)(iii) of the Corporation's Amended and Restated Certificate of Incorporation is hereby amended and restated in its entirety to read as follows:

"**(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, immediately prior to the automatic conversion of all of the Series Preferred into shares of Common Stock pursuant to this Section B.4(l) in connection with an initial public offering of the Common Stock, 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, immediately prior to the automatic conversion of all of the Series Preferred into shares of Common Stock pursuant to this Section B.4(l) in connection with an initial public offering of the Common Stock, 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))."

FOURTH: Thereafter, pursuant to a resolution of the Board of Directors, this Certificate of Amendment was submitted to the stockholders of the Corporation for their approval, and was duly adopted in accordance with the provisions of Sections 228 and 242 of the DGCL.

IN WITNESS WHEREOF, Chimerix, Inc. has caused this Certificate of Amendment to be executed by its duly authorized officer as of March 25, 2013.

/s/ Kenneth I. Moch

Kenneth I. Moch, Chief Executive Officer

ZQ|CERT#|COY|CLS|RGSTRY|ACCT#|TRANSTYPE|RUN#|TRANS#

COMMON STOCK

PAR VALUE $0.001

COMMON STOCK

THIS CERTIFICATE IS TRANSFERABLE IN CANTON, MA AND NEW YORK, NY

CHIMERIX, INC.

Certificate Number

ZQ00000000

Shares

CHIMERIX, INC.

INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE

THIS CERTIFIES THAT

MR. SAMPLE & MRS. SAMPLE & MR. SAMPLE & MRS. SAMPLE

CUSIP 16934W 10 6

SEE REVERSE FOR CERTAIN DEFINITIONS

is the owner of

ZERO HUNDRED THOUSAND ZERO HUNDRED AND ZERO

FULLY-PAID AND NON-ASSESSABLE SHARES OF COMMON STOCK OF

Chimerix, Inc. (hereinafter called the "Company"), transferable on the books of the Company in person or by duly authorized attorney, upon surrender of this Certificate properly endorsed. This Certificate and the shares represented hereby are issued and shall be held subject to all of the provisions of the Certificate of Incorporation, as amended, and the By-Laws, as amended, of the Company (copies of which are on file with the Company and with the Transfer Agent) to all of which each holder, by acceptance hereof, assents. This Certificate is not valid unless countersigned and registered by the Transfer Agent and Registrar.

Witness the facsimile seal of the Company and the facsimile signatures of its duly authorized officers.

President & CEO

SVP, CFO, Secretary

CHIMERIX, INC. SEAL 2000 DELAWARE

DATED DD-MMM-YYYY

COUNTERSIGNED AND REGISTERED:
COMPUTERSHARE TRUST COMPANY, N.A.
TRANSFER AGENT AND REGISTRAR,

By _____
AUTHORIZED SIGNATURE

1234567

CHIMERIX, INC.

PO BOX 43064, Providence, RI 02940-3064

MR A SAMPLE
DESIGNATION (IF ANY)
ADD 1
ADD 2
ADD 3
ADD 4
ADD 5
ADD 6

CUSIP XXXXXX XX X
Holder ID XXXXXXXXXX
Insurance Value 1,000,000.00
Number of Shares 12345
DTC 12345678 1234567890123456

Certificate Numbers	Num	Denom.	Total
1234567890123456789	1	1	1
1234567890123456789	2	2	2
1234567890123456789	3	3	3
1234567890123456789	4	4	4
1234567890123456789	5	5	5
1234567890123456789	6	6	6
Total Transaction	6	6	7

CHIMERIX, INC.

THE COMPANY WILL FURNISH WITHOUT CHARGE TO EACH SHAREHOLDER WHO SO REQUESTS, A SUMMARY OF THE POWERS, DESIGNATIONS, PREFERENCES AND RELATIVE, PARTICIPATING, OPTIONAL OR OTHER SPECIAL RIGHTS OF EACH CLASS OF STOCK OF THE COMPANY AND THE QUALIFICATIONS, LIMITATIONS OR RESTRICTIONS OF SUCH PREFERENCES AND RIGHTS, AND THE VARIATIONS IN RIGHTS, PREFERENCES AND LIMITATIONS DETERMINED FOR EACH SERIES, WHICH ARE FIXED BY THE ARTICLES OF INCORPORATION OF THE COMPANY, AS AMENDED, AND THE RESOLUTIONS OF THE BOARD OF DIRECTORS OF THE COMPANY, AND THE AUTHORITY OF THE BOARD OF DIRECTORS TO DETERMINE VARIATIONS FOR FUTURE SERIES. SUCH REQUEST MAY BE MADE TO THE OFFICE OF THE SECRETARY OF THE COMPANY OR TO THE TRANSFER AGENT. THE BOARD OF DIRECTORS MAY REQUIRE THE OWNER OF A LOST OR DESTROYED STOCK CERTIFICATE, OR HIS LEGAL REPRESENTATIVES, TO GIVE THE COMPANY A BOND TO INDEMNIFY IT AND ITS TRANSFER AGENTS AND REGISTRARS AGAINST ANY CLAIM THAT MAY BE MADE AGAINST THEM ON ACCOUNT OF THE ALLEGED LOSS OR DESTRUCTION OF ANY SUCH CERTIFICATE.

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM	- as tenants in common	UNIF GIFT MIN ACT	-.....(Cust).....Custodian.....(Minor)..... under Uniform Gifts to Minors Act.....(State).....
TEN ENT	- as tenants by the entireties		
JT TEN	- as joint tenants with right of survivorship and not as tenants in common	UNIF TRF MIN ACT	-.....(Cust).....Custodian (until age .....) .....(Minor).....under Uniform Transfers to Minors Act .....(State).....

Additional abbreviations may also be used though not in the above list.

PLEASE INSERT SOCIAL SECURITY OR OTHER IDENTIFYING NUMBER OF ASSIGNEE

For value received, _____ hereby sell, assign and transfer unto

_____

(PLEASE PRINT OR TYPEWRITE NAME AND ADDRESS, INCLUDING POSTAL ZIP CODE, OF ASSIGNEE)

_____

_____

_____ Shares

of the capital stock represented by the within Certificate, and do hereby irrevocably constitute and appoint

_____ Attorney

to transfer the said stock on the books of the within-named Company with full power of substitution in the premises.

Dated: _____ 20_____

Signature: _____

Signature: _____

Notice: The signature to this assignment must correspond with the name as written upon the face of the certificate, in every particular, without alteration or enlargement, or any change whatever.

Signature(s) Guaranteed: Medallion Guarantee Stamp

THE SIGNATURE(S) SHOULD BE GUARANTEED BY AN ELIGIBLE GUARANTOR INSTITUTION (Banks, Stockbrokers, Savings and Loan Associations and Credit Unions) WITH MEMBERSHIP IN AN APPROVED SIGNATURE GUARANTEE MEDALLION PROGRAM, PURSUANT TO S.E.C. RULE 17Ad-15.

SECURITY INSTRUCTIONS

THIS IS WATERMARKED PAPER. DO NOT ACCEPT WITHOUT NOTING WATERMARK. HOLD TO LIGHT TO VERIFY WATERMARK.

The IRS requires that we report the cost basis of certain shares acquired after January 1, 2011. If your shares were covered by the legislation and you have sold or transferred the shares and requested a specific cost basis calculation method, we have processed as requested. If you did not specify a cost basis calculation method, we have defaulted to the first in, first out (FIFO) method. Please visit our website or consult your tax advisor if you need additional information about cost basis.

If you do not keep in contact with us or do not have any activity in your account for the time periods specified by state law, your property could become subject to state unclaimed property laws and transferred to the appropriate state.

1524321

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 3,567,835 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.

By: _____
Signature

Title: _____

Date: _____

OPTIONHOLDER:

_____
Signature

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) 450,041 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 2,631,036 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 6,197,183 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

CHIMERIX, INC.

2013 EQUITY INCENTIVE PLAN

ADOPTED BY THE BOARD OF DIRECTORS: FEBRUARY 21, 2013
APPROVED BY THE STOCKHOLDERS: _____, 2013
IPO DATE/EFFECTIVE DATE: _____, 2013

1. GENERAL.

(a) Successor to and Continuation of Prior Plan. The Plan is intended as the successor to and continuation of the Chimerix, Inc. 2012 Equity Incentive Plan, as amended (the "***Prior Plan***") which was the successor to and continuation of the Chimerix, Inc. 2002 Equity Incentive Plan. From and after 12:01 a.m. Pacific time on the Effective Date, no additional stock awards will be granted under the Prior Plan. All Awards granted on or after 12:01 a.m. Pacific Time on the Effective Date will be granted under this Plan. All stock awards granted under the Prior Plan will remain subject to the terms of the Prior Plan.

(i) Any shares that would otherwise remain available for future grants under the Prior Plan as of 12:01 a.m. Pacific Time on the Effective Date (the "***Prior Plan's Available Reserve***") will cease to be available under the Prior Plan at such time. Instead, that number of shares of Common Stock equal to the Prior Plan's Available Reserve will be added to the Share Reserve (as further described in Section 3(a) below) and be then immediately available for grants and issuance pursuant to Stock Awards hereunder, up to the maximum number set forth in Section 3(a) below.

(ii) In addition, from and after 12:01 a.m. Pacific time on the Effective Date, with respect to the aggregate number of shares subject, at such time, to outstanding stock awards granted under the Prior Plan or under the Chimerix, Inc. 2002 Equity Incentive 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 otherwise return to the Company; or (iii) are reacquired, withheld (or not issued) to satisfy a tax withholding obligation in connection with an award or to satisfy the purchase price or exercise price of a stock award (such shares the "***Returning Shares***") will immediately be added to the Share Reserve (as further described in Section 3(a) below) as and when such a share becomes a Returning Share, up to the maximum number set forth in Section 3(a) below.

(b) Eligible Award Recipients. Employees, Directors and Consultants are eligible to receive Awards.

(c) Available Awards. The Plan provides for the grant of the following Awards: (i) Incentive Stock Options, (ii) Nonstatutory Stock Options, (iii) Stock Appreciation Rights (iv) Restricted Stock Awards, (v) Restricted Stock Unit Awards, (vi) Performance Stock Awards, (vii) Performance Cash Awards, and (viii) Other Stock Awards.

(d) **Purpose.** This Plan, through the granting of 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 Awards; (B) when and how each Award will be granted; (C) what type of Award will be granted; (D) the provisions of each Award (which need not be identical), including when a person will be permitted to exercise or otherwise receive cash or Common Stock under the Award; (E) the number of shares of Common Stock subject to, or the cash value of, an Award; and (F) the Fair Market Value applicable to a Stock Award.

(ii) To construe and interpret the Plan and Awards granted under it, and to establish, amend and revoke rules and regulations for administration of the Plan and Awards. The Board, in the exercise of these powers, may correct any defect, omission or inconsistency in the Plan or in any Award Agreement or in the written terms of a Performance Cash Award, in a manner and to the extent it will deem necessary or expedient to make the Plan or Award fully effective.

(iii) To settle all controversies regarding the Plan and Awards granted under it.

(iv) To accelerate, in whole or in part, the time at which an 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 an Award Agreement, suspension or termination of the Plan will not materially impair a Participant's rights under his or her then-outstanding 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 bring the Plan or 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. If required by applicable law or listing requirements, 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 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 Awards available for issuance under the Plan. Except as otherwise provided in the Plan or an Award Agreement, no amendment of the Plan will materially impair a Participant's rights under an outstanding Award without the Participant's written consent.

(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 (A) Section 162(m) of the Code regarding the exclusion of performance-based compensation from the limit on corporate deductibility of compensation paid to Covered Employees, (B) Section 422 of the Code regarding "incentive stock options" or (C) Rule 16b-3.

(viii) To approve forms of Award Agreements for use under the Plan and to amend the terms of any one or more Awards, including, but not limited to, amendments to provide terms more favorable to the Participant than previously provided in the 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 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 Awards without the affected Participant's consent (A) to maintain the qualified status of the 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 Award into compliance with, Section 409A of the Code; or (D) to comply with other applicable laws or listing requirements.

(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 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 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 award and/or (6) award of 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.

(i) General. 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, as applicable). 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 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.

(ii) Section 162(m) and Rule 16b-3 Compliance. The Committee may consist solely of two or more Outside Directors, in accordance with Section 162(m) of the Code, or solely of two or more Non-Employee Directors, in accordance with Rule 16b-3.

(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 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 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(x)(iii) 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. Subject to Section 9(a) relating to Capitalization Adjustments, and the following sentence regarding the annual increase, the aggregate number of shares of Common Stock that may be issued pursuant to Stock Awards will not exceed _____ shares (the "***Share Reserve***"), which number is the sum of (i) 1,408,450 shares, *plus* (ii) the number of shares subject to the Prior Plan's Available Reserve, *plus* (iii) the number of shares that are Returning Shares, as such shares become available from time to time. In addition, the Share Reserve will automatically increase on January 1st of each year, for a period of not more than ten years, commencing on January 1st of the year following the year in which the IPO Date occurs and ending on (and including) January 1, 2023, in an amount equal to 2.5% of the total number of shares of Capital Stock outstanding on December 31st of the preceding calendar year. Notwithstanding the foregoing, the Board may act prior to January 1st of a given year to provide that there will be no January 1st increase in the Share Reserve for such year or that the increase in the Share Reserve for such year will be a lesser number of shares of Common Stock than would otherwise occur pursuant to the preceding sentence. 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). Shares may be issued in connection with a merger or acquisition as permitted by NASDAQ Listing Rule 5635(c) or, if applicable, NYSE Listed Company Manual Section 303A.08, AMEX Company Guide Section 711 or other applicable rule, and such issuance will not reduce the number of shares available for issuance under the Plan.

(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 provisions of 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 2,816,901 shares of Common Stock.

(d) Section 162(m) Limitations. Subject to the provisions of Section 9(a) relating to Capitalization Adjustments, at such time as the Company may be subject to the applicable provisions of Section 162(m) of the Code, the following limitations shall apply.

(i) A maximum of 704,225 shares of Common Stock subject to Options, SARs 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 may be granted to any one Participant during any one calendar year. Notwithstanding the foregoing, if any additional Options, SARs or Other Stock Awards whose value is determined by reference to an increase over an exercise or strike price of at least one hundred percent (100%) of the Fair Market Value on the date the Stock Award are granted to any Participant during any calendar year, compensation attributable to the exercise of such additional Stock Awards will not satisfy the requirements to be considered "qualified performance-based compensation" under Section 162(m) of the Code unless such additional Stock Award is approved by the Company's stockholders.

(ii) A maximum of 704,225 shares of Common Stock subject to Performance Stock Awards may be granted to any one Participant during any one calendar year (whether the grant, vesting or exercise is contingent upon the attainment during the Performance Period of the Performance Goals).

(iii) A maximum of $5,000,000 may be granted as a Performance Cash Award to any one Participant during any one calendar year.

(e) 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 of the Securities Act, 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), (ii) the Company, in consultation with its legal counsel, has determined that such Stock Awards are otherwise exempt from Section 409A of the Code, or (iii) the Company, in consultation with its legal counsel, has determined that such Stock Awards 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 110% of the Fair Market Value on the date of grant and the Option is not exercisable after the expiration of five years from the date of grant.

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 Award Agreement will conform to (through incorporation of provisions hereof by reference in the applicable 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 years from the date of its grant or such shorter period specified in the 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 100% of the Fair Market Value of the Common Stock subject to the Option or SAR on the date the Award is granted. Notwithstanding the foregoing, an Option or SAR may be granted with an exercise or strike price lower than 100% of the Fair Market Value of the Common Stock subject to the Award if such 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 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 reduced 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; or

(v) in any other form of legal consideration that may be acceptable to the Board and specified in the applicable 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 Appreciation Right 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 aggregate strike price of the number of Common Stock equivalents with respect to which the Participant is exercising the SAR on such date. 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 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 (or 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 Regulations Section 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, on 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 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 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 Award as of the date of termination of Continuous Service) within the period of time ending on the earlier of (i) the date three months following the termination of the Participant's Continuous Service (or such longer or shorter period specified in the applicable Award Agreement), and (ii) the expiration of the term of the Option or SAR as set forth in the Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR (as applicable) within the applicable time frame, the Option or SAR will terminate.

(h) Extension of Termination Date. 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 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 exercise of the Option or SAR would not be in violation of such registration requirements, and (ii) the expiration of the term of the Option or SAR as set forth in the applicable Award Agreement. In addition, unless otherwise provided in a Participant's Award Agreement, if the sale of any Common Stock received on 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 months (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 Award Agreement.

(i) Disability of Participant. Except as otherwise provided in the applicable 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 12 months following such termination of Continuous Service (or such longer or shorter period specified in the Award Agreement), and (ii) the expiration of the term of the Option or SAR as set forth in the 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 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 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 18 months following the date of death (or such longer or shorter period specified in the Award Agreement), and (ii) the expiration of the term of such Option or SAR as set forth in the Award Agreement. If, after the Participant's death, the Option or SAR is not exercised within the applicable time frame, the Option or SAR will terminate.

(k) Termination for Cause. Except as explicitly provided otherwise in a Participant's 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 date 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 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 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 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.

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 will deem appropriate. To the extent consistent with the Company's bylaws, at the Board's election, shares of Common Stock may be (x) held in book entry form subject to the Company's instructions until any restrictions relating to the Restricted Stock Award lapse; or (y) 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. 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 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 will deem 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.

(c) Performance Awards.

(i) Performance Stock Awards. A Performance Stock Award is a Stock Award (covering a number of shares not in excess of that set forth in Section 3(d) above) that is payable (including that may be granted, vest or be exercised) contingent upon the attainment during a Performance Period of certain Performance Goals. A Performance Stock Award may, but need not, require the completion of a specified period of Continuous Service. The length of any Performance Period, the Performance Goals to be achieved during the Performance Period, and the measure of whether and to what degree such Performance Goals have been attained will be conclusively determined by the Committee (or, if not required for compliance with Section 162(m) of the Code, the Board), in its sole discretion. In addition, to the extent permitted by applicable law and the applicable Award Agreement, the Board may determine that cash may be used in payment of Performance Stock Awards.

(ii) Performance Cash Awards. A Performance Cash Award is a cash award (for a dollar value not in excess of that set forth in Section 3(d) above) that is payable contingent upon the attainment during a Performance Period of certain Performance Goals. A Performance Cash Award may also require the completion of a specified period of Continuous Service. At the time of grant of a Performance Cash Award, the length of any Performance Period, the Performance Goals to be achieved during the Performance Period, and the measure of whether and to what degree such Performance Goals have been attained will be conclusively determined by the Committee (or, if not required for compliance with Section 162(m) of the Code, the Board), in its sole discretion. The Board may specify the form of payment of Performance Cash Awards, which may be cash or other property, or may provide for a Participant to have the option for his or her Performance Cash Award, or such portion thereof as the Board may specify, to be paid in whole or in part in cash or other property.

(iii) Section 162(m) Compliance. Unless otherwise permitted in compliance with the requirements of Section 162(m) of the Code with respect to an Award intended to qualify as "performance-based compensation" thereunder, the Committee will establish the Performance Goals applicable to, and the formula for calculating the amount payable under, the Award no later than the earlier of (a) the date 90 days after the commencement of the applicable Performance Period, and (b) the date on which 25% of the Performance Period has elapsed, and in any event at a time when the achievement of the applicable Performance Goals remains substantially uncertain. Prior to the payment of any compensation under an Award intended to qualify as "performance-based compensation" under Section 162(m) of the Code, the Committee will certify the extent to which any Performance Goals and any other material terms under such Award have been satisfied (other than in cases where such relate solely to the increase in the value of the Common Stock). Notwithstanding satisfaction of any completion of any Performance Goals, the number of shares of Common Stock, Options, cash or other benefits granted, issued, retainable and/or vested under an Award on account of satisfaction of such Performance Goals may be reduced by the Committee on the basis of such further considerations as the Committee, in its sole discretion, will determine.

(d) 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 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 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 an Award or the subsequent issuance of cash or Common Stock pursuant to the 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 an Award or a possible period in which the Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of an Award to the holder of such Award.

8. MISCELLANEOUS.

(a) Use of Proceeds from Sales of Common Stock. Proceeds from the sale of shares of Common Stock pursuant to Awards will constitute general funds of the Company.

(b) Corporate Action Constituting Grant of Awards. Corporate action constituting a grant by the Company of an 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 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 Award Agreement or related grant documents as a result of a clerical error in the papering of the Award Agreement or related grant documents, the corporate records will control and the Participant will have no legally binding right to the incorrect term in the Award Agreement or related grant documents.

(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 an Award unless and until (i) such Participant has satisfied all requirements for exercise of, or the issuance of shares under, the Award pursuant to its terms, and (ii) the issuance of the Common Stock subject to such Award has been entered into the books and records of the Company.

(d) No Employment or Other Service Rights. Nothing in the Plan, any Award Agreement or any other instrument executed thereunder or in connection with any 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 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 or takes an extended leave of absence) after the date of grant of any Award to the Participant, the Board has the right in its sole discretion to (x) make a corresponding reduction in the number of shares or cash amount subject to any portion of such 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 Award. In the event of any such reduction, the Participant will have no right with respect to any portion of the Award that is so reduced.

(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 $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 the 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 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 Award; and (ii) to give written assurances satisfactory to the Company stating that the Participant is acquiring Common Stock subject to the 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 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 an Award Agreement, the Company may, in its sole discretion, satisfy any federal, state or local tax withholding obligation relating to an 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 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 an 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 Award Agreement.

(i) Electronic Delivery. Any reference herein to a "written" agreement or document will include any agreement or document delivered electronically, filed publicly at www.sec.gov (or any successor website thereto) 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 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 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. Unless otherwise expressly provided for in an Award Agreement, the Plan and Award Agreements will be interpreted to the greatest extent possible in a manner that makes the Plan and the Awards granted hereunder exempt from Section 409A of the Code, and, to the extent not so exempt, in compliance with Section 409A of the Code. If the Board determines that any Award granted hereunder is not exempt from and is therefore subject to Section 409A of the Code, the Award Agreement evidencing such Award will incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code, and to the extent an Award Agreement is silent on terms necessary for compliance, such terms are hereby incorporated by reference into the Award Agreement. Notwithstanding anything to the contrary in this Plan (and unless the Award Agreement specifically provides otherwise), if the shares of Common Stock are publicly traded, and if a Participant holding an Award that constitutes "deferred compensation" under Section 409A of the Code is a "specified employee" for purposes of Section 409A of the Code, no distribution or payment of any amount that is due because of a "separation from service" (as defined in Section 409A of the Code without regard to alternative definitions thereunder) will be issued or paid before the date that is six months following the date of such Participant's "separation from service" or, if earlier, the date of the Participant's death, unless such distribution or payment can be made in a manner that complies with Section 409A of the Code, and any amounts so deferred will be paid in a lump sum on the day after such six month period elapses, with the balance paid thereafter on the original schedule.

(l) Clawback/Recovery. All Awards granted under the Plan will be subject to recoupment in accordance with any clawback policy that the Company is required to adopt pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other applicable law. In addition, the Board may impose such other clawback, recovery or recoupment provisions in an Award Agreement as the Board determines necessary or appropriate, including but not limited to a reacquisition right in respect of previously acquired shares of Common Stock or other cash or property upon the occurrence of Cause. No recovery of compensation under such a clawback policy will be an event giving rise to a right to resign for "good reason" or "constructive termination" (or similar term) under any agreement with the Company.

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), (iii) the class(es) and maximum number of securities that may be awarded to any person pursuant to Sections 3(d), and (iv) 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, notwithstanding any other provision of the Plan, the Board will take one or more of the following actions with respect to Stock Awards, contingent upon the closing or completion of the Corporate Transaction:

(i) arrange for the surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) to assume or continue the Stock Award or to substitute a similar stock award for the Stock Award (including, but not limited to, an award to acquire the same consideration paid to the stockholders of the Company pursuant to the Corporate Transaction);

(ii) arrange for the assignment of any reacquisition or repurchase rights held by the Company in respect of Common Stock issued pursuant to the Stock Award to the surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company);

(iii) accelerate the vesting, in whole or in part, of the Stock Award (and, if applicable, the time at which the Stock Award may be exercised) to a date prior to the effective time of such Corporate Transaction as the Board will determine (or, if the Board will not determine such a date, to the date that is five days prior to the effective date of the Corporate Transaction), with such Stock Award terminating if not exercised (if applicable) at or prior to the effective time of the Corporate Transaction;

(iv) arrange for the lapse, in whole or in part, of any reacquisition or repurchase rights held by the Company with respect to the Stock Award;

(v) cancel or arrange for the cancellation of the Stock Award, to the extent not vested or not exercised prior to the effective time of the Corporate Transaction, in exchange for such cash consideration, if any, as the Board, in its sole discretion, may consider appropriate; and

(vi) make a payment, in such form as may be determined by the Board equal to the excess, if any, of (A) the value of the property the Participant would have received upon the exercise of the Stock Award immediately prior to the effective time of the Corporate Transaction, over (B) any exercise price payable by such holder in connection with such exercise.

The Board need not take the same action or actions with respect to all Stock Awards or portions thereof or with respect to all Participants. The Board may take different actions with respect to the vested and unvested portions of a Stock Award.

(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.

The Board may suspend or terminate the Plan at any time. No Incentive Stock Options may be granted after the tenth anniversary of the earlier of (i) the date the Plan is adopted by the Board (the "***Adoption Date***"), or (ii) the date the Plan is approved by the stockholders of the Company. No Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

11. Existence of the Plan; Timing of First Grant or Exercise.

The Plan will come into existence on the Adoption Date; *provided*, *however*, no Award may be granted prior to the IPO Date (that is, the Effective Date). In addition, no Stock Award will be exercised (or, in the case of a Restricted Stock Award, Restricted Stock Unit Award, Performance Stock Award, or Other Stock Award, will be granted) and no Performance Cash Award will be settled unless and until the Plan has been approved by the stockholders of the Company, which approval will be within 12 months after the date the Plan is adopted by the Board.

12. Choice of Law.

The law 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 "subsidiary" of the Company as such terms are defined in Rule 405 of the Securities Act. The Board will have the authority to determine the time or times at which "parent" or "subsidiary" status is determined within the foregoing definition.

(b) "***Award***" means a Stock Award or a Performance Cash Award.

(c) "***Award Agreement***" means a written agreement between the Company and a Participant evidencing the terms and conditions of an Award.

(d) "***Board***" means the Board of Directors of the Company.

(e) "***Capital Stock***" means each and every class of common stock of the Company, regardless of the number of votes per share.

(f) "***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 Adoption 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.

(g) "***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 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.

(h) "***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 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, (C) on account of the acquisition of securities of the Company by any individual who is, on the IPO Date, either an executive officer or a Director (either, an "***IPO Investor***") and/or any entity in which an IPO Investor has a direct or indirect interest (whether in the form of voting rights or participation in profits or capital contributions) of more than 50% (collectively, the "***IPO Entities***") or on account of the IPO Entities continuing to hold shares that come to represent more than 50% of the combined voting power of the Company's then outstanding securities as a result of the conversion of any class of the Company's securities into another class of the Company's securities having a different number of votes per share pursuant to the conversion provisions set forth in the Company's Amended and Restated Certificate of Incorporation; or (D) 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 50% of the combined outstanding voting power of the surviving Entity in such merger, consolidation or similar transaction or (B) more than 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; *provided*, *however*, that a merger, consolidation or similar transaction will not constitute a Change in Control under this prong of the definition if the outstanding voting securities representing more than 50% of the combined voting power of the surviving Entity or its parent are owned by the IPO Entities;

(iii) 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; *provided*, *however*, that a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries will not constitute a Change in Control under this prong of the definition if the outstanding voting securities representing more than 50% of the combined voting power of the acquiring Entity or its parent are owned by the IPO Entities; or

(iv) individuals who, on the date the Plan is adopted by the Board, are members of the Board (the "***Incumbent Board***") cease for any reason to constitute at least a majority of the members of the Board; *provided*, *however*, that if the appointment or election (or nomination for election) of any new Board member was approved or recommended by a majority vote of the members of the Incumbent Board then still in office, such new member will, for purposes of this Plan, be considered as a member of the Incumbent Board.

Notwithstanding the foregoing definition or any other provision of this Plan, 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 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 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.

(i) "***Code***" means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(j) "***Committee***" means a committee of one or more Directors to whom authority has been delegated by the Board in accordance with Section 2(c).

(k) "***Common Stock***" means, as of the IPO Date, the common stock of the Company, having 1 vote per share.

(l) "***Company***" means Chimerix, Inc., a Delaware corporation.

(m) "***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. Notwithstanding the foregoing, a person is treated as a Consultant under this Plan only if a Form S-8 Registration Statement under the Securities Act is available to register either the offer or the sale of the Company's securities to such person.

(n) "***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, 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. 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 an 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.

(o) "***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 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.

(p) "***Covered Employee***" will have the meaning provided in Section 162(m)(3) of the Code.

(q) "***Director***" means a member of the Board.

(r) "***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 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.

(s) "***Effective Date***" means the IPO Date.

(t) "***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.

(u) "***Entity***" means a corporation, partnership, limited liability company or other entity.

(v) "***Exchange Act***" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(w) "***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 a registered public 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 50% of the combined voting power of the Company's then outstanding securities.

(x) "***Fair Market Value***" means, as of any date, the value of the Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value of a share of Common Stock will be, unless otherwise determined by the Board, **the closing sales price** for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) **on the date of determination**, as reported in a source the Board deems reliable.

(ii) Unless otherwise provided by the Board, if there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing selling price on the last preceding date for which such quotation exists.

(iii) In the absence of such markets for the Common Stock, the Fair Market Value will be determined by the Board in good faith and in a manner that complies with Sections 409A and 422 of the Code.

(y) "***Incentive Stock Option***" means an option granted pursuant to Section 5 of the Plan that is intended to be, and qualifies as, an "incentive stock option" within the meaning of Section 422 of the Code.

(z) "***IPO Date***" means the date of the underwriting agreement between the Company and the underwriter(s) managing the initial public offering of the Common Stock, pursuant to which the Common Stock is priced for the initial public offering.

(aa) "***Non-Employee Director***" means a Director who either (i) is not a current employee or officer of the Company or an Affiliate, does not receive compensation, either directly or indirectly, from the Company or an Affiliate for services rendered as a consultant or in any capacity other than as a Director (except for an amount as to which disclosure would not be required under Item 404(a) of Regulation S-K promulgated pursuant to the Securities Act ("***Regulation S-K***")), does not possess an interest in any other transaction for which disclosure would be required under Item 404(a) of Regulation S-K, and is not engaged in a business relationship for which disclosure would be required pursuant to Item 404(b) of Regulation S-K; or (ii) is otherwise considered a "non-employee director" for purposes of Rule 16b-3.

(bb) "***Nonstatutory Stock Option***" means any option granted pursuant to Section 5 of the Plan that does not qualify as an Incentive Stock Option.

(cc) "***Officer***" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act.

(dd) "***Option***" means an Incentive Stock Option or a Nonstatutory Stock Option to purchase shares of Common Stock granted pursuant to the Plan.

(ee) "***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.

(ff) "***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.

(gg) "***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(d).

(hh) "***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.

(ii) "***Outside Director***" means a Director who either (i) is not a current employee of the Company or an "affiliated corporation" (within the meaning of Treasury Regulations promulgated under Section 162(m) of the Code), is not a former employee of the Company or an "affiliated corporation" who receives compensation for prior services (other than benefits under a tax-qualified retirement plan) during the taxable year, has not been an officer of the Company or an "affiliated corporation," and does not receive remuneration from the Company or an "affiliated corporation," either directly or indirectly, in any capacity other than as a Director, or (ii) is otherwise considered an "outside director" for purposes of Section 162(m) of the Code.

(jj) "***Own,***" "***Owned,***" "***Owner,***" "***Ownership***" means 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.

(kk) "***Participant***" means a person to whom an Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Stock Award.

(ll) "***Performance Cash Award***" means an award of cash granted pursuant to the terms and conditions of Section 6(c)(ii).

(mm) "***Performance Criteria***" means the one or more criteria that the Board will select for purposes of establishing the Performance Goals for a Performance Period. The Performance Criteria that will be used to establish such Performance Goals may be based on any one of, or combination of, the following as determined by the Board: (i) earnings (including earnings per share and net earnings); (ii) earnings before interest, taxes and depreciation; (iii) earnings before interest, taxes, depreciation and amortization; (iv) earnings before interest, taxes, depreciation, amortization and legal settlements; (v) earnings before interest, taxes, depreciation, amortization, legal settlements and other income (expense); (vi) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense) and stock-based compensation; (vii) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense), stock-based compensation and changes in deferred revenue; (viii) total stockholder return; (ix) return on equity or average stockholder's equity; (x) return on assets, investment, or capital employed; (xi) stock price; (xii) margin (including gross margin); (xiii) income (before or after taxes); (xiv) operating income; (xv) operating income after taxes; (xvi) pre-tax profit; (xvii) operating cash flow; (xviii) sales or revenue targets; (xix) increases in revenue or product revenue; (xx) expenses and cost reduction goals; (xxi) improvement in or attainment of working capital levels; (xxii) economic value added (or an equivalent metric); (xxiii) market share; (xxiv) cash flow; (xxv) cash flow per share; (xxvi) share price performance; (xxvii) debt reduction; (xxviii) implementation or completion of projects or processes; (xxix) user satisfaction; (xxx) stockholders' equity; (xxxi) capital expenditures; (xxxii) debt levels; (xxxiii) operating profit or net operating profit; (xxxiv) workforce diversity; (xxxv) growth of net income or operating income; (xxxvi) billings; (xxxvii) bookings; (xxxviii) the number of users, including but not limited to unique users; (xxxix) employee retention; (xxxx) and to the extent that an Award is not intended to comply with Section 162(m) of the Code, other measures of performance selected by the Board.

(nn) "***Performance Goals***" means, for a Performance Period, the one or more goals established by the Board for the Performance Period based upon the Performance Criteria. 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 by the Board (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 Performance Goals are established, the Board will appropriately make adjustments in the method of calculating the attainment of Performance Goals for a Performance Period as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (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; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by the Company achieved performance objectives at targeted levels during the balance of a Performance Period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of common stock of the Company by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock based compensation and the award of bonuses under the Company's bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to expensed under generally accepted accounting principles; (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles and (12) to exclude the effect of any other unusual, non-recurring gain or loss or other extraordinary item. In addition, the Board retains the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of Performance Goals and to define the manner of calculating the Performance Criteria it selects to use for such Performance Period. Partial achievement of the specified criteria may result in the payment or vesting corresponding to the degree of achievement as specified in the Stock Award Agreement or the written terms of a Performance Cash Award.

(oo) "***Performance Period***" means the period of time selected by the Board over which the attainment of one or more Performance Goals will be measured for the purpose of determining a Participant's right to and the payment of a Stock Award or a Performance Cash Award. Performance Periods may be of varying and overlapping duration, at the sole discretion of the Board.

(pp) "***Performance Stock Award***" means a Stock Award granted under the terms and conditions of Section 6(c)(i).

(qq) "***Plan***" means this Chimerix, Inc. 2013 Equity Incentive Plan.

(rr) "***Restricted Stock Award***" means an award of shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(a).

(ss) "***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.

(tt) "***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).

(uu) "***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.

(vv) "***Rule 16b-3***" means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b-3, as in effect from time to time.

(ww) "***Securities Act***" means the Securities Act of 1933, as amended.

(xx) "***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.

(yy) "***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.

(zz) "***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, a Performance Stock Award or any Other Stock Award.

(aaa) "***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.

(bbb) "***Subsidiary***" means, with respect to the Company, (i) any corporation of which more than 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 50%.

(ccc) "***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 of the total combined voting power of all classes of stock of the Company or any Affiliate.

CHIMERIX, INC.
2013 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 2013 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 provisions contained herein, your option will vest as provided in your Grant Notice. Vesting will cease upon the termination of your Continuous Service.

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.

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,* if during any part of such three (3) month period, the sale of any Common Stock received upon exercise of your option would violate the Company's insider trading policy, then 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 during which the sale of the Common Stock received upon exercise of your option would not be in violation of the Company's insider trading policy. Notwithstanding the foregoing, 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 (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 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, 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 rules 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) 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 approved by the Company and any broker designated by the Company to handle option exercises, designate a third party who, on 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. 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 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.

12. 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.

13. 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.

14. 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.

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. If there is any conflict between the provisions of your option and those of the Plan, the provisions of the Plan will control. In addition, your option (and any compensation paid or shares issued under your option) 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. Other Documents. You hereby acknowledge receipt of and the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act, which includes the Plan prospectus. In addition, you acknowledge receipt of the Company's policy permitting certain individuals to sell shares only during certain "window" periods and the Company's insider trading policy, in effect from time to time.

17. Effect on Other Employee Benefit Plans. The value of this option will not be included as compensation, earnings, salaries, or other similar terms used when calculating your 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. Voting Rights. 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 option until such shares are issued to you. Upon such issuance, you will obtain full voting and other rights as a stockholder of the Company. Nothing contained in this option, 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.

19. Severability. If all or any part of this Option 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 Option Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Option Agreement (or part of such a Section) so declared to be unlawful or invalid shall, 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.

20. MISCELLANEOUS.

(a) The rights and obligations of the Company under your option 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.

(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 option.

(c) You acknowledge and agree that you have reviewed your option in its entirety, have had an opportunity to obtain the advice of counsel prior to executing and accepting your option, and fully understand all provisions of your option.

(d) This Option 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 Option 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.

* * *

This Option Agreement will be deemed to be signed by you upon the signing by you of the Stock Option Grant Notice to which it is attached.

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 Chimerix, Inc. 2013 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.

Very truly yours,

CHIMERIX, INC.
STOCK OPTION GRANT NOTICE
(2013 EQUITY INCENTIVE PLAN)

Chimerix, Inc. (the "***Company***"), pursuant to its 2013 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[1] ☐ Nonstatutory Stock Option

Exercise Schedule: ☐ Same as Vesting Schedule ☐ Early Exercise Permitted

Vesting Schedule: **[**One-fourth **(**1/4th) 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):

☒ By cash, check, bank draft or money order payable to the Company
☒ Pursuant to a Regulation T Program if the shares are publicly traded
☒ By delivery of already-owned shares if the shares are publicly traded
☒ 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

[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 a Nonstatutory Stock Option.

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 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, (ii) any compensation recovery policy that is adopted by the Company or is otherwise required by applicable law and (iii) any written employment or severance arrangement that would provide for vesting acceleration of this option upon the terms and conditions set forth therein. By accepting this option, Optionholder consents 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.

CHIMERIX, INC.	**OPTIONHOLDER:**
By: _____	_____
Signature	Signature
Title: _____	Date: _____
Date: _____	

ATTACHMENTS: Option Agreement, 2013 Equity Incentive Plan and Notice of Exercise

Exhibit 10.5

CHIMERIX, INC.

2013 EMPLOYEE STOCK PURCHASE PLAN

ADOPTED BY THE BOARD OF DIRECTORS: FEBRUARY 21, 2013
APPROVED BY THE STOCKHOLDERS: _____, 2013

1. GENERAL; PURPOSE.

(a) The Plan provides a means by which Eligible Employees of the Company and certain designated Related Corporations may be given an opportunity to purchase shares of Common Stock. The Plan permits the Company to grant a series of Purchase Rights to Eligible Employees under an Employee Stock Purchase Plan.

(b) The Company, by means of the Plan, seeks to retain the services of such Employees, to secure and retain the services of new Employees and to provide incentives for such persons to exert maximum efforts for the success of the Company and its Related Corporations.

2. ADMINISTRATION.

(a) The Board will administer the Plan unless and until the Board delegates administration of the Plan to a Committee or Committees, as provided in Section 2(c).

(b) The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine how and when Purchase Rights will be granted and the provisions of each Offering (which need not be identical).

(ii) To designate from time to time which Related Corporations of the Company will be eligible to participate in the Plan.

(iii) To construe and interpret the Plan and Purchase Rights, 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, in a manner and to the extent it deems necessary or expedient to make the Plan fully effective.

(iv) To settle all controversies regarding the Plan and Purchase Rights granted under the Plan.

(v) To suspend or terminate the Plan at any time as provided in Section 12

.

(vi) To amend the Plan at any time as provided in Section 12.

(vii) Generally, to exercise such powers and to perform such acts as it deems necessary or expedient to promote the best interests of the Company and its Related Corporations and to carry out the intent that the Plan be treated as an Employee Stock Purchase Plan.

(viii) To adopt such procedures and sub-plans as are necessary or appropriate to permit participation in the Plan by Employees who are foreign nationals or employed outside the United States.

(c) The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration 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 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), 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 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. Whether or not the Board has delegated administration of the Plan to a Committee, the Board will have the final power to determine all questions of policy and expediency that may arise in the administration of the Plan.

(d) 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 of Common Stock Subject to the Plan.

(a) Subject to the provisions of Section 11(a) relating to Capitalization Adjustments, the maximum number of shares of Common Stock that may be issued under the Plan will not exceed 704,225 shares of Common Stock, plus the number of shares of Common Stock that are automatically added on January 1st of each year for a period of up to ten years, commencing on the first January 1 following the IPO Date and ending on (and including) January 1, 2023 , in an amount equal to the lesser of (i) 1% of the total number of shares of Capital Stock outstanding on December 31st of the preceding calendar year, and (ii) 422,535 shares of Common Stock. Notwithstanding the foregoing, the Board may act prior to the first day of any calendar year to provide that there will be no January 1st increase in the share reserve for such calendar year or that the increase in the share reserve for such calendar year will be a lesser number of shares of Common Stock than would otherwise occur pursuant to the preceding sentence.

(b) If any Purchase Right granted under the Plan terminates without having been exercised in full, the shares of Common Stock not purchased under such Purchase Right will again become available for issuance under the Plan.

(c) The stock purchasable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market.

4. GRANT OF PURCHASE RIGHTS; OFFERING.

(a) The Board may from time to time grant or provide for the grant of Purchase Rights to Eligible Employees under an Offering (consisting of one or more Purchase Periods) on an Offering Date or Offering Dates selected by the Board. Each Offering will be in such form and will contain such terms and conditions as the Board will deem appropriate, and will comply with the requirement of Section 423(b)(5) of the Code that all Employees granted Purchase Rights will have the same rights and privileges. The terms and conditions of an Offering shall be incorporated by reference into the Plan and treated as part of the Plan. The provisions of separate Offerings need not be identical, but each Offering will include (through incorporation of the provisions of this Plan by reference in the document comprising the Offering or otherwise) the period during which the Offering will be effective, which period will not exceed 27 months beginning with the Offering Date, and the substance of the provisions contained in Sections 5 through 8, inclusive.

(b) If a Participant has more than one Purchase Right outstanding under the Plan, unless he or she otherwise indicates in forms delivered to the Company: (i) each form will apply to all of his or her Purchase Rights under the Plan, and (ii) a Purchase Right with a lower exercise price (or an earlier-granted Purchase Right, if different Purchase Rights have identical exercise prices) will be exercised to the fullest possible extent before a Purchase Right with a higher exercise price (or a later-granted Purchase Right if different Purchase Rights have identical exercise prices) will be exercised.

(c) The Board will have the discretion to structure an Offering so that if the Fair Market Value of a share of Common Stock on the first Trading Day of a new Purchase Period within that Offering is less than or equal to the Fair Market Value of a share of Common Stock on the Offering Date for that Offering, then (i) that Offering will terminate immediately as of that first Trading Day, and (ii) the Participants in such terminated Offering will be automatically enrolled in a new Offering beginning on the first Trading Day of such new Purchase Period.

5. ELIGIBILITY.

(a) Purchase Rights may be granted only to Employees of the Company or, as the Board may designate in accordance with Section 2(b), to Employees of a Related Corporation. Except as provided in Section 5(b), an Employee will not be eligible to be granted Purchase Rights unless, on the Offering Date, the Employee has been in the employ of the Company or the Related Corporation, as the case may be, for such continuous period preceding such Offering Date as the Board may require, but in no event will the required period of continuous employment be equal to or greater than two years. In addition, the Board may provide that no Employee will be eligible to be granted Purchase Rights under the Plan unless, on the Offering Date, such Employee's customary employment with the Company or the Related Corporation is more than 20 hours per week and more than five months per calendar year or such other criteria as the Board may determine consistent with Section 423 of the Code.

(b) The Board may provide that each person who, during the course of an Offering, first becomes an Eligible Employee will, on a date or dates specified in the Offering which coincides with the day on which such person becomes an Eligible Employee or which occurs thereafter, receive a Purchase Right under that Offering, which Purchase Right will thereafter be deemed to be a part of that Offering. Such Purchase Right will have the same characteristics as any Purchase Rights originally granted under that Offering, as described herein, except that:

(i) the date on which such Purchase Right is granted will be the "Offering Date" of such Purchase Right for all purposes, including determination of the exercise price of such Purchase Right;

(ii) the period of the Offering with respect to such Purchase Right will begin on its Offering Date and end coincident with the end of such Offering; and

(iii) the Board may provide that if such person first becomes an Eligible Employee within a specified period of time before the end of the Offering, he or she will not receive any Purchase Right under that Offering.

(c) No Employee will be eligible for the grant of any Purchase Rights if, immediately after any such Purchase Rights are granted, such Employee owns stock possessing five percent or more of the total combined voting power or value of all classes of stock of the Company or of any Related Corporation. For purposes of this Section 5(c)
, the rules of Section 424(d) of the Code will apply in determining the stock ownership of any Employee, and stock which such Employee may purchase under all outstanding Purchase Rights and options will be treated as stock owned by such Employee.

(d) As specified by Section 423(b)(8) of the Code, an Eligible Employee may be granted Purchase Rights only if such Purchase Rights, together with any other rights granted under all Employee Stock Purchase Plans of the Company and any Related Corporations, do not permit such Eligible Employee's rights to purchase stock of the Company or any Related Corporation to accrue at a rate which exceeds $25,000 of Fair Market Value of such stock (determined at the time such rights are granted, and which, with respect to the Plan, will be determined as of their respective Offering Dates) for each calendar year in which such rights are outstanding at any time.

(e) Officers of the Company and any designated Related Corporation, if they are otherwise Eligible Employees, will be eligible to participate in Offerings under the Plan. Notwithstanding the foregoing, the Board may provide in an Offering that Employees who are highly compensated Employees within the meaning of Section 423(b)(4)(D) of the Code will not be eligible to participate.

6. PURCHASE RIGHTS; PURCHASE PRICE.

(a) On each Offering Date, each Eligible Employee, pursuant to an Offering made under the Plan, will be granted a Purchase Right to purchase up to that number of shares of Common Stock purchasable either with a percentage or with a maximum dollar amount, as designated by the Board, but in either case not exceeding 15% of such Employee's earnings (as defined by the Board in each Offering) during the period that begins on the Offering Date (or such later date as the Board determines for a particular Offering) and ends on the date stated in the Offering, which date will be no later than the end of the Offering.

(b) The Board will establish one or more Purchase Dates during an Offering on which Purchase Rights granted for that Offering will be exercised and shares of Common Stock will be purchased in accordance with such Offering.

(c) In connection with each Offering made under the Plan, the Board may specify (i) a maximum number of shares of Common Stock that may be purchased by any Participant on any Purchase Date during such Offering, (ii) a maximum aggregate number of shares of Common Stock that may be purchased by all Participants pursuant to such Offering and/or (iii) a maximum aggregate number of shares of Common Stock that may be purchased by all Participants on any Purchase Date under the Offering. If the aggregate purchase of shares of Common Stock issuable upon exercise of Purchase Rights granted under the Offering would exceed any such maximum aggregate number, then, in the absence of any Board action otherwise, a pro rata (based on each Participant's accumulated Contributions) allocation of the shares of Common Stock available will be made in as nearly a uniform manner as will be practicable and equitable.

(d) The purchase price of shares of Common Stock acquired pursuant to Purchase Rights will be not less than the lesser of:

(i) an amount equal to 85% of the Fair Market Value of the shares of Common Stock on the Offering Date; or

(ii) an amount equal to 85% of the Fair Market Value of the shares of Common Stock on the applicable Purchase Date.

7. PARTICIPATION; WITHDRAWAL; TERMINATION.

(a) An Eligible Employee may elect to authorize payroll deductions as the means of making Contributions by completing and delivering to the Company, within the time specified in the Offering, an enrollment form provided by the Company. The enrollment form will specify the amount of Contributions not to exceed the maximum amount specified by the Board. Each Participant's Contributions will be credited to a bookkeeping account for such Participant under the Plan and will be deposited with the general funds of the Company except where applicable law requires that Contributions be deposited with a third party. If permitted in the Offering, a Participant may begin such Contributions with the first payroll occurring on or after the Offering Date (or, in the case of a payroll date that occurs after the end of the prior Offering but before the Offering Date of the next new Offering, Contributions from such payroll will be included in the new Offering). If permitted in the Offering, a Participant may thereafter reduce (including to zero) or increase his or her Contributions. If specifically provided in the Offering, in addition to making Contributions by payroll deductions, a Participant may make Contributions through the payment by cash or check prior to a Purchase Date.

(b) During an Offering, a Participant may cease making Contributions and withdraw from the Offering by delivering to the Company a withdrawal form provided by the Company. The Company may impose a deadline before a Purchase Date for withdrawing. Upon such withdrawal, such Participant's Purchase Right in that Offering will immediately terminate and the Company will distribute to such Participant all of his or her accumulated but unused Contributions and such Participant's Purchase Right in that Offering shall thereupon terminate. A Participant's withdrawal from that Offering will have no effect upon his or her eligibility to participate in any other Offerings under the Plan, but such Participant will be required to deliver a new enrollment form to participate in subsequent Offerings.

(c) Purchase Rights granted pursuant to any Offering under the Plan will terminate immediately if the Participant either (i) is no longer an Employee for any reason or for no reason (subject to any post-employment participation period required by law) or (ii) is otherwise no longer eligible to participate. The Company will distribute to such individual all of his or her accumulated but unused Contributions.

(d) During a Participant's lifetime, Purchase Rights will be exercisable only by such Participant. Purchase Rights are not transferable by a Participant, except by will, by the laws of descent and distribution, or, if permitted by the Company, by a beneficiary designation as described in Section 10.

(e) Unless otherwise specified in the Offering, the Company will have no obligation to pay interest on Contributions.

8. EXERCISE OF PURCHASE RIGHTS.

(a) On each Purchase Date, each Participant's accumulated Contributions will be applied to the purchase of shares of Common Stock, up to the maximum number of shares of Common Stock permitted by the Plan and the applicable Offering, at the purchase price specified in the Offering. No fractional shares will be issued unless specifically provided for in the Offering.

(b) If any amount of accumulated Contributions remains in a Participant's account after the purchase of shares of Common Stock and such remaining amount is less than the amount required to purchase one share of Common Stock on the final Purchase Date of an Offering, then such remaining amount will be held in such Participant's account for the purchase of shares of Common Stock under the next Offering under the Plan, unless such Participant withdraws from or is not eligible to participate in such Offering, in which case such amount will be distributed to such Participant after the final Purchase Date, without interest. If the amount of Contributions remaining in a Participant's account after the purchase of shares of Common Stock is at least equal to the amount required to purchase one whole share of Common Stock on the final Purchase Date of an Offering, then such remaining amount will not roll over to the next Offering and will instead be distributed in full to such Participant after the final Purchase Date of such Offering without interest.

(c) No Purchase Rights may be exercised to any extent unless the shares of Common Stock to be issued upon such exercise under the Plan are covered by an effective registration statement pursuant to the Securities Act and the Plan is in material compliance with all applicable federal, state, foreign and other securities and other laws applicable to the Plan. If on a Purchase Date the shares of Common Stock are not so registered or the Plan is not in such compliance, no Purchase Rights will be exercised on such Purchase Date, and the Purchase Date will be delayed until the shares of Common Stock are subject to such an effective registration statement and the Plan is in material compliance, except that the Purchase Date will in no event be more than 6 months from the Offering Date. If, on the Purchase Date, as delayed to the maximum extent permissible, the shares of Common Stock are not registered and the Plan is not in material compliance with all applicable laws, no Purchase Rights will be exercised and all accumulated but unused Contributions will be distributed to the Participants without interest.

9. Covenants of the Company.

The Company will seek to obtain from each federal, state, foreign or other regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Purchase Rights and issue and sell shares of Common Stock thereunder. If, after commercially reasonable efforts, the Company is unable to obtain the authority that counsel for the Company deems necessary for the grant of Purchase Rights or the lawful issuance and sale of Common Stock under the Plan, and at a commercially reasonable cost, the Company will be relieved from any liability for failure to grant Purchase Rights and/or to issue and sell Common Stock upon exercise of such Purchase Rights.

10. Designation of Beneficiary.

(a) The Company may, but is not obligated to, permit a Participant to submit a form designating a beneficiary who will receive any shares of Common Stock and/or Contributions from the Participant's account under the Plan if the Participant dies before such shares and/or Contributions are delivered to the Participant. The Company may, but is not obligated to, permit the Participant to change such designation of beneficiary. Any such designation and/or change must be on a form approved by the Company.

(b) If a Participant dies, and in the absence of a valid beneficiary designation, the Company will deliver any shares of Common Stock and/or Contributions to the executor or administrator of the estate of the Participant. If no executor or administrator has been appointed (to the knowledge of the Company), the Company, in its sole discretion, may deliver such shares of Common Stock and/or Contributions to the Participant's spouse, dependents or relatives, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

11. Adjustments upon Changes in Common Stock; Corporate Transactions.

(a) 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 by which the share reserve is to increase automatically each year pursuant to Section 3(a), (iii) the class(es) and number of securities subject to, and the purchase price applicable to outstanding Offerings and Purchase Rights, and (iv) the class(es) and number of securities that are the subject of the purchase limits under each ongoing Offering. The Board will make these adjustments, and its determination will be final, binding and conclusive.

(b) In the event of a Corporate Transaction, then: (i) any surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) may assume or continue outstanding Purchase Rights or may substitute similar rights (including a right to acquire the same consideration paid to the stockholders in the Corporate Transaction) for outstanding Purchase Rights, or (ii) if any surviving or acquiring corporation (or its parent company) does not assume or continue such Purchase Rights or does not substitute similar rights for such Purchase Rights, then the Participants' accumulated Contributions will be used to purchase shares of Common Stock within ten business days prior to the Corporate Transaction under the outstanding Purchase Rights, and the Purchase Rights will terminate immediately after such purchase.

12. Amendment, Termination or Suspension of the Plan.

(a) The Board may amend the Plan at any time in any respect the Board deems necessary or advisable. However, except as provided in Section 11(a) relating to Capitalization Adjustments, stockholder approval will be required for any amendment of the Plan for which stockholder approval is required by applicable law or listing requirements, including any amendment that either (i) materially increases the number of shares of Common Stock available for issuance under the Plan, (ii) materially expands the class of individuals eligible to become Participants and receive Purchase Rights, (iii) materially increases the benefits accruing to Participants under the Plan or materially reduces the price at which shares of Common Stock may be purchased under the Plan, (iv) materially extends the term of the Plan, or (v) expands the types of awards available for issuance under the Plan, but in each of (i) through (v) above only to the extent stockholder approval is required by applicable law or listing requirements.

(b) The Board may suspend or terminate the Plan at any time. No Purchase Rights may be granted under the Plan while the Plan is suspended or after it is terminated.

(c) Any benefits, privileges, entitlements and obligations under any outstanding Purchase Rights granted before an amendment, suspension or termination of the Plan will not be materially impaired by any such amendment, suspension or termination except (i) with the consent of the person to whom such Purchase Rights were granted, (ii) as necessary to comply with any laws, listing requirements, or governmental regulations (including, without limitation, the provisions of Section 423 of the Code and the regulations and other interpretive guidance issued thereunder relating to Employee Stock Purchase Plans) including without limitation any such regulations or other guidance that may be issued or amended after the Effective Date, or (iii) as necessary to obtain or maintain favorable tax, listing, or regulatory treatment. To be clear, the Board may amend outstanding Purchase Rights without a Participant's consent if such amendment is necessary to ensure that the Purchase Right and/or the Plan complies with the requirements of Section 423 of the Code.

13. Effective Date of Plan.

The Plan will become effective on the IPO Date. No Purchase Rights will be exercised unless and until the Plan has been approved by the stockholders of the Company, which approval must be within 12 months before or after the date the Plan is adopted (or if required under Section 12(a) above, materially amended) by the Board.

14. MISCELLANEOUS PROVISIONS.

(a) Proceeds from the sale of shares of Common Stock pursuant to Purchase Rights will constitute general funds of the Company.

(b) A Participant will not be deemed to be the holder of, or to have any of the rights of a holder with respect to, shares of Common Stock subject to Purchase Rights unless and until the Participant's shares of Common Stock acquired upon exercise of Purchase Rights are recorded in the books of the Company (or its transfer agent).

(c) The Plan and Offering do not constitute an employment contract. Nothing in the Plan or in the Offering will in any way alter the at will nature of a Participant's employment or be deemed to create in any way whatsoever any obligation on the part of any Participant to continue in the employ of the Company or a Related Corporation, or on the part of the Company or a Related Corporation to continue the employment of a Participant.

(d) The provisions of the Plan will be governed by the laws of the State of North Carolina without resort to that state's conflicts of laws rules.

15. DEFINITIONS.

As used in the Plan, the following definitions will apply to the capitalized terms indicated below:

(a) "***Board***" means the Board of Directors of the Company.

(b) "***Capital Stock***" means each and every class of common stock of the Company, regardless of the number of votes per share.

(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 Purchase Right 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, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other similar equity restructuring transaction, as that term is used in 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) "***Code***" means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(e) "***Committee***" means a committee of one or more members of the Board to whom authority has been delegated by the Board in accordance with Section 2(c).

(f) "***Common Stock***" means, as of the IPO Date, the common stock of the Company, having 1 vote per share.

(g) "***Company***" means Chimerix, Inc., a Delaware corporation.

(h) ***"Contributions***" means the payroll deductions and other additional payments specifically provided for in the Offering that a Participant contributes to fund the exercise of a Purchase Right. A Participant may make additional payments into his or her account if specifically provided for in the Offering, and then only if the Participant has not already had the maximum permitted amount withheld during the Offering through payroll deductions.

(i) "***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 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.

(j) "***Director***" means a member of the Board.

(k) "***Eligible Employee***" means an Employee who meets the requirements set forth in the document(s) governing the Offering for eligibility to participate in the Offering, provided that such Employee also meets the requirements for eligibility to participate set forth in the Plan.

(l) "***Employee***" means any person, including an Officer or Director, who is "employed" for purposes of Section 423(b)(4) of the Code by the Company or a Related Corporation. 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.

(m) "***Employee Stock Purchase Plan***" means a plan that grants Purchase Rights intended to be options issued under an "employee stock purchase plan," as that term is defined in Section 423(b) of the Code.

(n) "***Exchange Act***" means the Securities Exchange Act of 1934, as amended and the rules and regulations promulgated thereunder.

(o) "***Fair Market Value***" means, as of any date, the value of the Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value of a share of Common Stock will be the **closing sales price** for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) **on the date of determination**, as reported in such source as the Board deems reliable. Unless otherwise provided by the Board, if there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing sales price on the last preceding date for which such quotation exists.

(ii) In the absence of such markets for the Common Stock, the Fair Market Value will be determined by the Board in good faith in compliance with applicable laws and in a manner that complies with Sections 409A of the Code.

(iii) Notwithstanding the foregoing, for any Offering that commences on the IPO Date, the Fair Market Value of the shares of Common Stock on the Offering Date will be the price per share at which shares are first sold to the public in the Company's initial public offering as specified in the final prospectus for that initial public offering.

(p) "***IPO Date***" means the date of the underwriting agreement between the Company and the underwriter(s) managing the initial public offering of the Common Stock, pursuant to which the Common Stock is priced for the initial public offering.

(q) "***Offering***" means the grant to Eligible Employees of Purchase Rights, with the exercise of those Purchase Rights automatically occurring at the end of one or more Purchase Periods. The terms and conditions of an Offering will generally be set forth in the "***Offering Document***" approved by the Board for that Offering.

(r) "***Offering Date***" means a date selected by the Board for an Offering to commence.

(s) "***Officer***" means a person who is an officer of the Company or a Related Corporation within the meaning of Section 16 of the Exchange Act.

(t) "***Participant***" means an Eligible Employee who holds an outstanding Purchase Right.

(u) "***Plan***" means this Chimerix, Inc. 2013 Employee Stock Purchase Plan.

(v) "***Purchase Date***" means one or more dates during an Offering selected by the Board on which Purchase Rights will be exercised and on which purchases of shares of Common Stock will be carried out in accordance with such Offering.

(w) "***Purchase Period***" means a period of time specified within an Offering, generally beginning on the Offering Date or on the first Trading Day following a Purchase Date, and ending on a Purchase Date. An Offering may consist of one or more Purchase Periods.

(x) "***Purchase Right***" means an option to purchase shares of Common Stock granted pursuant to the Plan.

(y) "***Related Corporation***" means any "parent corporation" or "subsidiary corporation" of the Company whether now or subsequently established, as those terms are defined in Sections 424(e) and (f), respectively, of the Code.

(z) "***Securities Act***" means the Securities Act of 1933, as amended.

(aa) "***Trading Day***" means any day on which the exchange(s) or market(s) on which shares of Common Stock are listed, including but not limited to the NYSE, Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Capital Market or any successors thereto, is open for trading.

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" and to the use of our report dated March 8, 2013 (except for Note 14, as to which the date is March 26, 2013), in the Registration Statement (Form S-1) and related Prospectus of Chimerix, Inc. for the registration of shares of its common stock.

Ernst & Young LLP

Raleigh, North Carolina
March 26, 2013