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

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

CHIMERIX, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware33-0903395(State or Other Jurisdiction of Incorporation or Organization)(I.R.S. Employer Identification No.)

2505 Meridian Parkway, Suite 100 Durham, NC 27713 (Address of Principal Executive Offices)

2013 Equity Incentive Plan
2013 Employee Stock Purchase Plan
(Full Title of the Plan)

Michael A. Sherman President and Chief Executive Officer Chimerix, Inc. 2505 Meridian Parkway, Suite 100 Durham, NC 27713

(Name and Address of Agent for Service)

(919) 806-1074
(Telephone Number, Including Area Code, of Agent for Service)

Copies to:

Michael T. Andriole Chief Financial Officer and Chief Business Officer Chimerix, Inc. 2505 Meridian Parkway, Suite 100 Durham, NC 27713 (919) 806-1074 Jason L. Kent, Esq. Alexander M. Davis, Esq. Cooley LLP 4401 Eastgate Mall San Diego, CA 92121 (858) 550-6000

Accelerated filer x

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

	Large accelerated filer \square
Smaller reporting company x	
	Non-accelerated filer \square
Emerging growth company \square	

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. \Box

CALCULATION OF REGISTRATION FEE

		Proposed		
Title of		Maximum	Proposed Maximum	
Securities to	Amount to be	Offering	Aggregate	Amount of
be Registered	Registered (1)	Price per Share (2)	Offering Price (2)	Registration Fee
2013 Equity Incentive Plan				
Common Stock, \$0.001 par value per share	2,463,600 shares (3)	\$1.718	\$4,231,233.00	\$549.21
2013 Employee Stock Purchase Plan				
Common Stock, \$0.001 par value per share	422,535 shares (4)	\$1.718	\$725,703.86	\$94.20
Total	2,886,135 shares	N/A	\$4,956,936.86	\$643.41

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "*Securities Act*"), this Registration Statement shall also cover any additional shares of Registrant's common stock (the "*Common Stock*") that become issuable under the plans by reason of any stock dividend, stock split, recapitalization or other similar transaction.
- (2) This estimate is made pursuant to Rule 457(c) and Rule 457(h)(1) of the Securities Act solely for purposes of calculating the registration fee. The price per share and aggregate offering price are based upon the average of the high and low prices of the Common Stock on February 20, 2020, as reported on the Nasdaq Global Market.
- (3) Represents shares of Common Stock that were automatically added to the shares authorized for issuance under the Registrant's 2013 Equity Incentive Plan (the "*EIP*") on January 1, 2020 pursuant to an "evergreen" provision contained in the EIP. Pursuant to such provision, on January 1st of each year commencing in 2014 and ending on (and including) January 1, 2023, the number of shares authorized for issuance under the EIP is automatically increased by a number equal to: (a) 4% of the total number of shares of capital stock outstanding on December 31 of the preceding calendar year; or (b) such lesser number of shares of Common Stock as is determined by the Registrant's board of directors (the "*Board*") for the applicable year.
- (4) Represents shares of Common Stock that were automatically added to the shares authorized for issuance under the Registrant's 2013 Employee Stock Purchase Plan (the "*ESPP*") on January 1, 2020 pursuant to an "evergreen" provision contained in the ESPP. Pursuant to such provision, on January 1st of each year commencing in 2014 and ending on (and including) January 1, 2023, the number of shares authorized for issuance under the ESPP is automatically increased by a number equal to the least of: (a) 1% of the total number of shares of Common Stock outstanding on December 31 of the preceding calendar year; (b) 422,535 shares; or (c) a number determined by the Board that is less than (a) and (b).

INCORPORATION BY REFERENCE OF CONTENTS OF REGISTRATION STATEMENTS ON FORM S-8

This Registration Statement on Form S-8 is being filed for the purpose of increasing the number of securities of the same class as other securities for which Registration Statements on Form S-8 relating to the same benefit plans are effective. The Registrant previously registered shares of its Common Stock for issuance under the EIP and the ESPP under Registration Statements on Form S-8 filed with the Securities and Exchange Commission on April 11, 2013 (File No. 333-187860), March 7, 2014 (File No. 333-194408), March 6, 2015 (File No. 333-202582), February 29, 2016 (File No. 333-209802), March 2, 2017 (File No. 333-216396), March 1, 2018 (File No. 333-223344), March 5, 2019 (File No. 333-230071) and August 8, 2019 (File No. 333-233115). Pursuant to General Instruction E to Form S-8, this Registration Statement hereby incorporates by reference the contents of the Registration Statements referenced above.

Item 8. Exhibits.

Exhibits: Description

- 4.1 Amended and Restated Certificate of Incorporation of the Registrant. (1)
- 4.2 <u>Amended and Restated Bylaws of the Registrant. (2)</u>
- 4.3 Form of Common Stock Certificate of the Registrant. (3)
- 5.1 Opinion of Cooley LLP.
- 23.1 Consent of Ernst & Young LLP, an Independent Registered Public Accounting Firm.
- 23.2 Consent of Cooley LLP. Reference is made to Exhibit 5.1.
- 24.1 Power of Attorney. Reference is made to the signature page hereto.
- 99.1 Chimerix, Inc. 2013 Equity Incentive Plan, as amended. (4)
- 99.2 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 under Chimerix, Inc. 2013 Equity Incentive Plan. (5)
- 99.3 Chimerix, Inc. 2013 Employee Stock Purchase Plan. (6)
- 1) Incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed on April 16, 2013.
- (2) Incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K, filed on April 16, 2013.
- (3) Incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1 (No. 333-187145), filed on March 8, 2013, as amended.
- (4) Incorporated by reference to Exhibit 99.2 to the Registrant's Current Report on Form 8-K, filed on June 23, 2014.
- (5) Incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q, filed on November 7, 2016.
- (6) Incorporated by reference to Exhibit 10.5 to the Registrant's Registration Statement on Form S-1 (No. 333-187145), filed on March 8, 2013, as amended.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and 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 February 25, 2020.

Chimerix, Inc.

By:/s/ Michael A. Sherman
Michael A. Sherman
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Michael A. Sherman and Michael T. Andriole, and each or either of them, his true and lawful attorneys-in-fact and agent, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Michael A. Sherman Michael A. Sherman	President, Chief Executive Officer and Director (Principal Executive Officer)	February 25, 2020
/s/ Michael T. Andriole Michael T. Andriole	Chief Business and Financial Officer (Principal Financial Officer)	February 25, 2020
<u>/s/ David Jakeman</u> David Jakeman	Executive Director of Finance and Accounting (Principal Accounting Officer)	February 25, 2020
<u>/s/ Martha J. Demski</u> Martha J. Demski	Chair of the Board of Directors	February 25, 2020
/s/ Catherine L. Gilliss Catherine L. Gilliss, Ph.D., RN, FAAN	Member of the Board of Directors	February 25, 2020
/s/ Edward F. Greissing Jr. Edward F. Greissing Jr.	Member of the Board of Directors	February 25, 2020
/s/ Patrick Machado Patrick Machado	Member of the Board of Directors	February 25, 2020
/s/ Robert J. Meyer Robert J. Meyer	Member of the Board of Directors	February 25, 2020
/s/ Fred A. Middleton Fred A. Middleton	Member of the Board of Directors	February 25, 2020
/s/ Ronald C Renaud, Jr. Ronald C Renaud, Jr.	Member of the Board of Directors	February 25, 2020

[LETTERHEAD OF COOLEY LLP]

Jason L. Kent T: +1 858 550 6044 jkent@cooley.com

February 25, 2020

Chimerix, Inc. 2505 Meridian Parkway, Suite 100 Durham, NC 27713

Ladies and Gentlemen:

You have requested our opinion, as counsel to Chimerix, Inc., a Delaware corporation (the "Company"), with respect to certain matters in connection with the filing of a Registration Statement on Form S-8 (the "Registration Statement") with the Securities and Exchange Commission, covering the offering of up to 2,886,135 shares of the Company's Common Stock, \$0.001 par value (the "Shares"), including 2,463,600 shares issuable pursuant to the Company's 2013 Equity Incentive Plan (the "Incentive Plan") and 422,535 shares issuable pursuant to the Company's 2013 Employee Stock Purchase Plan (together with the Incentive Plan, the "Plans").

In connection with this opinion, we have examined and relied upon (a) the Registration Statement and related prospectus, (b) the Plans, (c) the Company's Amended and Restated Certificate of Incorporation and Bylaws, each as currently in effect and (d) originals or copies certified to our satisfaction of such records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. We have assumed the genuineness and authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies thereof, the accuracy, completeness and authenticity of certificates of public officials; and the due authorization, execution and delivery of all documents by all persons other than the Company where authorization, execution and delivery are prerequisites to the effectiveness of such documents.

Our opinion herein is expressed solely with respect to the General Corporation Law of the State of Delaware. Our opinion is based on these laws as in effect on the date hereof. We express no opinion to the extent that any other laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when issued and sold in accordance with the Plans, the Registration Statement and related prospectus, will be validly issued, fully paid and nonassessable (except as to shares issued pursuant to certain deferred payment arrangements, which will be fully paid and nonassessable when such deferred payments are made in full).

We consent to the filing of this opinion as an exhibit to the Registration Statement.

Sincerely,

Cooley LLP

By: <u>/s/ Jason L. Kent</u> Jason L. Kent

4401 Eastgate Mall, San Diego, CA 92121 T: (858) 550-6000 F: (858) 550-6420 www.cooley.com

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement on Form S-8 of Chimerix, Inc. pertaining to the 2013 Equity Incentive Plan and 2013 Employee Stock Purchase Plan of Chimerix, Inc. of our reports dated February 25, 2020, with respect to the consolidated financial statements of Chimerix, Inc. and the effectiveness of internal control over financial reporting of Chimerix, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2019, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Raleigh, North Carolina

February 25, 2020