

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

**Post-Effective Amendment
to
FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

CHIMERIX, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

33-0903395

(I.R.S. Employer Identification Number)

**2505 Meridian Parkway, Suite 100
Durham, NC 27713
(919) 806-1074**

(Address, including zip code, and telephone number, including area code of registrant's principal executive offices)

**M. Michelle Berrey, M.D., M.P.H.
President and Chief Executive Officer
2505 Meridian Parkway, Suite 100
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.
Cooley LLP
4401 Eastgate Mall
San Diego, CA 92121
(858) 550-6000**

Not Applicable. This post-effective amendment deregisters all of the securities that were unsold under the registration statement as of the date hereof (Approximate date of commencement of proposed sale to the public)

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

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, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

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

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.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

Non-accelerated filer (Do not check if a smaller reporting company)

Accelerated filer

Smaller reporting company

DEREGISTRATION OF SECURITIES

Chimerix, Inc. (the “Company”) is filing this Post-Effective Amendment to its Registration Statement on Form S-3 to withdraw and remove from registration the unissued and unsold shares of the Company’s common stock, par value \$0.001 per share, shares of the Company’s preferred stock, par value \$0.001 per share, the Company’s debt securities and the Company’s warrants, issuable by the Company pursuant to its Registration Statement on Form S-3 originally filed with the Securities and Exchange Commission on November 5, 2015 (Registration No. 333-207815) (the “Registration Statement”).

In accordance with an undertaking made by the Company in the Registration Statement to remove from registration, by means of a post-effective amendment, any shares of its common stock, its preferred stock, its debt securities or its warrants which remain unsold at the termination of the offering, the Company hereby removes from registration all shares of its common stock, its preferred stock, its debt securities and its warrants registered under the Registration Statement which remain unsold as of the date hereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, and Rule 478 thereunder, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing this Post-Effective Amendment to the Registration Statement and has duly caused this Post-Effective Amendment to the 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 18th day of February, 2016.

CHIMERIX, INC.

By: /s/ M. Michelle Berrey, M.D., M.P.H.
M. Michelle Berrey, M.D., M.P.H.
President and Chief Executive Officer

Note: No other person is required to sign this Post-Effective Amendment to the Registration Statement in reliance on Rule 478 of the Securities Act of 1933, as amended.
