

May 14, 2014

Via EDGAR and FedEx

Ms. Christina De Rosa  
United States Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street, N.E.  
Mail Stop 4720  
Washington, D.C. 20549

**Re: Chimerix, Inc.  
Registration Statement on Form S-3  
Filed May 1, 2014  
File No. 333-195626**

Ladies and Gentlemen:

On behalf of Chimerix, Inc. (the "**Company**"), this letter is being transmitted in response to a comment received from the staff (the "**Staff**") of the Securities and Exchange Commission, by letter dated May 13, 2014 (the "**Comment Letter**"), regarding the Company's Registration Statement on Form S-3, filed on May 1, 2014 (the "**Form S-3**"). The text of the Staff's comment has been included in this letter in italics for your convenience, and we have numbered the paragraph below to correspond to the numbering of the Comment Letter.

Exhibit 5.1

- We note that page 2 of the legal opinion filed as Exhibit 5.1 indicates that the opinion "as to the Debt Securities and the Warrants constituting valid and legally binding obligations of the Company..." is expressed "solely with respect to the laws of the State of New York." As highlighted in Section II.B.1.e of the Division of Corporation Finance Staff Legal Bulletin No. 19, counsel must also consider the law of the jurisdiction under which the registrant is organized in order to provide the binding obligation opinion. Please revise your legal opinion to confirm that with respect to whether the Debt Securities and Warrants constitute valid and legally binding obligations of the Company, counsel considered the General Corporation Law of the State of Delaware in addition to the laws of the State of New York. Please file such revised opinion as an exhibit to an amended registration statement.*

Response:

The Company acknowledges the Staff's comment and has revised the following sentence in Exhibit 5.1 to the Form S-3 to read as follows (added text underlined):

"Our opinion herein is expressed solely with respect to the federal laws of the United States, the General Corporation Law of the State of Delaware and, as to the Debt Securities and the Warrants constituting valid and legally binding obligations of the Company, solely with respect to the laws of the State of New York and the General Corporation Law of the State of Delaware."

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The Exhibit 5.1, as so revised, has been filed as an exhibit to an amendment to the Form S-3.

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Please contact me at (858) 550-6044 with any questions or further comments regarding the Company's response to the Comment Letter.

Sincerely,

Cooley LLP

/s/ Jason L. Kent, Esq.

Jason L. Kent, Esq.

cc: M. Michelle Berrey, M.D., M.P.H., Chimerix, Inc.  
Timothy W. Trost, Chimerix, Inc.  
Michael Alrutz, Chimerix, Inc.

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