



DIVISION OF  
CORPORATION FINANCE

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

May 22, 2012

Via E-Mail

Peiyi Zhao, Esq.  
Paul Hastings LLP  
1117 S. California Avenue  
Palo Alto, CA 94304

**Re: Vermillion, Inc.  
Amended Preliminary Proxy Statement on Schedule 14A  
Filed on May 17, 2012  
File No. 1-34810**

Dear Ms. Zhao:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Schedule 14A

Proposal One: Election of Directors, page 7

1. Please revise to briefly describe why the issuer believes that the reduction in the size of the board is authorized under Delaware law or the issuer's governing documents. Please also disclose, here and on the proxy card, that the validity of the reduction in the number of board seats would ultimately be determined by a court of competent jurisdiction.
2. We note that Messrs. Bessenyei, Novak and Goggin are soliciting proxies to elect one director and in the event that the amendment to reduce the size of the board is reversed, they are seeking to elect two directors. Please revise to describe the treatment of the

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proxies submitted by Messrs. Besseneyi, Novak and Goggin and describe how the issuer will count these proxies.

3. Please revise, here and on the proxy card, to disclose the risk that if the amendment to reduce the size of the board is reversed, then shareholders who vote the issuer's proxy card will be disenfranchised with respect to the second board seat.

Proposal Four: Approval of an Amendment and Restatement..., page 39

New Plan Benefits, page 44

4. Please revise to include the tabular information required by Item 10(a)(2) of Schedule 14A. Please note that the instruction in Item 10(a)(2)(iii) discusses how to present the information if the benefits and amounts are not determinable.

Please direct any questions to me at (202) 551-3411. You may also contact me via facsimile at (202) 772-9203. Please send all correspondence to us at the following ZIP code: 20549-3628.

Sincerely,

/s/ Peggy Kim

Peggy Kim  
Special Counsel  
Office of Mergers & Acquisitions