



DIVISION OF
CORPORATION FINANCE

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

May 3, 2012

Via E-Mail

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

**Re: Vermillion, Inc.
Preliminary Proxy Statement on Schedule 14A
Filed on April 25, 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

General

1. Please revise to include a background discussion of the contacts between the participants and the issuer during the time leading up to the current proxy solicitation. Please also describe how the Board or management responded to contacts made by the participants and the material details of any discussions or correspondence.

Solicitation of Proxies, page 1

2. We note that proxies may be solicited personally or by electronic or regular mail, by telephone, by facsimile, or press releases. Please be advised that all written soliciting materials, including any scripts to be used in soliciting proxies over the telephone or any e-mail correspondence and any information posted on the Internet must be filed under the cover of Schedule 14A. Refer to Rule 14a-6(b) and (c). In this regard, we note that the Vermillion press release on April 27, 2012 regarding the nomination of Mr. Sohmer was not filed on EDGAR and did not contain the required legend. Refer to Rule 14a-12(a)(1)(ii) and (b). Please file all written soliciting materials and confirm your understanding in your response letter.

Proposal One—Election of Directors, page 5

3. We note that you reserve the right to vote for unidentified substitute nominees. Please confirm for us that should you identify or nominate substitute nominees before the meeting, you will file an amended proxy statement that (1) identifies the substitute nominees, (2) discloses whether such nominees have consented to being named in the revised proxy statement and to serve if elected and (3) includes the disclosure required by Items 5(b) and 7 of Schedule 14A with respect to such nominees.
4. We note that Vermillion believes that Mr. Sohmer is an “independent investor representative.” Please disclose whether Mr. Sohmer is independent as defined under the Nasdaq listing rules.

Compensation Discussion and Analysis, page 16

5. Please revise to include the disclosure required by Item 402(t) of Regulation S-K. Refer to Item 5(b)(3) of Schedule 14A.

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