

Mail Stop 6010

November 13, 2007

Gail S. Page  
President and Chief Executive Officer  
Vermillion, Inc.  
6611 Dumbarton Circle  
Fremont, California 94555

**Re: Vermillion, Inc.  
Response Letter filed on October 30, 2007  
Registration Statement on Form S-1  
File No. 333-146354**

Dear Ms. Page:

We have limited our review of your filing to those issues we have addressed in our comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

1. We note from your responses to our prior comments that some of your selling stockholders are affiliates of a broker-dealer. If a selling stockholder is an affiliate of a broker-dealer, it must be identified as an underwriter with respect to the securities it is offering for resale unless that selling stockholder is able to represent in the prospectus, in addition to having purchased the shares in the ordinary course of business, that at the time of such purchase of the securities to be resold, the seller had no agreements or understandings, directly or indirectly, with any person to distribute the securities.

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Gail S. Page  
Vermillion, Inc.  
November 13, 2007  
Page 2

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Tim Buchmiller at (202) 551-3635 or me at (202) 551-3444 with any other questions.

Sincerely,

Perry Hindin  
Special Counsel

cc: Robert Claassen, Esq. (via fax)