

Mail Stop 4720

February 19, 2010

Mr. Joshua Boger  
Chief Executive Officer  
Vertex Pharmaceuticals Incorporated  
130 Waverly Street  
Cambridge, MA 02139-4242

**Re: Vertex Pharmaceuticals Incorporated  
Form 10-K for the Period Ended December 31, 2008  
Definitive Proxy Statement on Schedule 14A filed April 8, 2009  
Response filed December 22, 2009  
File No. 000-19319**

Dear Mr. Boger:

We have reviewed your filing and have the following comments. Where the comments request you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you do not believe that revised disclosure is necessary, explain the reason in your response. After reviewing the information provided, we may raise additional comments and/or request that you amend your filing.

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 comment or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Schedule 14A

Compensation Discussion and Analysis

2008 Compensation Decisions for Performance-Based Elements, page 29

1. We note that your response to our prior comment 1 indicates you expect that the board of directors will evaluate corporate performance with regard to the factors indicated but that the factors considered is at the discretion of the board of directors. Please confirm that your next proxy statement will include the following:

- Confirmation that no corporate performance targets are set at the beginning of each fiscal year to be used at the end of the fiscal year to gauge corporate or executive performance;
- The analysis performed by the board of directors used to determine performance at end of each fiscal year; and
- How the performance evaluation was used to determine the amount of bonuses awarded to each named executive officer based on the extent of achievement determined by the board.

\* \* \*

Please respond to these comments within 10 business days or tell us when you will provide us with responses. Please furnish a letter that keys your response to our comments and provide the requested information. Detailed letters greatly facilitate our review. Please furnish your letter on EDGAR under the form type label CORRESP.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in your letter, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comment on your filing.

Please contact Michael Rosenthal at (202) 551-3674 or me at (202) 551-3715 with any questions.

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Vertex Pharmaceuticals Incorporated  
February 19, 2010  
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Sincerely,

Jeffrey P. Riedler  
Assistant Director