



VERTEX PHARMACEUTICALS INCORPORATED

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February 28, 2008

Delivered by EDGAR

Securities and Exchange Commission
Division of Corporate Finance
100 F Street, N.E.
Mail Stop 6010
Washington, DC 20549

Attn: Tim Buchmiller, Senior Attorney

Re: Vertex Pharmaceuticals Incorporated
Definitive Proxy Statement
Filed April 12, 2007
File No. 000-19319

Ladies and Gentlemen:

This letter is a response to comments from the staff of the Securities and Exchange Commission (the "Commission") directed to Vertex Pharmaceuticals Incorporated (the "Company"), as set forth in the staff's letter to Mr. Kenneth S. Boger, dated January 16, 2008 (the "Second Comment Letter"). The Second Comment Letter was itself a response to the Company's letter dated October 23, 2007, submitted in response to the staff's letter to Dr. Joshua Boger dated August 21, 2007", regarding the Company's Definitive Proxy Statement, which was filed with the Commission on April 12, 2007 (the "Proxy Statement").

For convenient reference, the Company has set forth below in italics each of the Staff's comments set forth in the Second Comment Letter and has keyed the Company's responses to the numbering of the comments and the headings used in the Second Comment Letter.

Comment 1: *We note from the first paragraph of your response to prior comment 4, in the sentence which begins "[f]or example," you have provided additional detail regarding the company-wide goals that were established in order for the named executive officers to earn their respective annual cash bonus and equity awards. Please confirm that, in addition to the greater detail that you have undertaken to make with respect to the difficulty of achieving the annual performance goals, your future filings, to the extent applicable, will include at least as much detail as you have provided in the portion of your response that we have noted and that you will provide all information with respect to these goals that is material to your shareholders' understanding of your compensation policies and decisions with respect to your named executive officers.*

Response 1: In addition to the greater detail that the Company has undertaken to provide with respect to the difficulty of achieving annual Company-wide performance goals, the Company will include in its future filings, to the extent applicable, at least as much detail as was provided in the portion of the response noted by the staff, and it will provide all information with respect to the Company-wide performance goals that is material to the Company's shareholders' understanding of the Company's compensation policies and decisions with respect to the named executive officers.

Comment 2: *We note your response to prior comment 7. Please confirm that you will include the disclosure in your future filings, as applicable, that was requested by that comment to the extent that it could affect a fair understanding of any of the named executive officer's compensation for the last fiscal year. In addition, for each specific target that you believe you have a basis to omit, please provide us with a more detailed analysis of how disclosure of the specific quantitative or qualitative company-wide and individual performance goals would result in competitive harm. Disclosure in the proxy statement and your response suggests that there may be a significant number of company-wide and individual performance goals, yet your response only makes a brief competitive harm argument as to those performance goals that you deem to be trade secrets and does not provide a competitive harm argument as to the subset of performance goals you do not consider to be confidential trade secrets. Identify in a response letter to us the specific company-wide and individual goals you consider to be trade secrets and explain in detail how a competitor could either use such information to cause you commercial harm or derive other information from such goals that could then be used to negatively impact the company. Provide a similar discussion for those goals you do not consider to be confidential trade secrets, such as financial objectives and as noted on page 15 of your disclosure, "other aspects of company performance that [you] believe drive stockholder value."*

Response 2: The Board of Directors establishes performance goals at the beginning of each fiscal year, and measures performance against those goals after the year has been completed. Goals in place for the current year therefore are not applicable to the named executive officers'

compensation for the last fiscal year, and disclosure of their content could not affect a fair understanding of any of the named executive officers' compensation based on performance for the last fiscal year. Accordingly, under the Company's existing compensation policies and with respect to compensation decisions made on account of prior years' performance, the Company does not expect that it will disclose current year performance goals. The Company further confirms that if, in the future, the current year performance goals do affect a fair understanding of the prior year's compensation decisions for the named executive officers, it will perform the same competitive harm analysis and provide the same level of detail and information that it has undertaken to provide with respect to the last year's performance goals in its responses to Comments 1 and 3 in the Second Comment Letter.

Comment 3: *We note your responses to prior comments 5 and 7. Item 402(b)(2)(vii) of Regulation S-K requires that a company disclose, if material, how specific forms of compensation are*

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structured and implemented to reflect a named executive officer's individual performance and/or individual contribution. As part of this, a company must identify the elements of individual performance and/or contribution that are taken into account. As such, to the extent material, you need to describe each of the individual performance goals that were in place for each named executive officer and how each named executive officer actually performed relative to such individual goals. Please confirm you will do so in future filings.

Response 3: The Board's evaluation of the named executive officers' performance in 2007 did not take specific individual goals into account. The Company confirms that it will describe all information with respect to the factors considered in assigning a performance rating for each named executive officer for 2007 that is material to the Company's shareholders' understanding of its compensation policies and decisions with respect to the named executive officers. The Company further confirms that, in the future, it will describe each of the individual performance goals that were in place for each named executive officer and how each named executive officer actually performed relative to such individual goals, to the extent such goals were taken into account in making compensation decisions and are material to the Company's shareholders' understanding of its compensation policies and decisions with respect to the named executive officers.

Comment 4: *We note your response to prior comment 9 and we disagree with your conclusion that disclosure of the specific target prices in the proxy statement would not be material to your shareholders' understanding of the level of executive compensation. Please either confirm you will disclose in future filings the specific target prices or provide us with the competitive harm analysis requested in prior comment 9.*

Response 4: Based on our telephone conversation, the Company will disclose that the "Target Price" that must be achieved in order to accelerate the vesting of 50% of the PARS shares for all such grants made to date is at least 50% higher than the fair market value of the Company's common stock on the date of grant. The Company also will clearly refer the Company's shareholders to the section of the proxy statement that addresses the Company's equity granting practices, to make clear that the Company's practice has been to award PARS on the date of the Board's first regularly scheduled meeting of each fiscal year, in conjunction with the Board's review of the prior year's performance. The Company further will disclose the Target Price for PARS for which the Target Price has been achieved.

Comment 5: *We note your response to prior comment 11. While we appreciate the concern that inclusion of the definitions of the referenced legal terms in the proxy statement may potentially complicate your disclosure, referring your shareholders to the applicable agreement with each named executive officer for the meanings of such terms is not consistent with the guidelines discussed in Section VI of Commission Release 33-8732A. However, in light of your concerns, it would appear appropriate to follow the guidelines in the Commission Release regarding use of a glossary. In future filings, please include the meanings of the defined terms in a glossary or other section of your document rather than referencing your shareholders to the agreements that have been previously filed*

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with the Commission. To mitigate your concerns, consider including such glossary in a section other than your compensation discussion and analysis, but clearly refer your shareholder to that section.

Response 5: The Company confirms that it will, in future filings, include the meanings of the defined terms referenced in the staff's prior comment 11 in a section of the proxy statement, and clearly refer the Company's shareholders to that section.

In addition, the Company hereby confirms that in future filings, the Company will enhance its overall disclosure by complying with the comments provided by the Commission in the manner set forth in the responses above, subject in all cases, to any change with respect to the policies, programs, agreements and other facts underlying the Company's disclosures.

Please contact me at 617-444-6417 in the event that you have any questions or concerns with respect to this matter. In the event that I am not available, please contact my colleague, Valerie Andrews, at 617-444-6227.

Very truly yours,

/s/ Kenneth S. Boger

Kenneth S. Boger
Senior Vice President and General Counsel

