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

DIVISION OF
CORPORATION FINANCE

March 31, 2011

Matthew W. Emmens
Chief Executive Officer
Vertex Pharmaceuticals Incorporated
130 Waverly Street
Cambridge, Massachusetts 02139-4242

Re: Vertex Pharmaceuticals Incorporated
Form 10-K
Filed February 17, 2010
File No. 000-19319

Dear Mr. Emmens:

We have reviewed your filing and have the following comments.

Please respond to this letter within ten business days 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, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K, filed February 17, 2011

Corporate Collaborations, page 13

1. In view of the current developmental status of your pipeline products, we believe that additional information regarding some of your collaboration agreements is material. Please provide draft disclosure to be included in future filings providing the following information:

   - The material terms related to both the duration and potential earlier termination of the agreements with Janssen Pharmaceutical, Mitsubishi Tanabe and Cystic Fibrosis Foundation Therapeutics Inc. including information regarding the duration of any patents to the extent the duration of the agreements are conditioned upon the duration of patents; and

   - A range of royalties payable on the agreement with Cystic Fibrosis Foundation Therapeutics Inc. expressed within ten percentage points (i.e. single digits, teens, twenties, etc.).

2. On page 2 of your filing, we note that telaprevir was discovered in your collaboration with Eli Lilly, which has now ended. However, we also note that you expect to pay Eli Lilly certain royalties on future sales of telaprevir if the product is commercialized. Please file the agreement with Eli Lilly as an exhibit pursuant to Item 601(b)(10)(ii)(B) of Regulation S-K and provide draft disclosure to be included in future filings describing the terms of the agreement that will still be applicable if telaprevir is commercialized including a range of royalty payments within ten percentage points. Alternatively, tell us the basis for your belief that the agreement is no longer material.

General

3. We note that you intend to provide your Part III information in your definitive proxy statement. We plan to review that information prior to clearing the filing and may have additional comments.

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written 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.

Please contact Johnny Gharib at (202) 551-3170 or me at (202) 551-3715 with any questions.

Sincerely,

Jeffrey Riedler
Assistant Director