



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4546

December 5, 2016

VIA E-mail

Dr. Jeffrey M. Leiden, M.D., Ph.D.
Chairman of the Board, President and Chief Executive Officer
Vertex Pharmaceuticals Incorporated
50 Northern Avenue,
Boston, Massachusetts 02210

**Re: Vertex Pharmaceuticals Incorporated
Form 10-K for Fiscal Year Ended December 31, 2015
Filed February 16, 2016
File No. 000-19319**

Dear Dr. Leiden:

We have reviewed your October 19, 2016 response to our comment letter 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 these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe a comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Notes to Consolidated Financial Statements

B. Collaborative Arrangements

Variable Interest Entities (VIE)

Parion Sciences, Inc., page F-19

1. We note from your response to comment 1 within your August 12, 2016 letter that your upfront payment and the related fair value of the contingent consideration provided significantly more than half of the financial support to Parion based on an analysis of the fair values of the interests in the legal entity. We further note your response to comment 6 of the same letter that *de minimis* value was attributed to Parion's assets other than the Licensed Assets. Please explain to us your analysis under ASC 810-10-25-55, supporting your conclusion that the fair value of the specified assets is more than half of the total fair value of Parion's assets after the execution of the Strategic Collaboration and License Agreement. Include within your response an explanation as to whether the fair value of

Parion's assets include both the fair value of the Licensed Assets (since the Licensed Assets remain in Parion) and the fair value of the consideration (upfront and contingent) received by Parion for the Licensed Assets and the basis for your conclusion.

2. We note your response to comment 5 of our letter dated September 30, 2016 regarding the calculation of goodwill upon consolidation of Parion. Please provide us with a quantitative breakdown of your calculation of the goodwill recognized upon consolidation of Parion in the following format:

Item	ASC Reference	Amount
Fair value of consideration transferred	ASC 805-30-30-1(a)(1)	
Plus: Fair value of noncontrolling interest	ASC 805-30-30-1(a)(2)	
Less: Identifiable assets of Parion measured in accordance with Topic 805	ASC 805-30-30-1(b)	
Plus: Identifiable liabilities of Parion measured in accordance with Topic 805	ASC 805-30-30-1(b)	
Equals: Goodwill recognized at the acquisition date	ASC 805-30-30-1	

You may contact Bonnie Baynes, Staff Accountant, at (202) 551-4924 if you have any questions regarding the comments. In this regard, do not hesitate to contact me at (202) 551-3679.

Sincerely,

/s/ Jim B. Rosenberg

Jim B. Rosenberg
Senior Assistant Chief Accountant
Office of Healthcare and Insurance