



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4546

January 3, 2017

Paul W. Hoelscher
Executive Vice President and Chief Financial Officer
Connaught House, 1st Floor
1 Burlington Road, Dublin 4, D04 C5Y6, Ireland

Re: Horizon Pharma plc
Form 10-K for Fiscal Year Ended December 31, 2015
Filed February 29, 2016
Form 10-Q for the Quarterly Period Ended September 30, 2016
Filed November 7, 2016
File No. 001-35238

Dear Mr. Hoelscher:

We have reviewed your December 16, 2016 response to our comment letter and have the following comments. In our comments, we 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. Unless we note otherwise, our references to prior comments are to comments in our November 22, 2016 letter.

Form 10-K for the Year Ended December 31, 2015
Notes to Consolidated Financial Statements

Note 2 Summary of Significant Accounting Policies
Concentration of Credit Risk and Other Risks and Uncertainties, page F-14

1. Please refer to your response to prior comment one. Tell us why the information you propose to include in future periodic reports to comply with ASC 280-10-50-42 reflects "gross sales" as opposed to "net sales," which you present in the consolidated statement of comprehensive income.

Note 14 Segment Reporting and Other Information, page F-28

2. Please refer to your response to prior comment two. Tell us what is meant by “combined basis” discussed on the top of page 4 of your response. In this regard, provide us a sample of the monthly discrete financial information that includes all three business units on a combined basis provided to and reviewed by the CODM, and tell us the items necessary to reconcile it to the Company’s consolidated net income.

Note 18 Debt Agreement
Convertible Senior Notes, page F-44

3. Please refer to your response to prior comment three. Regarding each of the line items within your consolidated statements of stockholders’ equity for 2014 and 2015 titled “issuance of ordinary shares in conjunction with inducement of convertible notes,” consider disclosing the amount netted therein that represents settlement consideration related to the reacquisition of the equity component. This will enable a reader to better understand the amount of the consideration transferred versus the reacquisition of the equity component. Also on page F-44, consider clarifying for each year’s conversion that:
 - the number of shares issued equaled the number of shares based on the underlying conversion option; and
 - the aggregate cash payments to the holders for additional exchange consideration was recorded as part of the loss.

Form 10-Q for the Quarterly Period Ended September 30, 2016
Notes to Unaudited Condensed Consolidated Financial Statements
Note 4 Inventories, page 14

4. Please refer to your response to prior comment four in which you propose to disclose in your inventories accounting policy note that the amortization of any step up in value for acquired inventory is recorded in the consolidated statement of comprehensive income (loss) based on actual sales, or usage, using the first-in, first-out convention. Tell us what “step up” represents and why it is relevant to a reader, and consider expanding your disclosure accordingly.

You may contact Jacob Luxenburg, Staff Accountant, at (202) 551-2339 if you have any questions. 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