



May 29, 2014

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, NE
Washington, D.C. 20549
Attention: Jim B. Rosenberg

**Re: Alexion Pharmaceuticals, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2013
Filed February 10, 2014
Form 10-Q for the Quarterly Period Ended March 31, 2014
Filed April 25, 2014
File No. 000-27756**

Ladies and Gentlemen:

On behalf of Alexion Pharmaceuticals, Inc. ("Alexion"), submitted herewith is a response to comments contained in the letter dated May 14, 2014 from Mr. Jim B. Rosenberg of the Staff ("Staff"), of the Securities and Exchange Commission ("Commission") to Mr. Vikas Sinha, Alexion's Executive Vice President and Chief Financial Officer. The comments and responses set forth below are keyed to the numbering of the comments and the headings used in the Staff's letter.

On behalf of Alexion, we advise you as follows:

Form 10-Q for the Quarterly Period Ended March 31, 2014
Management's Discussion and Analysis of Financial Condition and Results of Operations
Net Product Sales, page 25

- 1. You state that you entered into an agreement with the French government which positively impacts prospective reimbursement of Soliris and also provides for reimbursement for shipments made in years prior to January 1, 2014 and as a result of the agreement, in the first quarter of 2014, you recognized \$87.8 million of net product sales from Soliris in France relating to years prior to January 1, 2014. Please tell us how you determined that the \$87.8 million related to prior period sales and why recognition in the quarter ended March 31, 2014*

is appropriate under GAAP. In addition, tell us how you accounted for these sales in the prior periods.

Response: As disclosed in our Form 10-Q for the quarterly period ended March 31, 2014, we entered into an agreement with the French government in March 2014 that provides for prospective reimbursement for Soliris as well as reimbursement for shipments made prior to January 1, 2014.

Reimbursement for Soliris in France is determined under an arrangement with the French government in which we are required to repay amounts above a stated annual threshold. Following the end of each calendar year, a rebate is required to be paid to the French government for the product shipped and invoiced in excess of the threshold.

As disclosed in our Critical Accounting Policies and Footnote 2 of our Financial Statements included in our Annual Report on Form 10-K, we estimate incremental discounts resulting from these contractual limitations based on estimated shipments during the annual period, and we apply the discount percentage to product shipments as a reduction of revenue. The discount percentage is calculated by dividing the estimated rebate for the annual period by the estimated annual shipments. The discount percentage applied to sales is updated each quarter based on the latest forecast for annual shipments.

As a result of discussions with French authorities, the French government agreed, in March 2014, to increase the arrangement for periods prior to January 1, 2014. We calculated the additional revenue related to prior period shipments of \$87.8 million based on the excess of a) rebate amounts accrued as of December 31, 2013 over b) the reduced amount payable by us for periods prior to December 31, 2013 defined in the new arrangement. We recognized such additional revenue in the quarter ended March 31, 2014 because the arrangement was completed in March 2014.

Should you have any questions or require additional information, please telephone the undersigned at (203) 271-8250.

Very truly yours,

/s/ Scott Phillips

Scott Phillips

Vice President - Corporate Controller and Chief Accounting Officer

cc: Leonard Bell, Alexion Pharmaceuticals, Inc.

Vikas Sinha, Alexion Pharmaceuticals, Inc.

John Moriarty, Alexion Pharmaceuticals, Inc.

Michael Greco, Alexion Pharmaceuticals, Inc.

Patrick O'Brien, Ropes and Gray LLP