



VIA EDGAR

May 4, 2015

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, 2014
Filed February 6, 2015
File No. 0-27756**

Ladies and Gentlemen:

On behalf of Alexion Pharmaceuticals, Inc. ("Alexion"), submitted herewith is a response to comments contained in the letter dated April 29, 2015 from Mr. Jim B. Rosenberg of the Staff ("Staff") of the Securities and Exchange Commission ("Commission") to Mr. Vikas Sinha, M.B.A., C.A., C.P.A., 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:

Management's Discussion and Analysis of Financial Condition and Results of Operations

Results of Operations

Income Taxes, page 65

1. *Please refer to your response to comment 2 and provide proposed disclosure to be included in future periodic reports to address the following:*
 - *Expected trends such as lower taxes that may result from the centralization of your operations in Ireland.*

Response: In response to the Staff's comment, we will provide in our future periodic reports additional disclosure underlined below in substance similar to the following:

“Income Taxes

During the year ended December 31, 2014, we recorded an income tax provision of \$215,195 and an effective tax rate of 24.7%, compared to an income tax provision of \$273,374 and an effective tax rate of 51.9% for the year ended December 31, 2013. The reduction in the effective tax rate is primarily attributable to the centralization of our global supply chain and technical operations in Ireland. We expect to continue to benefit from a reduced tax rate compared to periods prior to January 1, 2014 as a result of centralizing our global supply chain and technical operations in Ireland in the fourth quarter of 2013.

The income tax provision for 2014 is attributable to the U.S. federal, state and foreign income taxes on our profitable operations. Additionally, included for the year ended December 31, 2014 is \$2,128 of tax attributable to our agreement with the French government that provided reimbursement for shipments of Soliris made prior to January 1, 2014.

The income tax provision for 2013 is attributable to the U.S. federal, state and foreign income taxes on our profitable operations, as well as the tax expense resulting from the centralization of our global supply chain and technical operations in Ireland undertaken in the fourth quarter of 2013 in the amount of approximately \$95,800. We were also impacted by a tax benefit of \$2,719 attributable to the 2012 U.S. Federal tax credit for research and experimentation due to retroactive extension of this credit signed into law in January 2013.”

- *How much the non-U.S. Income before taxes from December 31, 2013 to December 31, 2014 related to the partnership income derived in the foreign jurisdictions.*

Response: In response to the Staff's comment, we will provide in our future Annual Reports on Form 10-K additional disclosure underlined below in substance similar to the following:

“The income tax provision is based on income before income taxes as follows:

	Year Ended December 31,	
	2014	2013
U.S.	\$ 222,088	\$ 376,067
Non-U.S.	650,019	150,202
	<u>\$ 872,107</u>	<u>\$ 526,269</u>

During the fourth quarter of 2013, in connection with the centralization of our global supply chain and technical operations in Ireland, our U.S. parent company became a direct partner in a captive foreign partnership. Effective January 1, 2014 forward, the partnership income, which is derived in foreign jurisdictions, will be classified as Non-U.S. Income for purposes of financial reporting. Substantially all of our Non-U.S. Income for the year ended December 31, 2014 relates to income from our captive foreign partnership.”

- *That your election to capitalize research and development in 2014 under the Internal Revenue Code resulted in the significant increase in the deferred tax asset.*

Response: In response to the Staff’s comment, we will provide in our future Annual Reports on Form 10-K additional disclosure underlined below in substance similar to the following:

“Provisions have been made for deferred taxes based on the differences between the basis of the assets and liabilities for financial statement purposes and the basis of the assets and liabilities for tax purposes using currently enacted tax rates and regulations that will be in effect when the differences are expected to be recovered or settled. The components of the deferred tax assets and liabilities, which exclude "windfall" tax benefits, are as follows:

	December 31,	
	2014	2013
Deferred tax assets:		
Net operating losses	\$ 3,401	\$ 5,398
Income tax credits	1,706	4,863
Stock compensation	49,090	33,539
Accruals and allowances	29,072	26,092
Research and development expenses	129,995	3,418
Accrued royalties	41,201	14,346
	254,465	87,656
Valuation allowance	(1,117)	(1,934)
Total deferred tax assets	253,348	85,722
Deferred tax liabilities:		
Depreciable assets	(40,648)	(41,281)
Unrealized gains	(45,191)	(134)
Investment in foreign partnership	(116,359)	(100,746)
Total deferred tax liabilities	(202,198)	(142,161)
Net deferred tax asset (liability)	\$ 51,150	\$ (56,439)

The increase in our research and development deferred tax assets is primarily attributable to our election in 2014 to capitalize research and development expenses pursuant to Internal Revenue Code section 59(e).

We follow authoritative guidance regarding accounting for uncertainty in income taxes, which prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The interpretation also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosures, and transition.”

Alexion acknowledges the following:

- Alexion 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
- Alexion may not assert Staff comments as a defense in any proceedings initiated by the Commission or any person under the federal securities laws of the United States.

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

Senior Vice President, Corporate Controller and Chief Accounting Officer

cc. David Hallal, 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
Owen Davis, PricewaterhouseCoopers, LLP