



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4546

November 28, 2016

Via E-mail

Mr. Kevin G. Lafond
Vice President – Finance, Chief Accounting
Officer and Treasurer
ZIOPHARM Oncology, Inc.
One First Avenue
Parris Building 34
Navy Yard Plaza
Boston, Massachusetts 02129

**Re: ZIOPHARM Oncology, Inc.
Form 10-K for the Year Ended December 31, 2015
Filed February 24, 2016
File No. 001-33038**

Dear Mr. Lafond:

We have limited our review of your filing to the financial statements and related disclosures 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 10 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.

Management Discussion and Analysis of Financial Condition and Results of Operations
Financial Overview
Overview of Results of Operations
Research and Development Expenses, page 61

1. Please tell us why you do not disclose your externally incurred costs by research and development project consistent with your October 15, 2010 response to comment 3 from our letter dated September 20, 2010.

Note to Financial Statements

Note 3: Summary of Significant Accounting Policies

Revenue Recognition from Collaboration Agreements, page F-12

2. Please tell us your consideration for disclosing how you determine whether collaboration agreements with multiple deliverables can be separated into individual units of accounting. In this regard, we note your discussion of standalone value associated with your Ares Trading Agreement as disclosed in Note 8 on page F-24 but there is no specific reference in your policy disclosure or in any other agreement-specific disclosure.
3. Please tell us how your policy to recognize milestone consideration upon achievement of the associated milestone complies with the guidance in ASC 605-28-25-1 and 25-2.

Note 8: Commitments and Contingencies

License Agreements

Ares Trading License and Collaboration Agreement, page F-23

4. Please tell us your consideration for disclosing a description and the related contingent consideration for each milestone, a determination of whether each milestone is considered substantive, and the factors considered in determining whether milestones are substantive as required by ASC 605-28-50-2b, 50-2c, and 50-2d, respectively.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

You may contact Mark Brunhofer, Senior Staff Accountant, at (202) 551-3638 or Sharon Blume, Accounting Branch Chief, at (202) 551-3474 if you have 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