

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

DIVISION OF CORPORATION FINANCE

June 14, 2013

<u>Via E-mail</u> Jason A. Amello Executive Vice President, Chief Financial Officer and Treasurer Ziopharm Oncology, Inc. 1180 Avenue of the Americas, 20th Floor New York, NY 10036

> Re: Ziopharm Oncology, Inc. Form 10-K for the Fiscal Year Ended December 31, 2012 Filed March 18, 2013 File No. 001-33038

Dear Dr. Amello:

We have reviewed your filing and have the following comment.

Please respond to this letter within 10 business days by amending your filing or by advising us when you will provide the requested response. If you do not believe the comment applies to your facts and circumstances, please tell us why in your response. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your response to our comment.

After reviewing any amendment to your filing and the information you provide in response to this comment, we may have additional comments.

Report of Independent Registered Public Accounting Firm, page F-1

1. The audit report of McGladrey LLP references the reports of other auditors for the period from September 9, 2003 (date of inception) to December 31, 2009. Please amend your filing to include the other auditors' reports as reissued by them as required by Rule 2-05 of Regulation S-X.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made. Jason A. Amello Ziopharm Oncology, Inc. June 14, 2013 Page 2

In responding to our comment, please provide a written statement from the company acknowledging that:

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

You may contact Vanessa Robertson, Staff Accountant, at (202) 551-3649 or Joel Parker, Accounting Branch Chief, at (202) 551-3651 if you have any questions regarding the comment. 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