

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

DIVISION OF CORPORATION FINANCE

January 3, 2013

<u>Via E-mail</u> Peter Nielsen President and Chief Executive Officer Bio-Path Holdings, Inc. 2626 South Loop, Suite 180 Houston, Texas 77054

> Re: Bio-Path Holdings, Inc. Form 10-K for the Fiscal Year Ended December 31, 2011 Filed March 30, 2012 File No. 000-53404

Dear Mr. Nielsen:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

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

General

1. In your next periodic filing, please file your April 2012 Private Placement Agreement as a material contract or tell us why you believe this is unnecessary. Please see Item 601(b)(10) of Regulation S-K.

Item 13. Certain Relationships and Related Party Transactions, page 48

2. Please revise this section to include all related party transactions pursuant to Item 404 of Regulation S-K with MD Anderson such as those discussed in Notes 2, 5, 6, 7 and 12 of your financial statements. Please provide us with your proposed disclosure in this regard. Please see Item 404(a) and (d) of Regulation S-K.

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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.

In responding to our comments, 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 Angie Kim, Staff Attorney at (202) 551-3535 or me, at (202) 551-3720 with any questions.

Sincerely,

/s/ Dietrich A. King for

Mara L. Ransom Assistant Director