

Via Facsimile and U.S. Mail  
Mail Stop 6010

July 5, 2007

Mr. William G. Harris  
SVP of Finance and CFO  
XenoPort, Inc.  
3410 Central Expressway  
Santa Clara, CA 95051

**Re: XenoPort, Inc.**  
**Form 10-K for the Fiscal Year Ended December 31, 2006**  
**Filed March 7, 2007**  
**File No. 000-51329**

Dear Mr. Harris:

We have limited our review of your filing to those issues we have addressed in our comments. In our comments, we ask you to provide us with information so we may better understand your disclosure. Please be as detailed as necessary in your explanation. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

**Form 10-K for the year ending December 31, 2006**

**Note 1. Organization and Summary of Significant Accounting Policies, page 79**  
**Valuation Assumptions, page 84**

1. Please clarify, in disclosure type format, how your three accounting methodologies (Black-Scholes option valuation model, the single-option allocation method and the straight-line attribution approach) are used to account for your share based payments.

Note 2. Collaboration Revenue, page 86

2. The \$10 million milestone payment from Astellas is being amortized over the Phase 3 clinical trial, which appears to be 11 months ending January 2007. This timeline conflicts with your disclosure on page 55 which estimates the Phase 3 clinical trial completion date in Fiscal 2008. Please advise.
3. You state that the Astellas \$25 million and \$10 million payments were made, yet have a trade receivable for \$2.8 million. Please tell us the composition of the trade receivable.

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Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your response to our comments and provide the requested information. Detailed letters greatly facilitate our review. Please furnish the letter to us via EDGAR under the form type label CORRESP.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 connection with responding to our comments, please provide, in your letter, a 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

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You may contact Sasha Parikh, Staff Accountant, at (202) 551-3627 or Joel Parker, Accounting Branch Chief, at (202) 551-3651 if you have questions regarding the comments. Please contact me at (202) 551-3679 with any other questions.

Sincerely,

Jim B. Rosenberg  
Senior Assistant Chief Accountant