

March 15, 2006

Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street, NE  
Washington, D.C. 20549  
Attention: John Reynolds, Esq.

Re: Xenomics, Inc.  
Form SB-2 filed August 1, 2005  
Amendment No. 4 to Form SB-2 filed March 1, 2006  
File No. 333-127071

Dear Mr. Reynolds:

This letter sets forth the responses of Xenomics, Inc., a Florida corporation (the “Company” or “we”), to the comments received from the Staff (the “Staff”) of the Securities and Exchange Commission (the “Commission”) by letter dated March 13, 2006 concerning Amendment No. 4 to the Company’s Registration Statement on Form SB-2 (File No. 333-127071) filed with the Commission on March 1, 2006 (the “Registration Statement”). We are authorized by the Company to provide the responses contained in this letter on behalf of the Company.

The numbers of the responses in this letter correspond to the numbers of the Staff’s comments as set forth in its letter to the Company dated March 13, 2006. References in the text of the responses herein to captions and page numbers are to Amendment No. 5 to Form SB-2 which is being filed herewith. For your convenience, we set forth each comment from your comment letter in bold typeface and include the Company’s response below it.

**Risk Factors, page 5**

- 1. Please either include a risk factor addressing the weaknesses in your disclosure controls and procedures as is evidenced by the prior restatements made to your financial statements or tell us why such a risk factor is not necessary.**

On page 5 of Amendment No. 5 to Form SB-2 we have added a risk factor addressing the weaknesses in or disclosure controls and procedures as is evidenced by the prior restatements made to our financial statements.

**Management’s Discussion and Analysis .... page 12**

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2. **We note your response to prior comments 5 and 6. Please expand MD&A to state why you continue to believe that your disclosure controls and procedures were effective for the financial statement periods in light of the various restatements to your financial statements. Summarize the restatements in MD&A and state the specific reasons why you continue to believe that your disclosure controls were effective.**

On page 13 of Amendment No. 5 to Form SB-2 we have summarized the restatements and stated that we do not believe that our disclosure controls and procedures were effective during the financial statement periods disclosed.

3. **Revise MD&A to discuss the enhancements to your disclosure controls and procedures as summarized in your response to prior comments 5 and 6 and disclose any changes in internal control over financial reporting made to date.**

On page 13 of Amendment No. 5 to Form SB-2 we have added in a discussion of the enhancements of our disclosure controls and procedures designed to remediate the weaknesses in our disclosure controls and procedures and disclosed certain changes in our internal controls over financial reporting made to date.

4. **For each periodic report affected by the restatements, amend your disclosures in MD&A to summarize the restatements and the specific reasons why you continue to believe that your disclosure controls and procedures were effective.**

In Amendment No. 3 to Form 10-KSB for the year ended January 31, 2005, Amendment No. 2 to Form 10-QSB for the quarter ended April 30, 2005, Amendment No. 5 to Form 10-QSB for the quarter ended July 31, 2005 and Amendment No. 3 to Form 10-QSB for the quarter ended October 31, 2005 we have summarized the restatements and stated that we do not believe that our disclosure controls and procedures were effective during the financial statement periods disclosed. In addition we have modified the Controls and Procedures section of each of the periodic filings to disclose that our Chief Executive Officer and Chief Financial Officer do not believe that our disclosure controls and procedures were effective as of the periods ended in such periodic reports. We have also disclosed the actions we have taken to date to remediate such weaknesses.

Very truly yours,

/s/ Jeffrey J. Fessler

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