March 13, 2006 L. David Tomei, Ph.D. Chief Executive Officer Xenomics, Inc. 420 Lexington Avenue, Suite 1701 New York, New York 10170 Xenomics, Inc. Re: Amendment No. 4 to Registration Statement on Form SB-2 File No. 333-127071 Filed March 1, 2006 Dear Dr.Tomei: We have reviewed your amended filing and have the following Where indicated, we think you should revise your comments. document in response to these comments. 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 а risk factor is not necessary. Management's Discussion and Analysis..., page 12 2. We note your responses 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. 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. 1934 Act Periodic Reports 3. 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. Closing Comments As appropriate, please amend your registration statement in response to these comments. Provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments. We direct your attention to Rules 460 and 461 regarding

requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date. to Carlton Tartar at (202) 551-3387. Questions on other disclosure issues may be directed to William Bennett at (202) 551-3389.

Sincerely,

John Reynolds

Assistant Director

cc: Jeffrey J. Fessler Fax: 212-930-9725

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