

MAIL STOP 3561

February 2, 2006

V. Randy White, Ph.D
Chief Executive Officer
Xenomics, Inc.
420 Lexington Avenue, Suite 1701
New York, New York 10170

Re: Xenomics, Inc.
Amendment No. 2 to Registration Statement on Form SB-2
File No. 333-127071
Filed January 9, 2006

Dear Dr. White:

We have reviewed your amended filing and have the following comments. Where indicated, we think you should revise your document in response to these comments.

General

1. Please clarify throughout what "cGMP" means and who or what authority the guidelines come from.
2. The company's preferred dividend obligation should be discussed in MD&A under Liquidity and Capital Resources. Any arrearages should be indicated.
3. Please remove what appear to be tags of some sort (<R>) throughout the unmarked EDGAR version of the filing.

Risk Factors, page 5

4. The first risk factor refers to an inception date of April 26, 2002, which appears to be in error; it should reconcile with that used in the financial statements.

Executive Compensation, page 27

5. As previously requested, since none of the persons listed annual salary and bonus exceeded \$100,000, clarify the reference to compensation of "\$100,000 or more" in the first paragraph. Refer to Item 402(a)(2) of Regulation S-B for the persons required to be listed.
6. In addition, please update all disclosure hereunder for the most recent fiscal year.

Plan of Distribution

7. The references to "donees, pledgees, transferees or other successors-in-interest" should be removed or a statement added that the identities of such persons will be added by post effective amendment.

Financial Statements, page F-1

Note 2 - Basis of Presentation, page F-9

8. We note your response to prior comment 27. Please expand the APB 20 disclosures in Note 2 on page F-9 and Note 6 on page F-28 to show the amount and nature of each material revision. For example, expand the line item, "additional stock-based compensation" to disclose the effect of revisions including:
 - * expense recognition for the Trilogy warrants,
 - * expense resulting from the use of quoted market price,
 - * the application of EITF 96-18 to options granted to non-employees.

For each material revision, describe the original accounting treatment and the nature of the error correction. Disclose both amounts recorded in the financial statements prior to correction, as well as the revised amounts.

Note 4 - Stockholders` Equity, page F-25

9. We note your response to prior comment 30. While the agreement may provide that the liquidated damages are required to be paid in cash, the ability to have the registration statement declared effective remains outside of the control of the issuer. We note that

the liquidated damages are material and appear to be potentially unlimited, which renders the settlement option of providing unregistered shares to settle the warrants uneconomic.

Accordingly,

we believe the warrants are required to be initially classified as liabilities under EITF 00-19, and then adjusted to fair value at each

subsequent balance sheet date, with changes in fair value reflected

in the statement of operations. See paragraphs 14 - 17 of EITF 00-

19. Please revise your financial statements and related disclosures accordingly.

10. We note your response to prior comment 42. Please revise the statement of stockholders` equity and the calculation of net loss per

share applicable to common shareholders to reflect the dividend, or

tell us why you believe that no revisions are required.

Part II

Undertakings

11. In your amended filing, please revise to include the new undertakings that became effective on December 1, 2005. See Questions 3 through 6 in Securities Offering Reform Transition Questions and Answers, which is available on our web site at <http://www.sec.gov/divisions/corpfin/transitionfaq.htm>. See new Item

512(a)(4) and 512(g) of Regulation S-B, which were adopted in Securities Offering Reform, Release No. 33-8591 (July 19, 2005), which is available on our web site at <http://www.sec.gov/rules/final/33-8591fr.pdf>.

Signatures

12. Please have your Chief Financial Officer and Chief Accounting Officer sign in those capacities.

1934 Act Periodic Reports

13. We note your response to prior comment 27. We also note that no

filings were made under Item 4.02 of Form 8-K relating to the various

restatements. Please file the required disclosures under Item 4.02

of Form 8-K as soon as possible.

14. We note your disclosure under Item 307 of Regulation S-B in each

amended periodic report concludes your disclosure controls and procedures were effective. Please tell us the specific factors

you considered in determining your disclosure controls and procedures were effective, in light of the restatements to your financial statements disclosed in Note 2 to the financial statements for the year ended January 31, 2005, and in Note 6 to the financial statements for the six months ended July 31, 2005.

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.

Any questions regarding the accounting comments may be directed 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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V. Randy White, Ph.D
Xenomics, Inc.
February 2, 2006
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