

Mail Stop 6010

October 30, 2007

VIA U.S. MAIL AND FAX (614) 793-7520

Mr. Brent L. Larson  
Chief Financial Officer  
Neoprobe Corporation  
425 Metro Place North, Suite 300  
Dublin, Ohio 43017-1367

**Re: Neoprobe Corporation  
Form 10-KSB for the year ended December 31, 2006  
Filed March 16, 2007  
Form 10-QSB for the quarter ended June 30, 2007  
Filed August 9, 2007  
File No. 000-26520**

Dear Mr. Larson:

We have reviewed your filings and have the following comments. We have limited our review to only your financial statements and related disclosures and will make no further review of your documents. Where indicated, we think you should revise your documents in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may or may not 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 filings. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-KSB for the year ended December 31, 2006

Item 8A. Controls and Procedures, page 46

1. We note your statement that your Chief Executive Officer and Chief Financial Officer have “concluded that [your] disclosure controls and procedures are adequately designed to ensure that information required to be disclosed by [you] in the reports that [you] file or submit under the Securities Exchange Act of 1934....” It does not appear that your certifying officers have reached a conclusion that your disclosure controls and procedures are *effective*. Please confirm to us that your controls and procedures are effective and that you will revise future filings including interim filings to address your officers’ conclusions regarding the effectiveness of your disclosure controls and procedures.

Note 1. Organization and Summary of Significant Accounting Policies, page F-8

e. Inventory, page F-9

2. We note that you capitalized certain inventory costs associated with your Lymphoseek product prior to regulatory approval and product launch, based on management’s judgment of probable future commercial use and net realizable value. Please explain to us how the capitalization of certain costs associated with the Lymphoseek product is appropriate. Tell us the amount capitalized in fiscal year 2005. Cite the accounting literature upon which you relied upon. Refer to the definition of inventory in ARB 43, chapter 4 in your response.

i. Revenue Recognition, page F-11

3. We note that you have a distribution arrangement with Ethicon Endo-Surgery, Inc. (EES). Please explain and expand future filings to describe this arrangement in greater detail. For example, please describe any discounts; return policies; post shipment obligations; customer acceptance; warranties; price protection or similar privileges and how these impact your revenue recognition. Also, tell us more about the “retroactive annual adjustments” and your accounting. Demonstrates that your policies are SAB 104 and SFAS 48 compliant.
4. Please explain in greater detail your policy with respect to the demonstration equipment. Explain the contractual terms under which it has been loaned; and provide the amount of demonstration equipment sold in each period presented in the most recent 10-KSB and 10-QSB. We assume that these were sold at lower margins than other equipment. If so, please revise future MD&A to discuss if they have any material impact on gross margins.

Note 6. Notes Payable, page F-17

5. We note the disclosure on page F-18 that warrants issued to investors were valued using a third-party valuation firm. While in future filings management may elect to take full responsibility for valuing the equity instruments, if you choose to continue to refer to the expert in any capacity, please revise future filings, beginning with your next 10-QSB, to name the independent valuation firm. In addition, please note that if you intend to incorporate your Form 10-KSB by reference into any registration statement, you will be required to include the consent of the independent valuation firm as an exhibit to the registration statement.
6. We note that in November 2006 you amended and modified key terms of your notes, whereby cancelling and replacing the notes that were previously issued. It appears that the note was modified and amended, but not cancelled. Please confirm that the debt was modified in November 2006 and revise the disclosure in your future filings. Otherwise, please explain to us how the remainder of the debt discounts in connection with the conversion feature and the warrants was accounted upon the cancellation of the debt. Please refer the accounting literature which you relied upon.

Note 8. Equity, page F-20

a. Stock Warrants, page F-20

7. We note that you issued various warrants under Series Q, R and S. Please tell us and revise future filings to disclose the major terms of each series in greater detail, and how you valued and accounted for them. We also note herein and elsewhere in the filing that you reclassified the liability related to the warrants to equity in fiscal year 2005. Please explain how the reclassification as equity is appropriate. Cite accounting literature upon which you relied.

c. Common Stock Purchase Agreement, page F-20

8. We note that you entered into a common stock purchase agreement with Fusion Capital Fund II, LLC and issued 720,000 shares of common stock as an initial commitment fee in December 2006. We also note that you issued additional 6,000 shares of your common stock as additional commitment fees during 2006. Please explain to us how you valued and accounted for the common stocks issued as commitment fees citing accounting literature you relied upon.

Note 11. Agreements - Research and Development Agreements, page F-23

9. We note that you are obligated to pay royalties to the Government of Israel on the sale of products up to 300% of the total grant received from the Office of Chief Scientist. Please explain what you mean when you state that “if the Israeli content of your blood flow device products decrease below 10%” your total royalty payments could increase to \$2.3 million. Explain your accounting in greater detail and demonstrate whether and how it complies with SFAS 5.

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter 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 responses to our comments.

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 writing, a statement from the company acknowledging that

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- 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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Neoprobe Corporation  
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You may contact Andri Boerman, Staff Accountant, at (202) 551-3645 or me at (202) 551-3554 if you have any questions regarding these comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

Angela Crane  
Branch Chief