Via Edgar

Ms. Amanda Ravitz
Assistant Director
Division of Corporation Finance
United States Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Re: Neoprobe Corporation

Preliminary Proxy Statement on Schedule 14A

Filed June 14, 2011 File No. 001-35076

Dear Ms. Ravitz:

We have received your comments to the Preliminary Proxy Statement on Schedule 14A (the "Filing"), filed by Neoprobe Corporation (the "Company"), set forth in your letter dated June 30, 2011 (the "Comment Letter"). For your convenience, we have repeated the text of your comments, followed by our response.

We respectfully respond to the comments set out in the Comment Letter as follows:

Summary, page 3

1. We note your disclosure that the assets to be sold and the liabilities to be assigned are "primarily related" to the GDS business. Please revise your disclosure to clarify the meaning of this phrase and scope of the proposed disposition.

Response: The "primarily related" phrase was intended by the Buyer and the Seller to describe in a general way in the Asset Purchase Agreement the assets and liabilities that relate principally to the GDS business, and not to assets and liabilities related to Neoprobe's remaining businesses, which are described at pages 2 and 3 of the proxy statement. We have revised the first bulleted item under the caption "The Asset Sale" on page 2 of the proxy statement to clarify the kinds of assets and liabilities to be transferred to Devicor, as follows:

• we agreed to sell the assets and assign certain liabilities, in each case, that are primarily related to the GDS Business (i.e., assets and liabilities that relate principally to the GDS Business, consisting primarily of intellectual property associated with our GDS products, supply and manufacturing agreements for these products, tooling and dies, testing equipment, inventory, trademarks (including the "Neoprobe" name), and associated contractual rights and obligations); and

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2. Please revise to explain in greater detail how the royalty payments are calculated.

Response: As noted in counsel's separate letter of even date responding to Staff's comments on Neoprobe's confidential treatment request, Neoprobe has withdrawn its confidential treatment request with respect to the redacted material contained in Schedule 2.9 of the Asset Purchase Agreement, which will now appear as Schedule 2.9 to the Asset Purchase Agreement included as Appendix A to the proxy statement. Additionally, our disclosure in the proxy statement under the caption "Asset Purchase Agreement – General" at pages 4-5 of the proxy statement will be revised to include the following additional paragraph:

The method of calculating the royalty payments is set forth in Schedule 2.9 to the Asset Purchase Agreement. Potential royalty payments to the Seller are calculated based on the Buyer's "Net Revenue" derived from the purchased GDS Business and is defined as gross revenue derived from the sale, distribution, licensing or other disposition of the Products, and related warranties, offset by adjustments to reduce revenue for discounts, allowances, rebates and other gross to net reductions, and bad debt expense, as such net revenues are determined by Buyer in accordance with GAAP, applied in a manner consistent with Buyer's accounting policies and procedures. The Annual Royalty Amount payable by Buyer for any Performance Period shall be determined in accordance with the following:

| Net Revenue for Performance Period (i.e., the "Brackets") | % of Net Revenue Payable as Annual Royalty |
|--|--|
| | Amount |
| Equal to or greater than \$21,000,000 but less than \$25,000,000 | 5.00% |
| Equal to or greater than \$25,000,000 but less than \$30,000,000 | 8.75% |
| Equal to or greater than \$30,000,000 | 20.00% |

Percentages of Net Revenues payable are not cumulative, and no Annual Royalty Amount shall be payable to Seller once the aggregate Royalty Amount has been paid. Net Revenues are calculated based on a single Performance Period and will not be aggregated with Net Revenues of any other Performance Period. A sample calculation illustrating the manner in which the royalty will be calculated at various hypothetical levels of net revenue is included in Schedule 2.9 to the Asset Purchase Agreement.

Risk Factors Relating to the Asset Sale, page 25

3. Please provide us an analysis as to whether you will be required to register as an investment company pursuant to the Investment Company Act of 1940. In this regard, we note your disclosure on page 9 that you are considering "alternate uses" for "excess cash." With a view to disclosure, please tell us how you define "excess cash" and what "alternate uses" are being considered. To the extent that you intend to invest your cash, including the proceeds from this transaction and/or royalty payments, please tell us the amount that may be used for this purpose and the types of securities and/or instruments in which you plan to invest.

Response: Neoprobe does not believe that the nature of its assets or business after the closing of the transaction will require it to register as an "investment company" pursuant to the Investment Company Act of 1940.

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As noted in the proxy statement (page 2), the GDS Business is not the only business of Neoprobe, and following the closing, Neoprobe will continue to own and operate its remaining businesses. As noted on page 3 of the proxy statement, following the Asset Sale, Neoprobe will focus on these remaining businesses, including (i) developing, commercializing, marketing, selling and distributing biologics or pharmaceuticals, (ii) developing and commercializing personalized cell processing technology and cellular therapeutics; and (iii) advancing our technology for the detection of fluorescence labeled compounds and antibodies. We note that these are substantial businesses, as apparent from Neoprobe's current market capitalization, based only on basic shares outstanding, of approximately \$285 million (On a fully diluted basis, our market capitalization would be approximately \$491 million.). Given that the maximum value to be realized by Neoprobe from the sale of the GDS Business is \$50 million, our current market capitalization based on basic shares outstanding suggests that the market value of our remaining businesses is approximately \$235 million. Our drug candidate that is nearest to commercialization is Lymphoseek®, which has just completed a second Phase III clinical trial in support of a New Drug Application (NDA) with FDA, which we expect to file early in the third quarter.

With respect to the discussion of "excess cash" and "alternate uses," Neoprobe has disclosed that in addition to continuing the development toward commercialization of its existing drug candidates Lymphoseek and RIGSTM, it is investigating the acquisition or licensing of additional complementary drug candidates. See "Post Closing Business and Proceeds from the Asset Sale," p.17. Even if we are unable to identify appropriate acquisition targets in the short term, it is Neoprobe's intention to continue to invest in its existing drug candidates during the short term and to focus on acquiring additional suitable drug candidates over the longer term. It is not Neoprobe's intention to invest proceeds of this transaction in any securities or instruments, other than short-term government obligations and high-grade commercial paper that will be held pending application of funds for these purposes.

Consequently, following the Asset Sale, Neoprobe's business will not consist of "being engaged primarily, or propos[ing] to engage primarily, in the business of investing, reinvesting, or trading in securities," and hence it will not be an "investment company" as defined in Section 3(a)(1) of the Investment Company Act.

4. Please tell us whether you have considered the risk that NYSE Amex could delist your securities as a result of the disposition.

Response: Neoprobe considered the risk that disposition of its GDS Business could result in delisting of its securities from NYSE Amex. Neoprobe consulted with NYSE Amex on this question, and was able to demonstrate that based on market capitalization, the market value of Neoprobe's remaining businesses exceeds that of the business being sold, and that with the expected approval by FDA of Neoprobe's Lymposeek drug candidate in the first half of 2012, we anticipate earning significant revenues in 2012 from commercial sales of Lymphoseek. As a consequence, Neoprobe was advised by NYSE Amex that the sale of the GDS Business would not result in delisting.

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The Company acknowledges 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.

If you have any questions regarding any of the foregoing, please contact William J. Kelly, Porter Wright Morris & Arthur LLP, 41 S. High Street, Columbus, Ohio 43215, telephone (614) 227-2136, and fax (614) 227-2100.

Thank you for your assistance.

Sincerely,

NEOPROBE CORPORATION

/s/Brent L. Larson

Brent L. Larson Senior Vice President and Chief Financial Officer

cc: Joe McCann Daniel Morris