SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

DATE OF REPORT: MAY 12, 2004

NEOPROBE CORPORATION (EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

425 Metro Place North, Suite 300
Columbus, Ohio 43017
(614) 793-7500
(ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER INCLUDING AREA CODE OF REGISTRANT'S
PRINCIPAL EXECUTIVE OFFICES)

Not Applicable (FORMER NAME OR FORMER ADDRESS, IF CHANGED SINCE LAST REPORT)

ITEM 7. FINANCIAL STATEMENTS AND EXHIBITS.

(c) Exhibits.

99(a) Neoprobe Corporation press release dated May 12, 2004.*

ITEM 12. RESULTS OF OPERATIONS AND FINANCIAL CONDITION.

On May 12, 2004, Neoprobe Corporation (the "Company") issued a press release regarding its consolidated financial results for the first quarter ended March 31, 2004. A copy of the Company's press release is furnished as Exhibit 99(a) to this Current Report on Form 8-K and is incorporated herein by reference.

The information in this Current Report on Form 8-K, including the exhibits hereto, shall not be treated as "filed" for purposes of the Securities Exchange Act of 1934, as amended.

Statements contained or incorporated by reference in this Current Report on Form 8-K which relate to other than strictly historical facts, such as

^{*} Filed with this report

statements about the Company's plans and strategies, expectations for future financial performance, new and existing products and technologies, and markets for the Company's products, are forward-looking statements. The words "believe," "expect," "anticipate," "estimate," "project," and similar expressions identify forward-looking statements that speak only as of the date hereof. Investors are cautioned that such statements involve risks and uncertainties that could cause actual results to differ materially from historical or anticipated results due to many factors including, but not limited to, the Company's continuing operating losses, uncertainty of market acceptance, reliance on third party manufacturers, accumulated deficit, future capital needs, uncertainty of capital funding, dependence on limited product line and distribution channels, competition, limited marketing and manufacturing experience, and other risks detailed in the Company's most recent Annual Report on Form 10-KSB and other Securities and Exchange Commission filings. The Company undertakes no obligation to publicly update or revise any forward-looking statements.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

NEOPROBE CORPORATION

Date: May 12, 2004 By: /s/ Brent L. Larson

> Brent L. Larson Vice President Finance and Chief Financial Officer

EXHIBIT INDEX

Exhibit No. Description

Neoprobe Corporation press release dated May 12, 2004.* 99(a)

^{*} Filed with this report.

IMMEDIATE RELEASE CONTACTS:

MAY 12, 2004

BRENT LARSON JONATHAN FASSBERG, VICE PRESIDENT / CFO THE TROUT GROUP

614 793 7500 212 477 9007

NEOPROBE ANNOUNCES FIRST QUARTER RESULTS PROVIDES BUSINESS UPDATE

DUBLIN, OHIO - May 12, 2003 -- Neoprobe Corporation (OTCBB: NEOP), a diversified developer of innovative oncology and cardiovascular surgical and diagnostic products, today announced consolidated operating results for the first quarter of 2004. First quarter results included revenues of \$1.4 million compared to \$1.5 million for the first quarter of 2003. In addition, Neoprobe reported a net loss of \$589,000 or \$0.01 per share compared to a loss of \$479,000 or \$0.01 per share for the comparable period in 2003. Total operating expenses were \$1.4 million for the first quarter of 2004 compared to \$1.2 million for the first quarter of 2003.

David Bupp, Neoprobe's President & CEO said, "Our first quarter revenue was impacted by delays in the transfer of manufacturing of our neo2000(R) gamma detection device to our new contract manufacturer that resulted in our accumulating backorders to our primary distributor of over \$125,000 at March 31. If we had not been in a backorder position, which has since been corrected, our gamma device revenue would have been consistent with last year as expected. In addition, recent design improvements to the neo2000 have already contributed to an increase in gross margins on device sales to 56% of net sales compared to 36% of net sales in the prior year."

"Revenue from our blood flow line has been lower than planned so far this year," Bupp continued. "The feedback we are receiving from clinicians following marketing clearance of our lead blood flow product, the Quantix/OR(TM), has been gratifying. These early clinical exposures have also brought suggestions for product enhancements that we believe will stimulate a demand from blood flow measurement practitioners and expand our market by attracting surgeons not presently using blood flow measurement technology. We have already initiated efforts to implement the improvements to respond to the suggestions, the first of which will be completed during the second quarter. The Quantix/OR has gained attention in the last four months through two major cardiovascular and vascular tradeshows and we have now completed training seven vascular-specific professional distributor sales teams covering 20 states in the U.S. We are working with additional sales teams that cover an incremental 13 states and are identifying additional representatives to cover the remaining states. We are particularly encouraged by the willingness of North American and European thought leaders to continue their evaluation of the product as these exciting product improvements are implemented."

Operating expenses during the quarter increased over the prior year due primarily to development efforts in three areas. First, we reinitiated our RIGS(R) research efforts and continued to move forward with development of Lymphoseek(TM) (approximately \$90,000). Second, we completed final development activities related to an updated version of our neo2000 system (approximately \$55,000), and finally, we commenced certain product refinement activities related to the Quantix/OR (approximately \$65,000). Bupp continued, "We believe our investments in support of the development of Lymphoseek and RIGS will yield significant future rewards for Neoprobe and complement our successful gamma device products. In addition, we remain positive about the outlook for our Quantix(R) blood flow devices and believe the proposed refinements are primarily user interface in nature and do not detract from the overall value we see in the underlying ADBF(TM) technology platform."

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RIGS DEVELOPMENT PROCESS REACTIVATED THROUGH DISCUSSIONS WITH FDA During the first quarter, we prepared for the April 15th meeting with FDA to determine the feasibility of reactivating the RIGS development program. The April 15th meeting was very helpful from a number of aspects: We confirmed that the RIGS biologic license application (BLA) remains active and open. We believe this will improve both the cost effectiveness and timeliness of future regulatory submissions for RIGScan(R) CR49. Additionally, FDA preliminarily confirmed that the BLA may be applicable to the general colorectal population; and not just the recurrent colorectal market as applied for in 1996. Applicability to a general colorectal population could result in a greater market potential for the product than if applicable to just the recurrent population. During the meeting, FDA indicated that they would consider possible diagnostic/prognostic indications for RIGScan CR49 and that survival data from one of Neoprobe's earlier Phase III studies could be supportive of a prognostic indication. Neoprobe believes approval for a diagnostic indication prior to the submission of additional prognostic data from a new trial could positively impact the approval timeline for RIGScan CR49. Neoprobe is working on the development of clinical protocols covering both the diagnostic and prognostic indications for RIGScan CR49. We plan to submit these protocols for review by FDA during the second quarter. To support the protocol development, we have engaged some of the leading surgical oncologists in the United States and Europe to work with us in the development of the RIGScan CR49 clinical plan. We will be making further announcements on these activities in the near future. The April 15th meeting with FDA was an important event in the re-activation of the RIGS program. Further discussion with FDA is expected and it is possible that the regulatory pathway may evolve as Neoprobe seeks to reach a consensus with the agency on the reactivation of the RIGS filing.

o LYMPHOSEEK DEVELOPMENT

We continued to prepare our IND for submission to FDA. Efforts during the quarter primarily involved the identification of a suitable contract manufacturing facility for production of commercial grade product for use in the protocol.

o SECOND U.S. PATENT ISSUED COVERING THE QUANTIX ADBF TECHNOLOGY During the first quarter, the second ADBF patent was issued in the United States providing further coverage of the critical aspects of the Quantix products. In addition, we have received favorable input from European patent reviewers on patent applications covering the ADBF technology in the European Union.

o GROSS MARGINS ON NET DEVICE SALES INCREASED SIGNIFICANTLY OVER THE PRIOR YEAR

The investment of Neoprobe in the gamma device product provided immediate return during the first quarter with the improvement of gross margins on net device sales for these products. While delays in the transfer of manufacturing of the neo2000 caused Neoprobe to miss its sales target for the quarter, design modifications and lower manufacturing costs increased our gross margin on net sales of devices increased significantly from 36% last year to 56% this year. Deliveries of the gamma product to our primary distributor are back on schedule and we expect the improvement in margins to continue.

o EXTENSION OF GAMMA MARKETING AGREEMENT THROUGH DECEMBER 2006

The marketing agreement for Neoprobe's gamma products was extended through December 2006. The agreement extension affords Neoprobe access to one of the premier medical sales organizations with an expanding global reach. In cooperation with the marketing partner, we continue to work on product innovations to maintain Neoprobe's leadership position in the gamma product arena.

o EXPANSION OF QUANTIX PRODUCT SALES ORGANIZATION AND THOUGHT-LEADER NETWORK

During the first quarter, Neoprobe began the training of a network of independent medical sales organizations concerning the Quantix products. Our marketing efforts have been concentrated on the Quantix/OR device that we believe will be the flagship product of the

NEOPROBE CORPORATION ADD-2

Quantix family of products. In addition to training the sales organizations, Neoprobe continued to work with cardiovascular thought-leaders regarding the evaluation of the Quantix/OR and Quantix/ND(TM) systems. The feedback we received confirmed the desire for certain product improvements, such as changes to the probe configuration, that were underway but the clinician feedback emphasized their urgency. We expect to have initial product modifications completed by the end of the second quarter. During the coming months we expect to further expand our sales coverage through additional external organizations in preparation for the introduction of these product improvements.

RAISED \$1.9 MILLION IN EQUITY FINANCING

The addition of \$1.9 million in capital provides Neoprobe with a strong capital structure to accomplish our near-term goals. Approximately \$600,000 was obtained through the exercise of warrants issued in November of 2003 with the private equity placement. In addition, approximately \$1.3 million was raised through the issuance of common shares to Fusion Capital at an average share price of \$0.60.

ABOUT NEOPROBE

Neoprobe develops and provides innovative surgical and diagnostic products that enhance patient care by meeting the critical decision making needs of healthcare professionals. Neoprobe currently markets the neo2000(R) line of gamma detection systems that are widely used by cancer surgeons for intraoperative lymphatic mapping. Neoprobe is also in the process of commercializing the Quantix(R) line of blood flow measurement products developed by its subsidiary, Cardiosonix Ltd., that are designed to be used by cardiovascular surgeons, neurosurgeons and critical care physicians. In addition, Neoprobe holds significant interests in the development of related biomedical systems and agents including Lymphoseek(TM) and RIGScan(R) CR49. Lymphoseek is an investigational drug being developed as a lymphatic tracing agent in conjunction with the University of California, San Diego. The RIGS(R) system is an investigational technology that combines the Company's gamma detection device technology with a proprietary disease-specific radiolabeled cancer targeting agent, and a patented surgical method to get real-time information to locate tumor deposits that may not be detectable by conventional methods. Before surgery, a cancer patient is injected with one of the targeting agents, which circulates throughout the patient's body and binds specifically to cancer cell antigens or receptors. Concentrations of the targeting agent are then located during surgery by the Company's gamma-detection instrument, which emits an audible tone to direct the surgeon to targeted tissue. The Company's strategy is to deliver superior growth and shareholder return by maximizing its strong position in gamma detection technologies and diversifying into new, synergistic biomedical markets through continued investment and selective acquisitions.

Statements in this news release, which relate to other than strictly historical facts, such as statements about the Company's plans and strategies, expectations for future financial performance, new and existing products and technologies, and markets for the Company's products, are forward-looking statements. The words "believe," "expect," "anticipate," "estimate," "project," and similar expressions identify forward-looking statements that speak only as of the date hereof. Investors are cautioned that such statements involve risks and uncertainties that could cause actual results to differ materially from historical or anticipated results due to many factors including, but not limited to, the Company's continuing operating losses, uncertainty of market acceptance of its product, reliance on third party manufacturers, accumulated deficit, future capital needs, uncertainty of capital funding, dependence on limited product line and distribution channels, competition, limited marketing and manufacturing experience, risks of development of new products, regulatory risks and other risks detailed in the Company's most recent Annual Report on Form 10-KSB and other Securities and Exchange Commission filings. The Company undertakes no obligation to publicly update or revise any forward-looking statements.

NEOPROBE CORPORATION

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CONDENSED CONSOLIDATE <table> <caption></caption></table>	D BALANCE SHEETS					
CHI HOIV	March 31, December 31, 2004 2003 (unaudited)					
<s> Assets:</s>	<c> <c></c></c>					
Cash and cash equivalents Other current assets Intangible assets, net Other non-current assets	\$ 3,390,284 \$ 1,588,760 2,127,005 2,462,575 2,833,674 2,935,515 404,649 398,192					
Total assets	\$ 8,755,612 \$ 7,385,042 ====================================					
Liabilities and stockholders' equi	ty:					
Current liabilities, excluding defe Deferred revenue Other liabilities Stockholders' equity	er liabilities 160,834 516,169					
Total liabilities and stockholders'	equity \$ 8,755,612 \$ 7,385,042					

		ED STATEMENTS OF OPERATIONS		
	Three Months Ended March 31, March 31, 2004 2003 (unaudited) (unaudited)			
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Revenues: Net sales License revenue and other	\$ 1,225,617			
Total revenues	1,425,617 1,539,036			
Cost of goods sold	540,142 839,062			
Gross profit	885,475 699,974			
Operating expenses: Research and development Selling, general and administra	583,100 418,769 tive 813,393 754,083			
Total operating expenses	1,396,493 1,172,852			
Loss from operations Other expenses, net	(511,018) (472,878) (77,559) (5,690)			

Net loss	\$	(588,577)	\$	(478,568)		
Loss per common share:						
Basic	\$	(0.01)	\$	(0.01)		
Diluted	\$	(0.01)	\$	(0.01)		
Weighted average shares outstanding:						
Basic	53,049,534		38,258,231			
Diluted		53,049,534		38,258,231		

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