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: AUGUST 10, 2004

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

Delaware	0-26520	31-1080091
(STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)	(COMMISSION FILE NO.)	(IRS EMPLOYER IDENTIFICATION NUMBER)

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 August 10, 2004.*

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* Filed with this report

ITEM 12. RESULTS OF OPERATIONS AND FINANCIAL CONDITION.

On August 10, 2004, Neoprobe Corporation (the "Company") issued a press release regarding its consolidated financial results for the second quarter ended June 30, 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 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: August 10, 2004 By: /s/ Brent L. Larson

Brent L. Larson
Vice President Finance and
Chief Financial Officer

EXHIBIT INDEX

Exhibit No.	Description
99(a)	Neoprobe Corporation press release dated August 10, 2004.*

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* Filed with this report.

Exhibit 99(A)

IMMEDIATE RELEASE AUGUST 10, 2004

CONTACTS:
BRENT LARSON, TIM RYAN,
VICE PRESIDENT / CFO THE TROUT GROUP
614 793 7500 212 477 9007

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NEOPROBE PROVIDES SECOND QUARTER RESULTS & BUSINESS UPDATE
CONFERENCE CALL SCHEDULED

DUBLIN, OHIO - August 10, 2004 -- Neoprobe Corporation (OTCBB: NEOP), a diversified developer of innovative oncology and cardiovascular surgical and diagnostic products, today announced consolidated operating results for the second quarter of 2004. Second quarter results included revenues of $1.5 million compared to $1.9 million for the second quarter of 2003 and $1.4 million in the first quarter of 2004. In addition, Neoprobe reported a net loss of $430,000 or $0.01 per share for the second quarter of 2004 compared to a loss of $79,000 or $0.00 per share for the same period in 2003. Total operating expenses were $1.4 million for the second quarter of 2004 compared to $1.2 million for the second quarter of 2003.

David Bupp, Neoprobe's President and CEO said, "Our second quarter revenue was affected by delays in the commercial launch of our Quantix(R) products as well as the timing of purchases by our primary gamma device distribution partner. Although revenue from our blood flow line has been lower than planned so far this year, we are confident we have identified the product modifications that will lead to market acceptance of the Cardiosonix products. We initiated product improvement efforts during the second quarter and have already received positive clinical feedback to the design changes. In addition, our gamma device distribution partner weighted their purchases in 2003 toward the first half of the year but has spread their purchases more evenly over 2004. As a result, we still expect overall gamma device revenue for 2004 to be consistent with revenue for 2003. Despite the revenue decline for the quarter, we saw improvements in the margins we generate on device sales. Our gross margin on net device sales improved to 62% for second quarter 2004 from 53% during the same period in 2003 due primarily to the design modifications implemented on the neo2000(R) system coupled with the change in contract manufacturers. Second quarter 2004 margins were adversely affected by $60,000 in non-cash inventory charges related to the design changes for the Cardiosonix products. Excluding the inventory charges, gross margins on device sales for the second quarter of 2004 would have been greater by 5 percentage points.

Operating expenses during the quarter increased over the prior year due to three primary factors: efforts to support the re-initiation of our RIGS(R) research effort, development activities related to Lymphoseek(TM), and product refinement activities related to the Quantix/OR(TM). Of these operating expenses, approximately $300,000 were non-cash in nature for 2004 compared to $200,000 in similar non-cash expenses for the second quarter of 2003. Bupp continued, "During the second quarter we initiated clinical and manufacturing efforts in support of the development of Lymphoseek and RIGS that we believe will yield significant future rewards for Neoprobe. Our investments in the neo2000 design updates were completed earlier this year have already resulted in an increase in our gross margins on device sales of 17% compared to the same quarter of the prior year. In addition, we remain positive about the outlook for our Quantix blood flow devices and believe the product refinements we are working on 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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SECOND QUARTER MILESTONES:

- o RIGS CLINICAL PROTOCOL SUBMITTED TO FDA
  We submitted a Phase III protocol to the FDA for their comment and review. The protocol includes a proposed clinical plan that includes a near-term diagnostic endpoint for the study and a longer-term prognostic end-point.

- o MEETING HELD WITH CENTRALIZED EUROPEAN REGULATORY AUTHORITIES ON RIGS
  Neoprobe met with the centralized European regulatory agency, the EMEA, to discuss development plans for RIGS. The EMEA indicated that they were receptive to a similar diagnostic and prognostic clinical plan that is being reviewed with the FDA. In addition, the EMEA indicated that they would encourage Neoprobe to conduct the next clinical study of the RIGS technology with the humanized version of RIGScan(R) CR.

- o ADDITIONAL PATENTS COVERING RIGS TARGETING AGENTS
  Four additional patents were issued by the United States Patent and Trademark office covering targeting agents that are licensed to Neoprobe as RIGS targeting agents. The issuance of the new patents continues to expand and refresh the intellectual property estate surrounding the RIGS technology.

- o LYMPHOSEEK AND RIGS MANUFACTURING ACTIVITIES
  During the second quarter, Neoprobe initiated activities to secure manufacturing capability to support the proposed Phase III clinical development programs for both RIGS and Lymphoseek. The activities for the RIGS program include the identification of contract manufacturing capability to produce the biologic used in RIGScan CR and to radiolabel the final product. The efforts for Lymphoseek include the identification of a contract manufacturer to produce the drug compound.

- o 17% INCREASE IN DEVICE GROSS MARGINS OVER THE PRIOR YEAR
  The investment of Neoprobe in our gamma device product provided immediate return during the second quarter with improvement of gross margin for the product.

- o KEY MANAGEMENT POSITIONS FILLED
  Tony Blair, Vice President Manufacturing Operations and Doug Rash, Director of Marketing and Product Management assumed new positions within Neoprobe during the second quarter. Tony brings 21 years of operations management to Neoprobe and will coordinate the transfer of the Quantix products to TriVirix during the coming months. Doug brings 28 years of marketing and management experience to Neoprobe including extensive experience in the ultrasound and cardiovascular arena. We believe the marketing and product launch strategy Doug has developed for the Quantix products will yield positive results during the second half of 2004 and beyond.

Neoprobe's CEO, David Bupp, and CFO, Brent Larson, will discuss the operating results and current status of ongoing activities via a conference call scheduled for 11:00 AM EDT today, August 10, 2004. Participants may dial-in by calling 1-888-823-7457 from the United States and Canada or by calling 1-973-582-2718 internationally. A replay of the call will be available for one week by calling 1-877-519-4471 (PIN# 5061986) from the United States and Canada or by calling 1-973-341-3080 internationally.

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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) CR. 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

CONDENSED CONSOLIDATED BALANCE SHEETS
<TABLE>
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	June 30, 2004 (unaudited)	December 31, 2003
<S>	<C>	<C>
Assets:		
Cash and cash equivalents	$3,430,142	$1,588,760
Other current assets	1,835,524	2,462,575
Intangible assets, net	2,732,872	2,935,515
Other non-current assets	443,609	398,192
Total assets	$8,442,147	$7,385,042
Liabilities and stockholders' equity:		
Current liabilities, excluding deferred revenue	$ 805,685	$ 654,341
Deferred revenue	440,344	955,587
Other liabilities	82,588	516,169

Stockholders' equity	7,113,530	5,258,945
Total liabilities and stockholders' equity	$8,442,147	$7,385,042

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CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

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	Three Months Ended		Six Months Ended	
	June 30, 2004 (unaudited)	June 30, 2003 (unaudited)	June 30, 2004 (unaudited)	June 30, 2003 (unaudited)
<S>	<C>	<C>	<C>	<C>
Revenues:				
Net sales	$ 1,347,928	$ 1,637,060	$ 2,573,545	$ 2,940,706
License revenue and other	200,000	252,655	400,000	488,045
Total revenues	1,547,928	1,889,715	2,973,545	3,428,751
Cost of goods sold	508,639	775,727	1,048,781	1,614,789
Gross profit	1,039,289	1,113,988	1,924,764	1,813,962
Operating expenses:				
Research and development	594,730	437,815	1,177,830	856,584
Selling, general and administrative	853,149	721,506	1,666,542	1,475,589
Total operating expenses	1,447,879	1,159,321	2,844,372	2,332,173
Loss from operations	(408,590)	(45,333)	(919,608)	(518,211)
Other expenses, net	(21,283)	(34,039)	(98,842)	(39,729)
Net loss	$ (429,873)	$ (79,372)	$ (1,018,450)	$ (557,940)
Loss per common share:				
Basic	$ (0.01)	$ 0.00	$ (0.02)	$ (0.01)
Diluted	$ (0.01)	$ 0.00	$ (0.02)	$ (0.01)
Weighted average shares outstanding:				
Basic	57,727,298	38,458,009	55,388,205	38,403,202
Diluted	57,727,298	38,458,009	55,388,205	38,403,202

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