UNITED STATES 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 (Date of earliest event reported)

August 11, 2009

NEOPROBE CORPORATION (Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 0-26520 (Commission File Number) 31-1080091 (IRS Employer Identification No.)

43017

(Zip Code)

425 Metro Place North, Suite 300, Dublin, Ohio (Address of principal executive offices)

Registrant's telephone number, including area (614) 793-7500 code

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

□ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

D Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.02. Results of Operations and Financial Condition.

On August 11, 2009, Neoprobe Corporation (the "Company") issued a press release regarding its consolidated financial results for the second quarter ended June 30, 2009. A copy of the Company's August 11, 2009, press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

The information contained in Item 2.02 of this Current Report on Form 8-K, including exhibit 99.1 attached hereto, shall not be treated as "filed" for purposes of the Securities Exchange Act of 1934, as amended.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit <u>Number</u>

99.1

Exhibit Description

Neoprobe Corporation press release dated August 11, 2009, entitled "Neoprobe Announces Second Quarter Results."

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-K and other Securities and Exchange Commission filings. The Company undertakes no obligation to publicly update or revise any forward-looking statements.

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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 11, 2009

By: /s/ Brent L. Larson Brent L. Larson, Vice President, Finance and Chief Financial Officer

IMMEDIATE RELEASEAugust 11, 2009CONTACTS:Brent Larson,Brent Larson,Tim Ryan,Vice President / CFOThe Shoreham Group614 822 2330646 342 6199

NEOPROBE ANNOUNCES SECOND QUARTER RESULTS Year-to-Date Device Revenues up 13% Business Update Provided and Conference Call Scheduled

DUBLIN, OHIO – August 11, 2009 -- Neoprobe Corporation (OTCBB:<u>NEOP</u> - <u>News</u>), a diversified developer of innovative oncology surgical and diagnostic products, today announced consolidated results for the second quarter of 2009 and for the six-month period ended June 30, 2009. As a result of significant non-cash accounting charges in the second quarter of 2009, Neoprobe reported a net loss attributable to common stockholders of \$15.2 million compared to a net loss attributable to common stockholders of \$1.0 million for the second quarter in 2008. For the six months ended June 30, 2009, Neoprobe reported a net loss attributable to common stockholders of \$14.4 million compared to a net loss attributable to common stockholders of \$14.4 million compared to a net loss attributable to 2008.

As discussed more fully below, the second quarter and year-to-date 2009 net losses included significant non-cash losses due primarily to mark-to-market adjustments related to derivative accounting treatment required for certain financial instruments on the Company's balance sheet. Neoprobe's loss from operations for the second quarter of 2009, which by definition excludes the impact of these mark-to-market adjustments, was \$928,000 compared to \$454,000 for the second quarter of 2008. Neoprobe's loss from operations for the six-month period ended June 30, 2009 was \$1.2 million compared to \$771,000 for the same period of 2008.

Neoprobe's second quarter 2009 revenues were \$1.8 million compared to \$2.3 million for the second quarter of 2008. Year-to-date revenues for the six-month period ended June 30, 2009 were \$4.6 million compared to \$4.0 million for the same period of 2008. Neoprobe's second quarter 2009 operating expenses were \$2.2 million compared to \$1.8 million for the second quarter of 2008. Operating expenses for the six-month period ended June 30, 2009 were \$4.3 million compared to \$3.2 million for the second quarter of 2008.

Brent Larson, Neoprobe's Vice President, Finance and CFO, said, "Device-related revenue for the first half of 2009 increased 13% to \$4.6 million compared to \$4.0 million for the same period last year. Revenue from our gamma detection systems accounted for the improvement. We have also experienced improvement in our gross margin from our device products which increased to 68% for the first half of 2009 compared 61% for the same period in 2008, resulting in a gross profit of over \$3.1 million in 2009 year-to-date, an increase of 26% over the prior year. The improvements in revenue and gross margin were due to the increased share of end customer sales prices we began receiving starting in January of 2009 commensurate with the start of a 5-year extension of our distribution agreement with our primary marketing partner."

David Bupp, Neoprobe's President and CEO, said, "During the first half of 2009, our development expenses related primarily to the successful completion of the Lymphoseek[®] Phase 3 clinical trial in patients with breast cancer or melanoma and preparations for a Phase 3 trial in patients with head and neck squamous cell carcinoma that was initiated in the second quarter of this year. By comparison, there were minimal clinical trial costs in the first half of 2008. General and administrative costs remained steady across both periods."

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NEOPROBE CORPORATION ADD - - 2

The following are some of the milestones achieved by Neoprobe so far in 2009:

- [•] Completion of the 1st Phase 3 clinical trial of Lymphoseek (NEO3-05) and announcement that the primary efficacy endpoint was exceeded (based on preliminary results)
- · Commencement of the 5-year extension of the Ethicon gamma detection device distribution agreement
- · Addition of a high energy F18 probe to the gamma detection device product portfolio
- [•] Initiation of patient enrollment in a 2nd Phase 3 clinical trial for Lymphoseek (NEO3-06 or the "Sentinel" trial) for patients with head and neck squamous cell carcinoma
- Reached agreement with an investor to exercise all outstanding Series Y Warrants 4 years prior to their expiration resulting in a \$3.5 million in cash infusion to the Company
- Completion of debt restructuring accord reached with an investor allowing elimination of a majority of the Company's derivative liabilities resulting in more transparent accounting

"In summary, our gamma device business continues to perform well despite the overall economic downturn," Bupp continued. "The positive clinical milestones we have achieved and that are anticipated in our radiopharmaceutical development process continue to underscore Neoprobe's value proposition."

During the second quarter of 2009, Neoprobe recorded a mark-to-market adjustment of \$13.7 million related to accounting for certain of its financial instruments as derivative liabilities under current accounting rules which resulted in a net total mark-to-market adjustment of \$12.2 million for the first half of 2009. In addition, the Company reported total derivative liabilities of \$25.6 million on the Company's balance sheet as of June 30, 2009. Under the applicable accounting rules for financial instruments, embedded features of the Company's notes and preferred stock and the warrants to purchase common stock were considered derivative liabilities because these instruments contained language that provided for the resetting of the instruments' exercise/conversion prices in the event that the Company issues common stock at prices below the exercise/conversion prices of the respective instruments. Treatment of these instruments as derivative liabilities resulted in them being required to be reflected on the Company's balance sheet at their fair values (i.e., marked to market) based on certain assumptions, including the trading price of the Company's common stock. As the share price of the Company's common stock has increased over the past several months, significant mark-to-market adjustments have been recorded as non-cash expense in the Company's financial results does not appropriately communicate the results of the Company's operating performance and development activities to our investors. As a result, Neoprobe's management believes the ability of investors to analyze Neoprobe's business trends and to understand Neoprobe's performance may be better served from reviewing certain operational measures such as revenue, development expenses and income (loss) from operations.

On July 24, 2009, Neoprobe agreed with the holder of a majority of the instruments with derivative characteristics, Platinum-Montaur Life Sciences, LLC (Montaur), to eliminate the price reset features that had substantially caused the derivative treatment of the instruments thereby permitting the Company to effectively extinguish the majority of its derivative liabilities. During the third quarter of 2009, the Company will record an additional \$5.6 million in mark-to-market adjustments related to movement in the price of the Company's common stock from June 30th through July 24th. As a result of the extinguishment treatment associated with the elimination of the price reset features, the Company will also record \$16.2 million in non-cash loss on the extinguishment during the third quarter and will then reclassify approximately \$27 million in derivative liabilities to additional paid-in capital. Following the extinguishment treatment, the Company's balance sheet will reflect the face value of the \$10 million in notes due to Montaur.

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NEOPROBE CORPORATION ADD - - 3

Neoprobe's President and CEO, David Bupp, and Vice President and CFO, Brent Larson, will provide a business update and discuss the Company's results for the second quarter and first half of 2009 during a conference call with the investment community scheduled for 11:00 AM ET, Wednesday, August 12, 2009. The conference call can be accessed as follows:

	Confe	rence Call Information				
TO PART	TICIPATE LIVE:	TO LISTE	TO LISTEN TO A REPLAY:			
Date: Time:	August 12, 2009 11:00 AM ET	Available until: Toll-free (U.S.) Dial in # :	August 19, 2009 877-660-6853			
Time.	11.00 AW L1	International Dial in # :	201-612-7415			
Toll-free (U.S.) Dial in # : International Dial in # :	877-407-8033 201-689-8033	Replay passcodes (both requir for playback):	ed			
		Account # : Conference ID # :	286 329964			

About Neoprobe

Neoprobe is a biomedical company focused on enhancing patient care and improving patient outcome by meeting the critical intraoperative diagnostic information needs of physicians and therapeutic treatment needs of patients. Neoprobe currently markets the neoprobe[®] GDS line of gamma detection systems that are widely used by cancer surgeons. In addition, Neoprobe holds significant interests in the development of related biomedical systems and radiopharmaceutical agents including Lymphoseek[®] and RIGScan[®] CR. Neoprobe's subsidiary, Cira Biosciences, Inc., is also advancing a patient-specific cellular therapy technology platform called ACT. Neoprobe'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. <u>www.neoprobe.com</u>

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, anticipated clinical and regulatory pathways, 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 products, 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-K and other Securities and Exchange Commission filings. The Company undertakes no obligation to publicly update or revise any forward-looking statements.

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NEOPROBE CORPORATION

CONDENSED CONSOLIDATED BALANCE SHEETS

	June 30, 2009 (unaudited)		D	ecember 31, 2008
Assets:				
Cash and investments	\$	3,133,041	\$	4,061,220
Other current assets		2,736,370		3,179,504
Intangible assets, net		1,359,459		1,393,485
Other non-current assets		896,621		985,241
Total assets	\$	8,125,491	\$	9,619,450
Liabilities and stockholders' deficit:				
Current liabilities, including current portion of notes payable	\$	2,103,734	\$	2,322,456
Notes payable, long term (net of discounts)		6,175,087		5,922,557
Derivative liabilities		25,557,996		853,831
Other liabilities		502,374		546,331
Preferred stock		3,000,000		3,000,000
Stockholders' deficit		(29,213,700)		(3,025,725)
Total liabilities and stockholders' deficit	\$	8,125,491	\$	9,619,450

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

	(Three Mon June 30, 2009 (unaudited)	Ended June 30, 2008 (unaudited)	Six Montl June 30, 2009 (unaudited)		hs Ended June 30, 2008 (unaudited)	
Total revenues	\$	1,833,743	\$ 2,255,025	\$ 4,558,779	\$	4,037,817	
Cost of goods sold		587,635	906,670	1,436,169		1,566,677	
Gross profit		1,246,108	1,348,355	3,122,610		2,471,140	
Operating expenses:							
Research and development		1,307,978	898,712	2,546,036		1,462,415	
Selling, general and administrative		865,763	903,884	1,767,811		1,779,292	
Total operating expenses		2,173,741	1,802,596	4,313,847		3,241,707	
Loss from operations		(927,633)	(454,241)	(1,191,237)		(770,567)	
Interest expense		(461,585)	(470,035)	(918,719)		(801,814)	
Change in derivative liabilities		(13,730,204)	(113,442)	(12,204,839)		(500,188)	
Other income, net		2,488	18,859	11,982		27,719	
Net loss		(15,116,934)	(1,018,859)	(14,302,813)		(2,044,850)	
Preferred stock dividends		(60,000)	-	(120,000)		-	
Loss attributable to common stockholders	\$	(15,176,934)	\$ (1,018,859)	\$ (14,422,813)	\$	(2,044,850)	
Loss per common share:							
Basic	\$	(0.21)	\$ (0.01)	\$ (0.20)	\$	(0.03)	
Diluted	\$	(0.21)	\$ (0.01)	\$ (0.20)	\$	(0.03)	
Weighted average shares outstanding:							
Basic		71,316,657	68,526,573	70,908,835		67,905,581	
Diluted		71,316,657	68,526,573	70,908,835		67,905,581	