

PROSPECTUS SUPPLEMENT

Number 2

to

Prospectus dated January 30, 2009, and Prospectus Supplement dated April 13, 2009,

of

NEOPROBE CORPORATION

11,500,000 Shares of Common Stock

This Prospectus Supplement relates to the sale of up to 11,500,000 shares of Neoprobe Corporation common stock (the “Shares”) by Fusion Capital Fund II, LLC (“Fusion Capital”). We will not receive proceeds from the sale of the Shares by Fusion Capital.

This Prospectus Supplement No. 2 includes the attached Quarterly Report on Form 10-Q (the “Form 10-Q”) of Neoprobe Corporation (the “Company”) for the quarter ended March 31, 2009, filed by the Company with the Securities and Exchange Commission on May 15, 2009. The exhibits to the Form 10-Q are not included with this Prospectus Supplement No. 2 and are not incorporated by reference herein. This Prospectus Supplement No. 2 should be read in conjunction with the Prospectus Supplement dated April 13, 2009.

Our common stock is traded on the OTC Bulletin Board under the symbol “NEOP.”

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS SUPPLEMENT. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this Prospectus Supplement No. 2 is May 18, 2009.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended March 31, 2009

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to _____ to _____

Commission File Number: 0-26520

NEOPROBE CORPORATION

(Exact name of registrant as specified in its charter)

Delaware 31-1080091
(State or other jurisdiction of incorporation or organization) (IRS Employer Identification No.)

425 Metro Place North, Suite 300, Dublin, Ohio 43017-1367
(Address of principal executive offices) (Zip Code)

(614) 793-7500

(Registrant's telephone number, including area code)

(Former name, former address and former fiscal year, if changed since last report)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act.)

Yes No

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date: 72,229,237 shares of common stock, par value \$.001 per share (as of the close of business on May 8, 2009).

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PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

**Neoprobe Corporation and Subsidiaries
Consolidated Balance Sheets**

	March 31, 2009 (unaudited)	December 31, 2008
ASSETS		
Current assets:		
Cash	\$ 3,549,057	\$ 3,565,837
Available-for-sale securities	-	495,383
Accounts receivable, net	1,685,209	1,644,070
Inventory	976,138	961,861
Prepaid expenses and other	546,162	573,573
	<u>6,756,566</u>	<u>7,240,724</u>
Total current assets		
	<u>6,756,566</u>	<u>7,240,724</u>
Property and equipment	2,082,459	2,060,588
Less accumulated depreciation and amortization	1,696,304	1,669,796
	<u>386,155</u>	<u>390,792</u>
Patents and trademarks	3,032,667	3,020,001
Acquired technology	237,271	237,271
	<u>3,269,938</u>	<u>3,257,272</u>
Less accumulated amortization	1,909,871	1,863,787
	<u>1,360,067</u>	<u>1,393,485</u>
Other assets	568,019	594,449
	<u>568,019</u>	<u>594,449</u>
Total assets	<u>\$ 9,070,807</u>	<u>\$ 9,619,450</u>

Continued

Neoprobe Corporation and Subsidiaries
Consolidated Balance Sheets, continued

	March 31, 2009	December 31, 2008
	(unaudited)	
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable	\$ 692,302	\$ 731,220
Accrued liabilities and other	942,210	917,676
Capital lease obligations, current portion	7,417	9,084
Deferred revenue, current portion	511,776	526,619
Notes payable to finance companies	86,865	137,857
Total current liabilities	2,240,570	2,322,456
Capital lease obligations, net of current portion	9,341	11,095
Deferred revenue, net of current portion	474,193	490,165
Notes payable to CEO, net of discounts of \$71,012 and \$76,294, respectively	928,988	923,706
Notes payable to investors, net of discounts of \$4,909,630 and \$5,001,149, respectively	5,090,370	4,998,851
Derivative liabilities	12,345,006	853,831
Other liabilities	42,320	45,071
Total liabilities	21,130,788	9,645,175
Commitments and contingencies		
Preferred stock; \$.001 par value; 5,000,000 shares authorized; 3,000 Series A shares, par value \$1,000, issued and outstanding at March 31, 2009 and December 31, 2008	3,000,000	3,000,000
Stockholders' deficit:		
Common stock; \$.001 par value; 150,000,000 shares authorized; 71,555,707 and 70,862,641 shares issued and outstanding at March 31, 2009 and December 31, 2008, respectively	71,556	70,863
Additional paid-in capital	136,967,308	145,742,044
Accumulated deficit	(152,098,845)	(148,840,015)
Unrealized gain on available-for-sale securities	-	1,383
Total stockholders' deficit	(15,059,981)	(3,025,725)
Total liabilities and stockholders' deficit	\$ 9,070,807	\$ 9,619,450

See accompanying notes to consolidated financial statements

Neoprobe Corporation and Subsidiaries
Consolidated Statements of Operations
(unaudited)

	Three Months Ended	
	March 31,	
	2009	2008
Revenues:		
Net sales	\$ 2,700,036	\$ 1,782,792
License and other revenue	25,000	-
Total revenues	<u>2,725,036</u>	<u>1,782,792</u>
Cost of goods sold	<u>848,534</u>	<u>660,007</u>
Gross profit	<u>1,876,502</u>	<u>1,122,785</u>
Operating expenses:		
Research and development	1,238,058	563,703
Selling, general and administrative	902,048	875,408
Total operating expenses	<u>2,140,106</u>	<u>1,439,111</u>
Loss from operations	<u>(263,604)</u>	<u>(316,326)</u>
Other income (expense):		
Interest income	9,949	10,608
Interest expense	(457,134)	(331,779)
Change in derivative liabilities	1,525,365	(386,746)
Other	(455)	(1,748)
Total other income (expense), net	<u>1,077,725</u>	<u>(709,665)</u>
Net income (loss)	814,121	(1,025,991)
Preferred stock dividends	<u>(60,000)</u>	<u>-</u>
Income (loss) attributable to common stockholders	<u>\$ 754,121</u>	<u>\$ (1,025,991)</u>
Income (loss) per common share:		
Basic	\$ 0.01	\$ (0.02)
Diluted	\$ 0.01	\$ (0.02)
Weighted average shares outstanding:		
Basic	71,387,438	67,284,589
Diluted	96,346,846	67,284,589

See accompanying notes to consolidated financial statements.

Neoprobe Corporation and Subsidiaries
Consolidated Statement of Stockholders' Deficit
(unaudited)

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total
	Shares	Amount				
Balance, December 31, 2008	70,862,641	\$ 70,863	\$145,742,044	\$(148,840,015)	\$ 1,383	\$ (3,025,725)
Effect of adopting EITF 07-5	-	-	(8,948,089)	(4,012,951)	-	(12,961,040)
Issued restricted stock	500,000	500	-	-	-	500
Cancelled restricted stock	(9,000)	(9)	9	-	-	-
Issued stock upon exercise of warrants and other	50,000	50	25,950	-	-	26,000
Issued stock as payment of interest on convertible debt	152,066	152	83,181	-	-	83,333
Stock compensation expense	-	-	70,536	-	-	70,536
Paid preferred stock issuance costs	-	-	(6,323)	-	-	(6,323)
Preferred stock dividends	-	-	-	(60,000)	-	(60,000)
Comprehensive income (loss):						
Net income	-	-	-	814,121	-	814,121
Unrealized loss on available-for-sale securities	-	-	-	-	(1,383)	(1,383)
Total comprehensive income						812,738
Balance, March 31, 2009	<u>71,555,707</u>	<u>\$ 71,556</u>	<u>\$136,967,308</u>	<u>\$(152,098,845)</u>	<u>\$ -</u>	<u>\$ (15,059,981)</u>

See accompanying notes to consolidated financial statements.

Neoprobe Corporation and Subsidiaries
Consolidated Statements of Cash Flows
(unaudited)

	Three Months Ended	
	March 31,	
	2009	2008
Cash flows from operating activities:		
Net income (loss)	\$ 814,121	\$ (1,025,991)
Adjustments to reconcile net income (loss) to net cash used in operating activities:		
Depreciation and amortization	100,896	95,815
Amortization of debt discount and debt offering costs	179,730	129,373
Provision for bad debts	-	4,558
Issuance of common stock in payment of interest	83,333	-
Stock compensation expense	70,536	48,211
Change in derivative liabilities	(1,525,365)	386,746
Other	4,581	32,795
Changes in operating assets and liabilities:		
Accounts receivable	(41,139)	404,655
Inventory	(28,794)	123,057
Prepaid expenses and other assets	33,955	64,041
Accounts payable	(38,918)	36,996
Accrued liabilities and other liabilities	(38,217)	(312,631)
Deferred revenue	(30,815)	(29,976)
Net cash used in operating activities	(416,096)	(42,351)
Cash flows from investing activities:		
Maturities of available-for-sale securities	494,000	-
Purchases of property and equipment	(40,491)	(15,572)
Proceeds from sales of property and equipment	251	120
Patent and trademark costs	(12,665)	(487)
Net cash provided by (used in) investing activities	441,095	(15,939)
Cash flows from financing activities:		
Proceeds from issuance of common stock	25,500	114,200
Payment of common stock offering costs	(6,544)	-
Payment of preferred stock offering costs	(6,322)	-
Payment of debt issuance costs	-	(11,406)
Payment of notes payable	(50,992)	(52,887)
Payments under capital leases	(3,421)	(3,656)
Net cash (used in) provided by financing activities	(41,779)	46,251
Net decrease in cash	(16,780)	(12,039)
Cash, beginning of period	<u>3,565,837</u>	<u>1,540,220</u>
Cash, end of period	<u>\$ 3,549,057</u>	<u>\$ 1,528,181</u>

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements
(unaudited)

1. Summary of Significant Accounting Policies

- a. Basis of Presentation:** The information presented as of March 31, 2009 and for the three-month periods ended March 31, 2009 and March 31, 2008 is unaudited, but includes all adjustments (which consist only of normal recurring adjustments) that the management of Neoprobe Corporation (Neoprobe, the Company, or we) believes to be necessary for the fair presentation of results for the periods presented. Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. generally accepted accounting principles have been condensed or omitted pursuant to the rules and regulations of the U.S. Securities and Exchange Commission. The results for the interim periods are not necessarily indicative of results to be expected for the year. The consolidated financial statements should be read in conjunction with Neoprobe's audited consolidated financial statements for the year ended December 31, 2008, which were included as part of our Annual Report on Form 10-K.

Our consolidated financial statements include the accounts of Neoprobe, our wholly-owned subsidiary, Cardiosonix Ltd. (Cardiosonix), and our 90%-owned subsidiary, Cira Biosciences, Inc. (Cira Bio). All significant inter-company accounts were eliminated in consolidation.

- b. Financial Instruments and Fair Value:** We adopted Statement of Financial Accounting Standards (SFAS) No. 157, *Fair Value Measurements*, for financial assets and liabilities as of January 1, 2008. SFAS No. 157 establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy under SFAS No. 157 are described below:

Level 1 – Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;

Level 2 – Quoted prices in markets that are not active or financial instruments for which all significant inputs are observable, either directly or indirectly; and

Level 3 – Prices or valuations that require inputs that are both significant to the fair value measurement and unobservable.

A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. In determining the appropriate levels, we perform a detailed analysis of the assets and liabilities that are subject to SFAS No. 157. At each reporting period, all assets and liabilities for which the fair value measurement is based on significant unobservable inputs or instruments which trade infrequently and therefore have little or no price transparency are classified as Level 3. In estimating the fair value of our derivative liabilities, we used the Black-Scholes option pricing model and, where necessary, other macroeconomic, industry and Company-specific conditions. See Note 2.

We adopted the remaining provisions of SFAS No. 157 for non-financial assets and liabilities beginning January 1, 2009. Financial Accounting Standards Board (FASB) Staff Position (FSP) FAS 157-2 deferred the effective date of SFAS No. 157 for one year relative to nonfinancial assets and liabilities that are measured at fair value, but are recognized or disclosed at fair value on a nonrecurring basis. This deferral applied to such items as indefinite-lived intangible assets and nonfinancial long-lived asset groups measured at fair value for impairment assessments. The adoption of the remaining provisions of SFAS No. 157 did not have a material impact on our consolidated results of operations or financial condition.

2. Fair Value Hierarchy

The following tables set forth by level liabilities measured at fair value on a recurring basis.

Liabilities Measured at Fair Value on a Recurring Basis as of March 31, 2009

Description	Quoted Prices in Active Markets for Identical Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Balance as of March 31, 2009
<i>Liabilities:</i>				
Derivative liabilities related to warrants	\$ -	\$ 6,743,325	\$ -	\$ 6,743,325
Derivative liabilities related to conversion and put options	-	-	5,601,681	5,601,681
Total derivative liabilities	<u>\$ -</u>	<u>\$ 6,743,325</u>	<u>\$ 5,601,681</u>	<u>\$ 12,345,006</u>

Assets and Liabilities Measured at Fair Value on a Recurring Basis as of December 31, 2008

Description	Quoted Prices in Active Markets for Identical Assets and Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Balance as of December 31, 2008
<i>Assets:</i>				
Available-for-sale securities	\$ 495,383	\$ -	\$ -	\$ 495,383
<i>Liabilities:</i>				
Derivative liabilities related to conversion and put options	\$ -	\$ -	\$ 853,831	\$ 853,831

The following table sets forth a summary of changes in the fair value of our Level 3 liabilities for the three months ended March 31, 2009:

Description	Balance at December 31, 2008	Unrealized Gains	Transfers In and/or (Out) (See Note 10)	Balance at March 31, 2009
<i>Liabilities:</i>				
Derivative liabilities related to conversion and put options	\$ 853,831	\$ (556,637)	\$ 5,304,487	\$ 5,601,681

The unrealized gains and losses on the derivatives are classified in other expenses as a change in derivative liabilities in the statement of operations. Fair value of available-for-sale securities is determined based on a discounted cash flow analysis using current market rates. Fair value of warrant liabilities is determined based on a Black-Scholes option pricing model calculation. Fair value of conversion and put option liabilities is determined based on a probability-weighted Black-Scholes option pricing model calculation.

3. Stock-Based Compensation

We account for stock-based compensation in accordance with SFAS No. 123(R), *Share-Based Payment*. At March 31, 2009, we have three stock-based compensation plans. Under the Amended and Restated Stock Option and Restricted Stock Purchase Plan (the Amended Plan), the 1996 Stock Incentive Plan (the 1996 Plan), and the Second Amended and Restated 2002 Stock Incentive Plan (the 2002 Plan), we may grant incentive stock options, nonqualified stock options, and restricted stock awards to full-time employees, and nonqualified stock options and restricted awards may be granted to our consultants and agents. Total shares authorized under each plan are 2 million shares, 1.5 million shares and 7 million shares, respectively. Although options are still outstanding under the Amended Plan and the 1996 Plan, these plans are considered expired and no new grants may be made from them. Under all three plans, the exercise price of each option is greater than or equal to the closing market price of our common stock on the day prior to the date of the grant.

Options granted under the Amended Plan, the 1996 Plan and the 2002 Plan generally vest on an annual basis over one to three years. Outstanding options under the plans, if not exercised, generally expire ten years from their date of grant or 90 days from the date of an optionee's separation from employment with the Company. We issue new shares of our common stock upon exercise of stock options.

Compensation cost arising from stock-based awards is recognized as expense using the straight-line method over the vesting period. As of March 31, 2009, there was approximately \$356,000 of total unrecognized compensation cost related to unvested stock-based awards, which we expect to recognize over remaining weighted average vesting terms of 0.8 years. For the three-month periods ended March 31, 2009 and 2008, our total stock-based compensation expense was approximately \$71,000 and \$48,000, respectively. We have not recorded any income tax benefit related to stock-based compensation in either of the three-month periods ended March 31, 2009 and 2008.

The fair value of each option award is estimated on the date of grant using the Black-Scholes option pricing model to value share-based payments. Expected volatilities are based on the Company's historical volatility, which management believes represents the most accurate basis for estimating expected volatility under the current circumstances. Neoprobe uses historical data to estimate forfeiture rates. The expected term of options granted is based on the vesting period and the contractual life of the options. The risk-free rate is based on the U.S. Treasury yield in effect at the time of the grant.

A summary of stock option activity under our stock option plans as of March 31, 2009, and changes during the three-month period then ended is presented below:

Three Months Ended March 31, 2009				
	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life	Aggregate Intrinsic Value
Outstanding at beginning of period	5,619,500	\$ 0.40		
Granted	283,000	0.59		
Exercised	(80,000)	0.30		
Forfeited	-	-		
Expired	(79,000)	1.25		
Outstanding at end of period	<u>5,743,500</u>	<u>\$ 0.40</u>	5.4 years	<u>\$ 938,200</u>
Exercisable at end of period	<u>4,914,500</u>	<u>\$ 0.39</u>	<u>4.8 years</u>	<u>\$ 847,700</u>

A summary of the status of our unvested restricted stock as of March 31, 2009, and changes during the three-month period then ended is presented below:

	Three Months Ended March 31, 2009	
	Number of Shares	Weighted Average Grant-Date Fair Value
Unvested at beginning of period	473,000	\$ 0.37
Granted	500,000	0.60
Vested	-	-
Forfeited	(9,000)	0.68
Unvested at end of period	<u>964,000</u>	<u>\$ 0.49</u>

Restricted shares generally vest upon occurrence of a specific event or achievement of goals as defined in the grant agreements. As a result, we have recorded compensation expense related to grants of restricted stock based on management's estimates of the probable dates of the vesting events.

4. Comprehensive Income (Loss)

Due to our net operating loss carryforwards, there are no income tax effects on comprehensive income (loss) components for the three-month period ended March 31, 2009.

	Three Months Ended March 31, 2009
Net income	\$ 814,121
Unrealized losses on available-for-sale securities	(1,383)
Other comprehensive income	<u>\$ 812,738</u>

We had no accumulated other comprehensive income (loss) activity during the three-month period ended March 31, 2008; therefore, our total comprehensive loss was equal to our net loss for that period.

5. Earnings Per Share

Basic earnings (loss) per share is calculated by dividing net income (loss) by the weighted-average number of common shares and participating securities outstanding during the period. Diluted earnings (loss) per share reflects additional common shares that would have been outstanding if dilutive potential common shares had been issued. Potential common shares that may be issued by the Company include unvested restricted stock, convertible securities, options and warrants, if dilutive.

The following table sets forth the reconciliation of the weighted average number of common shares outstanding to those used to compute basic and diluted earnings (loss) per share for the three-month periods ended March 31, 2009 and 2008:

	Three Months Ended March 31, 2009		Three Months Ended March 31, 2008	
	Basic Earnings Per Share	Diluted Earnings Per Share	Basic Earnings Per Share	Diluted Earnings Per Share
Outstanding shares	71,555,707	71,555,707	68,950,821	68,950,821
Effect of weighting changes in outstanding shares	(168,269)	(168,269)	(1,216,232)	(1,216,232)
Unvested restricted stock	-	-	(450,000)	(450,000)
Stock options	-	1,803,941	-	-
Warrants	-	5,596,328	-	-
Convertible debt	-	11,559,139	-	-
Convertible preferred stock	-	6,000,000	-	-
Adjusted shares	<u>71,387,438</u>	<u>96,346,846</u>	<u>67,284,589</u>	<u>67,284,589</u>

Earnings (loss) per common share for the periods ended March 31, 2009 and 2008 excludes the effects of 14,163,538 and 33,959,645 common share equivalents, respectively, since such inclusion would be anti-dilutive. The excluded shares consist of common shares issuable upon exercise of outstanding stock options and warrants, or upon the conversion of convertible debt and convertible preferred stock.

Effective January 1, 2009, we were required to adopt FASB FSP Emerging Issues Task Force (EITF) 03-6-1, *Determining Whether Instruments Granted in Share-Based Payment Transactions are Participating Securities*. FSP EITF 03-6-1 requires that unvested stock awards which contain nonforfeitable rights to dividends or dividend equivalents, whether paid or unpaid (referred to as “participating securities”), be included in the number of shares outstanding for both basic and diluted earnings per share calculations. Under FSP EITF 03-6-1, the Company’s unvested restricted stock is considered a participating security. All prior period earnings per share data presented is required to be adjusted retrospectively to conform to the provisions of the FSP. In the event of a net loss, the participating securities are excluded from the calculation of both basic and diluted earnings per share. Due to our net loss, 450,000 shares of unvested restricted stock were excluded in determining basic and diluted loss per share for the three-month period ended March 31, 2008.

The following table presents the key factors considered in the calculation of basic and diluted net earnings per common share for the three-month period ended March 31, 2009. There was no difference in basic and diluted loss per share for the three-month period ended March 31, 2008.

	Three Months Ended March 31, 2009		
	Weighted Average		
	Earnings (Numerator)	Shares (Denominator)	Per Share Amount
Net income	\$ 814,121		
Preferred stock dividends	(60,000)		
Basic EPS:			
Income available to common stockholders	754,121	71,387,438	\$ 0.01
Effect of Dilutive Securities:			
Stock options	-	1,803,941	
Warrants	-	5,596,328	
Convertible debt	105,315	11,559,139	
Convertible preferred stock	60,000	6,000,000	
Diluted EPS:			
Income available to common stockholders, including assumed conversions	\$ 919,436	96,346,846	\$ 0.01

6. Inventory

From time to time, we capitalize certain inventory costs associated with our Lymphoseek[®] product prior to regulatory approval and product launch based on management's judgment of probable future commercial use and net realizable value of the inventory. We could be required to permanently write down previously capitalized costs related to pre-approval or pre-launch inventory upon a change in such judgment, due to a denial or delay of approval by regulatory bodies, a delay in commercialization, or other potential factors. Conversely, our gross margins may be favorably impacted if some or all of the inventory previously written down becomes available and is used for commercial sale. During the three-month periods ended March 31, 2009 and 2008, we did not capitalize any inventory costs associated with our Lymphoseek product.

The components of net inventory are as follows:

	March 31, 2009 (unaudited)	December 31, 2008
Materials and component parts	\$ 301,667	\$ 380,912
Finished goods	674,471	580,949
Total	<u>\$ 976,138</u>	<u>\$ 961,861</u>

7. Intangible Assets

The major classes of intangible assets are as follows:

	Wtd Avg Life	March 31, 2009		December 31, 2008	
		Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Patents and trademarks	7.5 yrs	\$ 3,032,667	\$ 1,672,600	\$ 3,020,001	\$ 1,626,516
Acquired technology	0 yrs	237,271	237,271	237,271	237,271
Total		<u>\$ 3,269,938</u>	<u>\$ 1,909,871</u>	<u>\$ 3,257,272</u>	<u>\$ 1,863,787</u>

The estimated amortization expenses for the next five fiscal years are as follows:

	Estimated Amortization Expense
For the year ended 12/31/2009	\$ 170,957
For the year ended 12/31/2010	170,341
For the year ended 12/31/2011	169,224
For the year ended 12/31/2012	168,885
For the year ended 12/31/2013	168,675

8. Product Warranty

We warrant our products against defects in design, materials, and workmanship generally for a period of one year from the date of sale to the end customer, except in cases where the product has a limited use as designed. Our accrual for warranty expenses is adjusted periodically to reflect actual experience and is included in accrued liabilities on the consolidated balance sheets. Our primary marketing partner, Ethicon Endo-Surgery, Inc. (EES), a Johnson & Johnson company, also reimburses us for a portion of warranty expense incurred based on end customer sales they make during a given fiscal year. Payments charged against the reserve are disclosed net of EES' estimated reimbursement.

The activity in the warranty reserve account, included in accrued liabilities and other, for the three-month periods ended March 31, 2009 and 2008 is as follows:

	Three Months Ended March 31,	
	2009	2008
Warranty reserve at beginning of period	\$ 72,643	\$ 115,395
Provision for warranty claims and changes in reserve for warranties	37,109	(14,036)
Payments charged against the reserve	<u>(30,380)</u>	<u>(19,846)</u>
Warranty reserve at end of period	<u>\$ 79,372</u>	<u>\$ 81,513</u>

9. Convertible Securities

In July 2007, David C. Bupp, our President and CEO, and certain members of his family (the Bupp Investors) purchased a \$1.0 million convertible note (the Bupp Note) and warrants. The note bears interest at 10% per annum, had an original term of one year and is repayable in whole or in part with no penalty. The note is convertible, at the option of the Bupp Investors, into shares of our common stock at a price of \$0.31 per share, a 25% premium to the average closing market price of our common stock for the 5 days preceding the closing of the transaction. As part of this transaction, we issued the Bupp Investors Series V Warrants to purchase 500,000 shares of our common stock at an exercise price of \$0.31 per share, expiring in July 2012. The value of the beneficial conversion feature of the note was estimated at \$86,000 based on the effective conversion price at the date of issuance. The fair value of the warrants issued to the investors was approximately \$80,000 on the date of issuance and was determined using the Black-Scholes option pricing model with the following assumptions: an average risk-free interest rate of 4.95%, volatility of 105% and no expected dividend rate. The value of the beneficial conversion feature and the fair value of the warrants issued to the investors were recorded as discounts on the note. We incurred \$43,000 of costs related to completing the Bupp financing, which were recorded in other assets. The discounts and the deferred debt issuance costs were being amortized over the term of the note using the effective interest method.

In December 2007, we executed a Securities Purchase Agreement (SPA) with Platinum Montaur Life Sciences, LLC (Montaur), pursuant to which we issued Montaur: (1) a 10% Series A Convertible Senior Secured Promissory Note in the principal amount of \$7,000,000, due December 26, 2011 (the Series A Note); and (2) a Series W Warrant to purchase 6,000,000 shares of our common stock at an exercise price of \$0.32 per share, expiring in December 2012 (the Series W Warrant). Additionally, pursuant to the terms of the SPA: (1) upon commencement of the Phase 3 clinical studies of Lymphoseek, in April 2008, we issued Montaur a 10% Series B Convertible Senior Secured Promissory Note, due December 26, 2011 (the Series B Note, and hereinafter referred to collectively with the Series A Note as the Montaur Notes), and a five-year warrant to purchase an amount of common stock equal to the number of shares into which Montaur may convert the Series B Note, at an exercise price of 115% of the conversion price of the Series B Note (the Series X Warrant), for an aggregate purchase price of \$3,000,000; and (2) upon obtaining 135 vital blue dye lymph nodes from patients with breast cancer or melanoma who completed surgery with the injection of the drug in a Phase 3 clinical trial of Lymphoseek in December 2008, we issued Montaur 3,000 shares of our 8% Series A Cumulative Convertible Preferred Stock (the Preferred Stock) and a five-year warrant to purchase an amount of common stock equal to the number of shares into which Montaur may convert the Preferred Stock, at an exercise price of 115% of the conversion price of the Preferred Stock (the Series Y Warrant, and hereinafter referred to collectively with the Series W Warrant and Series X Warrant as the Montaur Warrants), also for an aggregate purchase price of \$3,000,000.

In accordance with SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*, the conversion option and two put options associated with the Series A Note were considered derivative instruments and were required to be bifurcated from the Series A Note and accounted for separately. In addition, in accordance with SFAS No. 150, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity*, the Series W Warrant was accounted for as a liability due to the existence of certain provisions in the instrument. As a result, we recorded a total aggregate derivative liability of \$2.6 million on the date of issuance of the Series A Note and Series W Warrant. The fair value of the bifurcated conversion option and put options was approximately \$1.45 million on the date of issuance. The fair value of the Series W Warrant was approximately \$1.15 million on the date of issuance and was determined using the Black-Scholes option pricing model with the following assumptions: an average risk-free interest rate of 3.7%, volatility of 94% and no expected dividend rate.

On March 14, 2008, Neoprobe and Montaur executed amendments to the Series A Note and the Series W Warrant. The amendments eliminated certain minor cash-based penalty provisions in the Series A Note and Series W Warrant which entitled the holders to different compensation than our common shareholders under certain circumstances and qualifying Triggering Events. The provisions that were eliminated and/or modified were the provisions that led to the derivative accounting treatment for the embedded conversion option in the Series A Note and the Series W Warrant. The effect of marking the conversion option and warrant liabilities to "market" at March 14, 2008 resulted in an increase in the estimated fair value of the conversion option and warrant liabilities of \$381,000 which was recorded as non-cash expense during the first quarter of 2008. The estimated fair value of the conversion option and warrant liabilities of \$2.9 million was reclassified to additional paid-in capital during the first quarter of 2008 as a result of the amendments. The estimated fair value of the put option liabilities related to the Series A Note of \$360,000 remained classified as derivative liabilities. The initial aggregate fair value of the conversion option and the put options related to the Series A Note and the fair value of the Series W Warrant of \$2.6 million were recorded as a discount on the note and are being amortized over the term of the note using the effective interest method.

In April 2008, we completed the second closing under the December 2007 Montaur SPA, as amended, pursuant to which we issued Montaur a 10% Series B Convertible Senior Secured Promissory Note in the principal amount of \$3,000,000, due December 26, 2011; and a Series X Warrant to purchase 8,333,333 shares of our common stock at an exercise price of \$0.46 per share, expiring in April 2013. The two put options related to the Series B Note were considered derivative instruments and were required to be bifurcated from the Series B Note and accounted for separately. The fair value of the bifurcated put options was approximately \$258,000 on the date of issuance. The value of the beneficial conversion feature of the Series B Note was estimated at \$1.44 million based on the effective conversion price at the date of issuance. The fair value of the Series X Warrant was approximately \$1.28 million on the date of issuance and was determined using the Black-Scholes option pricing model with the following assumptions: an average risk-free interest rate of 2.6%, volatility of 95% and no expected dividend rate. The initial aggregate fair value of the beneficial conversion feature and put options related to the Series B Note, and the fair value of the Series X Warrant of \$2.98 million were recorded as discounts on the note and are being amortized over the term of the note using the effective interest method. We incurred \$188,000 of costs related to completing the second Montaur financing, which were recorded in other assets on the consolidated balance sheet. The deferred financing costs are being amortized using the effective interest method over the term of the note.

In December 2008, after we obtained 135 vital blue dye lymph nodes from patients who had completed surgery and the injection of Lymphoseek in a Phase 3 clinical trial in patients with breast cancer or melanoma, we issued Montaur 3,000 shares of our 8% Preferred Stock and a five-year Series Y warrant to purchase 6,000,000 shares of our common stock, at an exercise price of \$0.575 per share, for an aggregate purchase price of \$3,000,000. The "Liquidation Preference Amount" for the Preferred Stock is \$1,000 and the "Conversion Price" of the Preferred Stock was set at \$0.50 on the date of issuance, thereby making the shares of Preferred Stock convertible into an aggregate 6,000,000 shares of our common stock, subject to adjustment as described in the Certificate of Designations. The value of the beneficial conversion feature of the Preferred Stock was estimated at \$1.55 million based on the effective conversion price at the date of issuance. The put option was considered a derivative instrument and was required to be bifurcated from the Preferred Stock and accounted for separately. The fair value of the bifurcated put option was approximately \$216,000 on the date of issuance. The fair value of the Series Y warrant was approximately \$2.07 million on the date of issuance and was determined using the Black-Scholes option pricing model with the following assumptions: an average risk-free interest rate of 1.7%, volatility of 74% and no expected dividend rate. The relative fair value of the warrant, the amount recorded to equity in accordance with Accounting Principles Board Opinion No. 14, *Accounting for Convertible Debt and Debt Issued with Stock Purchase Warrants*, was \$1.13 million.

In accordance with EITF Topic D-98, *Classification and Measurement of Redeemable Securities*, the Preferred Stock was classified as temporary equity as the shares are subject to redemption under the contingent put option. The initial intrinsic value of the beneficial conversion feature and put option related to the Preferred Stock and the initial relative fair value of the Series Y warrant of \$1.13 million were recorded as deemed distributions and added to the accumulated deficit. We incurred \$180,000 of costs related to completing the third Montaur financing, which were recorded as a reduction of additional paid-in capital on the consolidated balance sheet.

In connection with the SPA, Montaur requested that the term of the \$1.0 million Bupp Note be extended until at least one day following the maturity date of the Montaur Notes. In consideration for the Bupp Investors' agreement to extend the term of the Bupp Note pursuant to an Amendment to the Bupp Purchase Agreement, dated December 26, 2007, we agreed to provide security for the obligations evidenced by the Amended 10% Convertible Note in the principal amount of \$1,000,000, due December 31, 2011, executed by Neoprobe in favor of the Bupp Investors (the Amended Bupp Note), under the terms of a Security Agreement, dated December 26, 2007, by and between Neoprobe and the Bupp Investors (the Bupp Security Agreement). As further consideration for extending the term of the Bupp Note, we issued the Bupp Investors Series V Warrants to purchase 500,000 shares of our common stock at an exercise price of \$0.32 per share, expiring in December 2012. The fair value of the warrants issued to the Bupp Investors was approximately \$96,000 on the date of issuance and was determined using the Black-Scholes option pricing model with the following assumptions: an average risk-free interest rate of 3.72%, volatility of 94% and no expected dividend rate. The fair value of the warrants was recorded as a discount on the note and is being amortized over the term of the note using the effective interest method. We treated the amendment to the Bupp Note as an extinguishment of debt for accounting purposes. As such, the remaining discount resulting from the value of the beneficial conversion feature and the fair value of the warrants and the remaining unamortized deferred financing costs associated with the original note were written off as a loss on extinguishment of debt in December 2007.

Effective January 1, 2009, we were required to adopt new accounting guidance that clarified the determination of whether equity-linked instruments (or embedded features), such as our convertible securities and warrants to purchase our common stock, are considered indexed to our own stock. As a result of adopting such guidance, certain embedded features of our convertible securities, as well as warrants to purchase our common stock, that were previously treated as equity are now considered derivative liabilities. See Note 10.

During the three-month periods ended March 31, 2009 and 2008, we recorded interest expense of \$151,000 and \$104,000, respectively, related to amortization of the debt discount related our convertible notes. During the three-month periods ended March 31, 2009 and 2008, we recorded interest expense of \$29,000 and \$26,000, respectively, related to amortization of the deferred financing costs related to our convertible notes.

10. Derivative Instruments

We account for derivative instruments in accordance with SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*, which provides accounting and reporting standards for derivative instruments, including certain derivative instruments embedded in other contracts. We do not use derivative instruments for hedging of market risks or for trading or speculative purposes. Effective January 1, 2009, we were required to adopt EITF Issue No. 07-5, *Determining Whether an Instrument (or Embedded Feature) is Indexed to an Entity's Own Stock*. EITF Issue No. 07-5 clarified the determination of whether equity-linked instruments (or embedded features), such as our convertible securities and warrants to purchase our common stock, are considered indexed to our own stock, which would qualify as a scope exception under SFAS No. 133. As a result of adopting EITF Issue No. 07-5, certain embedded features of our convertible securities, as well as warrants to purchase our common stock, that were previously treated as equity are now considered derivative liabilities.

The impact of adopting EITF Issue No. 07-5 is summarized in the following table:

	December 31, 2008	Impact of Adopting EITF Issue No. 07-5	January 1, 2009
Other assets	\$ 594,449	\$ 2,104	\$ 596,553
Total assets	<u>\$ 9,619,450</u>		<u>\$ 9,621,554</u>
Notes payable to investors, net of discounts	\$ 4,998,851	(54,396)	\$ 4,944,455
Derivative liabilities	853,831	13,017,540	13,871,371
Total liabilities	<u>\$ 9,645,175</u>		<u>\$ 22,608,319</u>
Additional paid-in capital	\$ 145,742,044	(8,948,089)	\$ 136,793,955
Accumulated deficit	<u>(148,840,015)</u>	<u>(4,012,951)</u>	<u>(152,852,966)</u>
Total stockholders' deficit	<u>\$ (3,025,725)</u>		<u>\$ (15,986,765)</u>

Convertible Notes – other assets increased \$2,104, notes payable to investors, net of discount, increased \$518,229, derivative liabilities increased \$4,146,392, additional paid-in capital decreased \$2,843,781, and accumulated deficit increased \$1,818,736.

Convertible Preferred Stock – derivative liabilities increased \$1,158,095, additional paid-in capital decreased \$1,550,629, and accumulated deficit decreased \$392,534.

Warrants – notes payable to investors, net of discount, decreased \$572,625, derivative liabilities increased \$7,713,053, additional paid-in capital decreased \$4,553,679, and accumulated deficit increased \$2,586,749.

The estimated fair values of the derivative liabilities are recorded as non-current liabilities on the consolidated balance sheet. Changes in the estimated fair values of the derivative liabilities are recorded in the consolidated statement of operations. The effect of marking the derivative liabilities to “market” at March 31, 2009 resulted in a net decrease in the estimated fair values of the derivative liabilities of \$1.5 million which was recorded as non-cash income during the first quarter of 2009. The total estimated fair value of the derivative liabilities was \$12.3 million as of March 31, 2009. See Note 9.

11. Stock Warrants

During the first quarter of 2009, David C. Bupp, our President and CEO, exercised 50,000 Series Q Warrants in exchange for issuance of 50,000 shares of our common stock, resulting in gross proceeds of \$25,000. The remaining 325,000 Series Q Warrants expired during the quarter.

At March 31, 2009, there are 23.1 million warrants outstanding to purchase our common stock. The warrants are exercisable at prices ranging from \$0.31 to \$0.85 per share with a weighted average exercise price of \$0.45 per share.

12. Income Taxes

We account for uncertainty in income taxes in accordance with Financial Interpretation (FIN) No. 48, *Accounting for Uncertainty in Income Taxes – an Interpretation of FASB Statement No. 109*. FIN 48 clarifies the accounting for uncertainty in income taxes recognized in the financial statements in accordance with SFAS No. 109, *Accounting for Income Taxes*. FIN 48 also prescribes a recognition threshold and measurement model for the financial statement recognition of a tax position taken, or expected to be taken, and provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. No adjustment was made to the beginning retained earnings balance as the ultimate deductibility of all tax positions is highly certain, although there is uncertainty about the timing of such deductibility. As a result, no liability for uncertain tax positions was recorded as of March 31, 2009. Should we need to accrue interest or penalties on uncertain tax positions, we would recognize the interest as interest expense and the penalties as a selling, general and administrative expense.

13. Segment and Subsidiary Information

We report information about our operating segments using the “management approach” in accordance with SFAS No. 131, *Disclosures about Segments of an Enterprise and Related Information*. This information is based on the way management organizes and reports the segments within the enterprise for making operating decisions and assessing performance. Our reportable segments are identified based on differences in products, services and markets served. There were no inter-segment sales. We own or have rights to intellectual property involving two primary types of medical device products, including oncology instruments currently used primarily in the application of sentinel lymph node biopsy, and blood flow measurement devices. We also own or have rights to intellectual property related to several drug and therapy products.

The information in the following table is derived directly from each reportable segment's financial reporting.

<i>(\$ amounts in thousands)</i>					
Three Months Ended March 31, 2009	Oncology Devices	Blood Flow Devices	Drug and Therapy Products	Corporate	Total
Net sales:					
United States ¹	\$ 2,553	\$ 29	\$ -	\$ -	\$ 2,582
International	104	14	-	-	118
Research and development expenses	294	16	928	-	1,238
Selling, general and administrative expenses, excluding depreciation and amortization ²	34	15	-	752	801
Depreciation and amortization	37	48	1	15	101
Income (loss) from operations	1,491	(58)	(929)	(768)	(264)
Other income (expenses) ⁴	-	-	-	1,078	1,078
Total assets, net of depreciation and amortization:					
United States operations	2,526	411	24	4,793	7,754
Israeli operations (Cardiosonix Ltd.)	-	1,317	-	-	1,317
Capital expenditures	-	-	-	40	40

<i>(\$ amounts in thousands)</i>					
Three Months Ended March 31, 2008	Oncology Devices	Blood Flow Devices	Drug and Therapy Products	Corporate	Total
Net sales:					
United States ¹	\$ 1,732	\$ 3	\$ -	\$ -	\$ 1,735
International	11	37	-	-	48
Research and development expenses	164	69	331	-	564
Selling, general and administrative expenses, excluding depreciation and amortization ²	-	-	-	779	779
Depreciation and amortization	23	64	-	9	96
Income (loss) from operations ³	932	(128)	(331)	(789)	(316)
Other income (expenses) ⁴	-	-	-	(710)	(710)
Total assets, net of depreciation and amortization:					
United States operations	1,751	664	186	2,247	4,848
Israeli operations (Cardiosonix Ltd.)	-	1,510	-	-	1,510
Capital expenditures	2	-	-	14	16

¹ All sales to EES are made in the United States. EES distributes the product globally through its international affiliates.

² General and administrative costs, excluding depreciation and amortization, represent costs that relate to the general administration of the Company and as such are not currently allocated to our individual reportable segments. Beginning in the third quarter of 2008, marketing and selling costs are allocated to our individual reportable segments.

³ Income (loss) from operations does not reflect the allocation of selling, general and administrative expenses, excluding depreciation and amortization, to the operating segments.

⁴ Amounts consist primarily of interest income, interest expense and changes in derivative liabilities which are not currently allocated to our individual reportable segments.

14. Supplemental Disclosure for Statements of Cash Flows

During the three-month periods ended March 31, 2009 and 2008, we paid interest aggregating \$111,000 and \$144,000, respectively. During the three-month periods ended March 31, 2009 and 2008, we transferred \$15,000 and \$31,000, respectively, of inventory to fixed assets related to the creation and maintenance of a pool of service loaner equipment. During the three-month period ended March 31, 2009, we issued 152,066 shares of our common stock as payment of interest on our convertible debt. During the three-month period ended March 31, 2008, we issued 114,921 shares of our common stock as a matching contribution to our 401(k) plan.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Forward-Looking Statements

From time to time, our representatives and we may make written or verbal forward-looking statements, including statements contained in this report and other Company filings with the SEC and in our reports to stockholders. Statements that relate to other than strictly historical facts, such as statements about our plans and strategies, expectations for future financial performance, new and existing products and technologies, anticipated clinical and regulatory pathways, and markets for our products are forward-looking statements. Generally, the words "believe," "expect," "intend," "estimate," "anticipate," "will" and other similar expressions identify forward-looking statements. The forward-looking statements are and will be based on our then-current views and assumptions regarding future events and operating performance, and speak only as of their dates. 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, our continuing operating losses, uncertainty of market acceptance of our 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 our most recent Annual Report on Form 10-K and other SEC filings. We undertake no obligation to publicly update or revise any forward-looking statements.

The Company

Neoprobe Corporation is a biomedical technology company that provides innovative surgical and diagnostic products that enhance patient care. We currently market two lines of medical devices; our neo2000[®] and neoprobe[®] GDS gamma detection systems and the Quantix[®] line of blood flow measurement devices of our wholly-owned subsidiary, Cardiosonix Ltd. (Cardiosonix). In addition to our medical device products, we have two radiopharmaceutical products, Lymphoseek[®] and RIGScan[®] CR, in the advanced phases of clinical development. We are also exploring the development of our activated cellular therapy (ACT) technology for patient-specific disease treatment through our majority-owned subsidiary, Cira Biosciences, Inc. (Cira Bio).

Product Line Overview

This Overview section contains a number of forward-looking statements, all of which are based on current expectations. Actual results may differ materially. Our financial performance is highly dependent on our ability to continue to generate income and cash flow from our medical device product lines. We cannot assure you that we will achieve the volume of sales anticipated, or if achieved, that the margin on such sales will be adequate to produce positive operating cash flow.

We believe that the future prospects for Neoprobe continue to improve as we make progress in all of our key growth areas. Despite the current global economic downturn, we continue to expect our gamma device line to provide a strong revenue base during 2009, although sales levels for the remainder of 2009 may be lower than historical levels. We also do not expect sales of our blood flow measurement devices to increase in 2009 over 2008. We believe we have minimized the potential negative cash flow impact of the blood flow line on our ongoing business as we evaluate other strategic options for the product line. Our primary development efforts over the last few years have been focused on our oncology drug development initiatives: Lymphoseek and RIGScan CR. We continue to make progress with both initiatives; however, neither Lymphoseek nor RIGScan CR are anticipated to generate any significant revenue for us during 2009.

Our operating expenses during the first three months of 2009 were focused primarily on support of Lymphoseek product development. In addition, we continued to modestly invest in our gamma detection device line related to product line expansion and innovation. We expect our drug-related development expenses to increase significantly over the remainder of 2009 as we continue the multi-center Phase 3 clinical evaluations of Lymphoseek and support the other drug stability and production validation activities related to supporting the potential marketing registration of Lymphoseek. We expect to continue to incur modest development expenses to support our device product lines as well as we work with our marketing partners to expand our product offerings in the gamma device arena. We expect to continue to limit our financial support for our blood flow measurement products during the remainder of 2009.

Our efforts thus far in 2009 have resulted in the following research and development milestone achievements:

- Achievement of target enrollment in a Phase 3 (NEO3-05) clinical evaluation of Lymphoseek in patients with breast cancer or melanoma
- Assessment of preliminary data that the NEO3-05 clinical study achieved its primary efficacy end-point

In June 2008, we initiated the NEO3-05 study, which was the first of two Phase 3 studies to support the filing of a new drug application for Lymphoseek. This first trial was conducted in patients with either breast cancer or melanoma and was designed to monitor the concordance of Lymphoseek uptake in lymph nodes with the uptake of vital blue dye in the same lymph nodes. In March 2009, we announced that we had reached the original patient accrual target and, based on a review of preliminary data, achieved the efficacy endpoint for the trial.

In addition, we have provided the U.S. Food and Drug Administration (FDA) and the centralized European Medicinal Evaluation Agency (EMA) with the full protocol and associated materials for a second Phase 3 study to be conducted in patients with head and neck squamous cell carcinoma. This second Phase 3 study is designed to validate Lymphoseek as a sentinel lymph node targeting agent. Our discussions with FDA and EMA have also suggested that the Phase 3 trials will support an intended use of Lymphoseek in sentinel lymph node biopsy procedures. We believe such an indication would be beneficial to the marketing and commercial adoption of Lymphoseek in the U.S. and European Union (EU). We plan to use the safety and efficacy results from the Phase 3 clinical evaluations of Lymphoseek, which will include sites in the EU, to support the drug registration application process in the EU as well as in the U.S. We plan to have approximately 25 – 35 participating institutions in the trial, which we hope will enable us to enroll patients at a fairly rapid rate. The trial protocol is currently under review at a number of these institutions. We expect to receive our first institutional review board clearance at a participating institution shortly and expect patient accrual to commence during the second quarter of 2009. Our goal is to file the new drug application for Lymphoseek in early 2010; however, this will be dependent upon our ability to commence and successfully conclude the second Phase 3 clinical study in a timely fashion. Depending on the timing and outcome of the FDA regulatory review cycle, we believe that Lymphoseek can be commercialized by early- to mid-2011. We cannot assure you, however, that this product will achieve regulatory approval, or if approved, that it will achieve market acceptance.

Over the past few years, we have made progress in advancing our RIGScan CR development program while incurring minimal research expenses. Our RIGS[®] technology, which had been essentially inactive since failing to gain approval following our original license application in 1997, has been the subject of renewed interest due primarily to the analysis of survival data related to patients who participated in the original Phase 3 clinical studies that were completed in 1996. After a successful pre-submission meeting with EMA in July 2008, we submitted a plan during the third quarter on how we would propose to complete clinical development plan for RIGScan CR. The clinical protocol we submitted to EMA involves approximately 400 patients in a randomized trial of patients with colorectal cancer. The participants in the trial would be randomized to either a control or RIGS treatment arm. Patients randomized to the RIGS arm would have their disease status evaluated at the end of their cancer surgery to determine the presence or absence of RIGS-positive tissue. Patients in both randomized arms would be followed to determine if patients with RIGS-positive status have a lower overall survival rate and/or a higher occurrence of disease recurrence. The hypothesis for the trial is based upon the data from the earlier NEO2-13 and NEO2-14 trial results.

We continue to believe it will be necessary for us to identify a development partner or an alternative funding source in order to prepare for and fund the pivotal clinical testing that will be necessary to gain marketing clearance for RIGScan CR. In the past, we have engaged in discussions with various parties regarding such a partnership. We believe the recently clarified regulatory pathway approved by EMEA will assist us in those efforts. However, even if we are able to make such arrangements on satisfactory terms, we believe that the time required for continued development, regulatory approval and commercialization of a RIGS product would likely be a minimum of five years before we receive any significant product-related royalties or revenues. We cannot assure you that we will be able to complete definitive agreements with a development partner or obtain financing to fund development of the RIGS technology and do not know if such arrangements could be obtained on a timely basis on terms acceptable to us, or at all. We also cannot assure you that FDA or EMEA will clear our RIGS products for marketing or that any such products will be successfully introduced or achieve market acceptance.

In 2005, we formed a new subsidiary, Cira Bio, to explore the development of ACT. Neoprobe owns approximately 90% of the outstanding shares of Cira Bio with the remaining shares being held by the principals of a private holding company, Cira LLC. In conjunction with the formation of Cira Bio, an amended technology license agreement also was executed with The Ohio State University, from whom both Neoprobe and Cira LLC had originally licensed or optioned the various cellular therapy technologies. As a result of the cross-license agreements, Cira Bio has the exclusive development and commercialization rights to three issued U.S. patents that cover the oncology and autoimmune applications of its technology. In addition, Cira Bio has exclusive licenses to several pending patent applications. We hope to identify a funding source to continue Cira Bio's development efforts. If we are successful in identifying a funding source, we expect that any funding would likely be accomplished by an investment directly into Cira Bio, so that the funds raised would not dilute current Neoprobe shareholders. Obtaining this funding would likely dilute Neoprobe's ownership interest in Cira Bio; however, we believe that moving forward such a promising technology will only yield positive results for the Neoprobe stockholders and the patients who could benefit from these treatments. However, we do not know if we will be successful in obtaining funding on terms acceptable to us, or at all. In the event we fail to obtain financing for Cira Bio, the technology rights for the oncology applications of ACT may revert back to Neoprobe and the technology rights for the viral and autoimmune applications may revert back to Cira LLC upon notice by either party.

We expect that sales from our medical devices will result in a net profit in 2009 for those lines of business, excluding general and administrative costs, interest and other financing-related charges. Our overall operating results for 2009 will also be greatly affected by the amount of development of our radiopharmaceutical products. Primarily as a result of the significant development costs we expect to incur related to the continued clinical development of Lymphoseek, we do not expect to achieve operating profit during 2009. In addition, our net loss and loss per share will likely be significantly impacted by the non-cash expense we expect to record due to the accounting treatment for the derivative liabilities related to the convertible debt we issued in December 2007 and April 2008 and the convertible preferred stock we issued in December 2008. We cannot assure you that our current or potential new products will be successfully commercialized, that we will achieve significant product revenues, or that we will achieve or be able to sustain profitability in the future.

Results of Operations

Revenue for the first quarter of 2009 increased to \$2.7 million from \$1.8 million for the same period in 2008. Research and development expenses, as a percentage of net sales, increased to 46% during the first quarter of 2009 from 32% during the same period in 2008. Selling, general and administrative expenses, as a percentage of net sales, decreased to 33% during the first quarter of 2009 from 49% during the same period in 2008. Due to the ongoing development activities of the Company, research and development expenses as a percentage of sales are expected to be higher in 2009 than they were in 2008.

Net Sales and Margins. Net sales, comprised primarily of sales of our gamma detection systems, increased \$917,000, or 51%, to \$2.7 million during the first quarter of 2009 from \$1.8 million during the same period in 2008. Gross margins on net sales increased to 69% of net sales for the first quarter of 2009 compared to 63% of net sales for the same period in 2008.

The increase in net sales was primarily the result of increased gamma detection device sales of \$890,000 due to increased prices and unit sales of our control units. The price at which we sell our gamma detection products to our primary marketing partner, Ethicon Endo-Surgery, Inc. (EES), a Johnson & Johnson company, is based on a percentage of the global average selling price (ASP) received by EES on sales of Neoprobe products to end customers, subject to a minimum floor price. Beginning in January 2009, Neoprobe is receiving an increased percentage of ASP for certain products under the terms of our amended distribution agreement with EES. In addition, the increase in unit sales can in large part be attributed to inventory restocking by EES following depletion of their stock to below normal levels at the end of 2008.

The increase in gross margins on net product sales was due to a combination of factors including the increased percentage of ASP received by Neoprobe from EES. Gross margins in 2008 were also positively affected by four percentage points due to better than expected warranty experience during the post-launch period of our new wireless probes, and decreased production-related costs of wireless probes.

License and Other Revenue. License and other revenue for the first quarter of 2009 included \$25,000 from the pro-rata recognition of license fees related to the renewed distribution agreement with EES. No license or other revenue was recognized during the first quarter of 2008.

Research and Development Expenses. Research and development expenses increased \$674,000, or 120%, to \$1.2 million during the first quarter of 2009 from \$564,000 during the same period in 2008. Research and development expenses in the first quarter of 2009 included approximately \$928,000 in drug and therapy product development costs, \$294,000 in gamma detection device development costs, and \$16,000 in product design and support activities for the Quantix products. This compares to expenses of \$331,000, \$164,000 and \$69,000 in these segment categories during the same period in 2008. The changes in each category were primarily due to (i) increased clinical activities related to Lymphoseek due to costs related to the Phase 3 clinical trials in the first quarter of 2009 being higher than costs of preparation for Phase 3 clinical trials in the first quarter of 2008, (ii) development costs of our new high energy detection probe in the first quarter of 2009, and (iii) decreased product refinement activities related to our Quantix devices, respectively.

Selling, General and Administrative Expenses. Selling, general and administrative expenses increased \$27,000, or 3%, to \$902,000 during the first quarter of 2009 from \$875,000 during the same period in 2008. The net difference was due primarily to increases in investor relations costs and utilities offset by decreases in consulting services and amortization of intangible assets.

Other Income (Expenses). Other income, net, was \$1.1 million during the first quarter of 2009 as compared to other expenses, net of \$710,000 during the same period in 2008. During the first quarter of 2009, we recorded a \$1.5 million decrease in derivative liabilities resulting from the accounting treatment for the convertible debt agreements we executed in December 2007 and April 2008, the convertible preferred stock we issued in December 2008, and the related warrants to purchase our common stock, which contained certain provisions that resulted in their being treated as derivative liabilities under new accounting guidance effective January 1, 2009. During the first quarter of 2008, we recorded a \$387,000 decrease in derivative liabilities. Interest expense, primarily related to the convertible debt agreements we completed in December 2007 and April 2008, increased \$125,000 to \$457,000 during the first quarter of 2009 from \$332,000 for the same period in 2008. Of this interest expense, \$180,000 and \$129,000 in the first quarters of 2008 and 2007, respectively, was non-cash in nature related to the amortization of debt issuance costs and discounts resulting from the warrants and conversion features of the convertible debt. An additional \$167,000 of interest expense in the first quarter of 2009 was non-cash in nature due to the payment or accrued payment of interest on our convertible debt with shares of our common stock.

Liquidity and Capital Resources

Cash and investment balances decreased to \$3.5 million at March 31, 2009 from \$4.1 million at December 31, 2008. The net decrease was primarily due to cash used to fund our operations, mainly for research and development activities, and to service our outstanding debt. The current ratio decreased slightly to 3.0:1 at March 31, 2009 from 3.1:1 at December 31, 2008.

Operating Activities. Cash used in operations increased \$374,000 to \$416,000 during the first quarter of 2009 compared to \$42,000 during the same period in 2008.

Accounts receivable increased to \$1.7 million at March 31, 2009 from \$1.6 million at December 31, 2008. The increase was primarily a result of normal fluctuations in timing of purchases and payments by EES. We expect overall receivable levels will continue to fluctuate during 2009 depending on the timing of purchases and payments by EES.

Inventory levels increased slightly to \$976,000 at March 31, 2009 from \$962,000 at December 31, 2008. Gamma detection device materials decreased as materials were converted into finished devices resulting in higher finished device inventory levels to support increased sales activity. Blood flow measurement device materials decreased as they were sold to our contract manufacturer in preparation for building finished devices in the second quarter of 2009. Blood flow finished device inventory also decreased as a result of sales. We expect inventory levels to increase during 2009 as a result of the planned production of a commercial-grade inventory of Lymphoseek.

Investing Activities. Investing activities provided \$441,000 during the first quarter of 2009 compared to \$16,000 used during the same period in 2008. Available-for-sale securities of \$494,000 matured during the first quarter of 2009. Capital expenditures of \$40,000 during the first quarter of 2009 were primarily for software, computers, and office furniture. Capital expenditures of \$16,000 during the first quarter of 2008 were primarily for computers and software. We expect our overall capital expenditures for 2009 will be higher than 2008 as we prepare for the commercial production of Lymphoseek. Payments for patent and trademark costs were \$13,000 during the first quarter of 2009.

Financing Activities. Financing activities used \$42,000 during the first quarter of 2009 compared to \$46,000 provided during the first quarter of 2008. Proceeds from the issuance of common stock were \$26,000 and \$114,000 during the first quarter of 2009 and 2008, respectively. Payments of notes payable were \$51,000 and \$53,000 during the first quarter of 2009 and 2008, respectively. Payments of common stock offering costs and preferred stock offering costs were \$7,000 and \$6,000, respectively, during the first quarter of 2009. Payments of debt issuance costs were \$11,000 during the first quarter of 2008.

In December 2006, we entered into a common stock purchase agreement with Fusion Capital, an Illinois limited liability company, to sell \$6.0 million of our common stock to Fusion Capital over a 24-month period which ended on November 21, 2008. Through November 21, 2008, we sold to Fusion Capital under the agreement 7,568,671 shares for proceeds of \$1.9 million. In December 2008, we entered into an amendment to the agreement which gave us a right to sell an additional \$6.0 million of our common stock to Fusion Capital before March 1, 2011, along with the \$4.1 million of the unsold balance of the \$6.0 million we originally had the right to sell to Fusion Capital under the original agreement. After giving effect to this amendment, the remaining aggregate amount of our common stock we can sell to Fusion Capital is \$10.1 million. We have reserved a total of 10,654,000 shares of our common stock in respect to potential sales of common stock we may make to Fusion Capital in the future under the amended agreement.

In December 2006, we issued to Fusion Capital 720,000 shares of our common stock as a commitment fee upon execution of the original agreement. As sales of our common stock were made under the original agreement, we issued an additional 234,000 shares of our common stock to Fusion Capital as an additional commitment fee. In connection with entering into the amendment, we issued an additional 360,000 shares in consideration for Fusion Capital's entering into the amendment. Also, as an additional commitment fee, we have agreed to issue to Fusion Capital an additional 486,000 shares of our common stock pro rata as we sell the first \$4.1 million of our common stock to Fusion Capital under the amended agreement.

In July 2007, David C. Bupp, our President and CEO, and certain members of his family (the Bupp Investors) purchased a \$1.0 million convertible note (the Bupp Note) and warrants. The note bears interest at 10% per annum, had an original term of one year and is repayable in whole or in part with no penalty. The note is convertible into shares of our common stock at a price of \$0.31 per share, a 25% premium to the average closing market price of our common stock for the 5 days preceding the closing of the transaction. As part of this transaction, we issued the Bupp Investors Series V Warrants to purchase 500,000 shares of our common stock at an exercise price of \$0.31 per share, expiring in July 2012.

In December 2007, we entered into a Securities Purchase Agreement (SPA) with Platinum Montaur Life Sciences, LLC (Montaur), pursuant to which we issued Montaur a 10% Series A Convertible Senior Secured Promissory Note in the principal amount of \$7,000,000, due December 26, 2011 (the Series A Note) and a five-year Series W Warrant to purchase 6,000,000 shares of our common stock, \$.001 par value per share, at an exercise price of \$0.32 per share. Montaur may convert \$3.5 million of the Series A Note into shares of our common stock at the conversion price of \$0.26 per share. The SPA also provided for two further tranches of financing, a second tranche of \$3 million in exchange for a 10% Series B Convertible Senior Secured Promissory Note along with a five-year Series X Warrant to purchase shares of our common stock, and a third tranche of \$3 million in exchange for 3,000 shares of our 8% Series A Cumulative Convertible Preferred Stock and a five-year Series Y Warrant to purchase shares of our common stock. Closings of the second and third tranches were subject to the satisfaction by the Company of certain milestones related to the progress of the Phase 3 clinical trials of our Lymphoseek radiopharmaceutical product.

In April 2008, following receipt by the Company of clearance by FDA to commence a Phase 3 clinical trial for Lymphoseek in patients with breast cancer or melanoma, we amended the SPA related to the second tranche and issued Montaur a 10% Series B Convertible Senior Secured Promissory Note in the principal amount of \$3,000,000, also due December 26, 2011 (the Series B Note, and hereinafter referred to collectively with the Series A Note as the Montaur Notes), and a five-year Series X Warrant to purchase 8,333,333 shares of our common stock at an exercise price of \$0.46 per share. Montaur may convert the Series B Note into shares of our common stock at the conversion price of \$0.36 per share. Provided we have satisfied certain conditions stated therein, we may elect to make payments of interest due under the Montaur Notes in registered shares of our common stock. If we choose to make interest payments in shares of common stock, the number of shares of common stock to be applied against any such interest payment will be determined by reference to the quotient of (a) the applicable interest payment divided by (b) 90% of the average daily volume weighted average price of our common stock on the OTCBB (or national securities exchange, if applicable) as reported by Bloomberg Financial L.P. for the five days upon which our common stock is traded on the OTCBB immediately preceding the date of the interest payment.

In December 2008, after we obtained 135 vital blue dye lymph nodes from patients who had completed surgery and the injection of the drug in a Phase 3 clinical trial of Lymphoseek in patients with breast cancer or melanoma, we issued Montaur 3,000 shares of our 8% Series A Cumulative Convertible Preferred Stock (the Preferred Stock) and a five-year Series Y Warrant (hereinafter referred to collectively with the Series W Warrant and Series X Warrant as the Montaur Warrants) to purchase 6,000,000 shares of our common stock, at an exercise price of \$0.575 per share, also for an aggregate purchase price of \$3,000,000. Montaur may convert each share of the Preferred Stock into a number of shares of our common stock equal to the quotient of (a) the Liquidation Preference Amount of the shares of Preferred Stock by (b) the Conversion Price. The "Liquidation Preference Amount" for the Preferred Stock is \$1,000 and the "Conversion Price" of the Preferred Stock was set at \$0.50 on the date of issuance, thereby making the shares of Preferred Stock convertible into an aggregate 6,000,000 shares of our common stock, subject to adjustment as described in the Certificate of Designations, Voting Powers, Preferences, Limitations, Restrictions, and Relative Rights of Series A 8% Cumulative Convertible Preferred Stock. We may elect to pay dividends due to Montaur on the shares of Preferred Stock in registered shares of our common stock. The number of shares of common stock to be applied against any such dividend payment will be determined by reference to the quotient of (a) the applicable dividend payment by (b) 90% of the average daily volume weighted average price of our common stock on the OTCBB (or national securities exchange, if applicable) as reported by Bloomberg Financial L.P. for the five days upon which our common stock is traded on the OTCBB immediately preceding the date of the dividend payment.

In connection with the Montaur SPA, the term of the \$1.0 million Bupp Note was extended to December 27, 2011, one day following the maturity date of the Montaur Notes. In consideration for the Bupp Investors' agreement to extend the term of the Bupp Note pursuant to an Amendment to the Bupp Purchase Agreement, dated December 26, 2007, we agreed to provide security for the obligations evidenced by the Amended 10% Convertible Note in the principal amount of \$1,000,000, due December 31, 2011, executed by Neoprobe in favor of the Bupp Investors (the Amended Bupp Note), under the terms of a Security Agreement, dated December 26, 2007, by and between Neoprobe and the Bupp Investors (the Bupp Security Agreement). This security interest is subordinate to the Security interest of Montaur. As further consideration for extending the term of the Bupp Note, we issued the Bupp Investors Series V Warrants to purchase 500,000 shares of our common stock at an exercise price of \$0.32 per share, expiring in December 2012. The Amended Bupp Note had an outstanding principal amount of \$1.0 million on March 31, 2009, and an outstanding principal amount of \$1.0 million as of May 8, 2009. During the first quarter of 2009, we paid none of the outstanding principal and paid \$25,000 in interest due under the Amended Bupp Note.

Our future liquidity and capital requirements will depend on a number of factors, including our ability to expand market acceptance of our current products, our ability to complete the commercialization of new products, our ability to monetize our investment in non-core technologies, our ability to obtain milestone or development funds from potential development and distribution partners, regulatory actions by FDA and international regulatory bodies, and intellectual property protection. Our most significant near-term development priority is to initiate the second Phase 3 trial. We believe our current funds and available capital resources will be adequate to complete our Lymphoseek development efforts and sustain our operations at planned levels through 2009. We are also in the process of determining the total development cost necessary to commercialize RIGScan CR but believe that it will require commitments of between \$3 million to \$5 million to restart manufacturing and other activities necessary to prepare for the Phase 3 clinical trial contemplated in the recent EMEA scientific advice response. We may be able to raise additional funds through a stock purchase agreement with Fusion Capital to supplement our capital needs. However, the extent to which we rely on Fusion Capital as a source of funding will depend on a number of factors, including the prevailing market price of our common stock and the extent to which we are able to secure working capital from other sources. Specifically, Fusion Capital does not have the right or the obligation to purchase any shares of our common stock on any business day that the market price of our common stock is less than \$0.20 per share. We cannot assure you that we will be successful in raising additional capital through Fusion Capital or any other sources at terms acceptable to the Company, or at all. We also cannot assure you that we will be able to successfully commercialize products, that we will achieve significant product revenues from our current or potential new products or that we will achieve or sustain profitability in the future.

Recent Accounting Developments

In September 2006, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 157, *Fair Value Measurements*. SFAS No. 157 defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. SFAS No. 157 applies under other accounting pronouncements that require or permit fair value measurements, the FASB having previously concluded in those accounting pronouncements that fair value is the relevant measurement attribute. Accordingly, SFAS No. 157 does not require any new fair value measurements. SFAS No. 157 was initially effective for Neoprobe beginning January 1, 2008. In February 2008, the FASB approved the issuance of FASB Staff Position (FSP) FAS 157-2. FSP FAS 157-2 allowed entities to electively defer the effective date of SFAS No. 157 until January 1, 2009 for nonfinancial assets and nonfinancial liabilities except those items recognized or disclosed at fair value on at least an annual basis. We began applying the fair value measurement and disclosure provisions of SFAS No. 157 to nonfinancial assets and liabilities effective January 1, 2009. The application of such was not material to our consolidated results of operations or financial condition. See Note 1(b) and Note 2.

In December 2007, the FASB issued SFAS No. 141(R) (revised 2007), *Business Combinations*. SFAS No. 141(R) retains the fundamental requirements of the original pronouncement requiring that the acquisition method (formerly called the purchase method) of accounting be used for all business combinations and for an acquirer to be identified for each business combination. SFAS No. 141(R) defines the acquirer as the entity that obtains control of one or more businesses in the business combination, establishes the acquisition date as the date that the acquirer achieves control and requires the acquirer to recognize the assets and liabilities assumed and any noncontrolling interest at their fair values as of the acquisition date. SFAS No. 141(R) requires, among other things, that the acquisition-related costs be recognized separately from the acquisition. SFAS No. 141(R) applies prospectively to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008, and was adopted by Neoprobe beginning January 1, 2009. The effect the adoption of SFAS No. 141(R) will have on us will depend on the nature and size of acquisitions we complete in the future, if any.

Also in December 2007, the FASB issued SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements – an Amendment of ARB No. 51*. SFAS No. 160 amends ARB No. 51 to establish accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of a subsidiary. It also amends certain of ARB No. 51's consolidation procedures for consistency with the requirements of SFAS No. 141(R), *Business Combinations*. SFAS No. 160 is effective for fiscal years and interim periods within those fiscal years beginning on or after December 15, 2008, and was adopted by Neoprobe beginning January 1, 2009. SFAS No. 160 is being applied prospectively as of the beginning of the fiscal year in which it was adopted, except for the presentation and disclosure requirements. The presentation and disclosure requirements are being applied retrospectively for all periods presented. The adoption of SFAS No. 160 did not have a material effect on our consolidated results of operations or financial condition.

In December 2007, the FASB ratified the consensus reached by the Emerging Issues Task Force (EITF) on EITF Issue No. 07-1, *Accounting for Collaborative Arrangements*. EITF Issue No. 07-1 focuses on defining a collaborative arrangement as well as the accounting for transactions between participants in a collaborative arrangement and between the participants in the arrangement and third parties. The EITF concluded that both types of transactions should be reported in each participant's respective income statement. We adopted EITF Issue No. 07-1 beginning January 1, 2009. The adoption of EITF Issue No. 07-1 did not have a material effect on our consolidated results of operations or financial condition.

In March 2008, the FASB issued SFAS No. 161, *Disclosures about Derivative Instruments and Hedging Activities – an Amendment of FASB Statement No. 133*. SFAS No. 161 amends and expands the disclosure requirements of Statement No. 133 to provide a better understanding of how and why an entity uses derivative instruments, how derivative instruments and related hedged items are accounted for, and their effect on an entity's financial position, financial performance, and cash flows. We adopted SFAS No. 161 beginning January 1, 2009. The adoption of SFAS No. 161 did not have a material impact on our derivative disclosures. See Note 10.

In June 2008, the FASB ratified the consensus reached by the EITF on EITF Issue No. 07-5, *Determining Whether an Instrument (or Embedded Feature) is Indexed to an Entity's Own Stock*. EITF Issue No. 07-5 clarifies the determination of whether equity-linked instruments (or embedded features), such as our convertible notes or warrants to purchase our common stock, are considered indexed to our own stock, which would qualify as a scope exception under SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*. We adopted EITF Issue No. 07-5 beginning January 1, 2009. The adoption of EITF Issue No. 07-5 had a material impact on our consolidated financial statements. See Note 10.

Also in June 2008, the FASB issued FSP EITF 03-6-1, *Determining Whether Instruments Granted in Share-Based Payment Transactions are Participating Securities*. FSP EITF 03-6-1 provides that unvested share-based payment awards that contain nonforfeitable rights to dividends or dividend equivalents, whether paid or unpaid, are participating securities and are required to be included in the computation of earnings per share pursuant to the two-class method described in SFAS No. 128, *Earnings Per Share*. The two-class method of computing earnings per share includes an earnings allocation formula that determines earnings per share for common stock and any participating securities according to dividends declared, whether paid or unpaid, and participation rights in undistributed earnings. All prior period earnings per share data presented is required to be adjusted retrospectively to conform with the provisions of FSP EITF 03-6-1. We adopted FSP EITF 03-6-1 beginning January 1, 2009. Adoption of FSP EITF 03-6-1 had no material impact on our first quarter 2009 or 2008 earnings per share.

In April 2009, the FASB issued FSP FAS 107-1 and APB 28-1, *Interim Disclosures About Fair Value of Financial Instruments*, which amends SFAS No. 107, *Disclosures About Fair Value of Financial Instruments*, and APB Opinion 28, *Interim Financial Reporting*, respectively, to require disclosure about fair value of financial instruments for interim reporting periods of publicly traded companies in addition to annual financial statements. FSP FAS 107-1 and APB 28-1 will be required for interim periods ending after June 15, 2009. As FSP FAS 107-1 and APB 28-1 provide only disclosure requirements, the adoption of this standard will not have a material impact on our consolidated financial position, results of operations or cash flows, but will result in increased disclosures in the second quarter of 2009.

Critical Accounting Policies

The following accounting policies are considered by us to be critical to our results of operations and financial condition.

Revenue Recognition Related to Net Sales. We currently generate revenue primarily from sales of our gamma detection products; however, sales of blood flow measurement products constituted approximately 2% of total revenues for the first quarter of 2009. Our standard shipping terms are FOB shipping point, and title and risk of loss passes to the customer upon delivery to a common carrier. We generally recognize sales revenue related to sales of our products when the products are shipped and the earnings process has been completed. However, in cases where product is shipped but the earnings process is not yet completed, revenue is deferred until it has been determined that the earnings process has been completed. Our customers have no right to return products purchased in the ordinary course of business.

The prices we charge our primary customer, EES, related to sales of products are subject to retroactive annual adjustment based on a fixed percentage of the actual sales prices achieved by EES on sales to end customers made during each fiscal year. To the extent that we can reasonably estimate the end-customer prices received by EES, we record sales to EES based upon these estimates. If we are unable to reasonably estimate end customer sales prices related to certain products sold to EES, we record revenue related to these product sales at the minimum (i.e., floor) price provided for under our distribution agreement with EES.

We also generate revenue from the service and repair of out-of-warranty products. Fees charged for service and repair on products not covered by an extended service agreement are recognized on completion of the service process when the serviced or repaired product has been returned to the customer. Fees charged for service or repair of products covered by an extended warranty agreement are deferred and recognized as revenue ratably over the life of the extended service agreement.

Use of Estimates. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. We base these estimates and assumptions upon historical experience and existing, known circumstances. Actual results could differ from those estimates. Specifically, management may make significant estimates in the following areas:

- *Stock-Based Compensation.* We account for stock-based compensation in accordance with SFAS No. 123(R), *Share-Based Payment*, which is a revision of SFAS No. 123, *Accounting for Stock-Based Compensation*. SFAS No. 123(R) requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their estimated fair values. Compensation cost arising from stock-based awards is recognized as expense using the straight-line method over the vesting period. We use the Black-Scholes option pricing model to value share-based payments. The valuation assumptions used have not changed from those used under SFAS No. 123.
- *Inventory Valuation.* We value our inventory at the lower of cost (first-in, first-out method) or market. Our valuation reflects our estimates of excess, slow moving and obsolete inventory as well as inventory with a carrying value in excess of its net realizable value. Write-offs are recorded when product is removed from saleable inventory. We review inventory on hand at least quarterly and record provisions for excess and obsolete inventory based on several factors, including current assessment of future product demand, anticipated release of new products into the market, historical experience and product expiration. Our industry is characterized by rapid product development and frequent new product introductions. Uncertain timing of product approvals, variability in product launch strategies, regulations regarding use and shelf life, product recalls and variation in product utilization all impact the estimates related to excess and obsolete inventory.
- *Impairment or Disposal of Long-Lived Assets.* We account for long-lived assets in accordance with the provisions of SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*. This Statement requires that long-lived assets and certain identifiable intangibles be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future net undiscounted cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell. As of March 31, 2009, the most significant long-lived assets on our balance sheet relate to assets recorded in connection with the acquisition of Cardiosonix. The recoverability of these assets is based on the financial projections and models related to the future sales success of Cardiosonix' products. As such, these assets could be subject to significant adjustment should the Cardiosonix technology not be successfully commercialized or the sales amounts in our current projections not be realized.
- *Product Warranty.* We warrant our products against defects in design, materials, and workmanship generally for a period of one year from the date of sale to the end customer. Our accrual for warranty expenses is adjusted periodically to reflect actual experience. EES also reimburses us for a portion of warranty expense incurred based on end customer sales they make during a given fiscal year.
- *Fair Value of Derivative Instruments.* We account for derivative instruments in accordance with SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*, which provides accounting and reporting standards for derivative instruments, including certain derivative instruments embedded in other contracts. We do not use derivative instruments for hedging of market risks or for trading or speculative purposes. Effective January 1, 2009, we were required to adopt EITF Issue No. 07-5, *Determining Whether an Instrument (or Embedded Feature) is Indexed to an Entity's Own Stock*. EITF Issue No. 07-5 clarified the determination of whether equity-linked instruments (or embedded features), such as our convertible securities and warrants to purchase our common stock, are considered indexed to our own stock, which would qualify as a scope exception under SFAS No. 133. As a result of adopting EITF Issue No. 07-5, certain embedded features of our convertible securities, as well as warrants to purchase our common stock, that were previously treated as equity are now considered derivative liabilities.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Not applicable.

Item 4T. Controls and Procedures

Disclosure Controls and Procedures

We maintain disclosure controls and procedures designed to ensure that information required to be disclosed in reports filed under the Exchange Act is recorded, processed, summarized, and reported within the specified time periods. As a part of these controls, our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Exchange Act.

Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles, and includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles and that receipts and expenditures of the Company are being made only in accordance with authorization of management and directors of the Company; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of March 31, 2009. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Based on our evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of the period covered by this report, our disclosure controls and procedures are adequately designed and effective.

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures will prevent all errors and all improper conduct. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute assurance that the objectives of the control systems are met. Further, a design of a control system must reflect the fact that there are resource constraints, and the benefit of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of improper conduct, if any, have been detected. These inherent limitations include the realities that judgments and decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more persons, or by management override of the control. Further, the design of any system of controls is also based in part upon assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations of a cost-effective control system, misstatements due to error or fraud may occur and may not be detected.

Changes in Control Over Financial Reporting

During the quarter ended March 31, 2009, there were no changes in our internal control over financial reporting that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

- (a) During the three-month period ended March 31, 2009, we issued 152,066 shares of our common stock in payment of January 2009 interest of \$83,333 on the 10% Series A and Series B Convertible Senior Secured Promissory Notes held by Platinum Montaur Life Sciences, LLC. Also during the three-month period ended March 31, 2009, our President and CEO, David C. Bupp, exercised a portion of his Series Q Warrant and we issued 50,000 shares of our common stock in exchange for gross proceeds of \$25,000. The issuances of the shares to the noteholder and Mr. Bupp were exempt from registration under Sections 4(2) and 4(6) of the Securities Act and Regulation D.

Item 6. Exhibits

- 31.1 Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.*
- 31.2 Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.*
- 32.1 Certification of Chief Executive Officer of Periodic Financial Reports pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350.*
- 32.2 Certification of Chief Financial Officer of Periodic Financial Reports pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350.*

* Filed herewith.

Items 1, 3, 4 and 5 are not applicable and have been omitted. There are no material changes in Item 1A from the corresponding item reported in the Company's Form 10-K for the year ended December 31, 2008, and this item has therefore been omitted.

SIGNATURES

In accordance with the requirements of the Exchange Act, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

NEOPROBE CORPORATION
(the Company)
Dated: May 15, 2009

By: /s/ David C. Bupp _____

David C. Bupp
President and Chief Executive Officer
(duly authorized officer; principal executive officer)

By: /s/ Brent L. Larson _____

Brent L. Larson
Vice President, Finance and Chief Financial Officer
(principal financial and accounting officer)