

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, 2010

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

For the transition period from _____ 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
Non-accelerated filer

Accelerated filer
Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange 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: 81,957,277 shares of common stock, par value \$.001 per share (as of the close of business on May 7, 2010).

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PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

**Neoprobe Corporation and Subsidiaries
Consolidated Balance Sheets**

ASSETS	March 31, 2010 (unaudited)	December 31, 2009
Current assets:		
Cash	\$ 5,956,271	\$ 5,639,842
Accounts receivable, net	1,136,073	1,331,908
Inventory	1,361,412	1,143,697
Prepaid expenses and other	212,723	474,243
Assets associated with discontinued operations	16,572	27,475
	<u>8,683,051</u>	<u>8,617,165</u>
Total current assets	8,683,051	8,617,165
Property and equipment	2,219,250	1,990,603
Less accumulated depreciation and amortization	1,749,164	1,693,290
	<u>470,086</u>	<u>297,313</u>
Patents and trademarks	533,261	524,224
Less accumulated amortization	444,378	445,650
	<u>88,883</u>	<u>78,574</u>
Other assets	22,534	24,707
	<u>22,534</u>	<u>24,707</u>
Total assets	\$ 9,264,554	\$ 9,017,759

Continued

Neoprobe Corporation and Subsidiaries
Consolidated Balance Sheets, continued

	March 31, 2010 (unaudited)	December 31, 2009
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable	\$ 1,091,743	\$ 763,966
Accrued liabilities and other	1,777,795	1,048,304
Capital lease obligations, current portion	11,633	11,265
Deferred revenue, current portion	522,320	560,369
Liabilities associated with discontinued operations	19,029	18,743
Total current liabilities	3,422,520	2,402,647
Capital lease obligations	16,519	19,912
Deferred revenue	502,875	534,119
Note payable to CEO, net of discounts of \$48,076 and \$54,093, respectively	951,924	945,907
Notes payable to investors	10,000,000	10,000,000
Derivative liabilities	2,380,956	1,951,664
Other liabilities	29,906	33,362
Total liabilities	17,304,700	15,887,611
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, 2010 and December 31, 2009	3,000,000	3,000,000
Stockholders' deficit:		
Common stock; \$.001 par value; 150,000,000 shares authorized; 81,891,716 and 80,936,711 shares issued and outstanding at March 31, 2010 and December 31, 2009, respectively	81,892	80,937
Additional paid-in capital	184,096,762	182,747,897
Accumulated deficit	(195,218,800)	(192,698,686)
Total stockholders' deficit	(11,040,146)	(9,869,852)
Total liabilities and stockholders' deficit	\$ 9,264,554	\$ 9,017,759

See accompanying notes to consolidated financial statements

Neoprobe Corporation and Subsidiaries
Consolidated Statements of Operations
(unaudited)

	Three Months Ended	
	March 31,	
	2010	2009
Revenues:		
Net sales	\$ 2,657,872	\$ 2,657,221
License revenue	25,000	25,000
Total revenues	<u>2,682,872</u>	<u>2,682,221</u>
Cost of goods sold	<u>888,867</u>	<u>826,363</u>
Gross profit	<u>1,794,005</u>	<u>1,855,858</u>
Operating expenses:		
Research and development	2,401,672	1,221,969
Selling, general and administrative	1,128,202	837,323
Total operating expenses	<u>3,529,874</u>	<u>2,059,292</u>
Loss from operations	<u>(1,735,869)</u>	<u>(203,434)</u>
Other income (expense):		
Interest income	1,814	9,947
Interest expense	(284,438)	(457,134)
Change in derivative liabilities	(429,292)	1,525,365
Other	(456)	(274)
Total other (expense) income, net	<u>(712,372)</u>	<u>1,077,904</u>
(Loss) income from continuing operations	(2,448,241)	874,470
Discontinued operations – loss from operations	<u>(11,873)</u>	<u>(60,349)</u>
Net (loss) income	(2,460,114)	814,121
Preferred stock dividends	<u>(60,000)</u>	<u>(60,000)</u>
(Loss) income attributable to common stockholders	<u>\$ (2,520,114)</u>	<u>\$ 754,121</u>
(Loss) income per common share (basic and diluted):		
Continuing operations	\$ (0.03)	\$ 0.01
Discontinued operations	\$ 0.00	\$ 0.00
Attributable to common stockholders	\$ (0.03)	\$ 0.01
Weighted average shares outstanding:		
Basic	79,571,399	71,387,438
Diluted	79,571,399	96,346,846

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	Total
	Shares	Amount			
Balance, December 31, 2009	80,936,711	\$80,937	\$182,747,897	\$(192,698,686)	\$ (9,869,852)
Issued stock in payment of interest on convertible debt and dividends on convertible preferred stock	239,757	240	309,760	—	310,000
Issued stock upon net-share exercise of options	1,208	1	(1)	—	—
Issued stock in connection with stock purchase agreement, net of costs	660,541	661	776,797	—	777,458
Issued stock to 401(k) plan at \$0.76	53,499	53	40,570	—	40,623
Paid common stock issuance costs	—	—	(1,366)	—	(1,366)
Stock compensation expense	—	—	223,105	—	223,105
Preferred stock dividends	—	—	—	(60,000)	(60,000)
Comprehensive loss:					
Net loss	—	—	—	(2,460,114)	(2,460,114)
Balance, March 31, 2010	<u>81,891,716</u>	<u>\$81,892</u>	<u>\$184,096,762</u>	<u>\$(195,218,800)</u>	<u>\$(11,040,146)</u>

See accompanying notes to consolidated financial statements.

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

	Three Months Ended	
	March 31,	
	2010	2009
Cash flows from operating activities:		
Net (loss) income	\$ (2,460,114)	\$ 814,121
Adjustments to reconcile net (loss) income to net cash used in operating activities:		
Depreciation and amortization	61,981	100,896
Amortization of debt discount and debt offering costs	8,190	179,730
Issuance of common stock in payment of interest and dividends	250,000	83,333
Stock compensation expense	223,105	70,536
Change in derivative liabilities	429,292	(1,525,365)
Other	40,977	4,581
Changes in operating assets and liabilities:		
Accounts receivable	200,735	(41,139)
Inventory	(226,003)	(28,794)
Prepaid expenses and other assets	38,976	33,955
Accounts payable	328,977	(38,918)
Accrued liabilities and other liabilities	597,321	(38,217)
Deferred revenue	(69,293)	(30,815)
Net cash used in operating activities	<u>(575,856)</u>	<u>(416,096)</u>
Cash flows from investing activities:		
Maturities of available-for-sale securities	—	494,000
Purchases of equipment	(90,422)	(40,491)
Proceeds from sales of equipment	—	251
Patent and trademark costs	(12,902)	(12,665)
Net cash (used in) provided by investing activities	<u>(103,324)</u>	<u>441,095</u>
Cash flows from financing activities:		
Proceeds from issuance of common stock	1,000,000	25,500
Payment of stock offering costs	(1,366)	(12,866)
Payment of notes payable	—	(50,992)
Payments under capital leases	(3,025)	(3,421)
Net cash provided by (used in) financing activities	<u>995,609</u>	<u>(41,779)</u>
Net increase (decrease) in cash	316,429	(16,780)
Cash, beginning of period	<u>5,639,842</u>	<u>3,565,837</u>
Cash, end of period	<u>\$ 5,956,271</u>	<u>\$ 3,549,057</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, 2010 and for the three-month periods ended March 31, 2010 and March 31, 2009 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 accounting principles generally accepted in the United States of America have been condensed or omitted pursuant to the rules and regulations of the U.S. Securities and Exchange Commission. The balances as of March 31, 2010 and 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, 2009, 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.

In August 2009, the Company's Board of Directors decided to discontinue the operations of Cardiosonix and to attempt to divest our Cardiosonix subsidiary. This decision was based on the determination that the blood flow measurement device segment was no longer considered a strategic initiative of the Company, due in large part to positive events in our other development initiatives. Our consolidated statements of operations have been restated for all prior periods presented to reflect Cardiosonix as a discontinued operation. Cash flows associated with the operation of Cardiosonix have been combined within operating, investing and financing cash flows, as appropriate, in our consolidated statements of cash flows. See Note 2.

- b. Financial Instruments and Fair Value:** The fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value, giving 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 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 whose fair value is measured on a recurring basis. 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 3.

The following methods and assumptions were used to estimate the fair value of each class of financial instruments:

- (1) Cash, accounts receivable, accounts payable, and accrued liabilities: The carrying amounts approximate fair value because of the short maturity of these instruments.
- (2) Note payable to CEO: The carrying value of our debt is presented as the face amount of the note less the unamortized discount related to the initial estimated fair value of the warrants to purchase common stock issued in connection with the note. At March 31, 2010 and December 31, 2009, the note payable to our CEO had an estimated fair value of \$5.3 million and \$3.9 million, respectively, based on the closing market price of our common stock.
- (3) Notes payable to investors: The carrying value of our debt is presented as the face amount of the notes. At March 31, 2010 and December 31, 2009, the notes payable to investors had an estimated fair value of \$41.6 million and \$31.0 million, respectively, based on the closing market price of our common stock.
- (4) Derivative liabilities: Derivative liabilities are recorded at fair value. 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. Unrealized gains and losses on the derivatives are classified in other expenses as a change in derivative liabilities in the statements of operations.

2. Discontinued Operations

In August 2009, the Company’s Board of Directors decided to discontinue the operations of Cardiosonix and to attempt to sell our Cardiosonix subsidiary. This decision was based on the determination that the blood flow measurement device segment was no longer considered a strategic initiative of the Company, due in large part to positive events in our other product and drug development initiatives. We are in the process of identifying potential buyers; however, no agreement has yet been reached.

As a result of our decision to hold Cardiosonix for sale, we reclassified certain assets and liabilities as assets and liabilities associated with discontinued operations and reduced them to their estimated fair value at that time. The following assets and liabilities have been segregated and included in assets associated with discontinued operations or liabilities associated with discontinued operations, as appropriate, in the consolidated balance sheets:

	March 31, 2010	December 31, 2009
Accounts receivable, net	\$ 10,450	\$ 15,349
Inventory	6,122	12,126
Current assets associated with discontinued operations	<u>\$ 16,572</u>	<u>\$ 27,475</u>
Accounts payable	\$ 6,600	\$ 5,400
Accrued expenses	12,429	13,343
Current liabilities associated with discontinued operations	<u>\$ 19,029</u>	<u>\$ 18,743</u>

We recorded an impairment loss of \$1.7 million during the third quarter of 2009 and have reclassified all related revenues and expenses to discontinued operations for all periods presented. Until a sale is completed, we expect to continue to generate revenues and incur expenses related to our blood flow measurement device business. The following amounts have been segregated from continuing operations and included in discontinued operations in the consolidated statements of operations:

	Three Months Ended	
	March 31,	
	2010	2009
Net sales	\$ 14,445	\$ 42,815
Cost of goods sold	<u>6,389</u>	<u>22,171</u>
Gross profit	<u>8,056</u>	<u>20,644</u>
Operating expenses:		
Research and development	251	16,089
Selling, general and administrative	<u>19,862</u>	<u>64,725</u>
Total operating expenses	<u>20,113</u>	<u>80,814</u>
Other income (expense)	<u>184</u>	<u>(179)</u>
Loss from discontinued operations	<u>\$ (11,873)</u>	<u>\$ (60,349)</u>

3. Fair Value Hierarchy

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

Liabilities Measured at Fair Value on a Recurring Basis as of March 31, 2010

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, 2010
<i>Liabilities:</i>				
Derivative liabilities related to warrants	\$ —	\$ 1,414,956	\$ —	\$ 1,414,956
Derivative liabilities related to conversion and put options	—	—	966,000	966,000
Total derivative liabilities	<u>\$ —</u>	<u>\$ 1,414,956</u>	<u>\$ 966,000</u>	<u>\$ 2,380,956</u>

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

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, 2009
<i>Liabilities:</i>				
Derivative liabilities related to warrants	\$ —	\$ 985,664	\$ —	\$ 985,664
Derivative liabilities related to put options	—	—	966,000	966,000
Total derivative liabilities	<u>\$ —</u>	<u>\$ 985,664</u>	<u>\$ 966,000</u>	<u>\$ 1,951,664</u>

The following tables set forth a summary of changes in the fair value of our Level 3 liabilities for the three-month periods ended March 31, 2010 and 2009:

Three Months Ended March 31, 2010

Description	Balance at December 31, 2009	Unrealized (Gains) Losses	Transfers In and/or (Out)	Balance at March 31, 2010
<i>Liabilities:</i>				
Derivative liabilities related to conversion and put options	<u>\$ 966,000</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 966,000</u>

Three Months Ended March 31, 2009

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

There were no transfers in or out of our Level 1 and Level 2 fair value measurements during the three-month period ended March 31, 2010. During the three-month period ended March 31, 2009, we transferred \$7.7 million into our Level 2 liabilities. The transfer was a result of the required January 1, 2009 adoption of a new accounting standard which clarified the determination of whether equity-linked instruments, such as warrants to purchase our common stock, are considered indexed to our own stock. As a result of adopting the new standard, certain warrants to purchase our common stock that were previously treated as equity were reclassified as derivative liabilities.

4. Stock-Based Compensation

At March 31, 2010, we have instruments outstanding under three stock-based compensation plans; 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). Currently, under the 2002 Plan, we may grant incentive stock options, nonqualified stock options, and restricted stock awards to full-time employees and directors, and nonqualified stock options and restricted stock 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.

Stock-based payments to employees and directors, including grants of stock options, are recognized in the statement of operations based on their estimated fair values. 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.

Compensation cost arising from stock-based awards is recognized as expense using the straight-line method over the vesting period. For the three-month periods ended March 31, 2010 and 2009, our total stock-based compensation expense was approximately \$223,000 and \$71,000, respectively. We have not recorded any income tax benefit related to stock-based compensation in either of the three-month periods ended March 31, 2010 and 2009.

A summary of stock option activity under our stock option plans as of March 31, 2010, and changes during the three-month period then ended, is presented below:

	Three Months Ended March 31, 2010		
	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life
Outstanding at beginning of period	5,689,500	\$ 0.44	
Granted	20,000	1.72	
Exercised	(5,000)	1.03	
Forfeited	—	—	
Expired	—	—	
Outstanding at end of period	<u>5,704,500</u>	<u>\$ 0.44</u>	5.1 years
Exercisable at end of period	<u>4,965,500</u>	<u>\$ 0.38</u>	4.5 years

A summary of the status of our unvested restricted stock as of March 31, 2010, and changes during the three-month period then ended, is presented below:

	Three Months Ended March 31, 2010	
	Number of Shares	Weighted Average Grant-Date Fair Value
Unvested at beginning of period	1,719,000	\$ 0.76
Granted	—	—
Vested	—	—
Forfeited	—	—
Unvested at end of period	<u>1,719,000</u>	<u>\$ 0.76</u>

Restricted shares 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.

As of March 31, 2010, there was approximately \$1.0 million of total unrecognized compensation cost related to unvested stock-based awards, which we expect to recognize over remaining weighted average vesting terms of 0.7 years.

5. Comprehensive Income (Loss)

We had no accumulated other comprehensive income (loss) activity during the three-month period ended March 31, 2010; therefore, our total comprehensive loss was equal to our net loss for that period. 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
Unrealized losses on available-for-sale securities	(1,383)
Other comprehensive income	<u>\$ 812,738</u>

6. Earnings (Loss) Per Share

Basic earnings (loss) per share is calculated by dividing net income (loss) by the weighted-average number of common shares and, except for periods of loss, 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 convertible securities, options and warrants.

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, 2010 and 2009:

	Three Months Ended March 31, 2010		Three Months Ended March 31, 2009	
	Basic Earnings Per Share	Diluted Earnings Per Share	Basic Earnings Per Share	Diluted Earnings Per Share
Outstanding shares	81,891,716	81,891,716	71,555,707	71,555,707
Effect of weighting changes in outstanding shares	(601,317)	(601,317)	(168,269)	(168,269)
Unvested restricted stock	(1,719,000)	(1,719,000)	—	—
Stock options	—	—	—	1,803,941
Warrants	—	—	—	5,596,328
Convertible debt	—	—	—	11,559,139
Convertible preferred stock	—	—	—	6,000,000
Adjusted shares	<u>79,571,399</u>	<u>79,571,399</u>	<u>71,387,438</u>	<u>96,346,846</u>

Earnings (loss) per common share for the periods ended March 31, 2010 and 2009 excludes the effects of 59,108,511 and 14,163,538 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.

The Company's unvested stock awards contain nonforfeitable rights to dividends or dividend equivalents, whether paid or unpaid (referred to as "participating securities"). Therefore, the unvested stock awards are included in the number of shares outstanding for both basic and diluted earnings per share calculations. 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, 1,719,000 shares of unvested restricted stock were excluded in determining basic and diluted loss per share for the three-month period ended March 31, 2010.

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, 2010.

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

7. 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, 2010 and 2009, we did not capitalize any inventory costs associated with our Lymphoseek product.

The components of net inventory are as follows:

	March 31, 2010 (unaudited)	December 31, 2009
Pharmaceutical materials	\$ 352,500	\$ 525,000
Gamma detection device materials	211,818	137,695
Pharmaceutical work-in-process	172,500	—
Gamma detection device finished goods	624,594	481,002
Total	\$ 1,361,412	\$ 1,143,697

8. Intangible Assets

The major classes of intangible assets are as follows:

	Weighted Average Remaining Life ¹	March 31, 2010		December 31, 2009	
		Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Patents and trademarks	2.7 yrs	\$ 533,261	\$ 444,378	\$ 524,224	\$ 445,650

¹ The weighted average remaining life is calculated for issued patents and does not include pending patent applications or trademarks which are not currently being amortized.

The estimated amortization expenses, related to those patents and trademarks currently being amortized, for the next five fiscal years are as follows:

	Estimated Amortization Expense
For the year ended 12/31/2010	\$ 2,755
For the year ended 12/31/2011	1,256
For the year ended 12/31/2012	980
For the year ended 12/31/2013	263
For the year ended 12/31/2014	244

9. 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 and other 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 for the three-month periods ended March 31, 2010 and 2009 is as follows:

	Three Months Ended March 31,	
	2010	2009
Warranty reserve at beginning of period	\$ 61,400	\$ 62,261
Provision for warranty claims and changes in reserve for warranties	38,097	37,623
Payments charged against the reserve	(21,873)	(30,291)
Warranty reserve at end of period	\$ 77,624	\$ 69,593

10. 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 Bupp 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. 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, \$3.5 million of which is convertible into shares of our common stock at the conversion price of \$0.26 per share, 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 at an exercise price of \$0.32 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 connection with the SPA, Montaur requested that the term of the \$1.0 million Bupp Note be extended approximately 42 months or until at least one day following the maturity date of the Series A Note. 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 additional 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.

In April 2008, following receipt by the Company of clearance from the United States Food and Drug Administration 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, which is convertible into shares of our common stock at the conversion price of \$0.36 per share, 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

In December 2008, after we obtained 135 vital blue dye lymph nodes from patients who had completed the injection of the drug and surgery 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 to purchase 6,000,000 shares of our common stock at an exercise price of \$0.575 per share (hereinafter referred to collectively with the Series W Warrant and Series X Warrant as the Montaur Warrants), 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.

On July 24, 2009, we entered into a Securities Amendment and Exchange Agreement with Montaur, pursuant to which Montaur agreed to the amendment and restatement of the terms of the Montaur Notes, the Preferred Stock, and the Montaur Warrants. The Series A Note was amended to grant Montaur conversion rights with respect to the \$3.5 million portion of the Series A Note that was previously not convertible. The newly convertible portion of the Series A Note is convertible into 3,600,000 shares of our common stock at \$0.9722 per share. The amendments also eliminated certain price reset features of the Montaur Notes, the Preferred Stock and the Montaur Warrants that had created significant non-cash derivative liabilities on the Company's balance sheet. In conjunction with this transaction, we issued Montaur a Series AA Warrant to purchase 2.4 million shares of our common stock at an exercise price of \$0.97 per share, expiring in July 2014. The change in terms of the Montaur Notes, the Preferred Stock and the Montaur Warrants were treated as an extinguishment of debt for accounting purposes. Following the extinguishment, the Company's balance sheet reflects the face value of the \$10 million due to Montaur pursuant to the Montaur Notes. See Note 11.

During the three-month periods ended March 31, 2010 and 2009, we recorded interest expense of \$6,000 and \$151,000, respectively, related to amortization of the debt discount related our convertible notes. During the three-month periods ended March 31, 2010 and 2009, we recorded interest expense of \$2,000 and \$29,000, respectively, related to amortization of the deferred financing costs related to our convertible notes.

11. Derivative Instruments

Effective January 1, 2009, we adopted a new accounting standard which 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 the new standard, 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. We do not use derivative instruments for hedging of market risks or for trading or speculative purposes.

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 net effect of marking the derivative liabilities to market at March 31 and June 30, 2009 resulted in a net increase in the estimated fair values of the derivative liabilities of \$12.2 million which was recorded as non-cash expense during the first half of 2009. On July 24, 2009, we entered into a Securities Amendment and Exchange Agreement with Montaur, pursuant to which Montaur agreed to the amendment and restatement of the terms of the Montaur Notes, the Preferred Stock, and the Montaur Warrants. As a result, the Company recorded an additional \$5.6 million in mark-to-market adjustments related to the increase in the Company's common stock from June 30 to July 24, 2009, and reclassified \$27.0 million in derivative liabilities related to the Montaur Notes, the Preferred Stock, and the Montaur Warrants to additional paid-in capital. Also on July 24, 2009, Montaur exercised 2,844,319 of their Series Y Warrants, which resulted in a decrease in the related derivative liability of \$2.2 million. The net effect of marking the Company's remaining derivative liabilities to market at September 30 and December 31, 2009 resulted in a net increase in the estimated fair values of the derivative liabilities of \$298,000 which was recorded as non-cash expense during the second half of 2009. The effect of marking the Company's remaining derivative liabilities to market at March 31, 2010 resulted in a net increase in the estimated fair values of the derivative liabilities of \$429,000 which was recorded as non-cash expense during the first quarter of 2010. The total estimated fair value of the derivative liabilities was \$2.4 million as of March 31, 2010. See Note 10.

12. 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, 2010, there are 17.8 million warrants outstanding to purchase our common stock. The warrants are exercisable at prices ranging from \$0.31 to \$0.97 per share with a weighted average exercise price of \$0.48 per share.

13. Common Stock Purchase Agreement

In March 2010, we sold to Fusion Capital Fund II, LLC (Fusion Capital), an Illinois limited liability company, 540,541 shares for proceeds of \$1.0 million under a common stock purchase agreement, as amended. In connection with this sale, we issued 120,000 shares of our common stock to Fusion Capital as an additional commitment fee. Subsequent to this sale, the remaining aggregate amount of our common stock we can sell to Fusion Capital under the amended agreement is \$9.1 million.

14. Income Taxes

We account for income taxes in accordance with current accounting standards, which include guidance on the accounting for uncertainty in income taxes recognized in the financial statements. Such standards also prescribe 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. As a result, no liability for uncertain tax positions was recorded as of March 31, 2010. 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.

15. Segment and Subsidiary Information

We report information about our operating segments using the “management approach” in accordance with current accounting standards. 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, 2010	Oncology Devices	Drug and Therapy Products	Corporate	Total
Net sales:				
United States ¹	\$ 2,637	\$ —	\$ —	\$ 2,637
International	21	—	—	21
License revenue	25	—	—	25
Research and development expenses	172	2,230	—	2,402
Selling, general and administrative expenses, excluding depreciation and amortization ²	60	—	1,006	1,066
Depreciation and amortization	33	13	16	62
Income (loss) from operations ³	1,529	(2,243)	(1,022)	(1,736)
Other income (expense) ⁴	—	—	(712)	(712)
Income (loss) from continuing operations	1,529	(2,243)	(1,734)	(2,448)
Loss from discontinued operations	—	—	(12)	(12)
Total assets, net of depreciation and amortization:				
United States operations	2,204	754	6,290	9,248
Discontinued operations	—	—	17	17
Capital expenditures	—	78	12	90

<i>(\$ amounts in thousands)</i>				
Three Months Ended March 31, 2009	Oncology Devices	Drug and Therapy Products	Corporate	Total
Net sales:				
United States ¹	\$ 2,553	\$ —	\$ —	\$ 2,553
International	104	—	—	104
License revenue	25	—	—	25
Research and development expenses	294	928	—	1,222
Selling, general and administrative expenses, excluding depreciation and amortization ²	34	—	750	784
Depreciation and amortization	37	1	15	53
Income (loss) from operations ³	1,491	(929)	(765)	(203)
Other income (expense) ⁴	—	—	1,078	1,078
Income (loss) from continuing operations	1,491	(929)	313	874
Loss from discontinued operations	—	—	(60)	(60)
Total assets, net of depreciation and amortization:				
United States operations	2,526	24	4,793	7,343
Discontinued operations	—	—	1,728	1,728
Capital expenditures	—	—	40	40

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

² General and administrative expenses, 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. Marketing and selling expenses 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 our individual reportable 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.

16. Supplemental Disclosure for Statements of Cash Flows

During the three-month periods ended March 31, 2010 and 2009, we paid interest aggregating \$26,000 and \$111,000, respectively. During the three-month periods ended March 31, 2010 and 2009, we transferred \$14,000 and \$15,000, respectively, of inventory to fixed assets related to the creation and maintenance of a pool of service loaner equipment. During the three-month periods ended March 31, 2010 and 2009, we issued 239,757 and 152,066, respectively, shares of our common stock as payment of interest on our convertible debt and dividends on our convertible preferred stock. During the three-month period ended March 31, 2010, we issued 53,499 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 oncology products that enhance patient care and improve patient outcome. We currently market a line of medical devices, our neoprobe[®] GDS gamma detection systems that are used in a cancer staging procedure called intraoperative lymphatic mapping. In addition to our medical device products, we have two radiopharmaceutical products, Lymphoseek[®] and RIGScan[™] CR, in 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

We believe that the future prospects for Neoprobe continue to improve as we make progress in all of our key growth areas, especially related to our Lymphoseek initiative. Despite the current global economic conditions, our gamma detection device line continues to provide a strong revenue base. Due primarily to stocking orders related to products introduced in 2009 that we do not expect to recur in 2010, we expect overall revenue for our gamma detection device line for 2010 to be lower than 2009. We expect to continue to incur modest development expenses to support our gamma detection device product line as well as we work with our marketing partners to expand our product offerings in the gamma detection device arena. 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 is anticipated to generate any significant revenue for us during 2010.

In August 2009, our Board of Directors decided to discontinue operations of Cardiosonix and to attempt to divest our Cardiosonix subsidiary. This decision was based on the determination that the blood flow measurement device segment was no longer considered a strategic initiative of the Company, due in large part to positive events in our other development initiatives. Until a sale is completed, we expect to continue to generate modest revenues and incur minimal expenses related to our blood flow measurement device business.

Our efforts thus far in 2010 have resulted in the following milestone achievements:

- Completion of a successful meeting with the United States Food and Drug Administration (FDA) for the NEO3-05 clinical study to review Phase 3 clinical study results and discuss development plans to support a New Drug Application (NDA) submission later this summer for Lymphoseek as a lymphatic tissue tracing agent;
- Validation of the first lot of commercial drug product of Lymphoseek that will be used for the commercial launch of the product in the United States upon NDA clearance.

Our operating expenses during the first quarter of 2010 were focused primarily on support of Lymphoseek product development and on efforts to re-qualify the manufacturing process for our RIGScan CR product initiative. We expect our drug-related development expenses for 2010 to be considerably higher than 2009 as we complete preparations for the filing of a NDA for Lymphoseek and as we continue the other clinical evaluations of Lymphoseek to support post-marketing amendments to the NDA.

During 2008, we initiated patient enrollment in a Phase 3 clinical study in subjects with either breast cancer or melanoma (NEO3-05). In March 2009, we announced that this study had reached the accrual of 203 lymph nodes, the study's primary accrual objective. The NEO3-05 Phase 3 clinical study was an open label trial of node-negative subjects with either breast cancer or melanoma. It was designed to evaluate the safety and the accuracy of Lymphoseek while identifying the lymph nodes draining from the subject's tumor site. To demonstrate the accuracy of Lymphoseek, each subject consenting to participate in the study was injected in proximity to the tumor with Lymphoseek and one of the vital blue dyes that are commonly used in lymphatic mapping procedures. The primary efficacy objective of the study was to identify lymph nodes that contained the vital blue dye and to demonstrate a statistically acceptable concordance rate between the identification of lymph nodes with the vital blue dye and Lymphoseek. To be successful, the study needed to achieve a statistical p-value of at least 0.05. In addition, the secondary endpoint of the study was to pathologically examine lymph nodes identified by either the vital blue dyes or Lymphoseek to determine if cancer was present in the lymph nodes.

In March 2010, Neoprobe met with FDA regarding the clinical outcomes of NEO3-05. The FDA meeting included a review of the efficacy and safety results of the NEO3-05 clinical study and Neoprobe's plans for the submission of a NDA for Lymphoseek. During the meeting, Neoprobe provided FDA with the clinical results of the protocol-compliant clinical sites that participated in the NEO3-05 clinical study that contributed 136 intent-to-treat subjects who provided 215 lymph nodes containing the vital blue dye. 210 of the vital blue dye positive lymph nodes contained Lymphoseek for an overall concordance rate of 98%, achieving a very high level of statistical correlation (p-value = 0.0001) for the primary endpoint of the clinical study. Prior to the meeting, FDA requested that Neoprobe conduct a "reserve concordance" assessment of the clinical study where Lymphoseek might identify lymph nodes missed by the vital blue dyes. This assessment showed that Lymphoseek was able to identify 85 additional lymph nodes that did not contain the vital blue dye, and 18% of these nodes were found by pathology to contain cancer. There were no significant safety events related to Lymphoseek. FDA indicated that the clinical data from the NEO3-05 clinical study and other completed clinical evaluations of Lymphoseek would be supportive of a NDA submission for Lymphoseek.

The Lymphoseek NDA submission will be based on the clinical results of NEO3-05 and other already completed clinical evaluations of Lymphoseek. However, Neoprobe intends to complete another Phase 3 clinical evaluation of Lymphoseek in subjects with either breast cancer or melanoma (NEO3-09) for the purpose of supplementing already submitted safety data and to support post-marketing product claim amendments for Lymphoseek. FDA agreed that this trial does not need to be completed prior to NDA submission. The Company believes the trial will be complete prior to potential marketing clearance for Lymphoseek. FDA also encouraged Neoprobe to request a series of pre-NDA meetings in the coming months to review the components of the NDA prior to its formal submission. Neoprobe indicated to FDA that the Company plans to submit the NDA following satisfactory completion of these meetings. In future pre-NDA meetings, Neoprobe will continue discussions with the FDA reviewers regarding the pre-clinical and chemistry, manufacturing and control quality data modules that will be part of the NDA submission. Neoprobe will be discussing elements of the statistical analysis plan that would support the NDA, including the design of any prospective clinical evaluations to support the primary indication, and to potentially expand the future indications for Lymphoseek.

In June 2009, we initiated a Phase 3 clinical trial to be conducted in subjects with head and neck squamous cell carcinoma (NEO3-06). The NEO3-06 clinical study is designed to expand the potential labeling for Lymphoseek as a sentinel lymph node targeting agent after the initial marketing clearance for the product. Our discussions with FDA and the European Medicinal Evaluation Agency (EMA) have also suggested that the NEO3-06 clinical trial will further support the use of Lymphoseek in sentinel lymph node biopsy procedures. We believe the outcome of the trial will be beneficial to the marketing and commercial adoption of Lymphoseek in the U.S. and European Union (EU). We now plan to have approximately 20 participating institutions in the NEO3-06 clinical trial. Subject recruitment and enrollment is actively underway at a number of institutions and the trial protocol is currently under review at several other institutions. The accrual rate for trials of this nature is highly dependent on the timing of institutional review board approvals of the NEO3-06 protocol. Our experience in the NEO3-05 trial has shown that this process may be lengthening due to risk management concerns on the part of hospitals participating in clinical trials, as well as other factors.

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 to amend the filing in the U.S. for expanded product labeling. Based on the positive outcome of the recent meeting with FDA regarding NEO3-05, Neoprobe expects to submit the NDA for Lymphoseek later in the summer of 2010. Depending on the timing of the planned pre-NDA meetings with FDA and the outcome of FDA regulatory review cycle, we believe that Lymphoseek could be commercialized in mid-2011. We cannot assure you, however, that this product will achieve regulatory approval, or if approved, that it will achieve market acceptance. See Risk Factors.

Over the past few years, we have also 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 of 2008 on how we would propose to complete clinical development 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.

Our desire has been, and continues to be, to develop a clinical development plan which is harmonized between the U.S. and the EU. To that end, during December 2009 we submitted an investigational new drug (IND) amendment to FDA which includes the design of a proposed Phase 3 clinical trial of RIGScan CR. The IND amendment included a Special Protocol Assessment (SPA) in accordance with the Prescription Drug User Fee Act of 1992 and current regulatory guidelines, and will be registered on the clinicaltrials.gov website following discussions with FDA regarding the SPA. Since filing the IND amendment and SPA request, we have determined that due to differences in the current manufacturing process from the process used in the 1990's, a further amendment to the IND should be filed addressing the differences. We expect to file the IND amendment in the near future and subsequently re-file the IND request. As a result, we do not expect to receive feedback from FDA on a RIGS SPA request until sometime in the third quarter of 2010.

The Phase 3 clinical study as currently designed would be a randomized clinical study that would evaluate the ability of RIGScan CR to identify tumor-associated tissue in a group of patients as compared to a group of patients provided with traditional surgical care. Based on our current statistical analysis, we now believe the sample size for the proposed Phase 3 clinical study would be approximately 350 patients including both the RIGScan CR and traditional treatment groups. The primary endpoint of the trial as proposed is the assessment of the diagnostic ability of RIGScan CR to identify tumor-associated tissue, with a secondary endpoint of the survival rate of the RIGScan CR treated patients compared to patients treated with conventional treatment modalities.

It should also be noted that the RIGScan CR biologic drug has not been produced for several years. We would have to perform some additional work related to ensuring the drug cell line is still viable and submit this data to EMEA and possibly FDA for their evaluation in connection with preparations to restart pivotal clinical trials. During the third quarter of 2009, we announced that we had executed a Biopharmaceutical Development and Supply Agreement with Laureate Pharma, Inc. This agreement will support the initial evaluation of the viability of the CC49 master working cell bank as well as the initial steps in re-validating the commercial production process for the biologic agent used in RIGScan CR. Laureate has made progress in the re-validation of the manufacturing process and we expect to have GMP-produced material for evaluation within the next few months. In addition, we will need to re-establish radiolabeling capabilities for the CC49 antibody in order to meet the regulatory needs for the RIGScan CR product. We have also begun discussions with parties capable of supporting such activities.

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 is very valuable, but we believe clarifying the regulatory pathway in the U.S. is important for us and our potential partners in assessing the full potential for RIGScan CR. 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. We have been encouraged by recent media speculation regarding the potential connection of a retrovirus with chronic fatigue syndrome and the potential use of ACT to develop a treatment, which may stimulate some interest in our ACT platform. 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 revenues from our gamma detection devices may decline from 2009 levels due to the previously discussed non-recurring stocking revenues, but should still result in a net profit in 2010 for that line of business, excluding general and administrative costs, interest and other financing-related charges. Our overall operating results for 2010 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 overall operating profitability during 2010. 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 2010 was consistent with revenue for the first quarter of 2009 at \$2.7 million. Research and development expenses, as a percentage of net sales, increased to 90% during the first quarter of 2010 from 46% during the same period in 2009. Due to the ongoing development activities of the Company, research and development expenses as a percentage of sales are expected to be higher in 2010 than they were in 2009. Selling, general and administrative expenses, as a percentage of net sales, increased to 42% during the first quarter of 2010 from 32% during the same period in 2009.

Three Months Ended March 31, 2010 and 2009

Net Sales and Margins. Net sales, comprised primarily of sales of our gamma detection systems, remained steady at \$2.7 million during the first quarter of both 2010 and 2009. Gross margins on net sales decreased to 67% of net sales for the first quarter of 2010 compared to 69% of net sales for the same period in 2009.

A decrease in gamma detection device sales of \$36,000 was offset by increases of \$22,000 and \$15,000 in service and extended warranty revenue, respectively. 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 received by EES on sales of Neoprobe products to end customers, subject to a minimum floor price. A slight decline in sales prices and control unit sales volumes were offset by increased sales of wireless probes. The decrease in gross margins on net product sales was due to net changes in the product mix coupled with the impact of the decline in sales prices.

License Revenue. License revenue for the first quarter of both 2010 and 2009 included \$25,000 from the pro-rata recognition of license fees related to the renewed distribution agreement with EES.

Research and Development Expenses. Research and development expenses increased \$1.2 million, or 97%, to \$2.4 million during the first quarter of 2010 from \$1.2 million during the same period in 2009. Research and development expenses in the first quarter of 2010 included approximately \$2.2 million in drug and therapy product development costs and \$172,000 in gamma detection device development costs. This compares to expenses of \$928,000 and \$294,000 in these segment categories during the same period in 2009. The changes in each category were primarily due to (i) increased compensation of \$337,000, process development costs of \$254,000, pricing study costs of \$217,000, and clinical activity costs of \$61,000 related to Lymphoseek, coupled with increased process development costs of \$317,000, pricing study costs of \$108,000, and license fees of \$50,000 related to RIGScan CR, and (ii) lower compensation of \$42,000 and lower development costs related to our new high energy detection probe which was launched in 2009 of \$35,000, respectively.

Selling, General and Administrative Expenses. Selling, general and administrative expenses increased \$291,000, or 35%, to \$1.1 million during the first quarter of 2010 from \$837,000 during the same period in 2009. The net increase was primarily due to increased stock and other incentive-based compensation costs.

Other Income (Expenses). Other expense, net, was \$712,000 during the first quarter of 2010 as compared to other income, net, of \$1.1 million during the same period in 2009. During the first quarter of 2010, we recorded a \$429,000 charge related to the increase in derivative liabilities resulting from the requirement to mark our derivative liabilities to market. During the first quarter of 2009, we recorded a \$1.5 million credit related to the decrease in derivative liabilities. Interest expense, primarily related to the convertible debt agreements we completed in December 2007 and April 2008, decreased \$173,000 to \$284,000 during the first quarter of 2010 from \$457,000 for the same period in 2009. Of this interest expense, \$8,000 and \$180,000 in the first quarters of 2010 and 2009, respectively, were 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 quarters of 2010 and 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 balances increased to \$6.0 million at March 31, 2010 from \$5.6 million at December 31, 2009. The net increase was primarily due to cash received for the issuance of common stock related to a stock purchase agreement, partially offset by cash used to fund our operations, mainly for research and development activities. The current ratio decreased to 2.5:1 at March 31, 2010 from 3.6:1 at December 31, 2009.

Operating Activities. Cash used in operations increased \$160,000 to \$576,000 during the first quarter of 2010 compared to \$416,000 during the same period in 2009.

Accounts receivable decreased to \$1.1 million at March 31, 2010 from \$1.3 million at December 31, 2009. The decrease was primarily a result of normal fluctuations in timing of purchases and payments by EES and Century Medical, Inc. We expect overall receivable levels will continue to fluctuate during 2010 depending on the timing of purchases and payments by our customers.

Inventory levels increased to \$1.4 million at March 31, 2010 from \$1.1 million at December 31, 2009. Gamma detection device materials and finished goods inventory levels increased as we have increased our product safety stock levels to ensure efficient and uninterrupted supply of our products to our distribution partners. We expect inventory levels to increase during 2010 as a result of the production of commercial-grade Lymphoseek.

Accounts payable increased to \$1.1 million at March 31, 2010 from \$764,000 at December 31, 2009. Accrued liabilities and other increased to \$1.8 million at March 31, 2010 from \$1.0 million at December 31, 2009. Accounts payable and accrued liabilities, primarily for consulting services and production equipment, related to our Lymphoseek and RIGScan initiatives increased as activities related to advancing those product lines increased.

Investing Activities. Investing activities used \$103,000 during the first quarter of 2010 compared to providing \$441,000 during the same period in 2009. Available-for-sale securities of \$494,000 matured during the first quarter of 2009. Capital expenditures of \$90,000 during the first quarter of 2010 were primarily for equipment to be used in the production of Lymphoseek and software. Capital expenditures of \$40,000 during the first quarter of 2009 were primarily for software, computers, and office furniture. We expect our overall capital expenditures for 2010 will be higher than 2009 as we begin the commercial production of Lymphoseek. Payments for patent and trademark costs remained steady at \$13,000 during the first quarters of 2010 and 2009.

Financing Activities. Financing activities provided \$996,000 during the first quarter of 2010 compared to \$42,000 used during the same period in 2009. The \$996,000 provided by financing activities in the first quarter of 2010 consisted primarily of proceeds from the issuance of common stock of \$1.0 million, offset slightly by payments of capital leases of \$3,000 and payments of stock offering costs of \$1,000. The \$42,000 used in financing activities in the first quarter of 2009 consisted primarily of payments of notes payable of \$51,000, payments of stock offering costs of \$13,000, and payments of capital leases of \$3,000, offset by proceeds from the issuance of common stock of \$26,000.

In December 2006, we entered into a common stock purchase agreement with Fusion Capital Fund II, LLC (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 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. In March 2010, we sold to Fusion Capital under the amended agreement 540,541 shares for proceeds of \$1.0 million. Subsequent to this sale, the remaining aggregate amount of our common stock we can sell to Fusion Capital is \$9.1 million, and we have reserved a total of 10,113,459 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 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 March 2010, we issued an additional 120,000 shares of our common stock to Fusion Capital as an additional commitment fee related to the 540,541 shares of stock that we sold to Fusion Capital for \$1.0 million.

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 Bupp 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. 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, \$3.5 million of which is convertible into shares of our common stock at the conversion price of \$0.26 per share, 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 at an exercise price of \$0.32 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 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 Series A Note. 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 additional 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, 2010, and an outstanding principal amount of \$1.0 million as of May 7, 2010. During the first quarter of 2010, we paid none of the outstanding principal and paid or accrued \$25,000 in interest due under the Amended Bupp Note.

In April 2008, following receipt by the Company of clearance from 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, which is convertible into shares of our common stock at the conversion price of \$0.36 per share, 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. 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 the injection of the drug and surgery 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 to purchase 6,000,000 shares of our common stock, at an exercise price of \$0.575 per share (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. 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.

On July 24, 2009, we entered into a Securities Amendment and Exchange Agreement with Montaur, pursuant to which Montaur agreed to the amendment and restatement of the terms of the Montaur Notes, the Preferred Stock, and the Montaur Warrants. The Series A Note was amended to grant Montaur conversion rights with respect to the \$3.5 million portion of the Series A Note that was previously not convertible. The newly convertible portion of the Series A Note is convertible into 3,600,000 shares of our common stock at \$0.9722 per share. The amendments also eliminated certain price reset features of the Montaur Notes, the Preferred Stock and the Montaur Warrants that had created significant non-cash derivative liabilities on the Company's balance sheet. In conjunction with this transaction, we issued Montaur a Series AA Warrant to purchase 2.4 million shares of our common stock at an exercise price of \$0.97 per share, expiring in July 2014. The change in terms of the Montaur Notes, the Preferred Stock and the Montaur Warrants was treated as an extinguishment of debt for accounting purposes. Following the extinguishment, the Company's balance sheet reflects the face value of the \$10 million due to Montaur pursuant to the Montaur Notes. In connection with this transaction, Montaur exercised 2,844,319 Series Y Warrants in exchange for issuance of 2,844,319 shares of our common stock, resulting in gross proceeds of \$1,635,483 received in July 2009. Montaur also exercised their remaining 3,155,681 Series Y Warrants in exchange for issuance of 3,155,681 shares of our common stock, resulting in additional gross proceeds of \$1,814,517 received in September 2009.

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 prepare for the NDA submission for Lymphoseek and to complete additional clinical testing for Lymphoseek to support potential safety and post-marketing amendments. 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 for the foreseeable future. We are in the process of determining the total development cost necessary to commercialize RIGScan CR but believe that it will require total additional 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 have used currently available funds to initiate the first steps of restarting manufacturing of RIGScan CR; however, we still intend to involve a partner in the longer-term development of RIGScan CR. We may also 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 obtain regulatory approval for and commercialize new 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 January 2010, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2010-6, *Improving Disclosures about Fair Value Measurements*. ASU 2010-6 amends FASB ASC Topic 820, *Fair Value Measurements and Disclosures*. ASU 2010-6 requires new disclosures as follows: (1) Transfers in and out of Levels 1 and 2 and (2) Activity in Level 3 fair value measurements. An entity should disclose separately the amounts of significant transfers in and out of Level 1 and Level 2 fair value measurements and describe the reasons for the transfers. In the reconciliation of fair value measurements using significant unobservable inputs (Level 3), an entity should present separately information about purchases, sales, issuances, and settlements (that is, on a gross basis rather than as one net number). ASU 2010-6 also clarifies existing disclosures as follows: (1) Level of disaggregation and (2) Disclosures about inputs and valuation techniques. An entity should provide fair value measurement disclosures for each class of assets and liabilities. A class is often a subset of assets or liabilities within a line item in the statement of financial position. An entity needs to use judgment in determining the appropriate classes of assets and liabilities. An entity should provide disclosures about the valuation techniques and inputs used to measure fair value for both recurring and nonrecurring fair value measurements. Those disclosures are required for fair value measurements that fall in either Level 2 or Level 3. ASU 2010-6 is effective for interim and annual reporting periods beginning after December 15, 2009, except for the separate disclosures about purchases, sales, issuances, and settlements in the roll forward of activity in Level 3 fair value measurements. Those disclosures are effective for fiscal years beginning after December 15, 2010, and for interim periods within those fiscal years. We adopted the initial provisions of ASU 2010-6 beginning January 1, 2010. As the new provisions of ASU 2010-6 provide only disclosure requirements, the adoption of this standard did not impact our consolidated financial position, results of operations or cash flows, but did result in increased disclosures.

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. 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. 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.* Stock-based payments to employees and directors, including grants of stock options, are recognized in the statement of operations based on their estimated fair values. 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. Compensation cost arising from stock-based awards is recognized as expense using the straight-line method over the vesting period.
- *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.* Long-lived assets and certain identifiable intangibles are 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.
- *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.* Derivative instruments embedded in contracts, to the extent not already a free-standing contract, are bifurcated from the debt instrument and accounted for separately. All derivatives are recorded on the consolidated balance sheet at fair value in accordance with current accounting guidelines for such complex financial instruments. 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. Unrealized gains and losses on the derivatives are classified in other expenses as a change in derivative liabilities in the statements of operations. We do not use derivative instruments for hedging of market risks or for trading or speculative purposes.

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, 2010. 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, 2010, 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, 2010, we issued 180,233 shares of our common stock in payment of December 2009, January 2010 and February 2010 interest of \$250,000 on the 10% Series A and Series B Convertible Senior Secured Promissory Notes held by Platinum Montaur Life Sciences, LLC (Montaur). Also during the three-month period ended March 31, 2010, we issued 59,524 shares of our common stock in payment of fourth quarter 2009 dividends of \$60,000 on the 8% Series A Cumulative Convertible Preferred Stock held by Montaur. The issuances of the shares to Montaur were exempt from registration under Sections 4(2) and 4(6) of the Securities Act and Regulation D.
- (b) During the three-month period ended March 31, 2010, we sold to Fusion Capital Fund II, LLC (Fusion Capital), an Illinois limited liability company, 540,541 shares for proceeds of \$1.0 million under a common stock purchase agreement, as amended. In connection with this sale, we issued 120,000 shares of our common stock to Fusion Capital as an additional commitment fee. The issuance of the commitment shares to Fusion Capital was 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, 2009, 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 14, 2010

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)

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, David C. Bupp, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Neoprobe Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

May 14, 2010

/s/ David C. Bupp
David C. Bupp
President and Chief Executive Officer

**CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Brent L. Larson, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Neoprobe Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

May 14, 2010

/s/ Brent L. Larson

Brent L. Larson

Vice President, Finance and Chief Financial Officer

**CERTIFICATION OF PERIODIC FINANCIAL REPORT PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002, 18 U.S.C. SECTION 1350**

The undersigned hereby certifies that he is the duly appointed and acting Chief Executive Officer of Neoprobe Corporation (the "Company") and hereby further certifies as follows:

- (1) The periodic report containing financial statements to which this certificate is an exhibit fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the periodic report to which this certificate is an exhibit fairly presents, in all material respects, the financial condition and results of operations of the Company.

In witness whereof, the undersigned has executed and delivered this certificate as of the date set forth opposite his signature below.

May 14, 2010

/s/ David C. Bupp
David C. Bupp
President and Chief Executive Officer

**CERTIFICATION OF PERIODIC FINANCIAL REPORT PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002, 18 U.S.C. SECTION 1350**

The undersigned hereby certifies that he is the duly appointed and acting Chief Financial Officer of Neoprobe Corporation (the "Company") and hereby further certifies as follows:

- (1) The periodic report containing financial statements to which this certificate is an exhibit fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the periodic report to which this certificate is an exhibit fairly presents, in all material respects, the financial condition and results of operations of the Company.

In witness whereof, the undersigned has executed and delivered this certificate as of the date set forth opposite his signature below.

May 14, 2010

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