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

FORM 10-Q

(Mark One)

 \mathbf{X} Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the quarterly period ended June 30, 2010 or

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 0-21615

PRESSURE BIOSCIENCES, INC.

(Exact Name of Registrant as Specified in its Charter)

Massachusetts

(State or Other Jurisdiction of Incorporation or Organization)

14 Norfolk Avenue South Easton, Massachusetts (Address of Principal Executive Offices)

04-2652826 (I.R.S. Employer Identification No.)

> 02375 (Zip Code)

(508) 230-1828

(Registrant's Telephone Number, Including Area Code)

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.

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 (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). \Box Yes \Box 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. (Check one): Large accelerated filer \Box

Non-accelerated filer \Box

Accelerated filer \Box

Smaller reporting company \boxtimes

Indicate by check mark whether the registrant is a shell company (as defined in Exchange Act Rule 12b-2 of the Exchange Act). \Box Yes \boxtimes No

The number of shares outstanding of the Issuer's common stock as of June 30, 2010 was 2,621,824.

⊠ Yes □ No

TABLE OF CONTENTS

PART I - FINANCIAL INFORMATION	
Item 1. Financial Statements (Unaudited)	
Consolidated Balance Sheets as of June 30, 2010 and December 31, 2009	3
Consolidated Statements of Operations for the Three Months and Six Months Ended June 30, 2010 and 2009	4
Consolidated Statements of Cash Flows for the Six Months Ended June 30, 2010 and 2009	5
Notes to Consolidated Financial Statements	6
	1.0
Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations	19
	•
Item 4T. Controls and Procedures	28
PART II - OTHER INFORMATION	
Kan (Falikita	20
Item 6. Exhibits	29
2	
2	

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARY CONSOLIDATED BALANCE SHEETS (UNAUDITED)

	June 30, 2010		December 31, 2009		
ASSETS					
CURRENT ASSETS					
Cash and cash equivalents	\$	1,677,354	\$	1,609,778	
Restricted cash		20,012		20,012	
Short-term investments		248,000		-	
Accounts receivable, net of allowances of \$26,820 at June 30, 2010					
and \$8,400 at December 31, 2009		274,909		203,211	
Inventories		830,233		638,350	
Deposits		189,250		182,010	
Prepaid income taxes		1,442		3,176	
Prepaid expenses and other current assets		71,271		86,563	
Total current assets		3,312,471		2,743,100	
PROPERTY AND EQUIPMENT, NET		222,425		249,465	
OTHER ASSETS					
Intangible assets, net		206,710		231,026	
TOTAL ASSETS	\$	3,741,606	\$	3,223,591	
LIABILITIES AND STOCKHOLDERS' EQUITY					
CURRENT LIABILITIES					
Accounts payable	\$	355,565	\$	148,087	
Accrued employee compensation		131,433		105,824	
Accrued professional fees and other		176,331		271,926	
Deferred revenue		19,649		8,058	
Total current liabilities		682,978		533,895	
LONG TERM LIABILITIES		,		,	
Deferred revenue		11,510		1,609	
TOTAL LIABILITIES		694,488		535,504	
		094,400	_	555,504	
COMMITMENTS AND CONTINGENCIES (Note 4)					
STOCKHOLDERS' EQUITY					
Series A convertible preferred stock, \$.01 par value; 313,960 designated shares;					
266,492 shares issued and outstanding on June 30, 2010 and 152,213 shares on					
December 31, 2009 (Liquidation value of \$3,064,658)		2,665		1,523	
Series B convertible preferred stock, \$.01 par value; 279,256 designated shares;					
88,711 shares issued and outstanding on June 30, 2010 and 62,039 shares on					
December 31, 2009 (Liquidation value of \$1,667,767)		887		620	
Common stock, \$.01 par value; 20,000,000 shares authorized; 2,621,824 shares					
issued and outstanding on June 30, 2010 and 2,328,426 shares issued and					
outstanding on December 31, 2009		26,218		23,284	
Warrants to acquire preferred stock and common stock		1,132,675		1,352,165	
Additional paid-in capital		11,911,626		9,297,115	
Accumulated deficit		(10,026,953)		(7,986,620)	
Total stockholders' equity		3,047,118		2,688,087	
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$	3,741,606	\$	3,223,591	

The accompanying notes are an integral part of these consolidated financial statements

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARY CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)

	For the Three Months Ended June 30,		For the Six Ended Ju				
	_	2010	 2009	_	2010		2009
REVENUE:							
PCT Products, services, other	\$	283,382	\$ 159,202	\$	472,532	\$	381,344
Grant revenue		118,722	111,179		220,385		195,799
Total revenue		402,104	 270,381		692,917		577,143
COSTS AND EXPENSES:							
Cost of PCT products and services		126,972	90,820		214,075		231,063
Research and development		304,143	315,046		598,284		622,270
Selling and marketing		294,275	252,464		576,853		530,880
General and administrative		474,381	 427,384		1,012,803		858,174
Total operating costs and expenses		1,199,771	1,085,714		2,402,015		2,242,387
Operating loss		(797,667)	(815,333)		(1,709,098)		(1,665,244)
Interest income		1,016	 1,284		1,122		3,687
Loss before income taxes		(796,651)	(814,049)		(1,707,976)		(1,661,557)
Income tax refund			 _		_		623,262
Net loss		(796,651)	 (814,049)		(1,707,976)		(1,038,295)
Accrued and deemed dividends on convertible preferred stock		(127,839)	 (33,880)		(384,363)		(523,683)
Net loss applicable to common shareholders	\$	(924,490)	\$ (847,929)	\$	(2,092,339)	\$	(1,561,978)
Net loss per share attributable to common stockholders - basic and diluted	\$	(0.35)	\$ (0.39)	\$	(0.80)	\$	(0.71)
Weighted average common stock shares outstanding used in the basic and diluted net loss per share calculation		2,621,291	2,195,283		2,615,557		2,195,283

The accompanying notes are an integral part of these consolidated financial statements

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARY CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

		For the Six Months Ended June 30,	
	2010	2009	
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	\$ (1,707,976)	\$ (1,038,295)	
Adjustments to reconcile net loss to operating cash flows:			
Depreciation and amortization	99,904	94,679	
Stock-based compensation expense	145,103	252,861	
Bad debt expense	18,420	55,600	
Changes in operating assets and liabilities:			
Restricted cash	-	30,000	
Short-term investments	(248,000)	-	
Accounts receivable	(90,118)	(2,823)	
Inventories	(191,883)	(179,234)	
Deposits	(7,240)	368,364	
Income tax receivable	-	(623,262)	
Accounts payable	207,478	(64,009)	
Accrued employee compensation	25,609	(8,281)	
Deferred revenue and other accrued expenses	(39,341)	59,843	
Prepaid expenses and other current assets	17,026	172,373	
Net cash used in operating activities	(1,771,018)	(882,184)	
CASH FLOWS FROM INVESTING ACTIVITIES:			
Additions to property and equipment	(48,548)	(64,932)	
Net cash used in investing activities	(48,548)	(64,932)	
CASH FLOWS FROM FINANCING ACTIVITIES:			
Net proceeds from stock warrant exercise	1,421,275	_	
Net proceeds from the issuance of preferred stock	465,867	1,567,923	
Net cash provided by financing activities	1,887,142	1,567,923	
Net easil provided by financing activities	1,007,142	1,307,925	
Change in cash and cash equivalents	67,576	620,807	
Cash and cash equivalents, beginning of period	1,609,778	868,208	
Cash and cash equivalents, end of period	\$ 1,677,354	\$ 1,489,015	
SUPPLEMENTAL INFORMATION:			
Income taxes paid	\$ 1,900	\$ -	
Issuance of common stock dividend on preferred stock	\$ 1,900 194,011	φ -	
Issuance of preferred stock warrants for services	194,011	-	
Issuance of common stock for services	18,122	-	
Beneficial conversion feature on convertible preferred stock	154,389	489,803	
Denominal conversion realize on convertible preferred stock	154,569	-09,003	

The accompanying notes are an integral part of these consolidated financial statements

1) Business Overview and Management Plans

We have developed instruments which utilize our unique and proprietary pressure cycling technology ("PCT"), which we sell, along with associated disposables to life sciences companies, academic institutions and government agencies. There are currently over 100 users of our enabling platform. PCT represents the core of our products and has enabled our customers to perform biological sample preparation and enzymatic digestion in unique ways that were previously unavailable. The enabling capability of our PCT products allows us to continue to increase the number of applications for our platform beyond current uses, which include genomic and proteomic sample preparation, pathogen inactivation, the control of chemical and enzymatic reactions, immunodiagnostics, and protein purification. Additionally, we are pursuing business opportunities to leverage our products and PCT into new markets beyond our current focus of PCT-enhanced enzymatic digestion products designed specifically for the mass spectrometry marketplace, as well as sample preparation products for biomarker discovery, soil and plant biology, forensics, histology, and counter-bioterror applications.

PCT uses internally developed instrumentation that is capable of cycling pressure between ambient and ultra-high levels at controlled temperatures to rapidly and repeatedly control the interactions of bio-molecules. Our instrument, the Barocycler®, and our internally developed consumables product line, which includes PULSE (Pressure Used to Lyse Samples for Extraction) Tubes as well as application specific kits (which include consumable products and reagents) together make up the PCT Sample Preparation System.

We have experienced negative cash flows from operations with respect to our pressure cycling technology business since our inception. As of June 30, 2010, we had working capital resources of approximately \$2.6 million. Based on our current projections, we believe our current cash resources are sufficient to fund our normal operations through the first quarter of 2011.

We believe we will need substantial additional capital to fund our operations in periods beyond the first quarter of 2011. If we are able to obtain additional capital or otherwise increase our revenues, we may increase spending in specific research and development applications and engineering projects and may hire additional sales personnel or invest in targeted marketing programs. In the event that we are unable to obtain financing on acceptable terms, or at all, we may be required to limit or cease our operations, pursue a plan to sell our operating assets, or otherwise modify our business strategy, which could materially harm our future business prospects.

2) Interim Financial Reporting

The accompanying unaudited consolidated financial statements of Pressure BioSciences, Inc. have been prepared in accordance with accounting principles generally accepted in the United States of America ("generally accepted accounting principles" or "GAAP") for interim financial information. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. In the opinion of management, all material adjustments (consisting of only normal recurring adjustments) considered necessary for a fair presentation have been included. Operating results for the three months and six months ended June 30, 2010 are not necessarily indicative of the results that may be expected for the year ending December 31, 2010. For further information, refer to the audited consolidated financial statements and footnotes thereto included in the Company's Annual Report on Form 10-K (the "Form 10-K") for the fiscal year ended December 31, 2009 as filed with the Securities and Exchange Commission on March 31, 2010.

3) <u>Summary of Significant Accounting Policies</u>

Principles of Consolidation

The consolidated financial statements include the accounts of Pressure BioSciences, Inc., and its wholly-owned subsidiary PBI BioSeq, Inc.

Use of Estimates

To prepare our consolidated financial statements in conformity with generally accepted accounting principles, we are required to make significant estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. In addition, significant estimates are made in projecting future cash flows to quantify impairment of assets, deferred tax assets and the costs associated with fulfilling our warranty obligations for the instruments that we sell, in our calculation of fair value of stock options awarded, and our allocation of the proceeds from our equity financings between the preferred stock and warrants sold. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from the estimates and assumptions used.

Revenue Recognition

Revenue is recognized when realized or earned when all the following criteria have been met: persuasive evidence of an arrangement exists; delivery has occurred and risk of loss has passed to the customer; the seller's price to the buyer is fixed or determinable; and collectability is reasonably assured.

Our current instruments, the Barocycler NEP3229 and NEP2320, require a basic level of instrumentation expertise to set-up for initial operation. To support a favorable first experience for our customers, we send a highly trained technical representative to the customer site to install every Barocycler that we sell, lease, or rent through our domestic sales force. The installation process includes uncrating and setting up the instrument, followed by introductory user training. Product revenue related to current Barocycler instrumentation is recognized upon the completion of the installation and introductory training process of the instrumentation at the customer location, for domestic installations. Product revenue related to sales of PCT instrumentation to our foreign distributors is recognized upon shipment through a common carrier. We provide for the expected costs of warranty upon the recognition of revenue for the sales of our instrumentation. Our sales arrangements do not provide our customers with a right of return. Product revenue related to our consumable products such as PULSE Tubes, MicroTubes, and application specific kits is recorded upon shipment through a common carrier. Shipping costs are included in sales and marketing expense. Any shipping costs billed to customers are recognized as revenue.

We account for our lease agreements under the operating method. We record revenue over the life of the lease term and we record depreciation expense on a straight-line basis over the thirty-six month estimated useful life of the Barocycler instrument. The depreciation expense associated with assets under lease agreements is included in the "Cost of PCT products and services" line item in our consolidated statements of operations. Many of our lease and rental agreements allow the lesse to purchase the instrument at any point during the term of the agreement with partial or full credit for payments previously made. We pay all maintenance costs associated with the instrument during the term of the leases.

Revenue from government grants is recorded when expenses are incurred under the grant in accordance with the terms of the grant award.

Our transactions sometimes involve multiple elements (i.e., products and services). If an arrangement includes undelivered elements that are not essential to the functionality of the delivered elements, we defer the fair value of the undelivered elements with the residual revenue allocated to the delivered elements. Fair value is determined based upon the price charged when the element is sold separately. If there is not sufficient evidence of the fair value of the undelivered elements, no revenue is allocated to the delivered elements and the total consideration received is deferred until delivery of those elements for which objective and reliable evidence of the fair value is not available. We provide certain customers with extended service contracts and, to the extent vendor specific objective evidence, or VSOE, is established, these service revenues are recognized ratably over the life of the contract, which is generally one to four years.

Cash and Cash Equivalents

Our policy is to invest available cash in short-term, investment-grade, interest-bearing obligations, including money market funds, and bank and corporate debt instruments. Securities purchased with initial maturities of three months or less are valued at cost plus accrued interest, which approximates fair market value, and are classified as cash equivalents. As of June 30, 2010, we held approximately \$20,000 in a restricted account as collateral for our corporate credit card and therefore classified this balance as restricted cash on our consolidated balance sheet. We purchased six-month certificates of deposit for \$248,000 to mature in December 2010. The balance is represented as short-term investments on our consolidated balance sheet. These certificates are valued at cost plus accrued interest.

Research and Development

Research and development costs, which are comprised of costs incurred in performing research and development activities - including wages and associated employee benefits, facilities, consumable products and overhead costs - are expensed as incurred. Our research and development activities are performed at our facility in Massachusetts in conjunction with our collaboration partner sites. In support of our research and development activities, we utilize our Barocycler instruments that are capitalized as fixed assets and depreciated over their expected useful lives.



Inventories

Inventories are valued at the lower of cost (average cost) or market (sales price). The cost of Barocyclers consists of the cost charged by the contract manufacturer. The cost of manufactured goods includes material, freight-in, direct labor, and applicable overhead. As of June 30, 2010, the recorded cost of all categories was less than the recent sales price. The composition of inventory as of June 30, 2010 and December 31, 2009 is as follows:

	J	lune 30, 2010	Dee	cember 31, 2009
Raw materials	\$	163,795	\$	92,453
Finished goods		666,438		545,897
Total	\$	830,233	\$	638,350

Our finished goods inventory as of June 30, 2010 included 65 Barocycler instruments. Our finished goods inventory as of December 31, 2009 included 44 Barocycler instruments.

Property and Equipment

Property and equipment are stated at cost, less accumulated depreciation. For financial reporting purposes, depreciation is recognized using the straight-line method, allocating the cost of the assets over their estimated useful lives of three years for certain laboratory equipment, from three to five years for management information systems and office equipment, and three years for all PCT finished units classified as fixed assets. Property and equipment includes total book value of \$140,768 relating to Barocycler instruments held under lease or collaboration.

Intangible Assets

We have classified as intangible assets, costs associated with the fair value of acquired intellectual property. Intangible assets including patents are amortized on a straight-line basis over sixteen years. The Company's intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. When impairment is indicated, any excess of carrying value over fair value is recorded as a loss. As of the date of this report's filing, no event has come to our attention that would cause us to record an impairment of intangible assets.

Long-Lived Assets and Deferred Costs

The Company's long-lived assets and other assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. Recoverability of an asset to be held and used is measured by a comparison of the carrying amount of an asset to the future undiscounted cash flows expected to be generated by the asset. If such asset is considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the asset exceeds its fair value. Through the date of this report's filing, the Company had not experienced impairment losses on its long-lived assets.

Concentrations

Credit Risk

Our financial instruments that potentially subject us to concentrations of credit risk consist primarily of cash, cash equivalents, and trade receivables. We have cash investment policies which, among other things, limit investments to investment-grade securities. We perform ongoing credit evaluations of our customers, and the risk with respect to trade receivables is further mitigated by the fact that many of our customers are government institutions, large pharmaceutical and biotechnology companies, and academic laboratories.

The following table illustrates the level of concentration as a percentage of total revenues during the three months and six months ended June 30, 2010 and 2009:

	For the Three Months Ended June 30,				
	2010		2009		
Top Five Customers	58	%		78	%
Federal Agencies	48	%		48	%
		e Six Mon led June 30			
	2010		2009		
Top Five Customers	51	%		60	%
Federal Agencies	44	%		38	%

The following table illustrates the level of concentration as a percentage of net accounts receivable balance as of June 30, 2010 and December 31, 2009:

	June 30, 2010		December 31, 2009	
Top Five Customers	62	%	62	%
Federal Agencies	25	%	12	%

Product Supply

Source Scientific, LLC has been our sole contract manufacturer for all of our PCT instrumentation. We have initiated several engineering initiatives to position us for greater independence from any one supplier, and we are continuing to develop a network of manufacturers and sub-contractors to reduce our reliance on any single supplier for PCT components. Until we develop a network of manufacturers and subcontractors, obtaining alternative sources of supply or manufacturing services could involve significant delays and other costs and challenges, and may not be available to us on reasonable terms, if at all. The failure of a supplier or contract manufacturer to provide sufficient quantities, acceptable quality and timely products at an acceptable price, or an interruption of supplies from such a supplier could harm our business and prospects.

Computation of Loss per Share

Basic loss per share is computed by dividing loss available to common shareholders by the weighted average number of common shares outstanding. Diluted loss per share is computed by dividing loss available to common shareholders by the weighted average number of common shares outstanding plus additional common shares that would have been outstanding if dilutive potential common shares had been issued. For purposes of this calculation, convertible preferred stock, common stock dividends, warrants to acquire preferred stock convertible into common stock, and warrants and options to acquire common stock, are all considered common stock equivalents in periods in which they have a dilutive effect and are excluded from this calculation in periods in which these are anti-dilutive. The loss per share for the six months ended June 30, 2009 reflects a deemed dividend of \$489,803, which was not shown previously in the loss per share calculation for the quarter ended June 30, 2009 filed on August 10, 2009.

The following table illustrates our computation of loss per share for the three months and six months ended June 30, 2010 and 2009:

		 For the Thr Ended Ju	 	For the Si Ended J	
		 2010	2009	 2010	2009
Numerator:					
Net loss		\$ (796,651)	\$ (814,049)	\$ (1,707,976)	\$ (1,038,295)
Accrued preferred stock dividend		(20,672)	(33,880)	(70,801)	(33,880)
Beneficial conversion feature for Series B Preferred Stock		-	-	(154,389)	(489,803)
Series A Preferred dividends paid in Common Stock		(107,167)	-	(152,130)	-
Series B Preferred dividends paid in Common Stock		-	-	(7,043)	-
Net loss applicable to common shareholders		\$ (924,490)	\$ (847,929)	\$ (2,092,339)	\$ (1,561,978)
Denominator for basic and diluted loss per share:					
Weighted average common stock shares outstanding		2,621,291	2,195,283	2,615,557	2,195,283
Loss per common share - basic and diluted		\$ (0.35)	\$ (0.39)	\$ (0.80)	\$ (0.71)
	0				

The following table presents securities that could potentially dilute basic loss per share in the future. For all periods presented, the potentially dilutive securities were not included in the computation of diluted loss per share because these securities would have been antidilutive. The Series A Convertible Preferred Stock and Series B Convertible Preferred Stock are presented below as if they were converted into common shares according to the conversion terms in Note 5.

		For the Three Months Ended June 30,		Six Months June 30,	
	2010	2009	2010	2009	
Stock options	1,019,500	215,586	1,019,500	105,478	
Common stock warrants	1,619,800	1,569,800	1,619,800	1,569,800	
Preferred stock warrants	940,550	1,569,800	940,550	1,569,800	
Convertible preferred stock:					
Series A Convertible Preferred	1,744,400	1,569,800	1,744,400	1,569,800	
Series B Convertible Preferred	887,110	-	887,110	-	
	6,211,360	4,924,986	6,211,360	4,814,878	

Accounting for Income Taxes

We account for income taxes under the asset and liability method, which requires recognition of deferred tax assets, subject to valuation allowances, and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting and income tax purposes. A valuation allowance is established if it is more likely than not that all or a portion of the net deferred tax assets will not be realized. If substantial changes in the Company's ownership should occur, as defined in Section 382 of the Internal Revenue Code, there could be sufficient limitations on the amount of net loss carry forwards that could be used to offset future taxable income.

In the six months ended June 30, 2009, we recorded a benefit for income taxes of \$623,262 due to provisions in the American Recovery and Reinvestment Act of 2009 relating to net operating loss carry-backs. The cash was received in August 2009. Aside from the impact of the passage of this congressional act, we do not expect any additional income tax benefits relating to carry-backs to prior periods. If we are successful in commercializing PCT and in generating operating income, then we may be able to utilize certain net operating losses we may have at the time against such future operating profits.

Accounting for Stock-Based Compensation

We maintain equity compensation plans under which incentive stock options and non-qualified stock options are granted to employees, independent members of our Board of Directors and outside consultants. We recognize equity compensation expense over the requisite service period using the Black-Scholes formula to estimate the fair value of the stock options on the date of grant.

Determining Fair Value of Stock Option Grants

Valuation and Amortization Method - The fair value of each option award is estimated on the date of grant using the Black-Scholes pricing model based on certain assumptions. The estimated fair value of employee stock options is amortized to expense using the straight-line method over the vesting period.

Expected Term - The Company uses the simplified calculation of expected life, described in the FASB ASC 718, Compensation-Stock Compensation, as the Company does not currently have sufficient historical exercise data on which to base an estimate of expected term. Using this method, the expected term is determined using the average of the vesting period and the contractual life of the stock options granted.

Expected Volatility - Expected volatility is based on the Company's historical stock volatility data over the expected term of the award.

Risk-Free Interest Rate - The Company bases the risk-free interest rate used in the Black-Scholes valuation method on the implied yield currently available on U.S. Treasury zero-coupon issues with an equivalent remaining term.



Forfeitures - - The Company records stock-based compensation expense only for those awards that are expected to vest. Specifically, the provisions of FASB ASC 718 require that the Company estimates the forfeiture rate and adjust the expense that it recognizes to reflect the estimated number of stock options that will go unexercised. The Company estimated a forfeiture rate of 5% for awards granted based on historical experience and future expectations of options vesting.

We recognized stock-based compensation expense of \$50,367 and \$106,957 for the three months ended June 30, 2010 and 2009, respectively. The following table summarizes the effect of this stock-based compensation expense within each of the line items of our costs and expenses within our Consolidated Statements of Operations:

	For the Three M Ended, June	
	2010	2009
Research and development	\$ 22,660	\$ 46,885
Selling and marketing	17,366	17,366
General and administrative	10,341	42,706
Total stock-based compensation expense	\$ 50,367	\$ 106,957

We recognized stock-based compensation expense of \$145,103 and \$252,861 for the six months ended June 30, 2010 and 2009, respectively. The following table summarizes the effect of this stock-based compensation expense within each of the line items of our costs and expenses within our Consolidated Statements of Operations:

	For the Six M Ended, June	
	2010	2009
Research and development	\$ 40,906	\$ 99,857
Selling and marketing	34,542	38,574
General and administrative	69,655	114,430
Total stock-based compensation expense	\$ 145,103	\$ 252,861

Fair Value of Financial Instruments

Due to their short maturities, the carrying amounts for cash and cash equivalents, accounts receivable, accounts payable, and accrued expenses approximate their fair value. Long-term liabilities are primarily related to liabilities transferred under contractual arrangements with carrying values that approximate fair value.

Reclassifications

Certain prior year amounts have been reclassified to conform to our current year presentation.

Advertising

Advertising costs are expensed as incurred. During the six months ended June 30, 2010, we incurred \$18,045 in advertising expenses but in the same period last year, we did not incur significant advertising expenses.

Rent Expense

Rental costs are expensed as incurred. During the six months ended June 30, 2010 and 2009, we incurred \$66,332 and \$43,989, respectively in rent expense for the use of our corporate office and research and development facilities.

4) <u>Commitments and Contingencies</u>

Operating Leases

Our corporate offices are currently located at 14 Norfolk Avenue, South Easton, Massachusetts 02375. In November 2007, we signed a lease agreement commencing in February 2008 pursuant to which we lease approximately 5,500 square feet of office space. We renewed the lease until August 31, 2011 with no increase in the monthly payment. We pay approximately \$6,500 per month for the use of these facilities.

Effective January 31, 2009, we terminated our sub-lease agreement with Proteome Systems, pursuant to which we leased approximately 650 square feet of laboratory space plus 100 square feet of office space from Proteome Systems in Woburn, Massachusetts. We paid approximately \$3,200 per month for the use of these facilities through January 31, 2009 with no further obligation.

Effective January 1, 2010, we entered into a three-year lease agreement with the University of Massachusetts, pursuant to which we are leasing laboratory and office space on campus at the university. We are paying \$5,000 per month for the use of these facilities.

Royalty Commitments

In 1996, we acquired our initial equity interest in BioSeq, Inc., which at the time was developing our original pressure cycling technology. BioSeq, Inc. acquired its pressure cycling technology from BioMolecular Assays, Inc. ("BMA") under a technology transfer and patent assignment agreement. In 1998, we purchased all of the remaining outstanding capital stock of BioSeq, Inc., and at such time, the technology transfer and patent assignment agreement was amended to require us to pay BMA a 5% royalty on our sales of products or services that incorporate or utilize the original pressure cycling technology that BioSeq, Inc. acquired from BMA. We are also required to pay BMA 5% of the proceeds from any sale, transfer or license of all or any portion of the original pressure cycling technology. These payment obligations terminate in 2016. During the six months ended June 30, 2010 and 2009, we incurred \$17,281 and \$15,002, respectively in royalty expense associated with our obligation to BMA.

In connection with our acquisition of BioSeq, Inc., we licensed certain limited rights to the original pressure cycling technology back to BMA. This license is non-exclusive and limits the use of the original pressure cycling technology by BMA solely for molecular applications in scientific research and development and in scientific plant research and development. BMA is required to pay us a royalty equal to 20% of any license or other fees and royalties, but not including research support and similar payments, it receives in connection with any sale, assignment, license or other transfer of any rights granted to BMA under the license. BMA must pay us these royalties until the expiration of the patents held by BioSeq, Inc. in 1998, which we anticipate will be in 2016. We have not received any royalty payments from BMA under this license.

Battelle Memorial Institute

In December 2008, we entered into an exclusive patent license agreement with the Battelle Memorial Institute ("Battelle"). The licensed technology is described in the patent application filed by Battelle on July 31, 2008 (US serial number 12/183,219). This application includes subject matter related to a method and a system for improving the analysis of protein samples, including through an automated system utilizing pressure and a pre-selected agent to obtain a digested sample in a significantly shorter period of time than current methods, while maintaining the integrity of the sample throughout the preparatory process. Pursuant to the terms of the agreement we paid Battelle a non-refundable initial fee. In addition to royalty payments on net sales on "licensed products", we are obligated to make minimum royalty payments for each year that we retain the rights outlined in the patent license agreement and we are required to have our first commercial sale of the licensed products within one year following the issuance of the patent covered by the licensed technology.

Purchase Commitments

On December 14, 2009, we submitted a purchase order to Source Scientific, LLC, the manufacturer of the Company's PCT Barocycler instrumentation, for 50 Barocycler NEP2320 units and 12 Barocycler NEP3229 units with various spare parts. Pursuant to the terms of the purchase order, we placed a deposit with Source Scientific, LLC, of approximately \$338,000 representing approximately 50% of the expected total value of the order. The purchase price for the 50 NEP2320 units and 12 NEP3229 units is based upon a fixed bill of materials. We will be billed for the unpaid purchase price of each unit at the time each unit is completed and ready for sale. As of June 30, 2010, we received 35 Barocycler NEP2320 units on this purchase order.

Severance and Change of Control Agreements

Each of our executive officers is entitled to receive a severance payment if terminated by the Company without cause. The severance benefits would include a payment in an amount equal to one year of each executive officer's annualized base salary compensation plus accrued paid time off. Additionally, each executive officer will be entitled to receive medical and dental insurance coverage for one year following the date of termination. The total commitment related to these agreements in the aggregate is approximately \$1.0 million.



Each of our executive officers, other than Mr. Richard T. Schumacher, our President and Chief Executive Officer, is entitled to receive a change of control payment in an amount equal to one year of such executive officer's annualized base salary compensation, accrued paid time off, and medical and dental coverage, in the event of a change of control of the Company. In the case of Mr. Schumacher, this payment would be equal to two years of annualized base salary compensation, accrued paid time off, and two years of medical and dental coverage. The total commitment related to these agreements in the aggregate is approximately \$1.3 million.

5) <u>Stockholders' Equity</u>

Preferred Stock

In 1996, our Board of Directors authorized the issuance of 1,000,000 shares of preferred stock with a par value of \$0.01. As of June 30, 2010, 20,000 shares of preferred stock have been designated as Series A Junior Participating Preferred Stock, none of which are issued and outstanding, 313,960 shares of preferred stock have been designated as Series A Convertible Preferred Stock, par value \$0.01 per share ("Series A Convertible Preferred Stock"), of which 266,492 shares are issued and outstanding, and 279,256 shares of preferred stock have been designated as Series B Convertible Preferred Stock"), of which 88,711 shares are issued and outstanding.

Series A Convertible Preferred Stock

On February 12, 2009, we completed a private placement, pursuant to which we sold an aggregate of 156,980 units (the "Series A Units") for a purchase price of \$11.50 per unit (the "Series A Purchase Price"), resulting in gross proceeds to us of \$1,805,270 (the "Series A Private Placement"). Each Series A Unit consisted of (i) one share of Series A Convertible Preferred Stock convertible into 10 shares of our common stock, (ii) a warrant to purchase one share of Series A Convertible Preferred Stock at an exercise price equal to \$12.50 per share, with a term expiring 15 months after the date of closing ("15-Month Series A Preferred Stock Warrant"); and (iii) a warrant to purchase 10 shares of common stock at an exercise price equal to \$2.00 per share, with a term expiring 30 months after the date of closing (the "30-Month Common Stock Warrants"). We did not pay any placement fees associated with this transaction but the expenses related to the offering totaled approximately \$233,000.

The proceeds from the sale of each Series A Unit was allocated between the Series A Convertible Preferred Stock, the 15-Month Series A Preferred Stock Warrant and the 30-Month Common Stock Warrant based on the relative estimated fair value of each security. The estimated fair value of the warrants was determined using the Black-Scholes formula, resulting in an allocation of the gross proceeds of \$882,253 to the total warrants issued. The allocation of the gross proceeds to the Series A Convertible Preferred Stock was \$923,017. In accordance with the provisions of FASB ASC 470-20, *Debt with Conversion and Other Options*, an additional adjustment between Additional Paid in Capital and Accumulated Deficit of \$489,803 was recorded to reflect an implicit non-cash dividend related to the allocation of proceeds between the stock and warrants issued. The \$489,803 represents the value of the adjustment to additional paid in capital related to the beneficial conversion feature of the Series A Convertible Preferred Stock. The value adjustment was calculated by subtracting the fair market value of the underlying common stock on February 12, 2009 issuable upon conversion of the Series A Convertible Preferred Stock as determined when the Company performed a fair market value allocation of the proceeds to the Series A Convertible Preferred Stock and warrants.

Each share of Series A Convertible Preferred Stock receives a cumulative dividend at the rate of 5% per annum of the Series A Purchase Price, payable semi-annually on June 30 and December 31, commencing on June 30, 2009 (with the first payment being pro-rated based on the number of days occurring between the date of issuance and June 30, 2009). Dividends may be paid in cash or in shares of common stock at our option, subject to certain conditions. The shares of Series A Convertible Preferred Stock also are entitled to a liquidation preference, such that in the event of any voluntary or involuntary liquidation, dissolution or winding up of our Company, the holders of Series A Convertible Preferred Stock will be paid out of the assets of the Company available for distribution to our stockholders before any payment shall be paid to the holders of common stock, an amount per share equal to the Series A Purchase Price, plus accrued and unpaid dividends. The Series A Convertible Preferred Stock (as described below) will be treated on an equivalent basis with respect to payments made in connection with a liquidation. The Board approved the method of payment in the form of common stock for the June 30, 2009 dividend, and the June 30, 2010 dividend.

Each share of Series A Convertible Preferred Stock is convertible into 10 shares of common stock at any time at the option of the holder, subject to adjustment for stock splits, stock dividends, recapitalizations and similar transactions (the "Series A Conversion Ratio"). Unless waived under certain circumstances by the holder of Series A Convertible Preferred Stock, such holder's shares of Series A Convertible Preferred Stock may not be converted if upon such conversion the holder's beneficial ownership would exceed certain thresholds. Each share of Series A Convertible Preferred Stock will automatically be converted into shares of common stock at the Series A Conversion Ratio then in effect: (i) if, after 12 months from the closing of the Series A Private Placement, the common stock trades on the Nasdaq Capital Market (or other primary trading market or exchange on which the common stock is then traded) at a price equal to \$4.00 for 20 out of 30 consecutive trading days with average daily trading volume of at least 10,000 shares or (ii) upon a registered public offering by the Company at a per share price equal to \$2.30 with aggregate gross proceeds to the Company of not less than \$10 million.

The holders of Series A Convertible Preferred Stock are not entitled to vote on any matters presented to the stockholders of the Company for their action or consideration at any meeting of stockholders of the Company (or by written consent of stockholders in lieu of meeting), except that the holders of Series A Convertible Preferred Stock may vote separately as a class on any matters that would amend, alter or repeal any provision of our Restated Articles of Organization, as amended, in a manner that adversely affects the powers, preferences or rights of the Series A Convertible Preferred Stock and such holders may also vote on any matters required by law.

At any time after February 11, 2014, upon 30 days written notice, we have the right to redeem the outstanding shares of Series A Convertible Preferred Stock at a price equal to the Series A Purchase Price, plus all accrued and unpaid dividends thereon. The redemption price may be paid in two annual installments.

15-Month Series A Preferred Stock Warrants and 30-Month Common Stock Warrants

Subject to the terms and conditions of the applicable warrants, the Company had the right to call for cancellation the 15-Month Series A Preferred Stock Warrants if the volume weighted average price of our common stock on the Nasdaq Capital Market (or other primary trading market or exchange on which our common stock is then traded) equaled or exceeded \$1.75 for either (i) 10 consecutive trading days or (ii) 15 out of 25 consecutive trading days. Pursuant to these provisions, on March 30, 2010, the Company called all of the 15-Month Series A Preferred Stock Warrants.

The 15-Month Series A Preferred Stock Warrants had an exercise price equal to \$12.50 per share, with a term expiring on May 12, 2010. Each of the 15-Month Series A Preferred Stock Warrants were exercised in connection with the warrant call and, therefore, there are no longer any 15-Month Series A Preferred Stock Warrants outstanding. The 30-Month Common Stock Warrants have an exercise price equal to \$2.00 per share, with a term expiring on August 12, 2011. Unless waived under certain circumstances by the holder of the 30-Month Common Stock Warrant, such holder's 30-Month Common Stock Warrants may not be exercised if upon such exercise the holder's beneficial ownership would exceed certain thresholds.

Each of the 15-Month Series A Preferred Stock Warrants permitted, and each of the 30-Month Common Stock Warrants permit the holder to conduct a "cashless exercise" at any time the holder of the warrant is an "affiliate" (as defined in the Securities Purchase Agreement) of the Company.

The warrant exercise price and/or number of shares issuable upon exercise of the applicable warrant are subject to adjustment for stock dividends, stock splits or similar capital reorganizations, as set forth in the warrants. As a result of the issuance of Common Stock in connection with dividends paid on the Series A Preferred Stock and the Series B Preferred Stock, the exercise price of the 30-Month Common Stock Warrants has been adjusted from \$2.00 to \$1.80 (the "New Exercise Price") to prevent dilution. The number of shares for which the 30-Month Common Stock Warrants are exercisable is equal to the original per share exercise price of the Warrant, prior to any adjustment, divided by the New Exercise Price, multiplied by the original number of Warrant Shares.

Subject to the terms and conditions of the 30-Month Common Stock Warrant, the Company has the right to call for cancellation the 30-Month Common Stock Warrant if the volume weighted average price for our common stock on the Nasdaq Capital Market (or other primary trading market or exchange on which our common stock is then traded) equals or exceeds \$2.80 for either (i) 10 consecutive trading days or (ii) 15 out of 25 consecutive trading days.

The warrants granted in connection with the Series A Units were valued based on a Black-Scholes pricing model at the date of the grant. The 15-Month Series A Preferred Stock Warrants and 30-Month Common Stock Warrants were granted with an exercise price of \$1.25 per share of Series A Convertible Preferred Stock and \$2.00 per share of common stock, respectively. The 15-Month Series A Preferred Stock Warrants vested immediately. The relative fair value of the warrants was calculated to be \$882,253 and was recorded to stockholders' equity in the first quarter of 2009. The assumptions for the Black-Scholes pricing model are represented in the table below with the 15-month Series A Preferred Stock Warrants being reflected on a per share common stock equivalent basis.



Assumptions	Preferred		Common			
Expected life (in months)		15			30	
Expected volatility		142.0	%		109.0	%
Risk-free interest rate		0.875	%		1.375	%
Exercise price	\$	1.25		\$	2.00	
Stock price	\$	0.90		\$	0.90	
Fair value per warrant	\$	0.45		\$	0.41	

Series B Convertible Preferred Stock

On November 18, 2009, we sold an aggregate of 62,039 units (the "Series B Units") for a purchase price of \$18.80 per unit (the "Series B Purchase Price"), resulting in gross proceeds to us of \$1,166,333. This was the first tranche of a \$2.5 million private placement. The second tranche closed on March 18, 2010 for the sale of 26,672 Series B Units with gross proceeds of \$501,434 (collectively the two tranches are referred to as the "Series B Private Placement"). Each Series B Unit consists of (i) one share of Series B Convertible Preferred Stock convertible into 10 shares of our common stock and (ii) a warrant to purchase one share of Series B Convertible Preferred Stock at an exercise price equal to \$23.80 per share for warrants issued in November 2009 and at an exercise price of \$28.80 for warrants issued in March 2010, in each case with a term expiring on August 11, 2011 (the "Series B Warrant").

In connection with the Series B Private Placements, we paid a finder's fee of \$100,478, plus warrants to purchase 5,344 shares of Series B Convertible Preferred Stock at \$28.80 per share, expiring August 11, 2012.

The proceeds from the sale of each Series B Unit were allocated between the Series B Convertible Preferred Stock and the Series B Warrants based on the relative estimated fair value of each security. The estimated fair value of the Series B Warrants was determined using the Black-Scholes formula, resulting in an allocation of the gross proceeds of \$592,685 to the total warrants issued for both tranches. The allocation of the gross proceeds to the Series B Convertible Preferred Stock was \$1,075,083 for both tranches. In accordance with the provisions of FASB ASC 470-20, *Debt with Conversion and Other Options*, an additional adjustment between Additional Paid in Capital and Accumulated Deficit of \$294,838 was recorded to reflect an implicit non-cash dividend related to the allocation of proceeds between the Series B Convertible Preferred Stock and Series B Warrants issued in both tranches. The \$294,838 represents the value of the adjustment to additional paid in capital related to the beneficial conversion feature of the Series B Convertible Preferred Stock. The value adjustment was calculated by subtracting the fair market value of the underlying common stock issuable upon conversion of the Series B Convertible Preferred Stock and Series B Convertible Preferred Stock on the date of the respective closing from the fair market value of the Series B Convertible Preferred Stock and Series B Warrants and the series B Convertible Preferred Stock and Seri

Each share of Series B Convertible Preferred Stock will receive a cumulative dividend at the rate of 5% per annum of the Series B Purchase Price, payable semi-annually on June 30 and December 31, commencing on December 31, 2009 (with the first payment being prorated based on the number of days occurring between the date of issuance and December 31, 2009). Dividends may be paid in cash or in shares of common stock at our option, subject to certain conditions. The shares of Series B Convertible Preferred Stock also are entitled to a liquidation preference, such that in the event of any voluntary or involuntary liquidation, dissolution or winding up of our Company, the holders of Series B Convertible Preferred Stock will be paid out of the assets of the Company available for distribution to our stockholders before any payment shall be paid to the holders of common stock, an amount per share equal to the Series B Purchase Price, plus accrued and unpaid dividends. The Series B Convertible Preferred Stock and the Series A Convertible Preferred Stock will be treated on an equivalent basis with respect to payments made in connection with a liquidation. The Board approved the method of payment in the form of common stock for the December 31, 2009 dividend and the June 30, 2010 dividend.

Each share of Series B Convertible Preferred Stock is convertible into 10 shares of common stock at any time at the option of the holder, subject to adjustment for stock splits, stock dividends, recapitalizations and similar transactions (the "Series B Conversion Ratio"). Each share of Series B Convertible Preferred Stock will automatically be converted into shares of common stock at the Series B Conversion Ratio then in effect: (i) if, after 12 months from the closing of the applicable tranche of the Series B Private Placement, the common stock trades on the Nasdaq Capital Market (or other primary trading market or exchange on which the common stock is then traded) at a price equal \$5.64 for 20 out of 30 consecutive trading days with average daily trading volume of at least 10,000 shares or (ii) upon a registered public offering by the Company at a per share price equal to \$5.64, with aggregate gross proceeds to the Company of not less than \$10 million. Unless waived under certain circumstances by the holder of the Series B Convertible Preferred Stock, such holder's Series B Convertible Preferred Stock may not be converted if upon such conversion the holder's beneficial ownership would exceed certain thresholds.

The holders of Series B Convertible Preferred Stock are not entitled to vote on any matters presented to the stockholders of the Company for their action or consideration at any meeting of stockholders of the Company (or by written consent of stockholders in lieu of meeting), except that the holders of Series B Convertible Preferred Stock may vote separately as a class on any matters that would amend, alter or repeal any provision of our Restated Articles of Organization, as amended, in a manner that adversely affects the powers, preferences or rights of the Series B Convertible Preferred Stock and such holders may also vote on any matters required by law.

At any time after February 12, 2014, upon 30 days written notice, we have the right to redeem the outstanding shares of Series B Convertible Preferred Stock at a price equal to the Series B Purchase Price, plus all accrued and unpaid dividends thereon. The redemption price may be paid in two annual installments. The Series B Convertible Preferred Stock and the Series A Convertible Preferred Stock will be treated on an equivalent basis with respect to payments made in connection with redemption.

Series B Warrants

The Series B Warrants issued in November 2009 have an exercise price equal to \$23.80 and the Series B Warrants issued in March 2010 have an exercise price equal to \$28.80, in each case with a term expiring on August 11, 2011. The Series B Warrants permit the holder to conduct a "cashless exercise" at any time the holder of the Series B Warrant is an "affiliate" (as defined in the Securities Purchase Agreement) of the Company.

The Series B Warrant exercise price and/or number of shares issuable upon exercise of the Series B Warrant will be subject to adjustment for stock dividends, stock splits or similar capital reorganizations, as set forth in the Series B Warrants.

Subject to the terms and conditions of the Series B Warrants, the Company has the right to call for cancellation the Series B Warrants if the volume weighted average price of our common stock on the Nasdaq Capital Market (or other primary trading market or exchange on which our common stock is then traded) equals or exceeds \$4.70 for either (i) 10 consecutive trading days or (ii) 15 out of 25 consecutive trading days.

In connection with the Series B Private Placement on March 18, 2010, we issued warrants to our placement agent to purchase 1,679 shares of Series B Convertible Preferred Stock at \$28.80 per share, expiring August 11, 2012. The Series B Warrants and placement agent warrants were valued based on a Black-Scholes pricing model at the date of the grants. The Series B Warrants and placement agent warrants vested immediately. The relative fair value of the Series B Warrants was calculated to be \$173,060 and was recorded to stockholders' equity. The assumptions for the Black-Scholes pricing model are represented in the table below for the warrants issued in both tranches reflected on a per share common stock equivalent basis. The assumptions for the placement agent show the range of values for both tranches.

	Preferred	Placement
Assumptions	warrants	Agent
Expected life (in months)	17	33
Expected volatility	146.4%	125.0%
Risk-free interest rate	1.000%	1.000%
Exercise price	\$ 2.88	\$ 2.88
Fair value per warrant	\$ 0.95	\$ 1.08

15-Month Series A Preferred Stock Warrant Call

On March 30, 2010, the Company called for cancellation any 15-Month Series A Preferred Stock Warrants that remained unexercised as of April 28, 2010. In connection with this warrant call, 15-Month Series A Preferred Stock Warrants to purchase 98,372 shares of Series A Convertible Preferred Stock were exercised at \$12.50 per share, for gross proceeds to the Company of \$1,229,650, before deducting expenses associated with the warrant call notice. 15-Month Series A Preferred Stock Warrants to purchase an additional 10,150 shares of Preferred Stock were exercised on a cashless basis, resulting in the net issuance of 2,883 shares of Series A Convertible Preferred Stock. Pursuant to the terms of the 15-Month Series A Preferred Stock Warrants, upon exercise of such warrants, the holders became entitled to receive an aggregate of 57,390 shares of common stock in payment of dividends on the Series A Convertible Preferred Stock paid on June 30, 2009 and December 31, 2009.



Common Stock

Shareholders Rights Plan

On March 3, 2003, our Board of Directors adopted a shareholder rights plan (the "Rights Plan") and declared a distribution of one Right for each outstanding share of our common stock to shareholders of record at the close of business on March 21, 2003 (the "Rights"). Initially, the Rights will trade automatically with the common stock and separate Right Certificates will not be issued. The Rights Plan is designed to deter coercive or unfair takeover tactics and to ensure that all of our shareholders receive fair and equal treatment in the event of an unsolicited attempt to acquire the Company. The Rights will expire on February 27, 2013 unless earlier redeemed or exchanged. Each Right entitles the registered holder, subject to the terms of a Rights Agreement, to purchase from the Company one one-thousandth of a share of the Company's Series A Junior Participating Preferred Stock at a purchase price of \$45.00 per one one-thousandth of a share, subject to adjustment. In general, the Rights will not be exercisable until a subsequent distribution date which will only occur if a person or group acquires beneficial ownership of 15% or more of our common stock or announces a tender or exchange offer that would result in such person or group owning 15% or more of the common stock. With respect to any person or group who currently beneficially owns 15% or more of our common stock, the Rights will not become exercisable unless and until such person or group acquires beneficial ownership of additional shares of common stock.

Subject to certain limited exceptions, if a person or group acquires beneficial ownership of 15% or more of our outstanding common stock or if a current 15% beneficial owner acquires additional shares of common stock, each holder of a Right (other than the 15% holder whose Rights become void once such holder reaches the 15% threshold) will thereafter have a right to purchase, upon payment of the purchase price of the Right, that number of shares of our common stock which at the time of such transaction will have a market value equal to two times the purchase price of the Right. In the event that, at any time after a person or group acquires 15% or more of our common stock, we are acquired in a merger or other business combination transaction or 50% or more of our consolidated assets or earning power are sold, each holder of a Right will thereafter have the right to purchase, upon payment of the purchase price of the Right, that number of shares of common stock of the acquiring company which at the time of such transaction will have a market value of two times the purchase price of the Right.

Our Board of Directors may exchange the Rights (other than Rights owned by such person or group which have become void), in whole or in part, at an exchange ratio of one share of common stock per Right (subject to adjustment). At any time prior to the time any person or group acquires 15% or more of our common stock, the Board of Directors may redeem the Rights in whole, but not in part, at a price of \$0.001 per Right.

Stock Options and Warrants

Our stockholders approved our amended 2005 Equity Incentive Plan (the "Plan") pursuant to which an aggregate of 1,800,000 shares of our common stock were reserved for issuance upon exercise of stock options or other equity awards made under the Plan. Under the Plan, we may award stock options, shares of common stock, and other equity interests in the Company to employees, officers, directors, consultants, and advisors, and to any other persons the Board of Directors deems appropriate.

As of June 30, 2010, options to acquire 1,325,500 shares were outstanding under the Plan with 474,500 shares available for future grant under the Plan. As of June 30, 2010, options to acquire 239,000 shares are outstanding under the 1999 Non-qualified Stock Option Plan. No additional options may be granted under the 1999 Non-qualified Stock Option Plan.

As of June 30, 2010, 1,569,800 of the 30-Month Common Stock Warrants were outstanding. Series B Warrants to purchase 94,055 shares of Series B Convertible Preferred Stock, which includes warrants given to our placement agent, were outstanding. On March 31, 2010, we issued warrants to an investor relations firm to purchase 50,000 shares of our common stock at an exercise price equal to \$3.00 per share, with a term expiring on August 11, 2012, in exchange for consulting services provided to us by such firm.



The following tables summarize information concerning common stock issuable upon the exercise of outstanding stock options and warrants to acquire either common stock or preferred stock convertible into common stock:

	Stock C	Stock Options Warrants		rants			
		Weighted		Weighted			
		Averag	e price		Average price	Total	
	Shares	per s	hare	Shares	per share	Shares	Exercisable
Balance outstanding, 12/31/2008	1,222,499	\$	3.30			1,222,499	932,334
Granted	485,000		0.82	3,846,640	1.78	4,331,640	
Exercised	-			(40,000)	1.25	(40,000)	
Expired	(5,000)		4.25	-	-	(5,000)	
Forfeited	(137,999)		3.40		<u> </u>	(137,999)	
Balance outstanding, 12/31/2009	1,564,500	\$	3.30	3,806,640	\$ 1.78	5,371,140	4,955,152
Granted	-		-	283,510	2.88	283,510	
Exercised	-		-	(1,529,800)	1.25	(1,529,800)	
Expired	-		-	-	-	-	
Forfeited			-				
Balance outstanding, 6/30/2010	1,564,500	\$	2.52	2,560,350	\$ 2.22	4,124,850	3,949,189

	0	ptions Outstanding		Options Exercisable					
		Weighted			Weighted				
	Average				Average				
Range of		Remaining				Remaining	Remaining		
Exercise	Number of	Contractual		Exercise	Number of	Contractual		Exercise	
Prices	Options	Life		Price	Options	Life		Price	
\$ 0.77 - \$2.70	704,000	6.4	\$	1.25	585,673	6.0	\$	1.34	
2.71 - 3.08	319,500	4.7		2.93	283,166	4.2		2.95	
3.09 - 3.95	302,000	5.9		3.67	302,000	5.9		3.67	
3.96 - 5.93	239,000	6.6		4.24	218,000	6.5		4.22	
\$ 0.77 - \$5.93	1,564,500	6.0	\$	2.52	1,388,839	5.7	\$	2.63	

During the six months ended June 30, 2009, the total fair value of stock options awarded was \$258,620. We did not grant employee stock options during the six months ended June 30, 2010.

As of June 30, 2010, the total estimated fair value of unvested stock options to be amortized over their remaining vesting period was \$119,340. The non-cash, stock based compensation expense associated with the vesting of these options is expected to be \$78,776 for the second half of 2010 and \$40,564 in 2011.

6) <u>Subsequent Events</u>

We performed a review of events subsequent to the balance sheet date through the date the financial statements were issued and determined that there were no such events requiring disclosure in the financial statements.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. In some cases, forward-looking statements are identified by terms such as "may", "will", "should", "could", "would", "expects", "plans", "anticipates", "believes", "estimates", "projects", "predicts", "potential", and similar expressions intended to identify forward-looking statements. Such statements include, without limitation, statements regarding:

- our ability to raise additional equity or debt financing on acceptable terms, if at all;
- our belief that we have sufficient liquidity to finance normal operations through the first quarter of 2011;
- our need to take additional cost reduction measures, cease operations or sell our operating assets, if we are unable to obtain sufficient additional financing in the future;
- the amount of cash necessary to operate our business;
- the amount of grant revenue and anticipated uses of grant revenue in future periods;
- our plans and expectations with respect to our pressure cycling technology (PCT) operations;
- the potential applications for PCT in, and the demonstration of proof-of-concept of PCT for, sample preparation, pathogen
- inactivation, protein purification, control of chemical reactions and immunodiagnostics, among others;
- the expected expenses, benefits and results from our research and development efforts;
- the expected benefits and results from our collaboration efforts;
- the expected increase in number of PCT units installed and the increase in revenues from sale of consumable products and extended service contracts;
- the potential size of the market for biological sample preparation;
- general economic conditions; and
- the anticipated future financial performance and business operations of our Company.

These forward-looking statements are only predictions and involve known and unknown risks, uncertainties, and other factors that may cause our actual results, levels of activity, performance, or achievements to be materially different from any future results, levels of activity, performance, or achievements expressed or implied by such forward-looking statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date of this Report. Except as otherwise required by law, we expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statement contained in this Report to reflect any change in our expectations or any change in events, conditions, or circumstances on which any of our forward-looking statements are based or to conform to actual results. We qualify all of our forward-looking statements by these cautionary statements. You should read this section in combination with the section entitled Management's Discussion and Analysis of Financial Condition and Results of Operations for the year ended December 31, 2009 included in our Annual Report on Form 10-K for the year ended December 31, 2009.

RISK FACTORS

Factors that could cause or contribute to differences in our future financial and operating results include those discussed in the risk factors set forth in Item 1 of our Annual Report on Form 10-K for the year ended December 31, 2009, as well as the risk factor below and those discussed elsewhere in this Report. The risks described in our Form 10-K and this Report are not the only risks that we face. Additional risks not presently known to us or that we do not currently consider significant may also have an adverse effect on us. If any of the risks actually occur, our business, results of operations, cash flows or financial condition could suffer.

If the research market opportunity for biological sample preparation is smaller than we believe, or we are unable to achieve a meaningful share of such market, we may not be able to increase our revenues and our overall business may suffer.

Based on published research reports, we believe that the research market for biological sample preparation is comprised of approximately 450,000 researchers working in about 80,000 labs worldwide, almost all of whom perform some level of sample preparation. If, by raising and devoting additional capital to our sales and marketing efforts, we are able to attain a 2.5% market share, we believe that we could achieve revenues of approximately \$32 million per year, based upon expected pricing for our existing products. We cannot assure you, however, that we have correctly estimated the size of the market or that we will be able to achieve a meaningful share of that market. Our estimations are based on assumptions that may ultimately be incorrect. If our estimates of the size of the potential market, the number of researchers and labs or the portion of those researchers who perform any level of sample preparation prove to be incorrect, the market opportunity for our products may be smaller than we believe. In that event, our prospects for generating revenue may be adversely affected, and our business may suffer. Even if the size of the market is consistent with our estimates, the amount of revenues we achieve may be significantly lower than what we have predicted if we are unable to raise sufficient capital to support increased sales and marketing efforts or have overestimated the expected pricing for our existing products. Further, even if our estimates and predictions are correct, we cannot be certain when we would achieve any increased revenues, if at all. Regardless of the accuracy of any of our assumptions, our sales force may not be successful in selling our PCT product line because scientists may not perceive the advantages of PCT over other sample preparation methods.

OVERVIEW

We have developed instruments which utilize our unique and proprietary pressure cycling technology ("PCT"), which we sell, along with associated disposables to life sciences companies, academic institutions and government agencies. There are currently over 100 users of our enabling platform. PCT represents the core of our products and has enabled our customers to perform biological sample preparation and enzymatic digestion in unique ways that were previously unavailable. The enabling capability of our PCT products allows us to continue to increase the number of applications for our platform beyond current uses, which include genomic and proteomic sample preparation, pathogen inactivation, the control of chemical and enzymatic reactions, immunodiagnostics, and protein purification. Additionally, we are pursuing business opportunities to leverage our products and PCT into new markets beyond our current focus of PCT-enhanced enzymatic digestion products designed specifically for the mass spectrometry marketplace, as well as sample preparation products for biomarker discovery, soil and plant biology, forensics, histology, and counter-bioterror applications.

PCT uses internally developed instrumentation that is capable of cycling pressure between ambient and ultra-high levels at controlled temperatures to rapidly and repeatedly control the interactions of bio-molecules. Our instrument, the Barocycler®, and our internally developed consumables product line, which includes PULSE (Pressure Used to Lyse Samples for Extraction) Tubes as well as application specific kits (which include consumable products and reagents) together make up the PCT Sample Preparation System.

We have experienced negative cash flows from our business. As of June 30, 2010, we had working capital resources of approximately \$2.6 million. Based on our current projections, we believe our current cash resources are sufficient to fund our normal operations through the first quarter of 2011. Depending upon the results of the Company's future financing and partnering activities and sales efforts, we may make cost reductions as required to accomplish this goal.

We believe we will need substantial additional capital to fund our operations in periods beyond the first quarter of 2011. If we are able to obtain additional capital or otherwise increase our revenues, we may increase spending in specific research and development applications and engineering projects and may hire additional sales personnel or invest in targeted marketing programs. In the event that we are unable to obtain financing on acceptable terms, or at all, we may be required to limit or cease our operations, pursue a plan to sell our operating assets, or otherwise modify our business strategy, which could materially harm our future business prospects.

We hold 14 United States and 10 foreign patents covering multiple applications of PCT in the life sciences field. Our pressure cycling technology employs a unique approach that we believe has the potential for broad use in a number of established and emerging life sciences areas, including;

- sample preparation for genomic, proteomic, and small molecule studies;
- pathogen inactivation;
- protein purification;
- control of chemical (particularly enzymatic) reactions; and
- Immunodiagnostics (clinical laboratory testing).

Since we began operations as Pressure BioSciences in February 2005, we have installed 150 Barocycler instruments, of which 108 currently remain installed. Our customers include researchers at academic laboratories, government agencies and biotechnology, pharmaceutical and other life sciences companies in the United States, and six foreign distribution partners.

	2005	2006	2007	2008	2009	YTD June 2010
Installed units	5	8	20	41	54	22
			21			

RESULTS OF OPERATIONS

Three Months Ended June 30, 2010 and 2009

Revenue

We recognized revenue of \$402,104 for the three months ended June 30, 2010 as compared to \$270,381 during the three months ended June 30, 2009.

PCT Products, Services, Other. Revenue from the sale of PCT products and services was \$283,382 for the three months ended June 30, 2010 as compared to \$159,202 during the three months ended June 30, 2009. The increase is due to more sales than rentals of instruments while the prior period included discounted sales to distributors. Sales of consumables of \$33,082 were recorded for the three months ended June 30, 2010 compared to \$15,290 during the same period in the prior year, an increase of \$17,792 or 116%. Our domestic and foreign installations of PCT systems are set forth in the table below.

	For the Three Months Ended June 30,		
	2010	2009	
Domestic	12	9	
International	-	3	
Total PCT System Installations	12	12	

Grant Revenue. During the three months ended June 30, 2010 and 2009, we recorded \$118,722 and \$111,179 of grant revenue, respectively. We received a new SBIR Phase I grant for approximately \$100,000 effective March 30, 2010. We expect grant revenues to remain consistent over the next several quarters as the amount of time and expense incurred in connection with the grants continues. The level of grant revenue that we recognize in any given quarter is dependent upon the level of resources we devote to grant related work in the period.

Cost of PCT Products and Services

The cost of PCT products and services was \$126,972 for the three months ended June 30, 2010 compared to \$90,820 for the comparable period in 2009. This increase was primarily due to a corresponding increase in PCT instrument sales.

Research and Development

Research and development expenditures were \$304,143 during the three months ended June 30, 2010 as compared to \$315,046 in the same period in 2009. This slight decrease resulted primarily from reduced project spending.

Research and development expense recognized in the three months ended June 30, 2010 and 2009 included \$22,660 and \$46,885 of non-cash, stock-based compensation expense, respectively.

Selling and Marketing

Selling and marketing expenses increased slightly to \$294,275 for the three months ended June 30, 2010 from \$252,464 for the comparable period in 2009. This increase was primarily due to recruiting efforts of sales personnel and compensation for new sales director.

During the three months ended June 30, 2010 and 2009, selling and marketing expense included \$17,366 and \$17,366 of non-cash, stock-based compensation expense, respectively.

General and Administrative

General and administrative costs totaled \$474,381 for the three months ended June 30, 2010 as compared to \$427,384 for the comparable period in 2009. This increase was primarily due to investor relations and patent related activities offset by a decrease in non-cash stock based compensation expense.

During the three months ended June 30, 2010 and 2009, general and administrative expense included \$10,341 and \$42,706 of non-cash, stock-based compensation expense, respectively. The non-cash, stock-based compensation expense is expected to increase in the third quarter due to stock options granted to new board members.



Operating Loss

Our operating loss was \$797,667 for the three months ended June 30, 2010 as compared to \$815,333 for the comparable period in 2009. The reduced operating loss resulted primarily for the reasons noted above.

Net Loss

During the three months ended June 30, 2010, we recorded a net loss to common shareholders of 924,490 or (0.35) per share, as compared to 847,929 or (0.39) per share in the three months ended June 30, 2009.

Six Months Ended June 30, 2010 and 2009

Revenue

We recognized revenue of \$692,917 for the six months ended June 30, 2010 as compared to \$577,143 during the six months ended June 30, 2009, respectively.

PCT Products, Services, Other. Revenue from the sale of PCT products and services was \$472,532 for the six months ended June 30, 2010, as compared to \$381,344 during the six months ended June 30, 2009. Sales of consumables of \$59,327 were recorded for the six months ended June 30, 2010 compared to \$41,040 during the same period in the prior year, an increase of \$18,287 or 45%. Our domestic and foreign installations of PCT systems are set forth in the table below.

	For the Six Ended Ju	
	2010	2009
Domestic	22	16
International	-	6
Total PCT System Installations	22	22

We expect the number of units installed will continue to increase in future periods due to our commercialization efforts although delays in customer purchases could occur due to current economic conditions in the global economy. Furthermore, we may realize some difficulties in signing up new distribution partners if we are unable to secure additional funding through equity or debt financings. We also expect that most of future installations will continue to be for the smaller, lower priced, Barocycler NEP2320 model and some will be placed under lease or short-term rental agreements. Therefore, we expect that the average revenue per installation will continue to fluctuate from period to period. As we expand the installed base of Barocycler instruments in the field, we expect to realize increasing revenues from the sale of consumable products and extended service contracts. In the short-term, these recurring revenue streams may continue to fluctuate from period to period.

Grant Revenue. During the six months ended June 30, 2010 and 2009, we recorded \$220,385 and \$195,799 of grant revenue, respectively. We completed the SBIR Phase I grant in the first quarter of 2010 and received a new SBIR Phase I grant from another federal agency for approximately \$100,000 effective March 30, 2010. We expect grant revenues to remain consistent over the next several quarters as the amount of time and expense incurred in connection with the grants continues. The level of grant revenue that we recognize in any given quarter is dependent upon the level of resources we devote to grant related work in the period.

Cost of PCT Products and Services

The cost of PCT products and services was \$214,075 for the six months ended June 30, 2010 compared to \$231,063 for the comparable period in 2009. Our gross profit margin on PCT products and services increased to 55% for the six months ended June 30, 2010, as compared to 39% for the six months ended June 30, 2009. The increase in the gross profit margin on PCT products and services was due primarily to sales of Barocycler units to our international distributors at distributor discounted prices in the prior year and increased rental rates this year on Barocycler leases.

The relationship between the cost of PCT products and services and PCT revenue will depend greatly on the mix of instruments we sell, the quantity of such instruments, and the mix of consumable products that we sell in a given period.



Research and Development

Research and development expenditures were \$598,284 in the first six months of 2010 as compared to \$622,270 in the same period in 2009. This consistent spending reflects consistent efforts on a number of R&D projects we are currently funding.

Research and development expense recognized in the first half of 2010 and 2009 included \$40,906 and \$99,857 of non-cash, stock-based compensation expense, respectively.

Selling and Marketing

Selling and marketing expenses increased slightly to \$576,853 for the six months ended June 30, 2010 from \$530,880 for the comparable period in 2009. This increase was primarily due to recruiting efforts of sales personnel and compensation for new sales director.

During the first half of 2010 and 2009, selling and marketing expense included \$34,542 and \$38,574 of non-cash, stock-based compensation expense, respectively.

General and Administrative

General and administrative costs totaled \$1,012,803 for the six months ended June 30, 2010 as compared to \$858,174 for the comparable period in 2009, an increase of \$154,629 or 18%. The increase is principally due to the expenses of patent filings and investor relations activities.

During the first half of 2010 and 2009, general and administrative expense included \$69,655 and \$114,430 of non-cash, stock-based compensation expense, respectively.

Operating Loss

Our operating loss was \$1,709,098 for the six months ended June 30, 2010 as compared to \$1,665,244 for the comparable period in 2009. The additional operating loss resulted primarily because of the factors noted above.

Income Taxes

During the first half of 2010, we did not record a benefit for income taxes. In the six months ended June 30, 2009, we recorded a benefit for income taxes of \$623,262 due to provisions in the American Recovery and Reinvestment Act of 2009 relating to net operating loss carrybacks.

Net Loss

During the first half of 2010, we recorded a net loss to common shareholders of \$2,092,339 or \$(0.80) per share, as compared to \$1,561,978 or \$(0.71) per share in the first half of 2009. Our net loss in the first half of 2010 increased from the corresponding net loss in the first half of 2009 because the prior period's net loss reflects an income tax benefit of \$623,262 which we did not have in the first half of 2010. The difference between net loss applicable to common shareholders and net loss relates to the beneficial conversion calculation associated with the intrinsic value of the Series A Convertible Preferred Stock and Series B Convertible Preferred Stock. See Note 3 of the Notes to Consolidated Financial Statements under the Computation of Loss per Share heading.

LIQUIDITY AND FINANCIAL CONDITION

As of June 30, 2010, our working capital position was \$2,629,493 the primary components of which were cash and cash equivalents, accounts receivable, inventory, prepaid expenses, and deposits, partially offset by accounts payable, accrued employee compensation, and other accrued expenses. As of December 31, 2009, our working capital position was \$2,209,205.

On March 18, 2010, we sold an aggregate of 26,672 units (the "Series B Units") for a purchase price of \$18.80 per unit, resulting in net proceeds to us of \$465,867. An initial tranche of Series B Units was sold in November 2009. Each Series B Unit consists of (i) one share of a newly created Series B Convertible Preferred Stock convertible into 10 shares of our common stock and (ii) a warrant to purchase one share of Series B Convertible Preferred Stock at an exercise price equal to \$28.80 per share with a term expiring on August 11, 2011 ("Series B Warrant"). See Note 5 of the Notes to Consolidated Financial Statements for a further description of the Series B Convertible Preferred Stock and Series B Warrants issued in the Series B Private Placement.



In connection with the warrant call notice issued on March 30, 2010, 15 Month Series A Preferred Stock Warrants to purchase 98,372 shares of Series A Convertible Preferred Stock were exercised at \$12.50 per share, for net proceeds to the Company of \$1,421,275 in March and April 2010, before deducting expenses associated with the warrant call notice. Warrants to purchase an additional 10,150 shares of Preferred Stock were exercised on a cashless basis, resulting in the net issuance of 2,883 shares of Preferred Stock.

As of June 30, 2010, we had working capital resources of approximately \$2.6 million. Based on our current projections, we believe our current cash resources, which include the funds we received from the Series A Preferred Stock Warrant exercise in March and April 2010, are sufficient to fund our normal operations through the first quarter of 2011. Depending upon the results of the Company's future financing and partnering activities and sales efforts, we may make cost reductions as required to accomplish this goal.

We believe we will need substantial additional capital to fund our operations in periods beyond the first quarter of 2011. If we are able to obtain additional capital or otherwise increase our revenues, we may increase spending in specific research and development applications and engineering projects and may hire additional sales personnel or invest in targeted marketing programs. In the event that we are unable to obtain financing on acceptable terms, or at all, we may be required to limit or cease our operations, pursue a plan to sell our operating assets, or otherwise modify our business strategy, which could materially harm our future business prospects.

Net cash used in operations for the six months ended June 30, 2010 was \$1,771,018 as compared to \$882,184 for the six months ended June 30, 2009. The increase in cash used in operations in 2010 as compared to 2009 is principally due to the investment of \$248,000 in certificates of deposit in 2010 and an increase in Barocycler inventory, and the federal income tax refund received in 2009.

Net cash used in investing activities for the six months ended June 30, 2010 was \$48,548 as compared to cash used of \$64,932 for the same period in the prior year. During the six months ended June 30, 2010, we purchased tooling and installed Barocycler instruments under collaboration or lease agreements while selling several demonstration units. Cash used in investing activities during the first six months of 2009 was for Barocycler instruments that we purchased and installed under collaboration or lease agreements.

Net cash provided by financing activities for the six months ended June 30, 2010 was \$1,887,142 as compared to \$1,567,923 for the same period in the prior year. We closed the second tranche of the Series B Private Placement on March 18, 2010 with the sale of an additional 26,672 Series B Units with net proceeds of \$465,867.

COMMITMENTS AND CONTINGENCIES

Operating Leases

Our corporate offices are currently located at 14 Norfolk Avenue, South Easton, Massachusetts 02375. In November 2007, we signed a lease agreement commencing in February 2008 pursuant to which we lease approximately 5,500 square feet of office space. We renewed the lease until August 31, 2011 with no increase in the monthly payment. We pay approximately \$6,500 per month for the use of these facilities.

Effective January 1, 2010, we entered into a three-year lease agreement with the University of Massachusetts, pursuant to which we are leasing laboratory and office space on campus at the university. We are paying \$5,000 per month for the use of these facilities.

Royalty Commitments

In 1996, we acquired our initial equity interest in BioSeq, Inc., which at the time was developing our original pressure cycling technology. BioSeq, Inc. acquired its pressure cycling technology from BioMolecular Assays, Inc. ("BMA") under a technology transfer and patent assignment agreement. In 1998, we purchased all of the remaining outstanding capital stock of BioSeq, Inc., and at such time, the technology transfer and patent assignment agreement was amended to require us to pay BMA a 5% royalty on our sales of products or services that incorporate or utilize the original pressure cycling technology that BioSeq, Inc. acquired from BMA. We are also required to pay BMA 5% of the proceeds from any sale, transfer or license of all or any portion of the original pressure cycling technology. These payment obligations terminate in 2016. During the six months ended June 30, 2010 and 2009, we incurred \$17,281 and \$15,002, respectively in royalty expense associated with our obligation to BMA.

In connection with our acquisition of BioSeq, Inc., we licensed certain limited rights to the original pressure cycling technology back to BMA. This license is non-exclusive and limits the use of the original pressure cycling technology by BMA solely for molecular applications in scientific research and development and in scientific plant research and development. BMA is required to pay us a royalty equal to 20% of any license or other fees and royalties, but not including research support and similar payments, it receives in connection with any sale, assignment, license or other transfer of any rights granted to BMA under the license. BMA must pay us these royalties until the expiration of the patents held by BioSeq, Inc. in 1998, which we anticipate will be in 2016. We have not received any royalty payments from BMA under this license.

Battelle Memorial Institute

In December 2008, we entered into an exclusive patent license agreement with the Battelle Memorial Institute ("Battelle"). The licensed technology is described in the patent application filed by Battelle on July 31, 2008 (US serial number 12/183,219). This application includes subject matter related to a method and a system for improving the analysis of protein samples, including through an automated system utilizing pressure and a pre-selected agent to obtain a digested sample in a significantly shorter period of time than current methods, while maintaining the integrity of the sample throughout the preparatory process. Pursuant to the terms of the agreement we paid Battelle a non-refundable initial fee. In addition to royalty payments on net sales on "licensed products", we are obligated to make minimum royalty payments for each year that we retain the rights outlined in the patent license agreement and we are required to have our first commercial sale of the licensed products within one year following the issuance of the patent covered by the licensed technology.

Target Discovery Inc.

In March 2010, we signed a strategic product licensing, manufacturing, co-marketing, and collaborative research and development agreement with Target Discovery Inc.("TDI"). Under the terms of the agreement, we have been licensed by TDI to manufacture and sell a highly innovative line of chemicals used in the preparation of tissues for scientific analysis ("TDI reagents"). The TDI reagents were designed for use in combination with our pressure cycling technology. The companies believe that the combination of PCT and the TDI reagents can fill an existing need in life science research for an automated method for rapid extraction and recovery of intact, functional proteins associated with cell membranes in tissue samples.

Purchase Commitments

On December 14, 2009, we submitted a purchase order to Source Scientific, LLC, the manufacturer of the Company's PCT Barocycler instrumentation, for 50 Barocycler NEP2320 units and 12 Barocycler NEP3229 units with various spare parts. Pursuant to the terms of the purchase order, we placed a deposit with Source Scientific, LLC, of approximately \$338,000 representing approximately 50% of the expected total value of the order. The purchase price for the 50 NEP2320 units and 12 NEP3229 units is based upon a fixed bill of materials. We will be billed for the unpaid purchase price of each unit at the time each unit is completed and ready for sale. As of June 30, 2010, we received 35 Barocycler NEP2320 units on this purchase order.

Severance and Change of Control Agreements

Each of our executive officers is entitled to receive a severance payment if terminated by the Company without cause. The severance benefits would include a payment in an amount equal to one year of each executive officer's annualized base salary compensation plus accrued paid time off. Additionally, each executive officer will be entitled to receive medical and dental insurance coverage for one year following the date of termination. The total commitment related to these agreements in the aggregate is approximately \$1.0 million.

Each of our executive officers, other than Mr. Richard T. Schumacher, our President and Chief Executive Officer, is entitled to receive a change of control payment in an amount equal to one year of such executive officer's annualized base salary compensation, accrued paid time off, and medical and dental coverage, in the event of a change of control of the Company. In the case of Mr. Schumacher, this payment would be equal to two years of annualized base salary compensation, accrued paid time off, and two years of medical and dental coverage. The total commitment related to these agreements in the aggregate is approximately \$1.3 million. The severance payment is meant to induce the executive to become an employee of the Company and to remain in the employ of the Company, in general, and particularly in the event of a change in control.



RECENT ACCOUNTING STANDARDS

In June 2009, the FASB issued FASB ASC 105, *Generally Accepted Accounting Principles*, which establishes the FASB Accounting Standards Codification as the sole source of authoritative generally accepted accounting principles. Pursuant to the provisions of FASB ASC 105, the Company has updated references to GAAP in its financial statements issued for the period ended December 31, 2009. The adoption of FASB ASC 105 did not impact the Company's financial position or results of operations.

On June 30, 2009, the Company adopted FASB ASC 855, *Subsequent Events*, which requires disclosure of the period after the balance sheet date during which management of a reporting entity should evaluate events or transactions that may occur for potential recognition or disclosure in the financial statements. The adoption of FASB ASC 855 did not have a material impact on our financial statements.

The Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, No. 2009-13, Revenue Recognition (Topic 605) — Multiple-Deliverable Revenue Arrangements, or ASU 2009-13. ASU 2009-13 amends existing revenue guidance related to revenue arrangements with multiple deliverables to allow the use of companies' estimated selling prices as the value for deliverable elements under certain circumstances and to eliminate the use of the residual method for allocation of deliverable elements. ASU 2009-13 is effective for fiscal years beginning on or after June 15, 2010, with earlier adoption permitted. The Company is currently evaluating the impact this standard will have on its financial statements.

ITEM 4T. CONTROLS AND PROCEDURES

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our Securities Exchange Act of 1934 filings are recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our President and Chief Executive Officer (Principal Executive Officer) and Chief Financial Officer (Principal Financial Officer), as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, as ours are designed to do, and management was necessarily required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As of June 30, 2010, we carried out an evaluation, under the supervision and with the participation of our management, including our Principal Executive Officer and Principal Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934. Based upon that evaluation, our Principal Executive Officer and Principal Financial Officer concluded that our disclosure controls and procedures are effective at the reasonable assurance level.

There have been no changes in our internal controls over financial reporting that occurred during the period covered by this Report that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

PART II. OTHER INFORMATION

ITEM 6. EXHIBITS

Exhibits		Reference
10.1	Amendment No. 2 to Pressure BioSciences, Inc. 2005 Equity Incentive Plan	Filed herewith
31.1	Principal Executive Officer Certification Pursuant to Item 601(b)(31) of Regulation S-K, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith
32.1	Principal Executive Officer Certification Pursuant to Item 601(b)(32) of Regulation S-K, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed herewith

SIGNATURES

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

PRESSURE BIOSCIENCES, INC.

Date: August 16, 2010

By: /s/ Richard T. Schumacher

Richard T. Schumacher President & Chief Executive Officer (Principal Executive Officer, Principal Financial Officer and Principal Accounting Officer)

AMENDMENT NO. 2 TO PRESSURE BIOSCIENCES, INC. 2005 EQUITY INCENTIVE PLAN

The following amendment to the Pressure BioSciences, Inc. (the "Corporation") 2005 Equity Incentive Plan (the "Plan") was approved by the Board of Directors of the Corporation on April 19, 2010, subject to the approval of the stockholders of the Corporation:

1. Section 3, Paragraph (a) is amended and restated by deleting the first sentence of this paragraph and replacing it with the following:

"Subject to adjustment under Section 3(c), the aggregate number of shares of Common Stock of the Company (the "Common Stock") that may be issued pursuant to the Plan is 1,800,000."

2. Except as amended hereby, the 2005 Equity Incentive Plan shall remain in full force and effect in accordance with its original terms.

Approved by the Board of Directors: April 19, 2010

Approved by Stockholders: June 25, 2010

EXHIBIT 31.1

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Richard T. Schumacher, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Pressure BioSciences, Inc.;

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 Rule 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 subsidiary, 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 controls over financial reporting, or caused such internal controls 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.

Dated: August 16, 2010

/s/ Richard T. Schumacher

Richard T. Schumacher President & Chief Executive Officer (Principal Executive Officer and Principal Financial Officer)

EXHIBIT 32.1

Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)

In connection with the Quarterly Report on Form 10-Q of Pressure BioSciences, Inc., a Massachusetts corporation (the "Company") for the period ended June 30, 2010 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Richard T. Schumacher, President and Chief Executive Officer of the Company, do hereby certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code) that:

(1) The Report of the Company 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 Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 16, 2010

By: /s/ Richard T. Schumacher

Richard T. Schumacher President & Chief Executive Officer (Principal Executive Officer and Principal Financial Officer)

A signed original of this written statement required by Section 906 has been provided to Pressure BioSciences, Inc. and will be retained by Pressure BioSciences, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.