

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

FORM 10-Q

(Mark One)

Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the quarterly period ended June 30, 2012 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)

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

14 Norfolk Avenue
South Easton, Massachusetts 02375
(Address of Principal Executive Offices) (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.

Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 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).

Yes No

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>

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

Yes No

The number of shares outstanding of the Issuer's common stock as of August 1, 2012 was 10,636,727.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

**PRESSURE BIOSCIENCES, INC. AND SUBSIDIARY
CONSOLIDATED CONDENSED BALANCE SHEETS**

ASSETS	June 30, 2012 (Unaudited)	December 31, 2011 (Audited)
CURRENT ASSETS		
Cash and cash equivalents	\$ 20,916	\$ 222,775
Accounts receivable, net of allowances of \$9,600 at June 30, 2012 and at December 31, 2011	241,726	269,237
Inventories	975,897	1,069,013
Prepaid income taxes	7,381	4,739
Prepaid expenses and other current assets	374,588	143,591
Total current assets	1,620,508	1,709,355
PROPERTY AND EQUIPMENT, NET	56,319	89,171
OTHER ASSETS		
Deposits	6,472	6,472
Intangible assets, net	109,446	133,762
TOTAL ASSETS	\$ 1,792,745	\$ 1,938,760
LIABILITIES AND STOCKHOLDERS' DEFICIT		
CURRENT LIABILITIES		
Accounts payable	\$ 1,195,567	\$ 890,676
Accrued employee compensation	182,697	180,437
Accrued professional fees and other	236,845	247,738
Deferred revenue	29,118	36,669
Promissory note	150,000	150,000
Funds held for private placement	295,000	—
Convertible debt, net of unamortized discount of \$0 at June 30, 2012 and \$17,088 as of December 31, 2011	13,139	394,912
Make-whole dividend liability	328,480	—
Warrant derivative liability	168,588	436,553
Total current liabilities	2,599,434	2,336,985
LONG TERM LIABILITIES		
Deferred revenue	5,266	10,111
TOTAL LIABILITIES	2,604,700	2,347,096
COMMITMENTS AND CONTINGENCIES (Note 4)		
STOCKHOLDERS' DEFICIT		
Series C convertible preferred stock, \$.01 par value; 88,098 shares authorized; 0 shares issued and outstanding on June 30, 2012 and 88,098 shares issued and outstanding on December 31, 2011	—	881
Series D convertible preferred stock, \$.01 par value; 850 shares authorized; 300 shares issued and outstanding on June 30, 2012 and 743 shares issued and outstanding on December 31, 2011 (Liquidation value of \$300,000)	3	7
Series E convertible preferred stock, \$.01 par value; 500 shares authorized; 350 shares issued and outstanding on June 30, 2012 and 0 shares issued and outstanding on December 31, 2011 (Liquidation value of \$350,000)	4	—
Common stock, \$.01 par value; 20,000,000 shares authorized; 10,405,469 shares issued and outstanding on June 30, 2012 and 6,723,993 shares issued and outstanding on December 31, 2011	104,055	67,240
Warrants to acquire preferred stock and common stock	2,828,713	2,203,101
Additional paid-in capital	14,935,697	13,823,875
Accumulated deficit	(18,680,427)	(16,503,440)
Total stockholders' deficit	(811,955)	(408,336)
TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT	\$ 1,792,745	\$ 1,938,760

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

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

	For the Three Months Ended		For the Six Months Ended	
	June 30,		June 30,	
	2012	2011	2012	2011
Revenue:				
PCT products, services, other	\$ 224,384	\$ 190,686	\$ 389,156	\$ 371,329
Grant revenue	100,524	—	241,413	—
Total revenue	<u>324,908</u>	<u>190,686</u>	<u>630,569</u>	<u>371,329</u>
Costs and expenses:				
Cost of PCT products and services	109,203	78,296	187,397	157,225
Research and development	256,307	263,809	527,918	482,774
Selling and marketing	168,173	242,544	406,265	546,383
General and administrative	474,015	448,314	1,156,361	860,843
Total operating costs and expenses	<u>1,007,698</u>	<u>1,032,963</u>	<u>2,277,941</u>	<u>2,047,225</u>
Operating loss	(682,790)	(842,277)	(1,647,372)	(1,675,896)
Other (expense) income:				
Interest (expense) income	(4,214)	75	(60,527)	329
Change in fair value of warrant derivative liability	177,312	84,021	135,300	84,021
Total other income	<u>173,098</u>	<u>84,096</u>	<u>74,773</u>	<u>84,350</u>
Net loss	<u>(509,692)</u>	<u>(758,181)</u>	<u>(1,572,599)</u>	<u>(1,591,546)</u>
Accrued and deemed dividends on convertible preferred stock	(579,974)	(414,360)	(604,388)	(547,451)
Net loss applicable to common shareholders	<u>\$ (1,089,666)</u>	<u>\$ (1,172,541)</u>	<u>\$ (2,176,987)</u>	<u>\$ (2,138,997)</u>
Net loss per share attributable to common stockholders - basic and diluted	\$ (0.11)	\$ (0.41)	\$ (0.21)	\$ (0.75)
Weighted average common stock shares outstanding used in the basic and diluted net loss per share calculation	10,197,850	2,874,305	10,352,461	2,867,381

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

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

	For the Six Months Ended	
	June 30,	
	2012	2011
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$ (1,572,599)	\$ (1,591,546)
Adjustments to reconcile net loss to net cash used in operating activities		
Depreciation and amortization	57,168	77,025
Accretion of interest and amortization of debt issue costs	46,159	—
Stock-based compensation expense	20,090	81,168
Amortization of third party fees paid in restricted common stock	79,575	—
Change in fair value of warrant derivative liability	(135,300)	(84,021)
Changes in operating assets and liabilities:		
Accounts receivable	27,511	74,879
Inventories	93,116	(29,772)
Accounts payable	304,891	276,450
Accrued employee compensation	2,260	1,946
Deferred revenue and other accrued expenses	50,520	(124,663)
Prepaid expenses and other current assets	(157,639)	119,147
Net cash used in operating activities	<u>(1,184,248)</u>	<u>(1,199,387)</u>
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from stock option exercises	—	43,980
Restricted cash	—	20,014
Funds held for private placement	295,000	—
Payments on convertible debt	(43,000)	—
Net proceeds from the issuance of equity securities	730,389	816,963
Net cash provided by financing activities	<u>982,389</u>	<u>880,957</u>
Change in cash and cash equivalents	(201,859)	(318,430)
Cash and cash equivalents, beginning of period	222,775	552,849
Cash and cash equivalents, end of period	<u>\$ 20,916</u>	<u>\$ 234,419</u>
SUPPLEMENTAL INFORMATION:		
Income taxes paid in cash	\$ 1,900	\$ 1,900
Issuance of common stock dividends on preferred stock	161,557	76,017
Issuance of common stock warrants to placement agent	—	94,313
Issuance of common stock for services	155,575	—
Convertible debt exchanged for common stock	387,547	—
Series B dividends paid in cash	—	42,037
Beneficial conversion feature on convertible preferred stock	—	304,823

The accompanying notes are an integral part of these consolidated condensed 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 consumables and services to life sciences companies, academic institutions and government agencies. Since we began operations as Pressure BioSciences in February 2005, we have installed 224 Barocycler instruments, of which 142 currently remain installed. 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, 2012, we did not have adequate working capital resources to satisfy our current liabilities and as a result, we have substantial doubt regarding our ability to continue as a going concern. Based on our current projections, including equity financing completed subsequent to June 30, 2012, we believe our current cash resources will enable us to extend our cash resources to fund normal operations until the end of August 2012. Please see Note 6, *Subsequent Events*.

We need substantial additional capital to fund normal operations in periods beyond the end of August 2012. In the event that we are unable to obtain financing on acceptable terms, or at all, we will likely be required to 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.

Until April 5, 2012, our common stock was traded on The NASDAQ Capital Market. As a result of our stockholders’ equity falling below the minimum \$2.5 million requirement and the bid price of our common stock remaining below the minimum \$1.00 per share requirement for continued inclusion on The NASDAQ Capital Market, on April 5, 2012, our common stock was delisted from The NASDAQ Capital Market and on April 5, 2012 our common stock began trading on the OTCQB Marketplace under the ticker symbol PBIO. We continue to file periodic reports with the Securities and Exchange Commission in accordance with the requirements of Section 12(g) of the Securities Exchange Act of 1934, as amended.

2) **Interim Financial Reporting**

The accompanying unaudited consolidated condensed 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, 2012 are not necessarily indicative of the results that may be expected for the year ending December 31, 2012. For further information, refer to the audited consolidated financial statements and footnotes thereto included in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2011 (the “Form 10-K”) as filed with the Securities and Exchange Commission on February 27, 2012.

3) **Summary of Significant Accounting Policies**

Principles of Consolidation

The consolidated condensed financial statements include the accounts of Pressure BioSciences, Inc., and its wholly-owned subsidiary PBI BioSeq, Inc. All intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates

To prepare our consolidated condensed financial statements in conformity with accounting principles generally accepted in the United States of America, 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 were made in projecting future cash flows to quantify impairment of assets, deferred tax assets, the costs associated with fulfilling our warranty obligations for the instruments that we sell, and the estimates employed in our calculation of fair value of stock options awarded and warrant derivative liability. 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

We recognize revenue in accordance with FASB ASC 605, *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 or lease 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 and overseas customers is recognized upon shipment through a common carrier unless installation is specifically requested by the customer. 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 the HUB440 and 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.

In accordance with FASB ASC 840, *Leases*, 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 agreement 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 lessee 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). Revenue under multiple element arrangements is recognized in accordance with FASB ASC 605-25 *Multiple-Element Arrangements ("ASC 605")*. When vendor specific objective evidence or third party evidence of selling price for deliverables in an arrangement cannot be determined, the Company develops a best estimate of the selling price to separate deliverables and allocates arrangement consideration using the relative selling price method. 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 based on the estimated selling price of the total arrangement. 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 with revenue recognized ratably over the life of the contract.

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.

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 that are expensed as incurred. 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 life.

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. The composition of inventory as of June 30, 2012 and December 31, 2011 is as follows:

	June 30, 2012	December 31, 2011
Raw materials	\$ 186,630	\$ 193,121
Finished goods	789,267	875,892
Total	\$ 975,897	\$ 1,069,013

Our finished goods inventory as of June 30, 2012 included 61 Barocycler instruments. Our finished goods inventory as of December 31, 2011 included 68 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 net book value of \$32,947 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 at least annually or 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, 2012 and 2011:

	For the Three Months Ended	
	June 30,	
	2012	2011
Top Five Customers	73%	65%
Federal Agencies	49%	12%

	For the Six Months Ended	
	June 30,	
	2012	2011
Top Five Customers	60%	40%
Federal Agencies	50%	10%

The following table illustrates the level of concentration as a percentage of net accounts receivable balance as of June 30, 2012 and December 31, 2011:

	June 30,	December 31,
	2012	2011
Top Five Customers	78%	89%
Federal Agencies	45%	42%

Product Supply

Source Scientific, LLC has been our sole contract manufacturer for all of our PCT instrumentation. 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, 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 to our net loss.

The following table illustrates our computation of loss per share for the three months and six months ended June 30, 2012 and 2011:

	For the Three Months Ended		For the Six Months Ended	
	June 30,		June 30,	
	2012	2011	2012	2011
Numerator:				
Net loss	\$(509,692)	\$(758,181)	\$(1,572,599)	\$(1,591,546)
Accrued dividend for Preferred Stock	(394,430)	(109,537)	(418,884)	(242,628)
Beneficial conversion feature for Preferred Stock	-	(304,823)	-	(304,823)
Deemed dividend on warrant modifications	(185,544)	-	(185,544)	-
Net loss applicable to common shareholders	\$(1,089,666)	\$(1,172,541)	\$(2,176,987)	\$(2,138,997)
Denominator for basic and diluted loss per share:				
Weighted average common stock shares outstanding	10,197,850	2,874,305	10,352,461	2,867,381
Loss per common share - basic and diluted	\$(0.11)	\$(0.41)	\$(0.21)	\$(0.75)

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 anti-dilutive to our net loss. The Series A Convertible Preferred Stock, Series B Convertible Preferred Stock, Series C Convertible Preferred Stock, Series D Convertible Preferred Stock and Series E Convertible Preferred Stock are presented below as if they were converted into common shares according to the conversion terms in Note 5. All of the outstanding shares of Series A Convertible Preferred Stock and Series B Convertible Preferred Stock were voluntarily converted by the holders in 2011 into shares of common stock. On April 5, 2012, the holders of the Series C Convertible Preferred Stock exchanged all of their Series C Preferred Stock and warrants ("Series C Units") for units that we offered in our February 2012 private placement consisting of shares of common stock and warrants to purchase shares of common stock (with a warrant to purchase 0.5 shares of common stock for each share of common stock purchased in the February 2012 private placement), resulting in an aggregate of 1,372,247 shares of common stock and warrants to purchase an aggregate of 686,125 shares of common stock being issued to the holders of Series C Units.

	For the Three Months Ended		For the Six Months Ended	
	June 30,		June 30,	
	2012	2011	2012	2011
Stock options	1,555,500	1,418,500	1,555,500	1,418,500
Convertible debt	7,000	—	7,000	—
Common stock warrants	5,115,533	2,745,110	5,115,533	2,745,110
Preferred stock warrants	—	940,550	—	940,550
Convertible preferred stock:				
Series A Convertible Preferred	—	2,611,350	—	2,611,350
Series B Convertible Preferred	—	841,790	—	841,790
Series C Convertible Preferred	—	880,980	—	880,980
Series D Convertible Preferred	461,539	—	461,539	—
Series E Convertible Preferred	343,137	—	343,137	—
	<u>7,482,709</u>	<u>9,438,280</u>	<u>7,482,709</u>	<u>9,438,280</u>

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 significant limitations on the amount of net loss carry forwards that could be used to offset future taxable income.

Warrant Derivative Liability

The warrants issued in connection with the Series C Convertible Preferred Stock private placement (the "Series C Warrants") and warrants issued in connection with the registered direct offering of Series D Convertible Preferred Stock (the "Series D Warrants") are measured at fair value and liability-classified because the Series C Warrants are entitled to certain rights in subsequent financings and the Series D Warrants contain "down-round protection" and, therefore, do not meet the scope exception for treatment as a derivative under ASC 815, *Derivatives and Hedging*, ("ASC 815"). Since "down-round protection" is not an input into the calculation of the fair value of the warrants, the warrants cannot be considered indexed to the Company's own stock which is a requirement for the scope exception as outlined under ASC 815. The estimated fair value of the warrants was determined using the binomial model, resulting in an allocation of the gross proceeds of \$583,250 to the total warrants issued in the Series C private placement and \$283,725 to the warrants issued in the Series D registered direct offering. The fair value will be affected by changes in inputs to that model including our stock price, expected stock price volatility, the contractual term, and the risk-free interest rate. We will continue to classify the fair value of the warrants as a liability until the warrants are exercised, expire or are amended in a way that would no longer require these warrants to be classified as a liability, whichever comes first. The down-round protection for the Series D Warrants survives for the life of the Series D Warrants which ends in May 2017. Effective immediately with the April 5, 2012 exchange of Series C Warrants for the warrants issued in our February 2012 private placement, the down-round protection for Series C Warrants ended. We reclassified the fair value of \$132,665 associated with

the Series C Warrants valued as of April 5, 2012 to Stockholders' Equity from the Warrant Derivative Liability.

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, which is over four years for options granted in 2012.

Expected Term - The Company uses the simplified calculation of expected life, 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. The Company estimated a forfeiture rate of 5% for awards granted based on historical experience and future expectations of options vesting. We used this historical rate as our assumption in calculating future stock-based compensation expense.

We recognized stock-based compensation expense of \$11,222 and \$12,202 for the three months ended June 30, 2012 and 2011, 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 Months Ended June 30,	
	2012	2011
Research and development	\$ 3,508	\$ 3,737
Selling and marketing	3,669	2,728
General and administrative	4,045	5,737
Total stock-based compensation expense	<u>\$ 11,222</u>	<u>\$ 12,202</u>

We recognized stock-based compensation expense of \$20,090 and \$81,168 for the six months ended June 30, 2012 and 2011, 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 Months Ended June 30,	
	2012	2011
Research and development	\$ 6,125	\$ 25,342
Selling and marketing	6,783	33,739
General and administrative	7,182	22,087
Total stock-based compensation expense	<u>\$ 20,090</u>	<u>\$ 81,168</u>

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.

Fair Value Measurements

The Company generally defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price). The Company uses a three-tier fair value hierarchy, which classifies the inputs used in measuring fair values. These tiers include: Level 1, defined as observable inputs such as quoted prices for identical instruments in active markets; Level 2, defined as inputs other than quoted prices in active markets that are either directly or indirectly observable; and Level 3, defined as unobservable inputs in which little or no market data exists, therefore requiring the Company's Chief Financial Officer to develop assumptions and the Company's valuation policy.

Financial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company has determined that it does not have any financial assets measured at fair value and that its financial liabilities are currently all classified within Level 3 in the fair value hierarchy.

The following tables set forth the Company's financial liabilities that were accounted for at fair value on a recurring basis as of June 30, 2012. The Series C Common Stock Purchase Warrants were exchanged for warrants without a derivative feature and were reclassified as an equity instrument within Stockholders' Equity as of June 30, 2012.

	June 30, 2012	Fair value measurements at June 30, 2012 using:		
		Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Series D Common Stock Purchase Warrants	\$ 168,588	\$ —	\$ —	\$ 168,588
	<u>\$ 168,588</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 168,588</u>

	January 1, 2012	Change in Fair Value	Reclassified to Equity	June 30, 2012
Series C Common Stock Purchase Warrants	\$ 205,353	\$ (72,688)	\$ (132,665)	\$ —
Series D Common Stock Purchase Warrants	231,200	(62,612)	—	168,588
	<u>\$ 436,553</u>	<u>\$ (135,300)</u>	<u>\$ (132,665)</u>	<u>\$ 168,588</u>

The following tables set forth the Company's financial liabilities that were accounted for at fair value on a recurring basis as of June 30, 2011.

	January 1, 2011	Change in Fair Value	June 30, 2011
Series C Common Stock Purchase Warrants	\$-	\$507,883	\$507,883
	<u>\$-</u>	<u>\$507,883</u>	<u>\$507,883</u>

Assumptions	Warrants revalued at April 5, 2012			
	April 8, 2011	June 20, 2011	April 8, 2011	June 20, 2011
Expected term (in months)	36.0	36.0	24.0	24.0
Expected volatility	118.5%	118.5%	100%	100%
Risk-free interest rate	0.625%	0.625%	0.75%	0.75%
Exercise price	\$ 2.13	\$ 2.13	\$ 2.13	\$ 2.13
Fair value per warrant	\$ 0.70	\$ 0.62	\$ 0.15	\$ 0.15

The assumptions for the binomial pricing model are represented in the table below for the warrants issued in the Series D private placement reflected on a per share common stock equivalent basis.

Assumptions	November 10, 2011	Warrants revalued at June 30, 2012
Expected term(in months)	60.0	53.0
Expected volatility	104.5%	123.9%
Risk-free interest rate	0.875%	0.75%
Exercise price	\$ 0.81	\$ 0.74
Fair value per warrant	\$ 0.54	\$ 0.30

Rent Expense

Rental costs are expensed as incurred. During the six months ended June 30, 2012 and 2011, we incurred \$58,800 and \$68,832, respectively, in rent expense for the use of our corporate office and research and development facilities.

4) **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 extended the lease term until September 30, 2012 with a monthly payment of \$4,800.

Effective January 1, 2010, we entered into a three-year lease agreement with the University of Massachusetts in Boston, pursuant to which we are leasing laboratory and office space on campus at the university for research and development activities. We pay \$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, 2012 and 2011, we incurred \$11,760 and \$11,672, 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 of \$35,000. 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. Our only obligation for 2011 was a minimum annual royalty payment of \$7,500. Our minimum annual royalty payment for 2012 is \$10,000.

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"). TDI's Chief Executive Officer is a board member of Pressure BioSciences, Inc. 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. We owe a royalty of approximately \$1,200 on qualifying sales through June 30, 2012.

In April 2012, we signed expanded strategic technology license and supply agreements (the "Agreements") with TDI. Under these agreements, TDI now has the right to use PBI's PCT Platform for their planned entry into the clinical diagnostics testing market. The planned commercial diagnostic services will initially target what the companies believe are critical, unmet needs in treatment selection guidance for ovarian cancer. Until now, PBI's PCT Platform has been available on a "research-use-only" basis.

Severance and Change of Control Agreements

Each of Mr. Schumacher, Dr. Ting, Dr. Lazarev, and Dr. Lawrence, executive officers of the Company, is entitled to receive a severance payment if terminated by us without cause. The severance benefits would include a payment in an amount equal to one year of such executive officer's annualized base salary compensation plus accrued paid time off. Additionally, the officer will be entitled to receive medical and dental insurance coverage for one year following the date of termination.

Each of these executive officers, other than Mr. Schumacher, 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.

Investment Banking Agreement

On November 4, 2011, the Company entered into an agreement with a former placement agent, pursuant to which the Company and the placement agent released each other of their respective obligations under a prior investment banking agreement. In connection with this agreement, the Company issued the placement agent a promissory note with an original principal amount of \$150,000 with a maturity date of May 4, 2012. The promissory note was interest free until May 4, 2012. The Company did not pay the principal of the promissory note on or before May 4, 2012, and, as a result, the Company began accruing interest on the principal amount of the promissory note at a rate of 18% per year commencing on May 5, 2012.

Funds Held for Private Placement

The current balance of \$295,000 represents funds held for our completed July 2012 private placement and is included in current liabilities on our consolidated condensed balance sheet.

Convertible Debt

Loans in the aggregate amount of \$362,000 from four individuals were converted into common stock and warrants in the February

2012 private placement. We had paid \$43,000 towards the outstanding balance in April 2012. Principal and interest of \$13,139 remained outstanding as of June 30, 2012 which was later converted into preferred stock and warrants in the July 2012 private placement.

5) Stockholders' Deficit

Preferred Stock

We are authorized to issue 1,000,000 shares of preferred stock with a par value of \$0.01. Of the 1,000,000 shares of preferred stock, 20,000 shares have been designated as Series A Junior Participating Preferred Stock, 313,960 shares have been designated as Series A Convertible Preferred Stock, 279,256 shares have been designated as Series B Convertible Preferred Stock, 88,098 shares have been designated as Series C Convertible Preferred Stock, 850 shares have been designated as Series D Convertible Preferred Stock, 500 shares have been designated as Series E Convertible Preferred Stock, and 240,000 shares were designated as Series G Convertible Preferred Stock. As of June 30, 2012, there were 300 shares of Series D Convertible Preferred Stock outstanding and 350 shares of Series E Convertible Preferred Stock issued and outstanding. Prior to June 30, 2012, 543 shares of Series D Convertible Preferred Stock have been converted into 835,385 shares of the Company's common stock since the November 2011 Series D registered direct offering. Prior to June 30, 2012, 150 shares of Series E Convertible Preferred Stock have been converted into 147,060 shares of the Company's common stock. As of June 30, 2012, there were no shares of Series A Junior Participating Preferred Stock, Series A Convertible Preferred Stock, Series B Convertible Preferred Stock or Series C Convertible Preferred Stock 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. All of the 15-Month Series A Preferred Stock Warrants were exercised by April 28, 2010.

On or about August 10, 2011, holders of 30-Month Common Stock Warrants to purchase 1,569,800 shares of Common Stock entered into an amendment to the 30-Month Common Stock Warrants which extended the expiration date of the warrants to August 11, 2012. On or about September 30, 2011, 30-Month Common Stock Warrants to purchase 1,556,750 shares of Common Stock were further amended to reduce the exercise price from \$1.74 to \$0.90 and to extend the term until August 12, 2016 and, with respect to affiliates, August 12, 2015.

In September and October 2011, all of the outstanding shares of Series A Convertible Preferred Stock were voluntarily converted. The Company has no obligation or intention to issue any more shares of Series A Convertible Preferred Stock.

30-Month Common Stock Warrants

The amended 30-Month Common Stock Warrants to purchase 1,556,750 shares of Common Stock have an exercise price equal to \$0.90 per share, with a term expiring on August 12, 2016 (August 12, 2015 for Affiliates). A 30-Month Common Stock Warrant to purchase 13,050 shares of Common Stock, which was not amended in September 2011, has an exercise price of \$1.72 per share, subject to future adjustment, with a term expiring on August 11, 2012. 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 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 applicable Securities Purchase Agreement of the Company.

The warrant exercise price and/or number of shares issuable upon exercise of the applicable warrant were subject to adjustment for stock dividends, stock splits or similar capital reorganizations, as set forth in the warrants. The 30-Month Common Stock Warrants that were amended as described above, no longer provide for adjustment to the exercise price and/or number of shares issuable upon exercise of the applicable warrant for stock dividends.

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 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.

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 Placements"). Each Series B Unit consisted 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.

On or about August 10, 2011, holders of the Series B Warrants to purchase 88,711 shares of Series B Convertible Preferred Stock entered into an amendment to the Series B Warrants which extended the expiration date of the Series B Warrants to August 11, 2012 and provided that they would be issuable for the equivalent number of shares of Common Stock at a proportionate, common stock equivalent exercise price. On or about September 30, 2011, Series B Warrants to purchase 887,110 shares of Common Stock were further amended to reduce the exercise price from \$2.38 to \$1.43, for Series B Warrants issued in November 2009, and from \$2.88 to \$1.75, for Series B Warrants issued in March 2010 and to extend the term of the Series B Warrants until August 12, 2016 and, with respect to affiliates, until August 12, 2015. All of the Series B Warrants are no longer exercisable for shares of Series B Convertible Preferred Stock.

On or about September 30, 2011, all of the outstanding shares of Series B Convertible Preferred Stock were voluntarily converted into shares of Common Stock. The Company has no obligation or intention to issue any more shares of Series B Convertible Preferred Stock. In April 2012, the Company issued 96,966 shares of common stock as the final payment of dividends to Series B holders for accrued dividends through April 3, 2012.

Series B Warrants

The Series B Warrants currently have an exercise price of \$1.43 for Series B Warrants issued in November 2009, and \$1.75 for Series B Warrants issued in March 2010, in each case with a term expiring on August 12, 2016 and, with respect to affiliates, August 12, 2015. The Series B Warrants are currently exercisable for shares of Common Stock. 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 splits or similar capital reorganizations, as set forth in the Series B Warrants, as amended.

Subject to the terms and conditions of the Series B Warrants, the Company has the right to call for cancellation of the Series B Warrants if the volume weighted average price of our common stock on the 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.

Series C Convertible Preferred Stock

In connection with our sale of the Series C Units in April and June of 2011, we agreed that, if we completed an equity financing within 12 months after the initial closing of the Series C Units (the “Next Financing”), then each purchaser of Series C Units would be entitled to exchange all, but not less than all, of his, her or its Series C Units for the equity securities issued in such equity financing (the “Next Financing Securities”); provided that the exchange of the purchaser’s Series C Units for the equity securities is permitted under NASDAQ rules and regulations then in effect. The number of Next Financing Securities into which a purchaser’s Series C Units could be exchanged was determined by dividing (a) the aggregate per unit purchase price at which the Series C Units being exchanged were issued, by (b) the price per Next Financing Security at which such securities were issued in the Next Financing. On April 5, 2012 the holders of the Series C Units exchanged all of their Series C Units for the units we offered in our February 2012 private placement consisting of shares of common stock and warrants to purchase shares of common stock (with a warrant to purchase 0.5 shares of common stock for each share of common stock purchased in the February 2012 private placement), resulting in an aggregate of 1,372,247 shares of common stock and the exchange of warrants to purchase an aggregate of 686,124 shares of common stock at an exercise price of \$0.74 being issued to the holders of Series C Units. The prior warrants issued with Series C were cancelled and no longer qualified as warrant derivative liabilities. As noted in the Warrant Derivative Liability section in Note 3, we reclassified the fair value of \$132,665 associated with the Series C Warrants exchange to Stockholders’ Equity. The assumptions that were used with the binomial model to determine the fair value of the cancelled warrants are disclosed in Note 3, “Fair Value Measurements”. In April 2012, the Company issued 36,806 shares of common stock as the final payment of dividends to Series C holders for accrued dividends through April 3, 2012. A dividend of \$22,322 remains owed to one shareholder at his request until it can be paid in common stock.

In connection with the Series C exchange, we calculated the fair value of the 686,124 warrants received, as described above, using a binomial model with the below assumptions.

<u>Assumptions</u>	<u>Warrants Received</u>
Expected term (in months)	64
Expected volatility	106.7%
Risk-free interest rate	0.75%
Exercise price	\$0.74
Fair value per warrant	\$0.46

A total of 880,980 original common stock warrants with a remaining term of 2 years were amended to provide for a term of 5.3 years and a reduced price of \$0.74. As a result, the aggregate fair value of the 880,980 original common stock warrants with a remaining term of 2 years, amended to provide for a term of 5.3 years and a reduced price of \$0.74, increased from \$132,665 to \$308,208. We recorded \$185,544 as the excess of fair value of the consideration given to the series C holders into equity and treated as a deemed dividend.

Series D Convertible Preferred Stock

On November 11, 2011, we completed a registered direct offering, pursuant to which we sold an aggregate of 843 units for a purchase price of \$1,000 per unit, resulting in gross proceeds to us of \$843,000 (the “Series D Placement”). Each unit (“Series D Unit”) consisted of (i) one share of Series D Convertible Preferred Stock, \$0.01 par value per share (the “Series D Convertible Preferred Stock”) convertible into 1,538.46 shares of our Common Stock, (subject to adjustment for stock splits, stock dividends, recapitalization, etc.) and (ii) one five-year warrant to purchase approximately 614 shares of our Common Stock at a per share exercise price of \$0.81, subject to adjustment as provided in the Warrants (“Series D Warrant”). The Series D Warrants will be exercisable beginning on May 11, 2012 and until the close

of business on the fifth anniversary of the initial exercise date.

We engaged an investment banker to assist with the Series D Placement. In connection with the Series D Placement, we paid the investment banker a fee of approximately \$67,000 cash.

The proceeds from the sale of each Series D Unit were allocated between the Series D Convertible Preferred Stock and the Series D Warrants based on the residual method. The estimated fair value of the Series D Warrants was determined using a binomial formula, resulting in an allocation of the gross proceeds of \$283,725 to the total warrants issued. The allocation of the gross proceeds to the Series D Convertible Preferred Stock was \$559,275. In accordance with the provisions of ASC 470-20, an additional adjustment between Additional Paid in Capital and Accumulated Deficit of \$530,140 was recorded to reflect an implicit non-cash dividend related to the allocation of proceeds between the stock and warrants issued. The \$530,140 represents the value of the adjustment to additional paid in capital related to the beneficial conversion feature of the Series D Convertible Preferred Stock. The value adjustment was calculated by subtracting the fair market value of the underlying common stock on November 10, 2011 issuable upon conversion of the Series D Convertible Preferred Stock from the fair market value of the Series D Convertible Preferred Stock as determined when the Company performed a fair market value allocation of the proceeds to the Series D Convertible Preferred Stock and warrants. The warrants are recorded as a liability. See "Warrant Derivative Liability" in Note 3.

The Series D Convertible Preferred Stock ranks senior to the Company's Common Stock and Series C Convertible Preferred Stock with respect to payments made upon liquidation, winding up or dissolution. Upon any liquidation, dissolution or winding up of the Company, after payment of the Company's debts and liabilities, and before any payment is made to the holders of any junior securities, the holders of Series D Convertible Preferred Stock are first entitled to be paid \$1,000 per share subject to adjustment for accrued but unpaid dividends.

We may not pay any dividends on shares of common stock unless we also pay dividends on the Series D Convertible Preferred Stock in the same form and amount, on an as-if-converted basis, as dividends actually paid on shares of our common stock. Except for such dividends, no other dividends may be paid on the Series D Convertible Preferred Stock.

Each share of Series D Convertible Preferred Stock is convertible into 1,538.46 shares of common stock (based upon an initial conversion price of \$0.65 per share) at any time at the option of the holder, subject to adjustment for stock splits, stock dividends, combinations, and similar recapitalization transactions (the "Series D Conversion Ratio"). Subject to certain exceptions, if the Company issues any shares of common stock or common stock equivalents at a per share price that is lower than the conversion price of the Series D Convertible Preferred Stock, the conversion price will be reduced to the per share price at which such shares of common stock or common stock equivalents are issued. Each share of Series D Convertible Preferred Stock will automatically be converted into shares of common stock at the Series D Conversion Ratio then in effect if, after six months from the closing of the Series D 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 at least 300% of the then effective Series D Convertible Preferred Stock conversion price for 20 out of 30 consecutive trading days with each trading day having a volume of at least \$50,000. Unless waived under certain circumstances by the holder of the Series D Convertible Preferred Stock, such holder's Series D Convertible Preferred Stock may not be converted if upon such conversion the holder's beneficial ownership would exceed certain thresholds.

In addition, in the event we consummate a merger or consolidation with or into another person or other reorganization event in which our shares of common stock are converted or exchanged for securities, cash or other property, or we sell, lease, license or otherwise dispose of all or substantially all of our assets or we or another person acquire 50% or more of our outstanding shares of common stock, then following such event, the holders of the Series D Convertible Preferred Stock will be entitled to receive upon conversion of the Series D Convertible Preferred Stock the same kind and amount of securities, cash or property which the holders of the Series D Convertible Preferred Stock would have received had they converted the Series D Convertible Preferred Stock immediately prior to such deemed liquidation event.

The holders of Series D 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 D Convertible Preferred Stock may vote separately as a class on any matters that would (i) amend our Restated Articles of Organization, as amended, in a manner that adversely affects the rights of the Series D Convertible Preferred Stock, (ii) alter or change adversely the powers, preferences or rights of the Series D Convertible Preferred Stock or alter or amend the certificate of designation, (iii) authorize or create any class of shares ranking as to dividends, redemption or distribution of assets upon liquidation senior to, or otherwise pari passu with, the Series D Convertible Preferred Stock, or (iv) increase the number of authorized shares of Series D Convertible Preferred Stock.

If, within 12 months of the initial issuance of the Series D Convertible Preferred Stock, we issue any common stock, common stock equivalents, indebtedness or any combination thereof (a "Subsequent Financing"), the holders of Series D Convertible Preferred Stock have the right to participate on a pro-rata basis in up to 50% of such Subsequent Financing.

Series D Warrants

The Series D Warrants originally had an exercise price equal to \$0.81 per share of Common Stock. In connection with our February 2012 private placement and in accordance with the terms of the Series D Warrants, the aggregate number of shares of Common Stock for which the Series D Warrants are exercisable increased by 48,950 to a total of 566,422 and the exercise price decreased to \$0.74 per share of Common Stock. The Series D Warrants are exercisable beginning on the six month anniversary of the date of issuance and expire five years from the initial exercise date. The Series D Warrants permit the holder to conduct a "cashless exercise" at any time a registration statement, or the prospectus contained therein, is not available for the issuance of the shares of Common Stock issuable upon exercise of the Series D Warrant, and under certain circumstances at the expiration of the Series D Warrants. The exercise price and/or number of shares of Common Stock issuable upon exercise of the Series D Warrants are subject to adjustment for certain stock dividends, stock splits or similar capital reorganizations, as set forth in the Warrants. The exercise price and/or number of shares of Common Stock issuable upon

exercise of the Series D Warrants are also subject to adjustment in the event that we issue any shares of common stock or common stock equivalents at a per share price that is lower than the exercise price for the Series D Warrants then in effect. Upon any such issuance, subject to certain exceptions, the exercise price will be reduced to the per share price at which such shares of common stock or common stock equivalents are issued and number of Series D Warrant shares issuable hereunder shall be increased such that the aggregate exercise price payable hereunder, after taking into account the decrease in the exercise price, shall be equal to the aggregate exercise price prior to such adjustment. Unless waived under certain circumstance by the holder of a Series D Warrant, such holder may not exercise the Series D Warrant if upon such exercise the holder's beneficial ownership of the Company's Common Stock would exceed certain thresholds. In the event we consummate a merger or consolidation with or into another person or other reorganization event in which our shares of common stock are converted or exchanged for securities, cash or other property, or we sell, lease, license or otherwise dispose of all or substantially all of our assets or we or another person acquire 50% or more of our outstanding shares of common stock, then following such event, the holders of the Series D Warrants will be entitled to receive upon exercise of the Series D Warrants the same kind and amount of securities, cash or property which the holders would have received had they exercised the Series D Warrants immediately prior to such fundamental transaction.

Series E Convertible Preferred Stock

On April 9, 2012, we completed a registered direct offering with Ironridge Global IV Ltd. ("Ironridge"), pursuant to which we sold an aggregate of 500 shares of our Series E Convertible Preferred Stock, a newly designated series of preferred stock, to Ironridge for a purchase price of \$1,000 per share or an aggregate purchase price of \$500,000 ("Series E Preferred Stock"). Each share of Series E Preferred Stock is convertible into approximately 980 shares of our common stock. The Series E Preferred Stock is entitled to a yearly dividend at a rate of 10.5% per year, subject to a credit risk and make-whole adjustment, and is payable in cash or shares of common stock at our election. Under certain conditions and subject to certain limitations, we may require Ironridge to convert their Series E Convertible Preferred Stock into common stock. In connection with this registered direct offering, our investment banker received a fee of \$40,000. The make-whole dividends are payable any time after the closing on April 9, 2012 at the option of the holder, therefore, we recognized the full value of \$262,500 as a current liability and charged immediately through accumulated deficit. We adjusted the value as of June 30, 2012 based on the closing bid on June 29, 2012. We paid \$62,374 of make-whole dividends in the Company's common stock through June 30, 2012. Subsequent to June 30, 2012, 50 shares of Series E Preferred Stock and make-whole dividends of \$43,528 were converted into 231,258 shares of the Company's common stock.

The Series E Preferred Stock ranks senior to the Company's Common Stock for so long as at least 250 shares of Series E Preferred Stock remain outstanding and pari passu thereafter and junior to Series D Preferred Stock with respect to payments made upon liquidation, winding up or dissolution. Upon any liquidation, dissolution or winding up of the Company, after payment of the Company's debts and liabilities, and before any payment is made to the holders of any junior securities, the holders of Series E Convertible Preferred Stock are first entitled to be paid \$1,000 per share subject to adjustment for accrued but unpaid dividends.

We may not pay any dividends on shares of common stock so long as any shares of Series E Preferred Stock are outstanding.

Each share of Series E Preferred Stock is convertible into 980.39 shares of common stock (based upon an initial conversion price of \$1.02 per share) at any time at the option of the holder, subject to adjustment for stock splits, stock dividends, combinations, and similar recapitalization transactions (the "Series E Conversion Ratio"). At our option, each share of Series E Preferred Stock can be converted into shares of common stock at the Series E Conversion Ratio then in effect if, the common stock trades on the OTC Capital Market (or other primary trading market or exchange on which the common stock is then traded) at a price equal to at least \$2.00 for 20 out of 25 consecutive trading days. Unless waived under certain circumstances by the holder of the Series E Preferred Stock, such holder's Series E Preferred Stock may not be converted if upon such conversion the holder's beneficial ownership would exceed certain thresholds.

Subject to the rights of the holders of Series D Preferred Stock, for so long as at least 250 shares of Series E Preferred Stock remain outstanding, upon any liquidation, dissolution or winding up of the Company, whether voluntary or involuntary (each a "Liquidation Event"), after payment or provision for payment of debts and other liabilities of the Company, the holders of Series E Preferred Stock will be entitled to be paid out of the assets of the Company available for distribution to its stockholders an amount with respect to each share of Series E Preferred Stock equal to \$1,000, plus any accrued but unpaid dividends thereon (the "Series E Liquidation Value"), before any distribution or payment shall be made to the holders of Common Stock. Subject to the rights of the holders of Series D Preferred Stock, at any time that fewer than 250 shares of Series E Preferred Stock remain outstanding, upon the occurrence of any Liquidation Event, after payment or provision for payment of debts and other liabilities of the Company, pari passu with any distribution or payment made to the holders of Common Stock by reason of their ownership thereof, the holders of Series E Preferred Stock will be entitled to be paid out of the assets of the Company available for distribution to its stockholders the Series E Liquidation Value. For so long as at least 250 shares of Series E Preferred Stock remain outstanding, if, upon the occurrence of any Liquidation Event, the amounts payable with respect to the shares of Series E Preferred Stock are not paid in full, the holders of shares of Series E Preferred Stock will share equally and ratably with each other in any distribution of assets of the Company in proportion to the Series E Liquidation Value, if any, to which each such holder is entitled, before any distribution or payment shall be made to holders of Common Stock. At any time that fewer than 250 shares of Series E Preferred Stock remain outstanding, if, upon the occurrence of any Liquidation Event, the amounts payable with respect to the shares of Series E Preferred Stock are not paid in full, the holders of shares of Series E Preferred Stock will receive the Series E Liquidation Value per share of Series E Preferred Stock on a proportionate and pari passu basis with the holders of Common Stock.

The holders of Series E 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 E Preferred Stock may vote separately as a class on any matters that would (i) amend our Restated Articles of Organization, as amended, in a manner that adversely affects the rights of the Series E Preferred Stock, (ii) alter or change adversely the powers, preferences or rights of the Series E Preferred Stock or alter or amend the certificate of designation, (iii) authorize or create any class of shares ranking as to dividends, redemption or distribution of assets upon liquidation senior to, or otherwise pari passu with, the Series E Preferred Stock, or (iv) increase the number of authorized shares of Series E Preferred Stock.

Common Stock

Shareholders Purchase Rights Plan

On March 3, 2003, our Board of Directors adopted a shareholder purchase 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 Plan was not adopted in response to any effort to acquire the Company and the Board is not aware of any such effort. 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 its 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, 2012, options to acquire 1,472,500 shares were outstanding under the Plan with 267,500 shares available for future grant under the Plan.

As of June 30, 2012, options to acquire 83,000 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.

The following tables summarize information concerning options and warrants outstanding and exercisable:

	Stock Options		Warrants		Total	
	Weighted		Weighted			
	Average price		Average price			
	Shares	per share	Shares	per share	Shares	Exercisable
Balance outstanding, 12/31/2010	1,605,603	\$ 2.49	2,681,350	\$ 2.24	4,286,953	4,114,792
Granted	180,000	1.00	2,094,151	1.44	2,274,151	
Exercised	(41,103)	1.07	—	—	(41,103)	
Expired	(161,000)	2.78	—	—	(161,000)	
Forfeited	(75,000)	2.57	—	—	(75,000)	
Balance outstanding, 12/31/2011	1,508,500	\$ 2.33	4,775,501	\$ 1.35	6,284,001	6,112,335
Granted	127,000	0.80	1,221,012	0.74	1,348,012	
Exercised	—	—	—	—	—	
Expired	(80,000)	3.08	—	—	(80,000)	
Forfeited	—	—	(880,980)	2.13	(880,980)	
Balance outstanding, 6/30/2012	1,555,500	\$ 2.17	5,115,533	\$ 1.06	6,671,033	6,372,367

Range of Exercise Prices	Options Outstanding			Options Exercisable		
	Number of Options	Weighted Average		Number of Options	Weighted Average	
		Remaining Contractual Life (Years)	Exercise Price		Remaining Contractual Life (Years)	Exercise Price
\$ 0.55 — \$ 2.70	870,000	7.2	\$ 1.07	571,334	6.1	\$ 1.14
2.71 — 3.08	219,500	3.7	2.88	219,500	3.7	2.88
3.09 — 3.95	302,000	3.9	3.67	302,000	3.9	3.67

3.96	—	5.93	164,000	4.5	4.27	164,000	4.5	4.27
\$ 0.55	—	\$ 5.93	1,555,500	5.8	\$ 2.17	1,256,834	4.9	\$ 2.46

There was \$126,275 of total unrecognized compensation cost, net of estimated forfeitures, related to nonvested stock options granted as of June 30, 2012. This cost is expected to be recognized over a period of 3.5 years, and will be adjusted for any future changes in estimated forfeitures.

Sale of Common Stock

On February 7, 2012, we completed a private placement with 7 accredited investors, pursuant to which we sold an aggregate of 971,867 shares of common stock, \$0.01 par value (“Shares”), resulting in gross proceeds to us of \$800,000 (the “Private Placement”). The price per unit was \$0.8025 for units consisting of 789,350 shares of common stock and warrants to purchase 394,677 shares of common stock, and was \$0.9125 for units consisting of the remaining 182,517 shares of common stock and warrants to purchase 91,260 shares of common stock. Of the \$800,000 invested in the private placement, \$412,453 was received in cash and \$387,547 was from the conversion of outstanding principal and interest on convertible promissory notes issued by us in 2011.

Each unit consists of one share of common stock and a warrant to purchase one-half share of common stock. The warrants are exercisable for a period of five years, commencing on August 7, 2012, at an exercise price of \$0.74 per share for the purchasers of the 789,350 shares, and \$0.85 per share for the purchasers of the 182,517 shares. The warrants permit the holder to conduct a “cashless exercise” at any time the holder is an affiliate. The exercise price and/or number of shares of common stock issuable upon exercise of the warrants will be subject to adjustment for certain stock dividends, stock splits or similar capital reorganizations.

In connection with the Private Placement, we paid our investment banker a fee of \$35,000 for providing advisory services. We accounted for this fee as a reduction in the gross proceeds received from the private placement.

Common Stock Issuances

On January 31, 2012, we issued 100,000 shares of restricted Common Stock to an investor relations firm for payment of services to be rendered over one year. We recorded \$72,000 for this issuance of which \$54,000 was recognized as a prepaid expense that will be amortized over the one year. On March 2, 2012, we issued 22,500 shares of restricted Common Stock to an investor relations firm for payment of services already rendered over the prior three months. We recorded \$13,950 for this issuance as expense. On April 26, 2012, we issued 17,500 shares of restricted Common Stock to two investor relations firms for payment of services to be rendered over one month. We recorded \$9,625 for this issuance as expense. On April 27, 2012, we issued 100,000 shares of restricted Common Stock to an investor relations firm for payment of services to be rendered over six months. We recorded \$60,000 for this issuance of which \$40,000 was recognized as a prepaid expense that will be amortized over the remaining months of service. We valued the above stock issuances using the Company’s stock price on date of issuance.

6) Subsequent Events

We performed a review of events subsequent to the balance sheet date through the date the financial statements were issued and determined, except as disclosed herein, that there were no other such events requiring recognition or disclosure in the financial statements.

Series G Private Placement

On July 6, 2012, we completed a private placement, pursuant to which we sold an aggregate of 120,095 units for a purchase price of \$5.00 per unit (the “Series G Purchase Price”), resulting in gross proceeds to us of \$600,473 (the “Series G Private Placement”). Each unit (“Series G Unit”) consists of (i) one share of newly created series of preferred stock, designated Series G Convertible Preferred Stock, \$0.01 par value per share (the “Series G Convertible Preferred Stock”) convertible into 10 shares of our Common Stock, (subject to adjustment for stock splits, stock dividends, recapitalization, etc.) and (ii) a three-year warrant to purchase 5 shares of our Common Stock at a per share exercise price of \$0.50 (the “Series G Warrant”). The Series G Warrants will be exercisable until the close of business on the third anniversary of the applicable closing date. Of the \$600,473 invested in the Series G Private Placement, \$485,000 was received in cash and \$115,000 was from the conversion of outstanding indebtedness and accrued board of directors’ fees.

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 need for, and 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 until the end of August 2012;
- 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;

- the expected expenses, benefits and results from our research and development efforts;
- the expected benefits and results from our collaboration efforts, strategic alliances and joint ventures;
- 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, 2011 included in our Annual Report on Form 10-K for the year ended December 31, 2011.

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, 2011, as well as 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.

As of August 2, 2012, we had available cash of approximately \$100,000. We require additional capital to fund our operations and cannot ensure that additional capital will be available on acceptable terms or at all.

We have experienced negative cash flows from operations from our pressure cycling technology business since we commenced our pressure cycling technology operations. As of August 2, 2012, we had available cash of approximately \$100,000 which, based on current projections, will be sufficient to fund normal operations until the end of August 2012. We need substantial additional capital to fund our operations in periods beyond August 2012. If we are unable to raise sufficient funds from equity or debt financings or other sources of financing, we may need to cease our business operations.

We failed to meet applicable NASDAQ Stock Market requirements and as a result we delisted our stock from The NASDAQ Capital Market, which could adversely affect the market liquidity of our common stock and harm our businesses.

Until April 5, 2012, our common stock was traded on The NASDAQ Capital Market. As a result of our stockholders' equity falling below the minimum \$2.5 million requirement and the bid price of our common stock remaining below the minimum \$1.00 per share requirement for continued inclusion on The NASDAQ Capital Market, on April 5, 2012, our common stock was delisted from The NASDAQ Capital Market and on April 5, 2012 our common stock began trading on the OTCQB Marketplace under the ticker symbol PBIO. We continue to file periodic reports with the Securities and Exchange Commission in accordance with the requirements of Section 12(g) of the Securities Exchange Act of 1934, as amended.

Our delisting from The NASDAQ Capital Market and commencement of trading on the OTCQB Marketplace may result in a reduction in some or all of the following, each of which could have a material adverse effect on our shareholders:

- the liquidity of our shares of common stock;
- the market price of our shares of common stock;
- our ability to obtain financing for the continuation of our operations;
- the number of institutional and other investors that will consider investing in our shares of common stock;
- the number of market makers in our shares of common stock;
 - the availability of information concerning the trading prices and volume of our shares of common stock;
 - and the number of broker-dealers willing to execute trades in our shares of common stock.

Furthermore, as a result of our delisting, our shares of common stock are subject to the so-called "penny stock" rules. The SEC has adopted regulations that define a penny stock to be any equity security that has a market price per share of less than \$5.00, subject to certain exceptions, such as any securities listed on a national securities exchange. For any transaction involving a penny stock, unless exempt, the rules impose additional sales practice requirements on broker-dealers, subject to certain exceptions. As a result of being a penny stock, a broker-dealer may find it more difficult to trade our shares of common stock and an investor may find it more difficult to acquire or dispose of our shares of common stock on the secondary market. Investors in penny stocks should be prepared for the possibility that they may lose their whole investment.

We have identified a material weakness in our internal control over financial reporting that could result in a material misstatement of our financial statements.

Our management is responsible for maintaining disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports to the SEC is 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 principal executive officer and our principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. Our management assessed the effectiveness of the design and operation of our disclosure controls and procedures as of June 30, 2012 and concluded that the material weaknesses identified in our Annual Report on Form 10-K for the year ended December 31, 2011 relating to the lack of sufficient segregation of duties and lack of sufficiency of personnel have not been fully remediated due to our limited financial resources, and therefore our disclosure controls and procedures were not effective as of June 30, 2012.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting that creates a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. While we have performed additional substantive procedures to ensure that our consolidated financial statements as of and for the three month period ended June 30, 2012, are fairly stated in all material respects in accordance with GAAP, the completion of our remediation efforts are largely dependent upon our securing additional financing to cover the costs of implementing the changes required. If we are unsuccessful in securing such funds, remediation efforts may be adversely affected in a material manner. If our efforts are insufficient to remediate our material weaknesses, our financial statements may contain material misstatements. Any failure on our part to remediate the material weaknesses successfully may affect the results of the periodic management evaluations on the effectiveness of our internal control over financial reporting and disclosure controls and procedures that we must include in our periodic reports. A material weakness could also cause investors to lose confidence in our reported financial information.

We cannot give any assurance that the measures we are taking to remediate the identified material weaknesses will be effective. We also cannot assure that other material weaknesses will not arise as a result of our failure to maintain adequate disclosure controls and procedures or circumvention of those controls and procedures. Additionally, even if we succeed in improving our controls and procedures, those

controls and procedures may not be adequate enough to prevent irregularities, identify irregularities or facilitate a fair presentation of our financial statements or reports we file with the SEC.

OVERVIEW

We have developed instruments which utilize our unique and proprietary pressure cycling technology (“PCT”), which we sell along with associated consumables and services to life sciences companies, academic institutions and government agencies. 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, 2012, we did not have adequate working capital resources to satisfy our current liabilities and as a result we have substantial doubt about our ability to continue as a going concern. Based on our current projections, including equity financing completed subsequent to June 30, 2012, we believe our current cash resources will enable us to extend our cash resources to fund normal operations until the end of August 2012. Please see Note 6, *Subsequent Events*.

We need substantial additional capital to fund normal operations in periods beyond the end of August 2012. 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 will likely be required to 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 224 Barocycler instruments, of which 142 currently remain installed. Our customers include researchers at academic laboratories, government agencies, biotechnology, pharmaceutical and other life sciences companies in the United States, and six foreign distribution partners.

	2005	2006	2007	2008	2009	2010	2011	Q2 2012 YTD
Installed units	5	8	20	41	54	50	31	15

We reported a number of accomplishments in the second quarter of 2012.

- *Registered Direct Offering with Ironridge BioPharma for \$500,000.* We completed a registered direct offering with Ironridge BioPharma Co. to purchase \$500,000 in shares of Series E Convertible Preferred Stock of the Company.
- *Distribution Agreement with Yinzhou Police Equipment & Technology Co., Ltd. (“Yinzhou”).* We entered into an exclusive distributor agreement for our PCT product line and a non-exclusive agreement for our patent-pending, mechanical homogenization device, the Shredder SG3, and associated consumables. This agreement allows Yinzhou to market and sell PBI products into the forensics marketplace in China only.
- *Distribution Agreement with BMN MSI, Ltd. (“BMN”).* For Vietnam, Cambodia, and Laos, we entered into an exclusive distribution agreement with BMN for our PCT product line and a non-exclusive agreement for the Shredder SG3 homogenization device and associated consumables.
- *Distribution Agreement with iScience Technology (“iScience”).* For Australia and New Zealand, we entered into an exclusive distribution agreement with iScience for our PCT product line and a non-exclusive agreement for the Shredder SG3 homogenization device and associated consumables.
- *Co-Development, Co-Marketing, and Co-Selling Agreement with LEAP Technologies, Inc. (“LEAP”).* Under the Agreement, we plan to develop a next generation sample preparation system by combining our PCT platform with LEAP’s proprietary robotics and lab automation equipment. The companies share an industry focus in proteomics sample preparation, primarily in mass spectrometry. PBI and LEAP believe that by combining the best attributes of both

technology platforms, they can develop a sample preparation system superior in quality and robustness to current methods.

Expanded strategic technology license and supply agreements with Target Discovery, Inc. (“TDI”). In April 2012, we signed expanded strategic technology license and supply agreements (the “Agreements”) with TDI. Under these agreements, TDI now has the right to use PBI’s PCT Platform for their planned entry into the clinical diagnostics testing market. The planned commercial diagnostic services will initially target what the companies believe are critical, unmet needs in treatment selection guidance for ovarian cancer. Until now, PBI’s PCT Platform has been available on a “research-use-only” basis.

RESULTS OF OPERATIONS

Three Months Ended June 30, 2012 and 2011

Revenue

We recognized revenue of \$324,908 for the three months ended June 30, 2012 as compared to \$190,686 during the three months ended June 30, 2011. This increase is due to an increase in grant revenue and the sale of a Barocycler HUB instrument system and its accessories.

PCT Products, Services, Other. Revenue from the sale of PCT products and services increased 18% to \$224,384 for the three months ended June 30, 2012 as compared to \$190,686 during the three months ended June 30, 2011. We expanded into Asia through sales to new distributors. Revenue increased from the sale of a Barocycler HUB instrument system and its accessories. The Barocycler HUB system became available for sale in late 2011. Sales of consumables of \$22,255 were recorded for the three months ended June 30, 2012 compared to \$20,295 during the same period in the prior year. Our domestic and foreign installations of PCT systems are set forth in the table below.

	For the Three Months Ended	
	June 30,	
	2012	2011
Domestic	5	6
International	3	1
Total PCT System Installations	8	7

Grant Revenue. During the three months ended June 30, 2012, we recorded \$100,524 of grant revenue. We continue to work on a Phase II grant received from the Department of Defense, or DOD, to fund the development of a PCT-based system to improve the processing of pathogenic organisms. We completed all billable work by the end of April 2012 on the Phase I grant received from the National Institutes of Health, or NIH, to help fund the development of a high pressure-based system to improve the processing of cancer and other samples. Both grants were awarded in the second half of 2011. During the three months ended June 30, 2011, we did not have any active grants.

Cost of PCT Products and Services

The cost of PCT products and services was \$109,203 for the three months ended June 30, 2012 compared to \$78,296 for the comparable period in 2011. Our gross profit margin on PCT products and services decreased to 51% for the three months ended June 30, 2012, as compared to 59% for the prior period. The decrease is from favorable pricing given to distributors on instrument sales.

Research and Development

Research and development expenditures were \$256,307 during the three months ended June 30, 2012 as compared to \$263,809 in the same period in 2011. Our work on research and development projects remained steady during both periods. Work on the NIH grant ended in April 2012.

Research and development expense recognized in the three months ended June 30, 2012 and 2011 included \$3,508 and \$3,737 of non-cash, stock-based compensation expense, respectively.

Selling and Marketing

Selling and marketing expenses decreased to \$168,173 for the three months ended June 30, 2012 from \$242,544 for the comparable period in 2011. This decrease was primarily due to employee related savings from a smaller headcount offset by tradeshow and travel related expenses.

During the three months ended June 30, 2012 and 2011, selling and marketing expense included \$3,669 and \$2,728 of non-cash, stock-based compensation expense, respectively.

General and Administrative

General and administrative costs totaled \$474,015 for the three months ended June 30, 2012 as compared to \$448,314 for the comparable period in 2011. We increased our investor relations efforts in the current period while the prior period included legal fees incurred in connection with investor matters.

During the three months ended June 30, 2012 and 2011, general and administrative expense included \$4,045 and \$5,737 of non-cash,

stock-based compensation expense, respectively.

Operating Loss

Our operating loss was \$682,790 for the three months ended June 30, 2012 as compared to \$842,277 for the comparable period in 2011. The decreased operating loss resulted primarily for the reasons noted above.

Other Income (Expense), Net

Interest (Expense) Income

Interest expense totaled \$4,214 for the three months ended June 30, 2012 as compared to interest income of \$75 for the three months ended June 30, 2011. We recorded \$4,216 of interest expense for the three months ended June 30, 2012 related to a promissory note.

Change in Fair Value of Warrant Derivative Liability

During the three months ended June 30, 2012, we recorded non-cash income of \$177,312 for warrant revaluation in our consolidated statements of operations due to a decrease in the fair value of the warrant liability related to warrants issued in our Series C private placement and Series D registered direct offering. This decrease in fair value was primarily due to a lower stock price at quarter-end and time remaining on warrants.

Net Loss

During the three months ended June 30, 2012, we recorded a net loss to common shareholders of \$1,089,666 or \$(0.11) per share, as compared to a net loss to common shareholders of \$1,172,541 or \$(0.41) per share in the three months ended June 30, 2011. The decrease in net loss per share is primarily due to a significant increase in the number of outstanding shares of common stock resulting from the issuance of shares of common stock upon conversion of convertible preferred stock. We also recorded a deemed dividend of \$185,544 in connection with the Series C Warrants exchange. See Note 3 of the Notes to Consolidated Condensed Financial Statements under the "Computation of Loss per Share" heading.

Six Months Ended June 30, 2012 and 2011

Revenue

We recognized revenue of \$630,569 for the six months ended June 30, 2012 as compared to \$371,329 during the six months ended June 30, 2011. This increase is due to an increase in grant revenue and the sale of a Barocyler HUB instrument system and its accessories.

PCT Products, Services, Other. Revenue from the sale of PCT products and services was \$389,156 for the six months ended June 30, 2012 as compared to \$371,329 during the six months ended June 30, 2011. We sold to new distributors in the Asia Pacific region. Revenue increased from the sale of a Barocyler HUB instrument system and its accessories. The Barocyler HUB system became available for sale in late 2011. We had fewer active Barocyler leases during the first half of 2012 due to expirations. Sales of consumables of \$38,876 were recorded for the six months ended June 30, 2012 compared to \$39,026 during the same period in the prior year. Our domestic and foreign installations of PCT systems are set forth in the table below.

	For the Six Months Ended	
	June 30,	
	2012	2011
Domestic	10	14
International	5	3
Total PCT System Installations	15	17

Grant Revenue. During the six months ended June 30, 2012, we recorded \$241,413 of grant revenue. We continue to work on a Phase II grant received from the Department of Defense, or DOD, to fund the development of a PCT-based system to improve the processing of pathogenic organisms. We completed all billable work by the end of April 2012 on the Phase I grant received from the National Institutes of Health, or NIH, to help fund the development of a high pressure-based system to improve the processing of cancer and other samples. Both grants were awarded in the second half of 2011. During the six months ended June 30, 2011, we did not have any active grants.

Cost of PCT Products and Services

The cost of PCT products and services was \$187,397 for the six months ended June 30, 2012 compared to \$157,225 for the comparable period in 2011. Our gross profit margin on PCT products and services decreased to 52% for the six months ended June 30, 2012, as compared to 58% for the prior period. The decrease in gross margin was primarily the result of discounted sales to distributors and changes in product mix with growth in sales of lower gross margin product offerings.

Research and Development

Research and development expenditures were \$527,918 during the six months ended June 30, 2012 as compared to \$482,774 in the same period in 2011. We capitalized approximately \$50,000 of engineering expenses to Inventory as overhead as a one-time implementation charge.

Research and development expense recognized in the six months ended June 30, 2012 and 2011 included \$6,125 and \$25,342 of non-cash, stock-based compensation expense, respectively. This decrease is due to expense adjustments for fully vested options included in the first half of 2011, which did not occur in the same period in 2012.

Selling and Marketing

Selling and marketing expenses decreased to \$406,265 for the six months ended June 30, 2012 from \$546,383 for the comparable period in 2011. This decrease was primarily due to employee related savings from a smaller headcount offset by tradeshow and travel related expenses.

During the six months ended June 30, 2012 and 2011, selling and marketing expense included \$6,783 and \$33,739 of non-cash, stock-based compensation expense, respectively. This decrease is due to expense adjustments for fully vested options included in the first half of 2011, which did not occur in the same period in 2012.

General and Administrative

General and administrative costs totaled \$1,156,361 for the six months ended June 30, 2012 as compared to \$860,843 for the comparable period in 2011. We increased our investor relations efforts in the current period. We also incurred increased audit fees relating to accounting matters and legal fees in connection with our completed private placements and amendments to our Registration Statement on Form S-1 originally filed in December 2011.

During the six months ended June 30, 2012 and 2011, general and administrative expense included \$7,182 and \$22,087 of non-cash, stock-based compensation expense, respectively. This decrease is due to expense adjustments for fully vested options included in the first half of 2011, which did not occur in the same period in 2012.

Operating Loss

Our operating loss was \$1,647,372 for the six months ended June 30, 2012 as compared to \$1,675,896 for the comparable period in 2011. The decreased operating loss resulted primarily for the reasons noted above.

Other Income (Expense), Net

Interest (Expense) Income

Interest expense totaled \$60,527 for the six months ended June 30, 2012 as compared to interest income of \$329 for the six months ended June 30, 2011. We recorded \$14,386 of interest expense for the six months ended June 30, 2012 related to our short-term loans and promissory note. We also amortized approximately \$46,000 of imputed interest against the debt discount on these short-term loans relating to warrants issued with these loans.

Change in Fair Value of Warrant Derivative Liability

During the six months ended June 30, 2012, we recorded non-cash income of \$135,300 for warrant revaluation in our consolidated statements of operations due to a decrease in the fair value of the warrant liability related to warrants issued in our Series C private placement and Series D registered direct offering. This decrease in fair value was primarily due to a lower stock price at quarter-end and time remaining on warrants.

Net Loss

During the six months ended June 30, 2012, we recorded a net loss to common shareholders of \$2,176,987 or \$(0.21) per share, as compared to a net loss to common shareholders of \$2,138,997 or \$(0.75) per share in the six months ended June 30, 2011. The decrease in net loss per share is primarily due to a significant increase in the number of outstanding shares of common stock resulting from the issuance of shares of common stock upon conversion of convertible preferred stock. We also recorded a deemed dividend of \$185,544 in connection with the Series C warrants exchange. See Note 3 of the Notes to Consolidated Condensed Financial Statements under the "Computation of Loss per Share" heading.

LIQUIDITY AND FINANCIAL CONDITION

We have experienced negative cash flows from operations with respect to our pressure cycling technology business since our inception. As of June 30, 2012, we did not have adequate working capital resources to satisfy our current liabilities and as a result, we have substantial doubt regarding our ability to continue as a going concern. Based on our current projections, including the proceeds from our equity financing described in Note 6 completed subsequent to June 30, 2012, we believe our current cash resources will enable us to extend our cash resources to fund normal operations until the end of August 2012.

We will need substantial additional capital to fund our operations in periods beyond August 2012. In the event that we are unable to obtain financing on acceptable terms, or at all, we will likely be required to 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, 2012 was \$1,184,248 as compared to \$1,199,387 for the six months ended June 30, 2011. The increase in cash used in operations in 2012 as compared to 2011 is principally due to expenses related to investor relations efforts in the current period offset by legal fees incurred in the prior year for investor matters.

Net cash provided by financing activities for the six months ended June 30, 2012 was \$982,389 as compared to \$880,957 for the same period in the prior year.

On April 8, 2011 and April 12, 2011, we completed the first tranche of a private placement, pursuant to which we sold an aggregate of 55,048 units for a purchase price of \$15.00 per unit, resulting in gross proceeds to us of \$825,720 (the "Series C Private Placement"). This was the first tranche of the Series C Private Placement. In connection with the second tranche, the purchase price was reduced to \$12.50 per unit and we issued an additional 11,011 units to the purchasers who participated in the first tranche, without any additional gross proceeds to us. The second tranche closed on June 20, 2011 for the sale of 22,039 Series C Units (consisting of one share of Series C Convertible Preferred Stock convertible into 10 shares of common stock and a three-year warrant to purchase 10 shares of common stock) for a purchase price of \$12.50 per unit with gross proceeds of \$275,485.

On February 7, 2012, we completed a private placement with 7 accredited investors, pursuant to which we sold an aggregate of 971,867 shares of common stock, resulting in gross proceeds to us of \$800,000 (the "Private Placement"). Of the \$800,000 invested in the private placement, \$412,453 was received in cash and \$387,547 was from the conversion of outstanding principal and interest on convertible promissory notes issued by us in 2011. In connection with the Private Placement, we paid our investment banker a fee of \$35,000 for providing advisory services.

On April 9, 2012, we completed a registered direct offering with Ironridge BioPharma Co. ("Ironridge"), pursuant to which we sold an aggregate of 500 shares of our Series E Convertible Preferred Stock, a newly designated series of preferred stock, to Ironridge for a purchase price of \$1,000 per share or an aggregate purchase price of \$500,000. In connection with this registered direct offering, our investment banker received a fee of \$40,000.

ITEM 4. 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, 2012, 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 were not effective.

Our conclusion that our disclosure controls and procedures were not effective as of June 30, 2012 is due to the continued presence of the material weaknesses identified in our Annual Report on Form 10-K for the year ended December 31, 2011. These material weaknesses are the following:

A lack of sufficient segregation of duties. Specifically, this material weakness is such that the design over these areas relies primarily on detective controls and could be strengthened by adding preventative controls to properly safeguard company assets.

A lack of sufficient personnel in the accounting function due to our limited resources with appropriate skills, training and experience to perform the review processes to ensure the complete and proper application of generally accepted accounting principles, particularly as it relates to valuation of warrants and other complex debt /equity transactions. Specifically, this material weakness led to segregation of duties issues and resulted in audit adjustments to the annual consolidated financial statements and revisions to related disclosures, valuation of warrants and other equity transactions.

We continue to plan to remediate those material weaknesses as follows:

Improve the effectiveness of the accounting group by continuing to augment our existing resources with additional consultants or employees to improve segregation procedures and to assist in the analysis and recording of complex accounting transactions. We plan to mitigate the segregation of duties issues by hiring an independent consultant once we generate significantly more revenue or raise significant additional working capital.

Improve segregation procedures by strengthening cross approval of various functions including quarterly internal audit procedures where appropriate.

During the period covered by this Report, we performed additional substantive procedures, such as supervisory review of work papers and consistent use of financial models used in equity valuations, to ensure our consolidated financial statements as of and for the three month period ended June 30, 2012, are fairly stated in all material respects in accordance with GAAP. We have not, however, been able to fully remediate the material weaknesses due to our limited financial resources. Our remediation efforts are largely dependent upon our securing additional financing to cover the costs of implementing the changes required. If we are unsuccessful in securing such funds, remediation efforts may be adversely affected in a material manner.

Except as described above, 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 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Unregistered Stock Issuances

On April 26, 2012, we issued 17,500 shares of restricted Common Stock to two investor relations firms for payment of services to be rendered over one month. On April 27, 2012, we issued 100,000 shares of restricted Common Stock to an investor relations firm for payment of services to be rendered over six months. The shares were issued without registration under the Securities Act, in reliance upon the exemption set forth in Section 4(2) of the Securities Act, for transactions not involving a public offering.

ITEM 6. EXHIBITS

Exhibits

31.1* Principal Executive and Principal Financial 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.

32.1* Principal Executive and Principal Financial 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.

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IN ACCORDANCE WITH THE GRACE PERIOD UNDER RULE 405(a)(2) OF REGULATION S-T APPLICABLE TO INITIAL SUBMISSIONS OF THE INTERACTIVE DATA FILE REQUIRED TO BE FILED WITH THIS REPORT, THE COMPANY WILL FILE AN AMENDMENT TO INCLUDE SUCH INTERACTIVE DATA WITHIN 30 DAYS FROM THE FILING DATE OF THIS QUARTERLY REPORT ON FORM 10-Q.

* 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 13, 2012

By: /s/ Richard T. Schumacher
Richard T. Schumacher
President & Chief Executive Officer
(Principal Executive Officer and Principal Financial Officer)

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 13, 2012

/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, 2012 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 14, 2012

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.
