PRESSURE BIOSCIENCES INC Form 10-O August 15, 2011

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

#### FORM 10-Q

	(Mark	One)
x	Quarterly Report Pursuant to Section 13	or 15(d) of the Securities Exchange Act of 1934
	For the quarterly period	ended June 30, 2011or
O	Transition Report Pursuant to Section 13	or 15(d) of the Securities Exchange Act of 1934
	For the transition period from	to
	Commission file n	umber 0-21615
	PRESSURE BIOS (Exact Name of Registrant a	
	Massachusetts	04-2652826
(State or Other Jurisdiction of		(I.R.S. Employer
Incom	poration or Organization)	Identification No.)
14 Norfolk Ave	enue	
South Easton, I	Massachusetts	02375
(Address of Pri	ncipal 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.

> x Yes o 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).

> x 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 o

Accelerated filer o

Non-accelerated filer o

Smaller reporting company x

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

o Yes x No

The number of shares outstanding of the Issuer's common stock as of August 15, 2011 was 2,939,070.

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### PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

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

	June 30,	December 31,
ASSETS	2011	2010
CURRENT ASSETS		
Cash and cash equivalents	\$ 234,419	\$ 552,849
Restricted cash	-	20,014
Accounts receivable	158,967	233,846
Inventories	1,147,632	1,104,056
Deposits	6,472	6,472
Prepaid income taxes	4,739	1,442
Prepaid expenses and other current assets	80,399	296,756
Total current assets	1,632,628	2,215,435
PROPERTY AND EQUIPMENT, NET	126,264	192,777
OTHER ASSETS		
Intangible assets, net	158,078	182,394
TOTAL ASSETS	\$ 1,916,970	\$ 2,590,606
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts payable	\$ 511,018	\$ 234,568
Accrued employee compensation	174,197	172,251
Accrued professional fees and other	261,828	337,698
Deferred revenue	28,636	27,153
Warrant derivative liability	507,883	<u>-</u>
Total current liabilities	1,483,562	771,670
LONG TERM LIABILITIES		
Deferred revenue	7,708	9,427
TOTAL LIABILITIES	1,491,270	781,097
COMMITMENTS AND CONTINGENCIES (Note		
4)		
STOCKHOLDERS' EQUITY		
Series A convertible preferred stock, \$.01 par value;		
313,960 shares authorized; 261,135 shares issued		
and outstanding on June 30, 2011 and on December		
31, 2010 (Liquidation value of \$3,003,053)	2,611	2,621
Series B convertible preferred stock, \$.01 par value;	,	,
279,256 shares authorized; 84,179 shares issued and	842	887
,	<del>-</del>	

outstanding on June 30, 2011 and 88,711 shares on		
December 31, 2010 (Liquidation value of		
\$1,582,565)		
Series C convertible preferred stock, \$.01 par value;		
303,125 shares authorized; 88,098 shares issued and		
outstanding on June 30, 2011 and 0 shares on		
December 31, 2010 (Liquidation value of		
\$1,101,225)	881	-
Common stock, \$.01 par value; 20,000,000 shares		
authorized; 2,874,305 shares issued and outstanding		
on June 30, 2011 and 2,711,750 shares issued and		
outstanding on December 31, 2010	28,743	27,118
Warrants to acquire preferred stock and common		
stock	1,343,222	1,248,909
Additional paid-in capital	12,635,607	12,095,237
Accumulated deficit	(13,586,206)	(11,565,263)
Total stockholders' equity	425,700	1,809,509
TOTAL LIABILITIES AND STOCKHOLDERS'		
EQUITY	\$ 1,916,970	\$ 2,590,606
TTI	11.1 . 1.0	

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

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

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2011	2010	2011	2010
REVENUE:				
PCT products, services, other	\$190,686	\$283,382	\$371,329	\$472,532
Grant revenue	-	118,722	_	220,385
Total revenue	190,686	402,104	371,329	692,917
COSTS AND EXPENSES:				
Cost of PCT products and services	78,296	126,972	157,225	214,075
Research and development	263,809	304,143	482,774	598,284
Selling and marketing	242,544	294,275	546,383	576,853
General and administrative	448,314	474,381	860,843	1,012,803
Total operating costs and expenses	1,032,963	1,199,771	2,047,225	2,402,015
3	, , , , , , ,	, , , , ,	,, -	, - ,
Operating loss	(842,277)	(797,667)	(1,675,896)	(1,709,098)
Interest income	75	1,016	329	1,122
Change in fair value of warrant derivative liability	84,021	_	84,021	_
Net loss	(758,181)	(796,651)	(1,591,546)	(1,707,976)
Accrued and deemed dividends on convertible preferred				
stock	(414,360)	(127,839)	(547,451)	(384,363)
Net loss applicable to common shareholders	\$(1,172,541)	\$ (924,490)	\$(2,138,997)	\$(2,092,339)
Net loss per share attributable to common stockholders -	*	*	* 40 == .	<b>.</b>
basic and diluted	\$(0.41)	\$(0.35)	\$(0.75)	\$(0.80)
Weighted average common stock shares outstanding used				
in the basic and diluted net loss per share calculation	2,874,305	2,621,291	2,867,381	2,615,557

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

	For the Six Months Ended June 30,	
CASH FLOWS FROM OPERATING ACTIVITIES:	2011	2010
Net loss	\$(1,591,546	\$(1,707,976)
Adjustments to reconcile net loss to operating cash flows:		
Depreciation and amortization	77,025	99,904
Stock-based compensation expense	81,168	145,103
Change in fair value of warrant derivative liability	(84,021	) -
Bad debt expense	-	18,420
Changes in operating assets and liabilities:		
Short-term investments	-	(248,000 )
Accounts receivable	74,879	(90,118)
Inventories	(29,772	) (216,121 )
Deposits	-	(7,240)
Accounts payable	276,450	207,478
Accrued employee compensation	1,946	25,609
Deferred revenue and other accrued expenses	(124,663	) (39,341 )
Prepaid expenses and other current assets	119,147	17,026
Net cash used in operating activities	(1,199,387	) (1,795,256)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Additions to property and equipment	-	(24,310)
Net cash used in investing activities	-	(24,310 )
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from stock option exercise	43,980	-
Decrease in restricted cash	20,014	-
Proceeds from stock warrant exercise	-	1,421,275
Net proceeds from the issuance of preferred stock and warrants	816,963	465,867
Net cash provided by financing activities	880,957	1,887,142
Change in cash and cash equivalents	(318,430	) 67,576
Cash and cash equivalents, beginning of period	552,849	1,609,778
Cash and cash equivalents, end of period	\$234,419	\$1,677,354
SUPPLEMENTAL INFORMATION:		
Income taxes paid	\$1,900	\$1,900
Issuance of common stock dividends on preferred stock	76,017	194,011
Issuance of common stock warrants to placement agent	94,313	18,122

Issuance of common stock for services	-	18,720
Series B dividends paid in cash	42,037	-
Beneficial conversion feature on convertible preferred stock	304,823	154,389

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

### 1) Business Overview, Liquidity, 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. There are currently over 130 users of our enabling platform. PCT represents the core of our products and has enabled our customers to perform biological sample preparation and enzymatic digestion in unique ways that were previously unavailable. The enabling capability of our PCT products allows us to continue to increase the number of applications for our platform beyond current uses, which include genomic and proteomic sample preparation, pathogen inactivation, the control of chemical and enzymatic reactions, immunodiagnostics, and protein purification. Additionally, we are pursuing business opportunities to leverage our products and PCT into new markets beyond our current focus of PCT-enhanced enzymatic digestion products designed specifically for the mass spectrometry marketplace, as well as sample preparation products for biomarker discovery, soil and plant biology, forensics, histology, and counter-bioterror applications.

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

We have experienced negative cash flows from operations with respect to our pressure cycling technology business since our inception. As of June 30, 2011, we had working capital resources of approximately \$657,000, which excludes the warrant liability of \$507,883. Based on our current projections, including borrowings subsequent to June 30, 2011, we believe our current cash resources will enable us to extend our cash resources until mid-September 2011.

We will need substantial additional capital to fund our operations in periods beyond the third quarter of 2011. If we are able to obtain additional capital or otherwise increase our revenues, we may increase spending in specific research and development applications and engineering projects and may hire additional sales personnel or invest in targeted marketing programs. In the event that we are unable to obtain financing on acceptable terms, or at all, we 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.

### 2) Interim Financial Reporting

The accompanying unaudited consolidated financial statements of Pressure BioSciences, Inc. have been prepared in accordance with accounting principles generally accepted in the United States of America ("generally accepted accounting principles" or "GAAP") for interim financial information. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. In the opinion of management, all material adjustments (consisting of only normal recurring adjustments) considered necessary for a fair presentation have been included. Operating results for the three months and six months ended June 30, 2011 are not necessarily indicative of the results that may be expected for the year ending December 31, 2011. For further information, refer to the audited consolidated financial statements and footnotes thereto included in the Company's Annual Report on Form 10-K (the "Form 10-K") for the fiscal year ended December 31, 2010 as filed with the Securities and Exchange Commission on March 31, 2011.

### 3) Summary of Significant Accounting Policies

### Principles of Consolidation

The consolidated 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 financial statements in conformity with generally accepted accounting principles, we are required to make significant estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. In addition, significant estimates are made in projecting future cash flows to quantify impairment of assets, deferred tax assets and the costs associated with fulfilling our warranty obligations for the instruments that we sell, in our calculation of fair value of stock options awarded, and our allocation of the proceeds from our equity financings between the preferred stock and warrants sold. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the

results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could materially differ from the estimates and assumptions used.

### Revenue Recognition

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

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

We account for our lease agreements under the operating method. We record revenue over the life of the lease term and we record depreciation expense on a straight-line basis over the thirty-six month estimated useful life of the Barocycler instrument. The depreciation expense associated with assets under lease agreements is included in the "Cost of PCT products and services" line item in our consolidated statements of operations. Many of our lease 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). If an arrangement includes undelivered elements that are not essential to the functionality of the delivered elements, we defer the fair value of the undelivered elements with the residual revenue allocated to the delivered elements. Fair value is determined based upon the price charged when the element is sold separately. If there is not sufficient evidence of the fair value of the undelivered elements, no revenue is allocated to the delivered elements and the total consideration received is deferred until delivery of those elements for which objective and reliable evidence of the fair value is not available. We provide certain customers with extended service contracts and, to the extent vendor specific objective evidence, or VSOE, is established, these service revenues are recognized ratably over the life of the contract, which is generally one to four years.

### Cash and Cash Equivalents

Our policy is to invest available cash in short-term, investment-grade, interest-bearing obligations, including money market funds, and bank and corporate debt instruments. Securities purchased with initial maturities of three months or less are valued at cost plus accrued interest, which approximates fair market value, and are classified as cash equivalents. Prior to June 30, 2011, we cancelled our corporate credit card and liquidated our entire certificate of deposit that was held as collateral for our corporate credit card.

### Research and Development

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

#### **Inventories**

Inventories are valued at the lower of cost (average cost) or market (sales price). The cost of Barocyclers consists of the cost charged by the contract manufacturer. The cost of manufactured goods includes material, freight-in, direct labor, and applicable overhead. The composition of inventory as of June 30, 2011 and December 31, 2010 is as follows:

		December
	June 30,	31,
	2011	2010
Raw materials	\$220,982	\$198,534
Finished goods	926,650	905,522
Total	\$1,147,632	\$1,104,056

Our finished goods inventory as of June 30, 2011 included 73 Barocycler instruments. Our finished goods inventory as of December 31, 2010 included 79 Barocycler instruments. Sales of leased barocycler units with the cost of \$13,804 are reflected in the inventory change on the Consolidated Statement of Cash Flows.

#### 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 \$85,891 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 16 years. The Company's intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. When impairment is indicated, any excess of carrying value over fair value is recorded as a loss. As of the date of this report's filing, no event has come to our attention that would cause us to record an impairment of intangible assets.

#### Long-Lived Assets and Deferred Costs

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

report's filing, the Company had not experienced impairment losses on its long-lived assets.

Concentrations

#### Credit Risk

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

The following table illustrates the level of concentration as a percentage of total revenues during the three months and six months ended June 30, 2011 and 2010:

)			
)			
8%			
8%			
For the Six Months Ended			
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1%			
1			

The following table illustrates the level of concentration as a percentage of net accounts receivable balance as of June 30, 2011 and December 31, 2010:

		December
	June 30,	31,
	2011	2010
Top Five Customers	72%	72%
Federal Agencies	13%	29%

#### **Product Supply**

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

### Computation of Loss per Share

Basic loss per share is computed by dividing loss available to common shareholders by the weighted average number of common shares outstanding. Diluted loss per share is computed by dividing loss available to common shareholders by the weighted average number of common shares outstanding plus additional common shares that would have been outstanding if dilutive potential common shares had been issued. For purposes of this calculation, convertible preferred stock, common stock dividends, warrants to acquire preferred stock convertible into common stock, and warrants and options to acquire common stock, are all considered common stock equivalents in periods in which they

have a dilutive effect and are excluded from this calculation in periods in which these are anti-dilutive.

The following table illustrates our computation of loss per share for the three months and six months ended June 30, 2011 and 2010:

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. The Series A Convertible Preferred Stock, Series B Convertible Preferred Stock and Series C Convertible Preferred Stock are presented below as if they were converted into common shares according to the conversion terms in Note 5.

	For the Three Months Ended June 30, 2011 2010	For the Six Months Ended June 30, 2011 2010
Numerator:		
Net loss	\$(758,181) \$(796,651	) \$(1,591,546) \$(1,707,976)
Accrued dividend for Preferred Stock	(67,500 ) (20,672	) (124,574 ) (70,801 )
Beneficial conversion feature for Preferred Stock	(304,823 ) -	(304,823 ) (154,389 )
Series A Preferred dividends paid in Common Stock	- (107,167	7 ) (76,017 ) (152,130 )
Series B Preferred dividends paid in Common Stock	-	- (7,043)
Series B Preferred dividends paid in cash	(42,037 ) -	(42,037 ) -
Net loss applicable to common shareholders	\$(1,172,541) \$(924,490	) \$(2,138,997) \$(2,092,339)
Denominator for basic and diluted loss per share:		
Weighted average common stock shares outstanding	2,874,305 2,621,29	2,867,381 2,615,557
Loss per common share - basic and diluted	\$(0.41) \$(0.35)	) \$(0.75 ) \$(0.80 )
For the T	hree Months Ended	For the Six Months Ended

	For the Three Months Ended		For the Six Months Ended	
	June 30,		June 30,	
	2011	2010	2011	2010
Stock options	1,418,500	1,019,500	1,418,500	1,019,500
Common stock warrants	2,745,110	1,619,800	2,745,110	1,619,800
Preferred stock warrants	940,550	940,550	940,550	940,550
Convertible preferred stock:				
Series A Convertible Preferred	2,611,350	1,744,400	2,611,350	1,744,400
Series B Convertible Preferred	841,790	887,110	841,790	887,110
Series C Convertible Preferred	880,980	-	880,980	-
	9,438,280	6,211,360	9,438,280	6,211,360

### Accounting for Income Taxes

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

### Warrant Derivative Liability

We accounted for the warrants, exercisable into common shares, issued in conjunction with the sale of the Series C Units in accordance with applicable guidance provided in ASC 815, Derivatives and Hedging, ("ASC 815"). The Series C warrants are measured at fair value and liability-classified because the Series C warrants contain "down-round protection" and therefore, do not meet the scope exception for treatment as a derivative under 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 Black-Scholes formula, resulting in an allocation of the gross proceeds of \$591,904 to the total warrants issued. 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. This down-round protection expires either 12 or 24 months subsequent to the issuance of the Series C Units, depending on the amount of additional capital raised by the Company.

The assumptions for the Black-Scholes pricing model are represented in the table below for the warrants issued in both tranches reflected on a per share common stock equivalent basis.

			Warrants r	evalued at Jun	e
			30, 2011		
	April 8,	June 20,	April 8,	June 20,	,
Assumptions	2011	2011	2011	2011	
Expected life (in months)	36.0	36.0	33.0	36.0	
Expected volatility	118.5	% 118.5	% 120.4	% 118.0	%
Risk-free interest rate	0.625	% 0.625	% 0.625	% 0.625	%
Exercise price	\$2.13	\$2.13	\$2.13	\$2.13	
Fair value per warrant	\$0.70	\$0.62	\$0.57	\$0.59	

The assumptions for the warrants issued to the investment banker show the range of values for both tranches. The investment banker received two sets of warrants in each tranche with half of the warrants assigned a different exercise price.

			mvesum	ont Dan	Kei waii	ants		
	I	April 8,	2011		$J_1$	une 20,	2011	
\$1	1.50	_	\$2.38		\$1.50		\$2.38	
6	60.0		60.0		60.0		60.0	
ç	99.1	%	99.1	%	99.9	%	99.9	%
1	1.500	%	1.500	%	1.500	%	1.500	%
\$1	1.50		\$2.38		\$1.50		\$2.38	

\$0.74

Investment Ranker Warrante

Accounting for Stock-Based Compensation

\$0.75

\$0.83

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.

\$0.67

### Determining Fair Value of Stock Option Grants

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

Expected Term - The Company uses the simplified calculation of expected life, as the Company does not currently have sufficient historical exercise data on which to base an estimate of expected term. Using this method, the

expected term is determined using the average of the vesting period and the contractual life of the stock options granted.

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

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

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

We recognized stock-based compensation expense of \$12,202 and \$50,367 for the three months ended June 30, 2011 and 2010, 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	l, June 30,		
	2011	2010		
Research and development	\$3,737	\$22,660		
Selling and marketing	2,728	17,366		
General and administrative	5,737	10,341		
Total stock-based compensation expense	\$12,202	\$50,367		

We recognized stock-based compensation expense of \$81,168 and \$145,103 for the six months ended June 30, 2011 and 2010, 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	For the Six Months	
	Ended	Ended, June 30,	
	2011	2010	
Research and development	\$25,342	\$40,906	
Selling and marketing	33,739	34,542	
General and administrative	22,087	69,655	
Total stock-based compensation expense	\$81,168	\$145,103	

### 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. There are three levels of inputs that may be used to measure fair value:

- Level 1. Observable inputs such as quoted prices in active markets;
- Level 2. Inputs, other than the quoted prices in active markets, that are observable either directly or indirectly; and
- Level 3. Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own

assumptions.

As of June 30, 2011, the Company's warrant derivative liability is considered a level 3 item, see Note "Warrant Derivative Liability".

### Advertising

Advertising costs are expensed as incurred. During the six months ended June 30, 2011, we did not incur significant advertising expenses but in the same period last year, we incurred \$18,045 in advertising expenses.

### Rent Expense

Rental costs are expensed as incurred. During the six months ended June 30, 2011 and 2010, we incurred \$68,832 and \$66,332, 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 renewed the lease until August 31, 2011 with no increase in the monthly payment and expect to extend the lease in 2011. We pay approximately \$6,500 per month for the use of these facilities.

Effective January 1, 2010, we entered into a three-year lease agreement with the University of Massachusetts, pursuant to which we are leasing laboratory and office space on campus at the university. We 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 three months ended June 30, 2011 and 2010, we incurred \$5,618 and \$10,757, respectively, in royalty expense associated with our obligation to BMA. During the six months ended June 30, 2011 and 2010, we incurred \$11,672 and \$17,281, respectively, in royalty expense associated with our obligation to BMA.

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

#### **Battelle Memorial Institute**

In December 2008, we entered into an exclusive patent license agreement with the Battelle Memorial Institute ("Battelle"). The licensed technology is described in the patent application filed by Battelle on July 31, 2008 (US serial number 12/183,219). This application includes subject matter related to a method and a system for improving the analysis of protein samples, including through an automated system utilizing pressure and a pre-selected agent to obtain a digested sample in a significantly shorter period of time than current methods, while maintaining the integrity of the sample throughout the preparatory process. Pursuant to the terms of the agreement we paid Battelle a non-refundable initial fee. In addition to royalty payments on net sales on "licensed products", we are obligated to make minimum royalty payments of \$5,000 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.

Severance and Change of Control Agreements

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

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

### 5) Stockholders' Equity

#### Preferred Stock

In 1996, our Board of Directors authorized the issuance of 1,000,000 shares of preferred stock with a par value of \$0.01. As of June 30, 2011, 20,000 shares of preferred stock have been designated as Series A Junior Participating Preferred Stock, none of which are issued and outstanding, 313,960 shares of preferred stock have been designated as Series A Convertible Preferred Stock, par value

\$0.01 per share ("Series A Convertible Preferred Stock"), of which 261,135 shares are issued and outstanding, 279,256 shares of preferred stock have been designated as Series B Convertible Preferred Stock, par value \$0.01 per share ("Series B Convertible Preferred Stock"), of which 84,179 shares are issued and outstanding and 303,125 shares of preferred stock have been designated as Series C Convertible Preferred Stock, par value \$0.01 per share ("Series C Convertible Preferred Stock"), of which 88,098 shares are issued and outstanding.

#### Series A Convertible Preferred Stock

On February 12, 2009, we completed a private placement, pursuant to which we sold an aggregate of 156,980 units (the "Series A Units") for a purchase price of \$11.50 per unit (the "Series A Purchase Price"), resulting in gross proceeds to us of \$1,805,270 (the "Series A Private Placement"). Each Series A Unit consisted of (i) one share of Series A Convertible Preferred Stock convertible into 10 shares of our common stock, (ii) a warrant to purchase one share of Series A Convertible Preferred Stock at an exercise price equal to \$12.50 per share, with a term expiring 15 months after the date of closing ("15-Month Series A Preferred Stock Warrant"); and (iii) a warrant to purchase 10 shares of common stock at an exercise price equal to \$2.00 per share, with a term expiring 30 months after the date of closing (the "30-Month Common Stock Warrants"). We did not pay any placement fees associated with this transaction but the expenses related to the offering totaled approximately \$233,000. We have offered each holder of the 30-Month Common Stock Warrants a one-year extension of the life of the warrant to August 11, 2012. See Note 6.

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

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

June 30, 2011.

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

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

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

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

Subject to the terms and conditions of the applicable warrants, the Company had the right to call for cancellation of the 15-Month Series A Preferred Stock Warrants if the volume weighted average price of our common stock on the Nasdaq Capital Market (or other primary trading market or exchange on which our common stock is then traded) equaled or exceeded \$1.75 for either (i) 10 consecutive trading days or (ii) 15 out of 25 consecutive trading days. Pursuant to these provisions, on March 30, 2010, the Company called all of the 15-Month Series A Preferred Stock Warrants resulting in the issuance of 104,155 shares of Series A Convertible Preferred Stock.

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

The warrant exercise price and/or number of shares issuable upon exercise of the applicable warrant are subject to adjustment for stock dividends, stock splits or similar capital reorganizations, as set forth in the warrants. As a result of the issuance of Common Stock in connection with dividends paid on the Series A Preferred Stock and the Series B Preferred Stock, the exercise price of the 30-Month Common Stock Warrants has been adjusted from \$2.00 to \$1.74 (the "New Exercise Price") to prevent dilution. The number of

shares for which the 30-Month Common Stock Warrants are exercisable is equal to the original per share exercise price of the Warrant, prior to any adjustment, divided by the New Exercise Price, multiplied by the original number of Warrant Shares.

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

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

Assumptions	Preferred	l Commo	n
Expected life (in months)	15.0	30.0	
Expected volatility	142.0	% 109.0	%
Risk-free interest rate	0.875	% 1.375	%
Exercise price	\$1.25	\$2.00	
Stock price	\$0.90	\$0.90	
Fair value per warrant	\$0.45	\$0.41	

### Series B Convertible Preferred Stock

On November 18, 2009, we sold an aggregate of 62,039 units (the "Series B Units") for a purchase price of \$18.80 per unit (the "Series B Purchase Price"), resulting in gross proceeds to us of \$1,166,333. This was the first tranche of a \$2.5 million private placement. The second tranche closed on March 18, 2010 for the sale of 26,672 Series B Units with gross proceeds of \$501,434 (collectively the two tranches are referred to as the "Series B Private Placement"). Each Series B Unit consists of (i) one share of Series B Convertible Preferred Stock convertible into 10 shares of our common stock and (ii) a warrant to purchase one share of Series B Convertible Preferred Stock at an exercise price equal to \$23.80 per share for warrants issued in November 2009 and at an exercise price of \$28.80 for warrants issued in March 2010, in each case with a term expiring on August 11, 2011 (the "Series B Warrant"). We have offered each holder of the Series B Warrant a one-year extension of the life of the warrant to August 11, 2012, but the warrant would be exercisable for Common Stock. See Note 6.

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

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

Each share of Series B Convertible Preferred Stock will receive a cumulative dividend at the rate of 5% per annum of the Series B Purchase Price, payable semi-annually on June 30 and December 31, commencing on December 31, 2009 (with the first payment being

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

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

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

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

#### Series B Warrants

The Series B Warrants issued in November 2009 have an exercise price equal to \$23.80 and the Series B Warrants issued in March 2010 have an exercise price equal to \$28.80, in each case with a term expiring on August 11, 2011. The Series B Warrants permit the holder to conduct a "cashless exercise" at any time the holder of the Series B

Warrant is an "affiliate" (as defined in the Securities Purchase Agreement) of the Company.

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

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

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

			Placemen	nt
Assumptions	Preferred		Agent	
Expected life (in months)	17.0		33.0	
Expected volatility	146.4	%	125.0	%
Risk-free interest rate	1.000	%	1.000	%
Exercise price	\$2.88		\$2.88	
Fair value per warrant	\$0.95		\$1.08	

#### 15-Month Series A Preferred Stock Warrant Call

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

### Series C Convertible Preferred Stock

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 \$6 million 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 for a purchase price of \$12.50 per unit with gross proceeds of \$275,485. Each unit ("Series C Unit") consists of (i) one share of Series C Convertible Preferred Stock, \$0.01 par value per share (the "Series C 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 10 shares of our Common Stock at a per share exercise price equal to the sum of (i) the Common Stock equivalent of the Series C Purchase Price (ii) plus \$0.88 (the "Series C Warrant"). The Series C Warrants will be exercisable until the close of business on the third anniversary of the applicable closing date.

We engaged an investment banker (the "Investment Banker") to assist with the Series C Private Placement. The Company paid the Investment Banker a cash retainer fee of \$50,000 and issued a warrant to purchase 100,000 shares of Common Stock at an exercise price of \$3.00 per share. In connection with the Series C Private Placement, we paid the Investment Banker a fee of (i) approximately \$66,000 cash, (ii) an expense allowance of approximately \$16,500, (iii) a warrant to purchase 61,670 shares of Common Stock exercisable at a purchase price of \$1.50, and (iv) a warrant to purchase 61,670 shares of Common Stock exercisable at a purchase price of \$2.38.

The proceeds from the sale of each Series C Unit was allocated between the Series C Convertible Preferred Stock and the Common Stock Warrant based on the relative estimated fair value of each security. The estimated fair value of the warrants was determined using the Black-Scholes formula, resulting in an allocation of the gross proceeds of \$591,904 to the total warrants issued. The allocation of the gross proceeds to the Series C Convertible Preferred Stock was \$509,303. In accordance with the provisions of FASB ASC 470-20, Debt with Conversion and Other Options, an additional adjustment between Additional Paid in Capital and Accumulated Deficit of \$181,907 was recorded to reflect an implicit non-cash dividend related to the allocation of proceeds between the stock and warrants issued. The \$181,907 represents the value of the adjustment to additional paid in capital related to the beneficial conversion feature of the Series C Convertible Preferred Stock. The value adjustment was calculated by subtracting the fair market value of the underlying common stock on April 7 and June 20 issuable upon conversion of the Series C Convertible Preferred Stock as determined when the Company performed a fair market value allocation of the proceeds to the Series C Convertible Preferred Stock and warrants. The warrants are recorded as a liability. See Note 3 "Warrant Liability" under Summary of Accounting Policies.

Each share of Series C Convertible Preferred Stock will receive a cumulative dividend at the rate of 5% per annum of the Series C's respective tranche purchase price, payable semi-annually on June 30 and December 31, commencing on June 30, 2011 (with the first payment being pro-rated based on the number of days occurring between the date of issuance and June 30, 2011). Dividends may

be paid in cash or in shares of common stock at our option, subject to certain conditions. The shares of Series C Convertible Preferred Stock also are entitled to a liquidation preference, such that in the event of any voluntary or involuntary liquidation, dissolution or winding up of our Company, the holders of Series C Convertible Preferred Stock will be paid out of the assets of the Company available for distribution to our stockholders before any payment shall be paid to the holders of common stock, an amount per share equal to the Series C Purchase Price, plus accrued and unpaid dividends. The Series C Convertible Preferred Stock will be treated on an equivalent basis with respect to payments made in connection with a liquidation.

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

The holders of Series C 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 C Convertible Preferred Stock may vote separately as a class on any matters that would amend, alter or repeal any provision of our Restated Articles of Organization, as amended, in a manner that adversely affects the powers, preferences or rights of the Series C Convertible Preferred Stock and such holders may also vote on any matters required by law.

If we consummate an equity financing (other than the exercise of employee stock options under the Company's stock option plans, the Series C purchase agreement or the exercise of any Warrants, or the exercise or conversion of any currently outstanding Common Stock Equivalents) within twelve months after the initial Closing and the gross proceeds to the Company from the sale of the Units are less than \$4 million, then each Series C holder may exchange all, but not less than all, of his, her or its Units for the equity securities issued in such next financing and shall become subject to the terms and conditions of such next financing; provided that the exchange of the purchaser's units for next financing securities is permitted under the rules and regulations of the NASDAQ Trading Market then in effect. The number of next financing securities into which a purchaser's Series C Units may be exchanged shall be 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.

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

### Series C Warrants

The Series C Warrants have an exercise price equal to \$2.13 with a term expiring on the third anniversary of the deal closing. The Series C Warrants permit the holder to conduct a "cashless exercise" at any time the holder of the Series C Warrant is an "affiliate" (as defined in the Securities Purchase Agreement) of the Company.

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

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

~	C41-
Common	STOCK

# PRESSURE BIOSCIENCES, INC. AND SUBSIDIARY NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## Shareholders Rights Plan

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

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

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

# Stock Options and Warrants

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

As of June 30, 2011, options to acquire 1,240,500 shares were outstanding under the Plan with 499,500 shares available for future grant under the Plan. As of June 30, 2011, options to acquire 178,000 shares are outstanding under the 1999 Non-qualified Stock Option Plan. No additional options may be granted under the 1999 Non-qualified

# Stock Option Plan.

As of June 30, 2011, 1,569,800 of the 30-Month Common Stock Warrants were outstanding. Series B Warrants to purchase 94,055 shares of Series B Convertible Preferred Stock, which includes warrants given to our placement agent, were outstanding. On March 31, 2010, we issued warrants to an investor relations firm to purchase 50,000 shares of our common stock at an exercise price equal to \$3.00 per share, with a term expiring on August 11, 2012, in exchange for consulting services provided to us by such firm.

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

	Stock Options Weighted		Warrants Weighted			
	Shares	Average price per share	Shares	Average price per share	Total Shares	Exercisable
Balance outstanding,		•		•		
12/31/2009	1,564,500	\$2.52	3,806,640	\$1.77	5,371,140	4,905,152
Granted	60,000	1.43	404,510	\$2.88	464,510	
Exercised	(18,897)	1.07	(1,529,800)	1.25	(1,548,697)	
Expired	_	-	-	-	_	
Forfeited	-	-	-	-	-	
Balance outstanding,						
12/31/2010	1,605,603	\$2.49	2,681,350	\$2.24	4,286,953	4,114,792
Granted	-		1,004,319	2.11	1,004,319	
Exercised	(41,103)	1.07	-	-	(41,103)	
Expired	(71,000)	2.41	-	-	(71,000)	
Forfeited	(75,000)	2.49	-	-	(75,000)	
Balance outstanding, 6/30/2011	1,418,500	\$2.54	3,685,669	\$2.21	5,104,169	5,057,669

			Options Outstanding Weighted Average		Options Exercisable Weighted Averag			
			Remaining				Remaining	
			Number of	Contractual	Exercise	Number of	Contractual	Exercise
Ra	inge of Exerc	ise Prices	Options	Life	Price	Options	Life	Price
\$0.77	-	\$2.70	598,000	6.6	\$1.18	568,000	6.5	\$1.16
2.71	-	3.08	314,500	3.5	2.93	298,000	3.2	2.94
3.09	-	3.95	302,000	4.9	3.67	302,000	4.9	3.67
3.96	-	5.93	204,000	4.5	4.25	204,000	4.5	4.25
\$0.77	-	\$5.93	1,418,500	5.2	\$2.54	1,372,000	5.1	\$2.56

We did not grant employee stock options during the six months ended June 30, 2011 and 2010.

As of June 30, 2011, the total estimated fair value of unvested stock options to be amortized over their remaining vesting period was \$13,872. The non-cash, stock-based compensation expense associated with the vesting of these options is expected to be immaterial for the next two years. The aggregate intrinsic value of stock options exercised during the six months ended June 30, 2011 is approximately \$20,000.

# 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.

#### Loan

On August 3, 2011, we received a loan in the amount of \$200,000 from existing investor, Clayton A. Struve. The loan was made pursuant to a Promissory Note, (the "Note"), with a maturity date of November 3, 2011, which may be extended with mutual consent of the parties. The interest rate under the Note is 20% per annum. The Company is required to pay at least three months of interest, regardless of earlier repayment of the Note. The Note may be repaid in cash or (at the option of the investor) by conversion into that number of securities issued in the next financing completed by the Company having an aggregate purchase price equal to the then outstanding principal amount of the Note, plus any accrued and unpaid interest due at the time of conversion.

In connection with the loan, the Company also issued to Mr. Struve a warrant to purchase 26,315 shares of the Company's Common Stock, \$0.01 par value, at an exercise price of \$0.76 per share, expiring on August 3, 2014.

Amendments to 30-Month Common Stock Warrants and Series B Warrants

On or about August 10, 2011, we entered into Amendment No. 1 to the Series B Preferred Stock Purchase Warrant, the "Series B Warrant Amendment", with each of the holders of the outstanding Series B Warrants, which were issued in the Series B Private Placement. The Series B Warrant Amendment extends the term of the Series B Warrants from August 11, 2011 to August 11, 2012. Additionally, the Series B Warrant Amendment amends the Warrants so that they are no longer exercisable for shares of our Series B Convertible Preferred Stock, but will be exercisable for that number of shares of our Common Stock into which the shares of Series B Convertible Preferred Stock subject to the Series B Warrant were previously convertible. The Warrants will have the same aggregate exercise price but, due to this change, will have a per share exercise price equal to one-tenth of the original exercise price.

Also on or about August 10, 2011, we entered into Amendment No. 1 to the 30-Month Common Stock Warrant, the Common Warrant Amendment, with each of the holders of the outstanding 30-Month Common Stock Warrants, which were issued in the Series A Private Placement completed in February 2009. The Common Warrant Amendment extended the term of the 30-Month Common Stock Warrants from August 11, 2011 to August 11, 2012.

## Series A Dividends

On August 10, 2011, we issued 64,765 shares of Common Stock to holders of Series A Convertible Preferred Stock.

# 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", "believ "estimates", "projects", "predicts", "potential", and similar expressions intended to identify forward-looking statements. Such statements include, without limitation, statements regarding:

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

These forward-looking statements are only predictions and involve known and unknown risks, uncertainties, and other factors that may cause our actual results, levels of activity, performance, or achievements to be materially different from any future results, levels of activity, performance, or achievements expressed or implied by such forward-looking statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date of this Report. Except as otherwise required by law, we expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statement contained in this Report to reflect any change in our expectations or any change in events, conditions, or circumstances on which any of our forward-looking statements are based or to conform to actual results. We qualify all of our forward-looking statements by these cautionary statements. You should read this section in combination with the section entitled Management's Discussion and Analysis of Financial Condition and Results of Operations for the year ended December 31, 2010 included in our Annual Report on Form 10-K for the year ended December 31, 2010.

# **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, 2010, 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.

## **OVERVIEW**

We have developed instruments which utilize our unique and proprietary pressure cycling technology ("PCT"), which we sell, along with associated consumables to life sciences companies, academic institutions and government agencies. There are currently over 130 users of our enabling platform. PCT represents the core of our products and has enabled our customers to perform biological sample preparation and enzymatic digestion in unique ways that were previously unavailable. The enabling capability of our PCT products allows us to continue to increase the number of applications for our platform beyond current uses, which include genomic and proteomic sample preparation, pathogen inactivation, the control of chemical and enzymatic reactions, immunodiagnostics, and protein purification. Additionally, we are pursuing business opportunities to leverage our products and PCT into new markets beyond our current focus of PCT-enhanced enzymatic digestion products designed specifically for the mass spectrometry marketplace, as well as sample preparation products for biomarker discovery, soil and plant biology, forensics, histology, and counter-bioterror applications.

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

We have experienced negative cash flows from operations with respect to our pressure cycling technology business since our inception. As of June 30, 2011, we had working capital resources of approximately \$657,000, which excludes the warrant liability of \$507,883. Based on our current projections, we believe our current cash resources will enable us to extend our cash resources until mid-September 2011.

We will need substantial additional capital to fund our operations in periods beyond the third quarter of 2011. If we are able to obtain additional capital or otherwise increase our revenues, we may increase spending in specific research and development applications and engineering projects and may hire additional sales personnel or invest in targeted marketing programs. In the event that we are unable to obtain financing on acceptable terms, or at all, we 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 extraction and recovery;
- -control of chemical (particularly enzymatic) reactions; and
- -Immunodiagnostics (clinical laboratory testing).

Since we began operations as Pressure BioSciences in February 2005, we have installed 195 Barocycler instruments, of which 128 currently remain in use. Our customers include researchers at academic laboratories, government agencies, biotechnology, pharmaceutical and other life sciences companies in the United States, and distribution partners in six foreign countries.

2005 2006 2007 2008 2009 2010

							YTD 2011
Installed	5	8	20	41	54	50	17
units							

# **RESULTS OF OPERATIONS**

Three Months Ended June 30, 2011 and 2010

## Total Revenue

We recognized total revenue of \$190,686 for the three months ended June 30, 2011 as compared to \$402,104 during the three months ended June 30, 2010. This decrease in total revenue was due to a lower number of PCT instrument installations and a lack of grant revenue during the period. The primary reasons for the decrease in Barocycler installations and the reduction in grant revenue are described below.

PCT Products, Services, Other. Revenue from the sale of PCT products and services was \$190,686 for the three months ended June 30, 2011 as compared to \$283,382 during the three months ended June 30, 2010. We recorded seven PCT installations for the

three months ended June 30, 2011 compared to twelve for the same period in 2010. Revenue from the sale of PCT consumables was approximately \$20,000 for the three months ended June 30, 2011 compared to approximately \$33,000 for the same period in 2010.

The decrease in PCT instrument installations and consumables was due to several factors. Our Vice President of Sales resigned in early May 2011, and his responsibilities included direct sales in the New England territory and supervision of the three Sales Directors. In addition, sales and marketing activities were limited during the second quarter of 2011 compared to the second quarter of 2010 as a result of our limited financial resources. The decrease in PCT consumable sales was due for the reasons just stated, and also in part to significant purchases of PULSE Tubes (both ND and Shredder) by certain clients during the second quarter of 2010 whose studies ended prior to the second quarter of 2011.

Our domestic and foreign installations of PCT Systems are set forth in the table below.

	For the Three Months Ended			
	June 30,			
	2011	2010		
Domestic	6	12		
International	1	-		
Total PCT System				
Installations	7	12		

Grant Revenue. During the three months ended June 30, 2010, we recorded \$118,722 of grant revenue. We did not record any grant revenue during the three months ended June 30, 2011. This decrease was due to the completion of work on the SBIR Phase II grant in December 2010. During the three months ended June 30, 2011, we did not have any active grants. We have submitted requests for several grants that would pay the Company going forward for work that is currently on-going in the development of our high throughput Barocycler instrument and our formalin-fixed paraffin-embedded (FFPE) tissue application.

## Cost of PCT Products and Services

The cost of PCT products and services was \$78,296 for the three months ended June 30, 2011 compared to \$126,972 for the comparable period in 2010. The decrease corresponds to the decrease in PCT installations. Our gross profit margin on PCT products and services increased to 59% for the three months ended June 30, 2011, as compared to 55% for the prior period. The increase is from the sale of our SG3 Shredder kits launched this quarter that have a higher profit margin.

## Research and Development

Research and development expenditures were \$263,809 during the three months ended June 30, 2011 as compared to \$304,143 in the same period in 2010. This decrease resulted primarily from the full vesting of a significant number of employee stock options and discontinued research by a collaborative partner funded by us through the SBIR Phase II grant. The grant was completed in 2010.

Research and development expense recognized in the three months ended June 30, 2011 and 2010 included \$3,737 and \$22,660 of non-cash, stock-based compensation expense, respectively. A significant number of employee options

became fully vested in the first quarter of 2011 with no further expensing.

# Selling and Marketing

Selling and marketing expenses decreased to \$242,544 for the three months ended June 30, 2011 from \$294,275 for the comparable period in 2010. This decrease was primarily due to the full vesting of a significant number of employee stock options, reduced marketing activities and employee costs relating to the departure of our Vice President of Sales.

During the three months ended June 30, 2011 and 2010, selling and marketing expense included \$2,728 and \$17,366 of non-cash, stock-based compensation expense, respectively. This was primarily due to a significant number of employee options becoming fully vested in the first quarter of 2011 with no further expensing.

#### General and Administrative

General and administrative costs totaled \$448,314 for the three months ended June 30, 2011 as compared to \$474,381 for the comparable period in 2010. This decrease was primarily due to significant investor relations and patent related activities incurred in the previous period not continuing in the current quarter.

During the three months ended June 30, 2011 and 2010, general and administrative expense included \$5,737 and \$10,341 of non-cash, stock-based compensation expense, respectively. This was primarily due to a significant number of employee options becoming fully vested in the first quarter of 2011 with no further expensing.

## Operating Loss

Our operating loss was \$842,277 for the three months ended June 30, 2011 as compared to \$797,667 for the comparable period in 2010. The decreased operating loss resulted primarily for the reasons noted above.

Change in fair value of warrant derivative liability

During the three months ended June 30, 2011, we recorded non-cash income of \$84,021 for warrant revaluation expense in our statements of operations due to a decrease in the fair value of the warrant liability related to the Series C Private Placement. This decrease in fair value was primarily due to a decrease in the price per share of our common stock on June 30, 2011 as compared to June 20, 2011 or April 8, 2011, depending on the tranche.

## Net Loss

During the three months ended June 30, 2011, we recorded a net loss applicable to common shareholders of \$1,172,541 or \$(0.41) per share, as compared to \$924,490 or \$(0.35) per share in the three months ended June 30, 2010. We recorded \$107,167 in the three months ended June 30, 2010 relating to the payment of common stock to holders of the Series A Convertible Preferred Stock. We paid approximately \$42,000 to Series B holders in the three months ended June 30, 2011. We also recorded a deemed dividend of \$304,823 relating to the beneficial conversion calculation on the Series C Private Placement.

Six Months Ended June 30, 2011 and 2010

## Total Revenue

We recognized total revenue of \$371,329 for the six months ended June 30, 2011 as compared to \$692,917 during the six months ended June 30, 2010. This decrease in total revenue was due to a lower number of PCT instrument installations during the six month period ended June 30, 2011 versus the same period in 2010. The primary reasons for the decrease in Barocycler installations and the reduction in grant revenue are described below.

PCT Products, Services, Other. Revenue from the sale of PCT products and services was \$371,329 for the six months ended June 30, 2011 as compared to \$472,532 during the six months ended June 30, 2010. We recorded seventeen PCT installations for the six months ended June 30, 2011 compared to twenty-two for the same period in 2010. Revenue from the sale of PCT consumables was approximately \$39,000 for the three months ended June 30, 2011 compared to approximately \$59,000 for the same period in 2010.

The decrease in PCT instrument installations and consumables was due to several factors. Our Vice President of Sales resigned in early May 2011, and his responsibilities included direct sales in the New England territory and supervision of the three Sales Directors. In addition, sales and marketing activities were limited during the second

quarter of 2011 compared to the second quarter of 2010 as a result of our limited financial resources. The decrease in PCT consumable sales was due for the reasons just stated, and also in part to significant purchases of PULSE Tubes (both ND and Shredder) by certain clients during the second quarter of 2010 whose studies ended prior to the second quarter of 2011.

Our domestic and foreign installations of PCT Systems are set forth in the table below.

	For the Six Months Ended			
	June 30,			
	2011	2010		
Domestic	14	22		
International	3	-		
Total PCT System				
Installations	17	22		

Grant Revenue. During the six months ended June 30, 2010, we recorded \$220,385 of grant revenue. We did not record any grant revenue during the six months ended June 30, 2011. This decrease was due to the completion of work on the SBIR Phase II grant in December 2010. During the six months ended June 30, 2011, we did not have any active grants. The Company has submitted requests for several grants that would pay the Company going forward for work that is currently on-going in the development of our high throughput Barocycler instrument and our formalin-fixed paraffin-embedded (FFPE) tissue application.

Cost of PCT Products and Services

The cost of PCT products and services was \$157,225 for the six months ended June 30, 2011 compared to \$214,075 for the comparable period in 2010. The decrease corresponds to the decrease in PCT installations and sales of accessories and consumables. Our gross profit margin on PCT products and services increased to 58% for the six months ended June 30, 2011, as compared to 55% for the prior period. The increase is from the sale of our SG3 Shredder kits launched this quarter that have a higher profit margin.

# Research and Development

Research and development expenditures were \$482,774 during the six months ended June 30, 2011 as compared to \$598,284 in the same period in 2010. This decrease resulted primarily from the completion of employee stock option vesting and discontinued research by a collaborative partner funded by us through the SBIR Phase II grant. The grant was completed in 2010.

Research and development expense recognized in the six months ended June 30, 2011 and 2010 included \$25,342 and \$40,906 of non-cash, stock-based compensation expense, respectively. A significant number of employee options became fully vested in the first quarter of 2011 with no further expensing.

# Selling and Marketing

Selling and marketing expenses decreased to \$546,383 for the six months ended June 30, 2011 from \$576,853 for the comparable period in 2010. This decrease was primarily due to full vesting of a significant number of employee stock options, reduced marketing activities and employee costs relating to the departure of our Vice President of Sales.

During the six months ended June 30, 2011 and 2010, selling and marketing expense included \$33,739 and \$34,542 of non-cash, stock-based compensation expense, respectively. A significant number of employee options became fully vested in the first quarter of 2011 with no further expensing.

## General and Administrative

General and administrative costs totaled \$860,843 for the six months ended June 30, 2011 as compared to \$1,012,803 for the comparable period in 2010. This decrease was primarily due to significant investor relations and patent related activities incurred in the previous period not continuing in the current period.

During the six months ended June 30, 2011 and 2010, general and administrative expense included \$22,087 and \$69,655 of non-cash, stock-based compensation expense, respectively. A significant number of employee options became fully vested in the first quarter of 2011 with no further expensing.

# Operating Loss

Our operating loss was \$1,675,896 for the six months ended June 30, 2011 as compared to \$1,709,098 for the comparable period in 2010. The decreased operating loss resulted primarily for the reasons noted above.

## Change in fair value of warrant derivative liability

During the six months ended June 30, 2011, we recorded non-cash income of \$84,021 for warrant revaluation expense in our statements of operations due to a decrease in the fair value of the warrant liability related to the Series C Private Placement. This decrease in fair value was primarily due to a decrease in the price per share of our common stock on June 30, 2011 as compared to June 20, 2011 or April 8, 2011, depending on the tranche.

#### Net Loss

During the six months ended June 30, 2011, we recorded a net loss to common shareholders of \$2,138,997 or \$(0.75) per share, as compared to \$2,092,339 or \$(0.80) per share in the six months ended June 30, 2010. We recorded \$304,823 and \$154,389 in the six months ended June 30, 2011 and 2010, respectively, relating to the beneficial conversion calculation associated with the intrinsic value of the Series C Convertible Preferred Stock and Series B Convertible Preferred Stock, respectively. We paid approximately \$42,000 to Series B holders in the six months ended June 30, 2011.

## LIQUIDITY AND FINANCIAL CONDITION

As of June 30, 2011, our working capital position was \$656,949, which excludes the warrant derivative liability of \$507,883. As of December 31, 2010, our working capital position was \$1,443,765.

On March 18, 2010, we sold an aggregate of 26,672 units (the "Series B Units") for a purchase price of \$18.80 per unit, resulting in net proceeds to us of \$465,867. An initial tranche of Series B Units was sold in November 2009 with net proceeds of \$1,078,885. Each Series B Unit issued in the March 2010 tranche 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 \$28.80 per share with a term expiring on August 11, 2011 ("Series B Warrant"). See Note 5 of the Notes to Consolidated Financial Statements for a further description of the Series B Convertible Preferred Stock and Series B Warrants issued in the Series B Private Placement.

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

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. This was the first tranche of the \$6 million 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 for a purchase price of \$12.50 per unit with gross proceeds of \$275,485. Each unit consists of (i) one share of Series C Convertible Preferred Stock, \$0.01 par value per share (the "Series C 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 10 shares of our Common Stock at a per share exercise price equal to the sum of (i) the Common Stock equivalent of the Series C Purchase Price (ii) plus \$0.88. The Series C Warrants will be exercisable until the close of business on the third anniversary of the applicable closing date.

Based on our current projections, we believe our current cash resources will enable us to extend our cash resources until approximately mid-September 2011.

We will need substantial additional capital to fund our operations in periods beyond the third quarter of 2011. If we are able to obtain additional capital or otherwise increase our revenues, we may increase spending in specific research and development applications and engineering projects and may hire additional sales personnel or invest in targeted marketing programs. In the event that we are unable to obtain financing on acceptable terms, or at all, we 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, 2011 was \$1,199,387 as compared to \$1,795,256 for the six months ended June 30, 2010. The prior period included accrued legal fees incurred in connection with the Series B financing and the release of our inventory deposits when Barocyclers were built offset by Barocycler sales.

Net cash used in investing activities for the six months ended June 30, 2011 was \$0 as compared to \$24,310 for the same period in the prior year. We purchased tooling in the prior year.

Net cash provided by financing activities for the six months ended June 30, 2011 was \$880,957 as compared to \$1,887,142 for the same period in the prior year. We raised approximately \$1.1 million in gross proceeds this year from Series C Private Placement offset by approximately \$378,000 in offering costs excluding the issuance of additional warrants to the placement agent. During the same period in the prior year, we closed the second tranche of the Series B Private Placement on March 18, 2010 with the sale of 26,672 Series B Units with net proceeds of \$465,867. Warrants were exercised for a total of \$1,421,275 given to the company in the six months ended June 30, 2010.

# COMMITMENTS AND CONTINGENCIES

#### **Operating Leases**

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

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

month for the use of these facilities.

## **Royalty Commitments**

In 1996, we acquired our initial equity interest in BioSeq, Inc., which at the time was developing our original pressure cycling technology. BioSeq, Inc. acquired its pressure cycling technology from BioMolecular Assays, Inc. ("BMA") under a technology transfer and patent assignment agreement. In 1998, we purchased all of the remaining outstanding capital stock of BioSeq, Inc., and at such time, the technology transfer and patent assignment agreement was amended to require us to pay BMA a 5% royalty on our sales of products or services that incorporate or utilize the original pressure cycling technology that BioSeq, Inc. acquired from BMA. We are also required to pay BMA 5% of the proceeds from any sale, transfer or license of all or any portion of the original pressure cycling technology. These payment obligations terminate in 2016. During the three months ended June 30, 2011 and 2010, we incurred \$5,618 and \$10,757, respectively, in royalty expense associated with our obligation to BMA. During the six months ended June 30, 2011 and 2010, we incurred \$11,672 and \$17,281, respectively, in royalty expense associated with our obligation to BMA.

In connection with our acquisition of BioSeq, Inc., we licensed certain limited rights to the original pressure cycling technology back to BMA. This license is non-exclusive and limits the use of the original pressure cycling technology by BMA solely for

molecular applications in scientific research and development and in scientific plant research and development. BMA is required to pay us a royalty equal to 20% of any license or other fees and royalties, but not including research support and similar payments, it receives in connection with any sale, assignment, license or other transfer of any rights granted to BMA under the license. BMA must pay us these royalties until the expiration of the patents held by BioSeq, Inc. in 1998, which we anticipate will be in 2016. We have not received any royalty payments from BMA under this license.

#### **Battelle Memorial Institute**

In December 2008, we entered into an exclusive patent license agreement with the Battelle Memorial Institute ("Battelle"). The licensed technology is described in the patent application filed by Battelle on July 31, 2008 (US serial number 12/183,219). This application includes subject matter related to a method and a system for improving the analysis of protein samples, including through an automated system utilizing pressure and a pre-selected agent to obtain a digested sample in a significantly shorter period of time than current methods, while maintaining the integrity of the sample throughout the preparatory process. Pursuant to the terms of the agreement we paid Battelle a non-refundable initial fee. In addition to royalty payments on net sales on "licensed products", we are obligated to make minimum royalty payments of \$5,000 for each year that we retain the rights outlined in the patent license agreement and we are required to have our first commercial sale of the licensed products within one year following the issuance of the patent covered by the licensed technology.

# Target Discovery Inc.

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

# Severance and Change of Control Agreements

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

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

## RECENT ACCOUNTING STANDARDS

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

In January 2010, the FASB issued ASU 2010-06 "Fair Value Measurements and Disclosures" ("ASU2010-06"). ASU 2010-06 updated section ASC 820-10 to require a greater level of disaggregated information and more robust disclosure about valuation techniques and inputs to fair value measurements. ASU 2010-06 is effective for interim and annual reporting periods beginning after December 15, 2009, with the exception of the disclosures about purchases, sales, issuances and settlements in the roll forward of activity in Level 3 fair value measures which are effective for interim and annual reporting periods beginning after December 15, 2010. The Company determined that there is no significant impact to its operations from this guidance because the Company invests in assets considered to be in Level 1 status.

## 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, 2011, we carried out an evaluation, under the supervision and with the participation of our management, including our Principal Executive Officer and Principal Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934. Based upon that evaluation, our Principal Executive Officer and Principal Financial Officer concluded that our disclosure controls and procedures are effective at the reasonable assurance level.

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

# PART II. OTHER INFORMATION

# ITEM 6. EXHIBITS

	Reference
Amendment No. 1 to Securities Purchase Agreement (Filed as an Exhibit to the Current Report on Form 8-K filed on June 21, 2011 and incorporated herein by reference.)	Filed herewith
Principal Executive Officer Certification Pursuant to Item 601(b)(31) of Regulation S-K, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith
Principal Executive Officer Certification Pursuant to Item 601(b)(32) of Regulation S-K, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed herewith
The following financial information from this Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2011, formatted in XBRL (Extensible Business Reporting Language) and furnished electronically herewith: (i) the Consolidated Balance Sheets; (ii) the Consolidated Statements of Operations; (iii) the Consolidated Statements of Cash Flows; and (iv) the Notes to Financial Statements, tagged as blocks of text	Filed herewith
	the Current Report on Form 8-K filed on June 21, 2011 and incorporated herein by reference.)  Principal Executive Officer Certification Pursuant to Item 601(b)(31) of Regulation S-K, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002  Principal Executive Officer Certification Pursuant to Item 601(b)(32) of Regulation S-K, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002  The following financial information from this Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2011, formatted in XBRL (Extensible Business Reporting Language) and furnished electronically herewith: (i) the Consolidated Balance Sheets; (ii) the Consolidated Statements of Cash Flows;

# **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 15, 2011 By: /s/Richard T. Schumacher

Richard T. Schumacher

President & Chief Executive Officer (Principal Executive Officer, Principal Financial Officer and Principal Accounting

Officer)