

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2018

or

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

For the transition period from _____ to _____

Commission File Number 001-38185

PRESSURE BIOSCIENCES, INC.

(Exact name of registrant as specified in its charter)

Massachusetts

(State or other jurisdiction of
incorporation or organization)

04-2652826

(I.R.S. Employer
Identification No.)

14 Norfolk Avenue
South Easton, Massachusetts

(Address of principal executive offices)

02375

(Zip Code)

(508) 230-1828

(Registrant's telephone number, including area code)

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

Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes No

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

Large accelerated filer

Accelerated filer

Non-accelerated
filer
(Do not check if a smaller
reporting company)

Smaller reporting
company

Emerging growth
company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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

Yes No

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of August 7, 2018.

Class

Number of Shares

Common Stock, par value \$.01 per share

1,565,082



TABLE OF CONTENTS

	<u>Page</u>
<u>PART I - FINANCIAL INFORMATION</u>	3
<u>Item 1. Unaudited Financial Statements</u>	3
<u>Consolidated Balance Sheets as of June 30, 2018 and December 31, 2017</u>	3
<u>Consolidated Statements of Operations for the Three- and Six-Months Ended June 30, 2018 and 2017</u>	4
<u>Consolidated Statements of Comprehensive Loss for the Three Months and Six Months Ended June 30, 2018 and 2017</u>	5
<u>Consolidated Statements of Cash Flows for the Six-Month Periods Ended June 30, 2018 and 2017</u>	6
<u>Notes to Unaudited Consolidated Financial Statements</u>	7
<u>Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	27
<u>Item 3. Quantitative and Qualitative Disclosure About Market Risk</u>	32
<u>Item 4. Controls and Procedures</u>	32
<u>PART II - OTHER INFORMATION</u>	33
<u>Item 1. Legal Proceedings</u>	33
<u>Item 1A. Risk Factors</u>	33
<u>Item 2. Unregistered Sales of Equity Securities and Use of Proceeds</u>	33
<u>Item 3. Defaults Upon Senior Securities</u>	34
<u>Item 4. Mine Safety Disclosures</u>	34
<u>Item 5. Other Information</u>	34
<u>Item 6. Exhibits</u>	35
<u>SIGNATURES</u>	36

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements

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

	<u>June 30, 2018</u>	<u>December 31, 2017</u>
<u>ASSETS</u>		
CURRENT ASSETS		
Cash and cash equivalents	\$ 18,491	\$ 81,033
Accounts receivable	526,090	206,848
Inventories, net of \$139,700 reserve at June 30, 2018 and \$179,600 at December 31, 2017	900,063	857,662
Prepaid expenses and other current assets	202,736	222,158
Total current assets	1,647,380	1,367,701
Intangible assets, net of amortization of \$43,269 and \$0, respectively	707,611	750,000
Investment in available-for-sale equity securities	17,991	19,825
Property and equipment, net	19,177	22,662
TOTAL ASSETS	\$ 2,392,159	\$ 2,160,188
<u>LIABILITIES AND STOCKHOLDERS' DEFICIT</u>		
CURRENT LIABILITIES		
Accounts payable	\$ 697,961	\$ 589,263
Accrued employee compensation	427,625	368,700
Accrued professional fees and other	917,498	800,620
Other current liabilities	912,402	1,536,507
Deferred revenue	208,857	263,106
Revolving note payable	-	3,500,000
Related party convertible debt, net of debt discount of \$0 and \$31,372, respectively	-	259,762
Convertible debt, net of unamortized debt discounts of \$547,582 and \$401,856, respectively	3,222,167	8,028,014
Other debt, net of unamortized discounts of \$25,982 and \$48,194, respectively	703,130	1,379,863
Total current liabilities	7,089,640	16,725,835
LONG TERM LIABILITIES		
Deferred revenue	45,990	57,149
TOTAL LIABILITIES	7,135,630	16,782,984
COMMITMENTS AND CONTINGENCIES (Note 5)		
STOCKHOLDERS' DEFICIT		
Series D Convertible Preferred Stock, \$.01 par value; 850 shares authorized; 300 shares issued and outstanding on June 30, 2018 and December 31, 2017, respectively (Liquidation value of \$300,000)	3	3
Series G Convertible Preferred Stock, \$.01 par value; 240,000 shares authorized; 80,570 shares issued and outstanding on June 30, 2018 and December 31, 2017, respectively	806	806
Series H Convertible Preferred Stock, \$.01 par value; 10,000 shares authorized; 10,000 shares issued and outstanding on June 30, 2018 and December 31, 2017, respectively	100	100
Series H2 Convertible Preferred Stock, \$.01 par value; 21 shares authorized; 21 shares issued and outstanding on June 30, 2018 and December 31, 2017, respectively	-	-
Series J Convertible Preferred Stock, \$.01 par value; 6,250 shares authorized; 3,458 shares issued and outstanding on June 30, 2018 and December 31, 2017, respectively	35	35
Series K Convertible Preferred Stock, \$.01 par value; 15,000 shares authorized; 6,880 shares issued and outstanding on June 30, 2018 and December 31, 2017, respectively	68	68
Series AA Convertible Preferred Stock, \$.01 par value; 10,000 shares authorized; 5,195.4 and 0 shares issued and outstanding on June 30, 2018 and December 31, 2017, respectively	52	-
Common stock, \$.01 par value; 100,000,000 shares authorized; 1,537,094 and 1,342,858 shares issued and outstanding on June 30, 2018 and December 31, 2017, respectively	15,371	13,429
Warrants to acquire common stock	17,450,717	9,878,513
Additional paid-in capital	37,747,441	30,833,549
Accumulated deficit	(59,958,064)	(55,349,299)
Total stockholders' deficit	(4,743,471)	(14,622,796)
TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT	\$ 2,392,159	\$ 2,160,188

The accompanying notes are an integral part of these unaudited 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,	
	2018	2017	2018	2017
Revenue:				
Products, services, other	\$ 618,418	\$ 480,400	\$ 1,203,662	\$ 1,006,398
Grant revenue	20,355	59,972	45,885	85,331
Total revenue	<u>638,773</u>	<u>540,372</u>	<u>1,249,547</u>	<u>1,091,729</u>
Costs and expenses:				
Cost of products and services	270,046	287,299	594,835	523,296
Research and development	323,832	241,783	648,808	505,239
Selling and marketing	224,942	300,111	499,410	513,120
General and administrative	740,843	915,470	1,535,448	1,753,468
Total operating costs and expenses	<u>1,559,663</u>	<u>1,744,663</u>	<u>3,278,501</u>	<u>3,295,123</u>
Operating loss	(920,890)	(1,204,291)	(2,028,954)	(2,203,394)
Other expense:				
Interest expense	(1,159,242)	(1,983,112)	(2,282,387)	(3,509,744)
Other expense	(9,582)	(80)	(14,312)	(7,108)
Gain on extinguishment of debt	471,612	-	475,897	-
Incentive shares/warrants	(663,130)	(186,802)	(663,130)	(186,802)
Change in fair value of derivative liabilities	-	2,790,525	-	(271,227)
Total other (expense) income	<u>(1,360,342)</u>	<u>620,531</u>	<u>(2,483,932)</u>	<u>(3,974,881)</u>
Net loss	<u>(2,281,232)</u>	<u>(583,760)</u>	<u>(4,512,886)</u>	<u>(6,178,275)</u>
Deemed dividend on down round feature	(213,012)	-	(213,012)	-
Deemed dividend on beneficial conversion feature	(10,532,291)	-	(10,532,291)	-
Preferred stock dividends	(95,879)	-	(95,879)	-
Net loss attributable to common stockholders	<u>\$ (13,122,414)</u>	<u>\$ (583,760)</u>	<u>\$ (15,354,068)</u>	<u>\$ (6,178,275)</u>
Basic and diluted net loss per share attributable to common stockholders	\$ (9.20)	\$ (0.54)	\$ (11.01)	\$ (5.83)
Weighted average common stock shares outstanding used in the basic and diluted net loss per share calculation	1,426,698	1,077,529	1,395,187	1,059,250

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

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

	For the Three Months Ended		For the Six Months Ended	
	June 30,		June 30,	
	2018	2017	2018	2017
Comprehensive Loss				
Net loss	\$ (2,281,232)	\$ (583,760)	\$ (4,512,886)	\$ (6,178,275)
Other comprehensive loss				
Unrealized income on marketable securities	-	6,190	-	6,190
Comprehensive loss	<u>\$ (2,281,232)</u>	<u>\$ (577,570)</u>	<u>\$ (4,512,886)</u>	<u>\$ (6,172,085)</u>

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

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

	For the Six Months Ended	
	June 30,	
	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$ (4,512,886)	\$ (6,178,275)
Adjustments to reconcile net loss to net cash used in operating activities:		
Common stock issued for debt extension	28,490	10,000
Depreciation and amortization	45,874	4,716
Accretion of interest and amortization of debt discount	986,155	2,922,265
Issuance of incentive shares and common stock warrants	663,130	186,802
Inventory reserve recovery	(39,900)	-
Gain on extinguishment of debt	(475,897)	-
Stock-based compensation expense	148,270	179,511
Amortization of third party fees paid in common stock and warrants	-	30,558
Shares issued with debt	7,800	-
Change in fair value of derivative liabilities	-	271,227
Impairment loss on investment	1,834	6,069
Changes in operating assets and liabilities:		
Accounts receivable	(319,242)	(282,728)
Inventories	(2,501)	(226,204)
Prepaid expenses and other assets	19,422	82,193
Accounts payable	108,698	338,838
	58,925	310,615
Accrued employee compensation		
Deferred revenue and other accrued expenses	678,789	4,715
Net cash used in operating activities	<u>(2,603,039)</u>	<u>(2,339,698)</u>
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property plant and equipment	-	(16,617)
Net cash used in investing activities	<u>-</u>	<u>(16,617)</u>
CASH FLOWS FROM FINANCING ACTIVITIES:		
Net proceeds from revolving note payable	460,000	1,610,000
Net proceeds from warrant exercises	-	140,215
Net proceeds from Series AA convertible preferred stock	226,091	-
Net proceeds from convertible debt	3,242,950	-
Net proceeds from non-convertible debt – third party	952,501	1,987,752
Net proceeds from non-convertible debt – related party	102,100	-
Payments on convertible debt	(1,518,500)	(840,541)
Payments on non-convertible debt – related party	(52,100)	-
Payments on non-convertible debt	(872,545)	(478,141)
Net cash provided by financing activities	<u>2,540,497</u>	<u>2,419,285</u>
NET INCREASE (DECREASE) IN CASH	(62,542)	62,970
CASH AT BEGINNING OF YEAR	81,033	138,363
CASH AT END OF PERIOD	<u>\$ 18,491</u>	<u>\$ 201,333</u>
SUPPLEMENTAL INFORMATION		
Interest paid in cash	\$ 525,979	\$ 173,243
Income taxes paid	-	-
NON CASH TRANSACTIONS:		
Common stock issued in lieu of cash for interest	90,023	-
Common stock issued with debt	170,745	297,252
Discount from warrants issued with convertible debt	162,023	554,998
Discount from one-time interest	154,500	175,000
Unrealized gain from available-for-sale equity securities	-	6,190
Preferred stock dividends	95,879	-
Conversion of debt into preferred stock	12,688,634	-
Contingent beneficial conversion feature on convertible note	253,000	-
Deemed dividend-triggered down round feature	213,012	-
Deemed dividend-beneficial conversion feature	10,532,291	-
Derivative liability released upon warrant exercise	-	49,327

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

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
JUNE 30, 2018
(UNAUDITED)

1) Business Overview, Liquidity and Management Plans

Pressure BioSciences, Inc. (“we”, “our”, “the Company”) is focused on solving the challenging problems inherent in biological sample preparation, a crucial laboratory step performed by scientists worldwide working in biological life sciences research. Sample preparation is a term that refers to a wide range of activities that precede most forms of scientific analysis. Sample preparation is often complex, time-consuming, and in our belief, one of the most error-prone steps of scientific research. It is a widely-used laboratory undertaking, the requirements of which drive what we believe is a large and growing worldwide market. We have developed and patented a novel, enabling technology platform that can control the sample preparation process. It is based on harnessing the unique properties of high hydrostatic pressure. This process, called pressure cycling technology, or PCT, uses alternating cycles of hydrostatic pressure between ambient and ultra-high levels (45,000 psi or greater) to safely, conveniently and reproducibly control the actions of molecules in biological samples, such as cells and tissues from human, animal, plant, and microbial sources.

Our pressure cycling technology uses internally developed instrumentation that is capable of cycling pressure between ambient and ultra-high levels - at controlled temperatures and specific time intervals - to rapidly and repeatedly control the interactions of bio-molecules, such as DNA, RNA, proteins, lipids, and small molecules. Our laboratory instrument, the Barocycler®, and our internally developed consumables product line, including PULSE® (Pressure Used to Lyse Samples for Extraction) Tubes, other processing tubes, and application specific kits (which include consumable products and reagents) together make up our PCT Sample Preparation System, or PCT SPS.

In 2015, together with an investment bank, we formed a subsidiary called Pressure BioSciences Europe (“PBI Europe”) in Poland. We have 49% ownership interest with the investment bank retaining 51%. As of now, PBI Europe does not have any operating activities and we cannot reasonably predict when operations will commence. Therefore, we do not have control of the subsidiary and did not consolidate in our financial statements. PBI Europe did not have any operations in the six months ended June 30, 2018 or in fiscal year 2017.

2) Going Concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern, which contemplates the realization of assets and the liquidation of liabilities in the normal course of business. However, we have experienced negative cash flows from operations with respect to our pressure cycling technology business since our inception. As of June 30, 2018, we do not have adequate working capital resources to satisfy our current liabilities and as a result, there is substantial doubt regarding our ability to continue as a going concern. We have been successful in raising cash through debt and equity offerings in the past and as described in Notes 6 and 7. In addition we raised cash through debt financing after June 30, 2018 as described in Note 8. We have financing efforts in place to continue to raise cash through debt and equity offerings. Although we have successfully completed financings and reduced expenses in the past, we cannot assure you that our plans to address these matters in the future will be successful. These financial statements do not include any adjustments that might result from this uncertainty.

In August 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2014-15, *Presentation of Financial Statements-Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern*. (“ASU 2015-14”). Under the new standard, management must evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company’s ability to continue as a going concern within one year after the date that the financial statements are issued. This evaluation initially does not take into consideration the potential mitigating effect of management’s plans that have not been fully implemented as of the date the financial statements are issued. When substantial doubt exists under this methodology, management evaluates whether the mitigating effect of its plans sufficiently alleviates substantial doubt about the Company’s ability to continue as a going concern. The mitigating effect of management’s plans, however, is only considered if both (1) it is probable that the plans will be effectively implemented within one year after the date that the financial statements are issued, and (2) it is probable that the plans, when implemented, will mitigate the relevant conditions or events that raise substantial doubt about the entity’s ability to continue as a going concern within one year after the date that the financial statements are issued. This standard was adopted by the Company at January 1, 2017.

3) Interim Financial Reporting

The accompanying unaudited consolidated balance sheet as of December 31, 2017, which was derived from audited financial statements, and the unaudited interim 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, 2018 are not necessarily indicative of the results that may be expected for the year ending December 31, 2018. 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, 2017 as filed with the Securities and Exchange Commission on April 2, 2018.

4) 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.

Reclassifications

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

Recent Accounting Standards

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842). The new standard requires the recognition of assets and liabilities arising from lease transactions on the balance sheet and the disclosure of key information about leasing arrangements. Accordingly, a lessee will recognize a lease asset for its right to use the underlying asset and a lease liability for the corresponding lease obligation. Both the asset and liability will initially be measured at the present value of the future minimum lease payments over the lease term. Subsequent measurement, including the presentation of expenses and cash flows, will depend on the classification of the lease as either finance or an operating lease. Initial costs directly attributable to negotiating and arranging the lease will be included in the asset. Lessees will also be required to provide additional qualitative and quantitative disclosures regarding the amount, timing and uncertainty of cash flows arising from leases. The new standard is effective for fiscal years beginning after December 15, 2018, and interim periods therein. We will adopt ASC 842 effective January 1, 2019. We are currently in the process of evaluating the impact of the guidance on our consolidated financial statements.

In November 2016, the FASB issued ASU 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash, which requires restricted cash to be presented with cash and cash equivalents on the statement of cash flows and disclosure of how the statement of cash flows reconciles to the balance sheet if restricted cash is shown separately from cash and cash equivalents on the balance sheet. The guidance is effective for interim and annual periods beginning after December 15, 2017, and early adoption is permitted. The Company early adopted the ASU 2016-18 on January 1, 2017.

In January 2017, the FASB issued ASU No. 2017-01, Business Combinations (Topic 805): Clarifying the Definition of a Business, which clarifies the definition of a business to provide additional guidance with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. This ASU is effective for annual periods beginning after December 15, 2017, including interim periods within those periods. The Company early adopted the ASU 2016-18 on January 1, 2017 starting with its purchase of BaroFold assets.

Effective January 1, 2018, the Company adopted ASU 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities. The standard amends various aspects of the recognition, measurement, presentation, and disclosure of financial instruments. The most significant impact to our consolidated financial statements relates to the recognition and measurement of equity investments at fair value with changes recognized in Net income. The amendment also updates certain presentation and disclosure requirements. The adoption of ASU 2016-01 did not have a material impact on the consolidated financial statements. The adoption of ASU 2016-01 is expected to increase volatility in net income as changes in the fair value of available-for-sale equity investments and changes in observable prices of equity investments without readily determinable fair values will be recorded in net income.

Effective January 1, 2018, the Company adopted ASC Topic 606, Revenue from Contracts with Customers, using the modified retrospective method. This guidance supersedes nearly all existing revenue recognition guidance under US GAAP. The core principle of the guidance is that an entity should recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. The Company updated its accounting policy for the new standard based on a detailed review of its business and contracts. Based on the new guidance, the Company continues to recognize revenue at a point in time for the majority of its contracts with customers, which is generally when products are either shipped or delivered. Therefore, the adoption of ASC 606 did not have a material impact on the consolidated financial statements.

In July 2018, the FASB issued ASU 2018-07, Compensation- Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting as an amendment and update expanding the scope of Topic 718. The amendment specifies that Topic 718 now applies to all share-based payment transactions, even non-employee awards, in which a grantor acquires goods or services to be used or consumed in a grantor's own operations by issuing share-based payment awards. Under the new guidance, awards to nonemployees are measured on the grant date, rather than on the earlier of the performance commitment date or the date at which the nonemployee's performance is complete. Also, the awards would be measured by estimating the fair value of the equity instruments to be issued, rather than the fair value of the goods or services received or the fair value of the equity instruments issued, whichever can be measured more reliably. In addition, entities may use the expected term to measure nonemployee awards or elect to use the contractual term as the expected term, on an award-by-award basis. The new guidance is effective for the Company in annual periods beginning after December 15, 2018, and interim periods within those annual periods, with early adoption permitted. The Company is currently evaluating the impact of this new guidance.

Revenue Recognition

We recognize revenue in accordance with FASB ASC 606, *ASC 606, Revenue from Contracts with Customers*, and *ASC 340-40, Other Assets and Deferred Costs—Contracts with Customers*. Revenue is measured based on a consideration specified in a contract with a customer, and excludes any sales incentives and amounts collected on behalf of third parties. We enter into sales contracts that may consist of multiple distinct performance obligations where certain performance obligations of the sales contract are not delivered in one reporting period. We measure and allocate revenue according to ASC 606-10.

We identify a performance obligation as distinct if both the following criteria are true: the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer and the entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract. Determining the standalone selling price ("SSP") and allocation of consideration from a contract to the individual performance obligations, and the appropriate timing of revenue recognition, is the result of significant qualitative and quantitative judgments. Management considers a variety of factors such as historical sales, usage rates, costs, and expected margin, which may vary over time depending upon the unique facts and circumstances related to each performance obligation in making these estimates. While changes in the allocation of the SSP between performance obligations will not affect the amount of total revenue recognized for a particular contract, any material changes could impact the timing of revenue recognition, which would have a material effect on our financial position and result of operations. This is because the contract consideration is allocated to each performance obligation, delivered or undelivered, at the inception of the contract based on the SSP of each distinct performance obligation.

Taxes assessed by a governmental authority that are both imposed on and concurrent with a specific revenue-producing transaction, that are collected by the Company from a customer, are excluded from revenue.

Shipping and handling costs associated with outbound freight after control over a product has transferred to a customer are accounted for as a fulfillment cost and are included in cost of revenues as consistent with treatment in prior periods.

Our current Barocycler® instruments require a basic level of instrumentation expertise to set-up for initial operation. To support a favorable first experience for our customers, upon customer request, and for an additional fee, will send a highly trained technical representative to the customer site to install Barocyclers® 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. Our sales arrangements do not provide our customers with a right of return. Any shipping costs billed to customers are recognized as revenue.

The majority of our instrument and consumable contracts contain pricing that is based on the market price for the product at the time of delivery. Our obligations to deliver product volumes are typically satisfied and revenue is recognized when control of the product transfers to our customers. Concurrent with the transfer of control, we typically receive the right to payment for the shipped product and the customer has significant risks and rewards of ownership of the product. Payment terms require customers to pay shortly after delivery and do not contain significant financing components.

We apply ASC 845, "Accounting for Non-Monetary Transactions", to account for products and services sold through non-cash transactions based on the fair values of the products and services involved, where such values can be determined. Non-cash exchanges would require revenue to be recognized at recorded cost or carrying value of the assets or services sold if any of the following conditions apply:

- a) The fair value of the asset or service involved is not determinable.
- b) The transaction is an exchange of a product or property held for sale in the ordinary course of business for a product or property to be sold in the same line of business to facilitate sales to customers other than the parties to the exchange.
- c) The transaction lacks commercial substance.

We currently record revenue for its non-cash transactions at recorded cost or carrying value of the assets or services sold.

In accordance with FASB ASC 840, *Leases*, we account for our lease agreements under the operating method. We record revenue over the life of the lease term and we record depreciation expense on a straight-line basis over the thirty-six-month estimated useful life of the Barocyler® instrument. The depreciation expense associated with assets under lease agreement is included in the “Cost of PCT products and services” line item in our accompanying consolidated statements of operations. Many of our lease and rental agreements allow the lessee to purchase the instrument at any point during the term of the agreement with partial or full credit for payments previously made. We pay all maintenance costs associated with the instrument during the term of the leases.

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

Deferred revenue represents amounts received from grants and service contracts for which the related revenues have not been recognized because one or more of the revenue recognition criteria have not been met. Revenue from service contracts is recorded ratably over the length of the contract.

Disaggregation of revenue

In the following table, revenue is disaggregated by primary geographical market, major product line, and timing of revenue recognition.

<i>In thousands of US dollars (\$)</i>	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Primary geographical markets				
North America	351	396	716	722
Europe	64	1	219	158
Asia	224	143	315	211
	<u>639</u>	<u>540</u>	<u>1,250</u>	<u>1,091</u>
Major products/services lines				
Hardware	397	347	817	743
Grants	20	60	45	85
Consumables	64	52	139	115
Contract research services	67	-	67	-
Sample preparation accessories	47	39	96	74
Technical support/extended service contracts	22	26	50	43
Shipping and handling	16	11	28	21
Other	6	5	8	10
	<u>639</u>	<u>540</u>	<u>1,250</u>	<u>1,091</u>

Timing of revenue recognition	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Products transferred at a point in time	609	471	1,185	985
Products and services transferred over time	30	69	65	106
	<u>639</u>	<u>540</u>	<u>1,250</u>	<u>1,091</u>

Contract balances

<i>In thousands of US dollars (\$)</i>	June 30, 2018	December 31, 2017
Receivables, which are included in 'Accounts Receivable'	526	207
Contract liabilities (deferred revenue)	255	320

Transaction price allocated to the remaining performance obligations

The following table includes estimated revenue expected to be recognized in the future related to performance obligations that are unsatisfied (or partially unsatisfied) at the end of the reporting period.

<i>In thousands of US dollars (\$)</i>	2018	2019	2020	Total
Extended warranty service	209	46	-	255

All consideration from contracts with customers is included in the amounts presented above.

Contract Costs

The Company recognizes the incremental costs of obtaining contracts as an expense when incurred if the amortization period of the assets that the Company otherwise would have recognized is one year or less. These costs are included in selling, general, and administrative expenses. The costs to obtain a contract are recorded immediately in the period when the revenue is recognized either upon shipment or installation. The costs to obtain a service contract are considered immaterial when spread over the life of the contract so the Company records the costs immediately upon billing.

Use of Estimates

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

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, 2018 and 2017.

	For the Three Months Ended June 30,	
	2018	2017
Top Five Customers	54%	60%
Federal Agencies	12%	11%

	For the Six Months Ended June 30,	
	2018	2017
Top Five Customers	38%	42%
Federal Agencies	8%	8%

The following table illustrates the level of concentration as a percentage of net accounts receivable balance as of June 30, 2018 and December 31, 2017. The Top Five Customers category may include federal agency receivable balances if applicable.

	June 30, 2018	December, 31, 2017
Top Five Customers	70%	85%
Federal Agencies	11%	1%

Product Supply

CBM Industries (Taunton, MA) has recently become the manufacturer of the Barocycler® 2320EXT. CBM is ISO 13485:2003 and 9001:2008 Certified. CBM provides us with precision manufacturing services that include management support services to meet our specific application and operational requirements. Among the services provided by CBM to us are:

- CNC Machining
- Contract Assembly & Kitting
- Component and Subassembly Design
- Inventory Management
- ISO certification

At this time, we believe that outsourcing the manufacturing of our new Barocycler® 2320EXT to CBM is the most cost-effective method for us to obtain and maintain ISO Certified, CE and CSA Marked instruments. CBM's close proximity to our South Easton, MA facility is a significant asset enabling interactions between our Engineering, R&D, and Manufacturing groups and their counterparts at CBM. CBM was instrumental in helping PBI achieve CE Marking on our Barocycler® 2320EXT, as announced on February 2, 2017.

Although we currently manufacture and assemble the Barozyme HT48, Barocycler® HUB440, the SHREDDER SG3, and most of our consumables at our South Easton, MA facility, we plan to take advantage of the established relationship with CBM and transfer manufacturing of the entire Barocycler® product line, future instruments, and other products to CBM.

The Barocycler® NEP3229, launched in 2008, and manufactured by the BIT Group, will be phased out over the next several years and replaced by the new state-of-the-art Barocycler® HUB and Barozyme HT48 product lines.

Investment in Available-For-Sale Equity Securities

As of June 30, 2018, we held 100,250 shares of common stock of Everest Investments Holdings S.A. (“Everest”), a Polish publicly traded company listed on the Warsaw Stock Exchange. We account for this investment in accordance with ASC 320 “Investments — Debt and Equity Securities” as securities available for sale. On June 30, 2018, our consolidated balance sheet reflected the fair value of our investment in Everest to be approximately \$18,000, based on the closing price of Everest shares of \$0.18 USD per share on that day. The carrying value of our investment in Everest common stock held will change from period to period based on the closing price of the common stock of Everest as of the balance sheet date. The change in market value since the receipt of stock was determined to be other than temporary. We recorded \$1,834 as an impairment loss in the first half of 2018.

Computation of Loss per Share

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

The following table illustrates our computation of loss per share for the three months and six months ended June 30, 2018 and 2017:

	For the Three Months Ended		For the Six Months Ended	
	June 30,		June 30,	
	2018	2017	2018	2017
Numerator:				
Net loss	\$ (2,281,232)	\$ (583,760)	\$ (4,512,886)	\$ (6,178,275)
Deemed dividend on down round feature	(213,012)	-	(213,012)	-
Deemed dividend on beneficial conversion feature	(10,532,291)	-	(10,532,291)	-
Preferred stock dividends	(95,879)	-	(95,879)	-
Net loss applicable to common shareholders	<u>\$ (13,122,414)</u>	<u>\$ (583,760)</u>	<u>\$ (15,354,068)</u>	<u>\$ (6,178,275)</u>
Denominator for basic and diluted loss per share:				
Weighted average common stock shares outstanding	1,426,698	1,077,529	1,395,187	1,059,250
Loss per common share – basic and diluted	\$ (9.20)	\$ (0.54)	\$ (11.01)	\$ (5.83)

The following table presents securities that could potentially dilute basic loss per share in the future. For all periods presented, the potentially dilutive securities were not included in the computation of diluted loss per share because these securities would have been anti-dilutive to our net loss. The Series D Convertible Preferred Stock, Series G Convertible Preferred Stock, Series H Convertible Preferred Stock, Series H2 Convertible Preferred Stock, Series J Convertible Preferred Stock and Series K Convertible Preferred Stock are presented below as if they were converted into common shares according to the conversion terms.

	As of June 30,	
	2018	2017
Stock options	244,467	250,109
Convertible debt	346,133	827,560
Common stock warrants	6,263,607	890,047
Convertible preferred stock:		
Series D Convertible Preferred Stock	25,000	25,000
Series G Convertible Preferred Stock	26,857	28,857
Series H Convertible Preferred Stock	33,334	33,334
Series H2 Convertible Preferred Stock	70,000	70,000
Series J Convertible Preferred Stock	115,267	117,367
Series K Convertible Preferred Stock	229,334	227,200
Series AA Convertible Preferred Stock	5,195,400	-
	<u>12,549,399</u>	<u>2,469,474</u>

Accounting for Stock-Based Compensation Expense

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 stock-based compensation expense over the requisite service period using the Black-Scholes formula to estimate the fair value of the stock options on the date of grant.

Determining Fair Value of Stock Option Grants

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

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

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

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

Forfeitures - The Company records stock-based compensation expense only for those awards that are expected to vest. The Company estimated a forfeiture rate of 5% for awards granted based on historical experience and future expectations of options vesting. The Company used this historical rate as our assumption in calculating future stock-based compensation expense.

The Company recognized stock-based compensation expense of \$62,249 and \$104,982 for the three months ended June 30, 2018 and 2017, respectively. The Company recognized stock-based compensation expense of \$148,270 and \$179,511 for the six months ended June 30, 2018 and 2017, 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		For the Six Months Ended	
	June 30,		June 30,	
	2018	2017	2018	2017
Research and development	\$ 15,649	\$ 22,949	\$ 31,148	\$ 38,918
Selling and marketing	7,279	13,447	14,476	24,334
General and administrative	39,321	68,586	102,646	116,259
Total stock-based compensation expense	<u>\$ 62,249</u>	<u>\$ 104,982</u>	<u>\$ 148,270</u>	<u>\$ 179,511</u>

Fair Value of Financial Instruments

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

The issuances of our convertible promissory notes and common stock purchase warrant are accounted for under the fair value and relative fair value method.

The warrant is first analyzed per its terms as to whether it has derivative features or not. If the warrant is determined to be a derivative, then it is measured at fair value using the Black Scholes Option Model and recorded as a liability on the balance sheet. The warrant is re-measured at its then current fair value at each subsequent reporting date (it is “marked-to-market”).

If the warrant is determined to not have derivative features, it is recorded into equity at its fair value using the Black Scholes option model, however, limited to a relative fair value based upon the percentage of its fair value to the total fair value including the fair value of the convertible note.

The convertible note is recorded at its fair value, limited to a relative fair value based upon the percentage of its fair value to the total fair value including the fair value of the warrant. Further, the convertible promissory note is examined for any intrinsic beneficial conversion feature (“BCF”) of which the convertible price of the note is less than the closing stock price on date of issuance. If the relative fair value method is used to value the convertible promissory note and there is an intrinsic BCF, a further analysis is undertaken of the BCF using an effective conversion price which assumes the conversion price is the relative fair value divided by the number of shares the convertible debt is converted into by its terms. The adjusted BCF value is accounted for as equity.

The warrant and BCF relative fair values are also recorded as a discount to the convertible promissory notes. At present, these equity features of the convertible promissory notes have been recorded at a discount to the convertible notes that is substantially equal to the proceeds received.

Fair Value Measurements

The Company follows the guidance of FASB ASC Topic 820, “*Fair Value Measurements and Disclosures*” (“ASC 820”) as it related to all financial assets and financial liabilities that are recognized or disclosed at fair value in the financial statements on a recurring basis.

In determining the fair value of its assets and liabilities, the Company uses various valuation approaches. The Company employs a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that observable inputs be used when available. Observable inputs are inputs that market participants would use in pricing the asset or liability based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company’s assumptions about the inputs that market participants would use in pricing the asset or liability and are developed based on the best information available in the circumstances. The fair value hierarchy is broken down into three levels based on the source of inputs as follows:

Level 1 – Valuations based on unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access.

Level 2–Valuations based on quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active and models for which all significant inputs are observable, either directly or indirectly.

Level 3 – Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

Financial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company has determined that its financial assets are classified within Level 1 and its financial liabilities are currently classified within Level 3 in the fair value hierarchy. The development of the unobservable inputs for Level 3 fair value measurements and fair value calculations are the responsibility of the Company's management.

Adoption of ASU 2017-11

The Company changed its method of accounting for the Debentures, Debenture Warrants and Series D Warrants through the early adoption of ASU 2017-11 during the year ended December 31, 2017 on a modified retrospective basis. Accordingly, the Company reclassified the warrant derivative and conversion option derivative liabilities to additional paid in capital on its January 1, 2017 consolidated balance sheets totaling approximately \$2.6 million, reduced debt discount by approximately \$0.9 million and recorded the cumulative effect of the adoption to the beginning balance of accumulated deficit of approximately \$2.4 million. This resulted to an increase in stock warrants by \$2.6 million and additional paid-in capital by \$1.4 million. The following table provides a reconciliation of the warrant derivative liability, convertible debt, conversion option derivative liability, stock warrant, additional paid-in capital and accumulated deficit on the consolidated balance sheet as of December 31, 2016:

	<u>Convertible debt, current portion</u>	<u>Convertible debt, long term portion</u>	<u>Warrant Derivative Liability</u>	<u>Conversion Option Liability</u>	<u>Warrants to acquire common stock</u>	<u>Additional Paid-in Capital</u>	<u>Accumulated deficit</u>
Balance, January 1, 2017 (Prior to adoption of ASU 2017-11)	\$ 4,005,702	\$ 529,742	\$ 1,685,108	\$ 951,059	\$6,325,102	\$27,544,265	\$ (42,264,190)
Reclassified derivative liabilities and cumulative effect of adoption	769,316	154,152	(1,685,108)	(951,059)	2,636,236	1,446,011	(2,369,548)
Balance, January 1, 2017 (After adoption of ASU 2017-11)	<u>\$ 4,775,018</u>	<u>\$ 683,894</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$8,961,338</u>	<u>\$28,990,276</u>	<u>\$ (44,633,738)</u>

The following tables set forth the Company's financial assets and liabilities that were accounted for at fair value on a recurring basis as of June 30, 2018:

	<u>Fair value measurements at June 30, 2018 using:</u>			
	<u>June 30, 2018</u>	<u>Quoted prices in active markets (Level 1)</u>	<u>Significant other observable inputs (Level 2)</u>	<u>Significant unobservable inputs (Level 3)</u>
Available-For-Sale Equity Securities	17,991	17,991	-	-
Total Financial Assets	<u>\$ 17,991</u>	<u>\$ 17,991</u>	<u>\$ -</u>	<u>\$ -</u>

The following tables set forth the Company's financial assets and liabilities that were accounted for at fair value on a recurring basis as of December 31, 2017:

	<u>Fair value measurements at December 31, 2017 using:</u>			
	<u>December 31, 2017</u>	<u>Quoted prices in active markets (Level 1)</u>	<u>Significant other observable inputs (Level 2)</u>	<u>Significant unobservable inputs (Level 3)</u>
Available-For-Sale Equity Securities	19,825	19,825	-	-
Total Financial Assets	<u>\$ 19,825</u>	<u>\$ 19,825</u>	<u>\$ -</u>	<u>\$ -</u>

5) Commitments and Contingencies

Operating Leases

Our corporate office is currently located at 14 Norfolk Avenue, South Easton, Massachusetts 02375. We are currently paying \$6,950 per month, on a lease extension, signed on December 29, 2017, that expires December 31, 2018, for our corporate office. We expanded our space to include offices, warehouse and a loading dock on the first floor starting May 1, 2017 with a monthly rent increase already reflected in the current payments.

We extended our lease for our space in Medford, MA to December 30, 2020. The lease requires monthly payments of \$6,912.75 subject to annual cost of living increases. The lease shall be automatically extended for additional three years unless either party terminates at least six months prior to the expiration of the current lease term.

Rental costs are expensed as incurred. During the six months ended June 30, 2018 and 2017 we incurred \$92,216 and \$69,092 in rent expense, respectively for the use of our corporate office and research and development facilities.

Following is a schedule by years of future minimum rental payments required under operating leases with initial or remaining non-cancelable lease terms in excess of one year as of June 30, 2018:

2018	\$ 83,177
2019	82,953
2020	82,953
2021	-
Thereafter	-
	<u>\$ 249,083</u>

Government Grants

We received a \$1.02 million NIH SBIR Phase II Grant in November 2014. Under the grant, the NIH has committed to pay the Company to develop a high-throughput, high pressure-based DNA Shearing System for Next Generation Sequencing and other genomic applications. In March 2018, we received an extension on the SBIR Phase II grant to utilize unused funds until November 30, 2018.

6) Convertible Debt and Other Debt

Conversion of Notes

We issued 5,075.40 shares of our Series AA Convertible Preferred Stock in satisfaction of \$12,688,634 of convertible promissory notes, Revolving Note and short-term loans issued:

	Debt converted to stock
Current liabilities	
Convertible Debentures, face value	\$ 6,962,634
Revolving Note with interest	4,750,000
May 19, 2017 Promissory Note with interest	750,000
Other Notes with interest	226,000
Total debt converted in the second quarter of 2018	<u>\$ 12,688,634</u>

Senior Secured Convertible Debentures and Warrants

We entered into Subscription Agreements (the "Subscription Agreement") with various individuals (each, a "Purchaser") between July 23, 2015 and March 31, 2016, pursuant to which the Company sold Senior Secured Convertible Debentures (the "Debentures") and warrants to purchase shares of common stock equal to 50% of the number of shares issuable pursuant to the subscription amount (the "Warrants") for an aggregate purchase price of \$6,329,549 (the "Purchase Price").

The Company issued a principal aggregate amount of \$6,962,634 in Debentures which includes a 10% original issue discount on the Purchase Price. The Debenture does not accrue any additional interest during the first year it is outstanding but accrues interest at a rate equal to 10% per annum for the second year it is outstanding. The Debenture has a maturity date of two years from issuance. The Debenture is convertible any time after its issuance date. The Purchaser has the right to convert the Debenture into shares of the Company's common stock at a fixed conversion price equal to \$8.40 per share, subject to applicable adjustments. In the second year that the Debenture is outstanding, any interest accrued shall be payable quarterly in either cash or common stock, at the Company's discretion.

In connection with the Debentures issued, the Company issued warrants exercisable into a total of 376,759 shares of our common stock. The Warrants issued in this transaction are immediately exercisable at an exercise price of \$12.00 per share, subject to applicable adjustments including full ratchet anti-dilution if we issue any securities at a price lower than the exercise price then in effect. The Warrants have an expiration period of five years from the original issue date. The Warrants are subject to adjustment for stock splits, stock dividends or recapitalizations and also include anti-dilution price protection for subsequent equity sales below the exercise price.

On May 2, 2018, the Company entered into a Securities Purchase Agreement with an existing shareholder pursuant to which the Company sold an aggregate of 100 shares of Series AA Convertible Preferred Stock for an aggregate Purchase Price of \$250,000. We

issued to the shareholder a new warrant to purchase 100,000 shares of common stock with an exercise price of \$3.50 per share.

The Company, pursuant to a price protection provision triggered on May 2, 2018 with the sale of Series AA units, amended the Debentures and Warrants to purchase Common Stock held by the Debenture Holders entered into between July 22, 2015 and March 31, 2016 as first disclosed in the Company's Current Report on Form 8-K filed on July 28, 2015. The fair value of \$207,899 relating to the reduction in exercise price was treated as a deemed dividend and recorded as a charge against additional paid-in capital within equity. The amended Debenture conversion price was exempt from revaluation because a beneficial conversion feature had already been recorded on the Debenture at issuance.

Subject to the terms and conditions of the Warrants, at any time commencing six months from the Final Closing, the Company has the right to call the Warrants for cancellation if the volume weighted average price of its Common Stock on the OTCQB (or other primary trading market or exchange on which the Common Stock is then traded) equals or exceeds three times the per share exercise price of the Warrants for 15 out of 20 consecutive trading days.

In connection with the Subscription Agreement and Debenture, the Company entered into Security Agreements with the Purchasers whereby the Company agreed to grant to Purchasers an unconditional and continuing, first priority security interest in all of the assets and property of the Company to secure the prompt payment, performance and discharge in full of all of Company's obligations under the Debentures, Warrants and the other Transaction Documents. On May 14 and June 11, 2018, the Company signed letter agreements with the Debenture holders as explained below that discharged all of the Company's obligations within the Debenture Agreement.

Conversion of Debentures

On May 14, 2018, we entered into letter agreements (the "Letter Agreements") with 22 investors (each a "Debenture Holder" and together the "Debenture Holders") holding convertible debentures (collectively the "Debentures") and warrants to purchase common stock (the "Debenture Warrants") whereby the Debenture Holders agreed to convert a total of \$6,220,500 in principal and original issue discount due them under the Debentures into 2,448.20 shares of Series AA Convertible Preferred Stock with a conversion price of \$2.50 per share. The Debenture Holders were also: (a) issued amended Debenture Warrants such that the exercise price will be \$3.50 per share; and (b) issued a new warrant with an exercise price of \$3.50 per share to purchase 2,448,200 shares of common stock (the number of shares of common stock issuable upon conversion of the Series AA Convertible Preferred Stock shares received as a result of the Debenture conversions). The Debenture Holders also agreed to waive any and all defaults or events of default by the Company with respect to any failure by the Company to comply with any covenants contained in the Debentures. The fair value of \$29,865 relating to the adjustment in exercise price was treated as a loan modification and recorded as a gain toward the extinguishment of debt.

On June 11, 2018, the Company entered into additional Letter Agreements with 15 Debenture Holders whereby the Debenture Holders agreed to convert a total of \$742,134 in principal and original issue discount due them under the Debentures into 296.80 shares of Series AA Convertible Preferred Stock with a conversion price of \$2.50 per share. The Debenture Holders were also: (a) issued amended Debenture Warrants such that the exercise price will be \$3.50 per share; and (b) issued a new warrant with an exercise price of \$3.50 per share to purchase 296,800 shares of common stock (the number of shares of common stock issuable upon conversion of the Series AA Convertible Preferred Stock shares received as a result of the Debenture conversions). The Debenture Holders also agreed to waive any and all defaults or events of default by the Company with respect to any failure by the Company to comply with any covenants contained in the Debentures. The fair value of \$3,155 relating to the adjustment in exercise price was treated as a loan modification and recorded as a gain toward the extinguishment of debt.

In connection with the above Debenture conversions and cancellation of the debt term, the Company recorded the full amount of the remaining unamortized Debenture discounts of \$157,908 as interest expense during the three months of June 30, 2018. The Company recorded \$287,676 of the Debenture discounts during the six months ended June 30, 2018.

On various dates for the six months ended June 30, 2018, the Company issued 25,243 shares of common stock based on the 10-day VWAP prior to quarter end to holders of the Debentures in payment of the quarterly interest accrued from the Debentures first anniversary date through December 31, 2017 for an aggregate amount of \$95,121. We recognized a \$5,101 gain on extinguishment of debt by calculating the difference of the shares valued on the issuance date and the amount of accrued interest through December 31, 2017.

Other convertible notes

The Company, pursuant to a price protection provision triggered on May 2, 2018 with the sale of Series AA units, amended the conversion price of a March 12, 2018 loan to \$2.50 per share. The fair value of \$253,000, limited to the face value of the loan, relating to the reset in the conversion price was recorded as a debt discount and amortized as interest expense over the remaining loan term.

On various dates during the six months ended June 30, 2018, the Company issued convertible notes for net proceeds of \$3,242,950 which contained varied terms and conditions as follows: a) maturity dates ranging from 3 to 12 months; b) interest rates that accrue per annum ranging from 5% to 12%; c) convertible to the Company's common stock at issuance at a fixed rate of \$7.50 or convertible at variable conversion rates either after 6 months after issuance or in the event of a default. Certain of these notes were issued with shares of common stock or warrants to purchase common stock that were fair valued at issuance dates. The aggregate relative fair value of \$214,351 of the shares of common stock or warrants to purchase common stock issued with the notes was recorded as a debt discount and amortized over the term of the notes. We then computed the effective conversion price of the notes, noting that no beneficial conversion feature exists. We also evaluated the convertible notes for derivative liability treatment and determined that the notes did not qualify for derivative accounting treatment as of June 30, 2018.

The specific terms of the convertible notes and outstanding balances as of June 30, 2018 are listed in the tables below.

Convertible Notes

Inception Date	Term	Loan Amount	Outstanding Balance with OID	Original Issue Discount	Interest Rate	Conversion Price (Convertible at Inception Date)	Deferred Finance Fees	Discount related to fair value of conversion feature and warrants/shares
July 22, 2015	30 months ¹	\$ 2,398,000	\$ -	\$ 218,000 ²	10% ³	\$ 8.40	\$ 388,532	\$ 2,163,074
September 25, 2015	30 months ¹	1,210,000	-	110,000 ²	10% ³	8.40	185,956	1,022,052
October 2, 2015	30 months ¹	165,000	-	15,000 ²	10% ³	8.40	26,345	140,832
October 6, 2015	30 months ¹	33,000	-	3,000 ²	10% ³	8.40	5,168	26,721
October 14, 2015	30 months ¹	55,000	-	5,000 ²	10% ³	8.40	8,954	49,377
November 2, 2015	30 months ¹	275,000	-	25,000 ²	10% ³	8.40	43,079	222,723
November 10, 2015	30 months ¹	55,000	-	5,000 ²	10% ³	8.40	8,790	46,984
November 12, 2015	30 months ¹	236,500	-	21,500 ²	10% ³	8.40	38,518	212,399
November 20, 2015	30 months ¹	220,000	-	20,000 ²	10% ³	8.40	37,185	200,000
December 4, 2015	30 months ¹	187,000	-	17,000 ²	10% ³	8.40	37,352	170,000
December 11, 2015	30 months ¹	396,000	-	36,000 ²	10% ³	8.40	75,449	360,000
December 18, 2015	30 months ¹	60,500	-	5,500 ²	10% ³	8.40	11,714	55,000
December 31, 2015	30 months ¹	110,000	-	10,000 ²	10% ³	8.40	20,634	100,000
January 11, 2016	30 months ¹	110,000	-	10,000 ²	10% ³	8.40	24,966	80,034
January 20, 2016	30 months ¹	55,000	-	5,000 ²	10% ³	8.40	9,812	40,188
January 29, 2016	30 months ¹	330,000	-	30,000 ²	10% ³	8.40	60,887	239,113
February 26, 2016	30 months ¹	220,000	-	20,000 ²	10% ³	8.40	43,952	156,048
March 10, 2016	30 months ¹	137,500	-	12,500 ²	10% ³	8.40	18,260	106,740
March 18, 2016	30 months ¹	396,000	-	36,000 ²	10% ³	8.40	94,992	265,008
March 24, 2016	30 months ¹	117,334	-	10,667 ²	10% ³	8.40	15,427	91,240
March 31, 2016	30 months ¹	195,670	-	17,788 ²	10% ³	8.40	2,436	175,446
October 20, 2017	12 months	150,000	-	-	5%	\$ 7.50	7,500	-
October 25, 2017	6 months	103,000	-	-	12%	-	3,000	-
October 27, 2017	12 months	170,000	-	-	5%	-	4,250	10,000
November 13, 2017	9 months	380,000	-	15,200	8%	\$ 7.50	15,200	46,274
November 22, 2017	12 months	100,000	-	10,000	5%	-	2,000	-
November 28, 2017	10 months	103,000	-	3,000	12%	-	-	-
November 29, 2017	6 months	150,000	-	-	15%	\$ 7.50	-	15,200
November 30, 2017	3 months	50,000	-	-	8%	\$ 7.50	-	-
December 5, 2017	3 months	52,500	-	-	10%	\$ 7.50	2,500	-
December 6, 2017	4 months	100,000	-	-	10%	\$ 7.50	-	-
December 11, 2017	6 months	130,000	-	1,500	5%	-	6,500	6,460
December 19, 2017	6 months	110,000	-	1,500	5%	-	5,500	5,775
December 28, 2017	6 months	55,000	-	-	15%	\$ 7.50	5,000	-
December 29, 2017	12 months	105,000	-	-	5%	-	5,000	-
January 3, 2018	12 months	95,000	95,000	4,750	5%	-	2,000	-
January 16, 2018	12 months	131,250	131,250	-	-	-	6,250	-
January 19, 2018	6 months	150,000	150,000	-	10%	\$ 7.50	6,000	12,267
February 9, 2018	6 months	100,000	100,000	-	15%	\$ 7.50	23,500	-
February 15, 2018	6 months	100,000	100,000	-	15%	\$ 7.50	9,000	10,474
March 12, 2018	6 months	85,000	85,000	1,150	5%	-	4,250	5,183
March 12, 2018	6 months	253,000	253,000	53,000	0%	-	-	28,722
April 11, 2018	6 months	100,000	100,000	4,000	15%	\$ 7.50	20,000	7,218
April 23, 2018	6 months	103,000	103,000	-	12%	-	3,000	-
April 24, 2018	9 months	77,000	77,000	-	12%	\$ 7.50	2,000	-
April 25, 2018	12 months	105,000	105,000	-	4%	\$ 7.50	5,000	4,590
April 25, 2018	12 months	105,000	105,000	-	4%	\$ 7.50	5,000	4,590
April 25, 2018	12 months	130,000	130,000	-	6%	\$ 7.50	6,500	-
April 26, 2018	12 months	65,000	65,000	6,500	5%	-	2,000	-
May 9, 2018	12 months	250,000	250,000	-	10%	\$ 7.50	12,500	26,466
May 11, 2018	6 months	161,250	161,250	11,250	15%	\$ 7.50	10,000	-
May 14, 2018	9 months	50,000	50,000	2,500	15%	\$ 7.50	2,500	3,704
May 17, 2018	12 months	380,000	380,000	15,200	8%	\$ 7.50	15,200	43,607
May 23, 2018	9 months	103,000	103,000	-	12%	-	3,000	-
May 24, 2018	9 months	52,500	52,500	2,500	4%	-	-	2,075
May 25, 2018	12 months	78,750	78,750	-	4%	\$ 7.50	3,750	3,112
May 30, 2018	2 months	150,000	150,000	-	8%	\$ 7.50	-	6,870
June 4, 2018	12 months	75,000	75,000	7,500	5%	-	2,000	3,869
June 8, 2018	6 months	50,000	50,000	2,500	15%	\$ 7.50	2,500	3,271

June 12, 2018	6 months	100,000	100,000	-	5%	\$ 7.50	5,000	-
June 14, 2018	9 months	280,000	280,000	25,000	10%	-	5,000	17,573
June 16, 2018	9 months	130,000	130,000	-	5%	-	-	-
June 16, 2018	6 months	110,000	110,000	-	5%	-	-	-
June 26, 2018	3 months	150,000	150,000	-	15%	\$ 7.50	-	20,242
June 28, 2018	6 months	50,000	50,000	-	15%	\$ 7.50	-	10,518
		<u>\$ 12,490,754</u>	<u>\$ 3,769,750</u>	<u>\$ 800,005</u>			<u>\$ 1,343,858</u>	<u>\$ 6,221,039</u>

1. The loan term was extended by 180 days and further extended on January 15, 2018 by 60 days to repay in common stock. The Debenture holders signed letter agreements on May 14, 2018 and June 11, 2018 to waive default penalties relating to the maturity date.

2. The original issue discount is reflected in the first year.

3. The annual interest started accruing in the second year.

4. The Debentures were converted into Series AA Convertible Preferred Stock.

Deferred finance fees included cash commissions amounting to \$621,500 and the fair value of the 2,101,786 warrants issued to the placement agent amounting to \$536,908. For the six months ended June 30, 2018, the Company recognized amortization expense related to the convertible debt discounts indicated above of \$905,171. The unamortized debt discounts as of June 30, 2018 related to the convertible debentures and other convertible notes amounted to \$547,582.

Revolving Note Payable and May 19, 2017 Promissory Note

On October 28, 2016, an accredited investor (the “*Investor*”) purchased from us a promissory note in the aggregate principal amount of up to \$2,000,000 (the “*Revolving Note*”) due and payable on the earlier of October 28, 2017 (the “*Maturity Date*”) or on the seventh business day after the closing of a Qualified Offering (as defined in the Revolving Note). Although the Revolving Note is dated October 26, 2016, the transaction did not close until October 28, 2016, when we received its initial \$250,000 advance pursuant to the Revolving Note. As a result, on the same day and pursuant to the Revolving Note, we issued to the Investor a Common Stock Purchase Warrant (the “*Line of Credit Warrants*”) to purchase 20,834 shares of our common stock at an exercise price per share equal to \$12.00 per share. The Investor is obligated to provide us with advances of \$250,000 under the Revolving Note, but the Investor shall not be required to advance more than \$250,000 in any individual fifteen (15) day period and no more than \$500,000 in the thirty (30) day period immediately following the date of the initial advance. We received \$3,500,000 pursuant to the Revolving Note as amended of which \$2,070,000 net proceeds was received in 2017 and we issued to the Investor Line of Credit Warrants to purchase 291,667 shares of our Common Stock at an exercise price per share equal to \$12.00 per share. The terms of the Line of Credit Warrants are identical except for the exercise date, issue date, and termination date which are based on the advance date.

The Revolving Note was amended on May 2, 2017 to increase the aggregate principal amount to \$3,000,000, to issue 16,667 shares of our Common Stock to the Investor, to decrease the exercise price per share of the warrants to the lower of (i) \$12.00 or (ii) the per share purchase price of the shares of our Common Stock sold in the Qualified Offering, and to change the references in the Revolving Note from “the six (6) month anniversary of October 28, 2016” to “July 25, 2017.” The fair value of the 16,667 shares issued of \$149,018 was accounted for as a note discount and are amortized to interest expense over the life of the loan. We evaluated the accounting impact of the Revolving Note amendment and deemed that the amendment did not have a material impact on our consolidated financial statements.

The Revolving Note was amended on August 18, 2017 to increase the aggregate principal amount to \$3,500,000 with all other terms unchanged. The Revolving Note, previously amended, was further amended on January 30, 2018 to increase the aggregate principal amount to \$4,000,000 with all other terms unchanged.

In the event that a Qualified Offering had occurred after July 25, 2017, but prior to the Maturity Date, within seven (7) Business Days of the closing of the Qualified Offering, the Company was to pay a cash fee equal to five percent (5%) of the total outstanding amount owed by the Company to the Holder as of the closing date of the Qualified Offering or, at the option of the Company, issue to the Holder a number of restricted shares of the Company’s common stock equal to (x) five percent (5%) of the total outstanding amount owed by the Company to the Holder as of the closing date of the Qualified Offering divided by (y) the purchase price provided by the documents governing the Qualified Offering. A Qualified Offering means the completion of a public offering of the Company’s securities pursuant to which the Company receives aggregate gross proceeds of at least Seven Million United States Dollars (US\$7,000,000) in consideration of the purchase of its securities and resulting in, pursuant to the effectiveness of the registration statement for such offering, the Company’s common stock being traded on the NASDAQ Capital Market, NASDAQ Global Select Market or the New York Stock Exchange. A Qualified Offering did not occur on or prior to the Maturity Date.

Interest on the principal balance of the Revolving Note shall be paid in full on the Maturity Date, unless otherwise paid prior to the Maturity Date. Interest shall be assessed as follows: (i) a one-time interest of 10% on all principal amounts advanced prior to April 28, 2017; (ii) the foregoing and 4% on any amount remaining outstanding if the principal amount is repaid between April 28, 2017 and July 28, 2017; or (iii) both of the foregoing and 4% on any amount remaining outstanding if the principal amount is repaid between July 28, 2017 and October 28, 2017.

Broker fees amounting to \$336,500, the one-time interest of \$400,000 and the relative fair value of the 333,334 warrants issued to the Investor amounting to \$1,266,691 were recorded as debt discounts and amortized over the term of the revolving note. The unamortized debt discounts related to the Revolving Note were fully amortized as of December 31, 2017. The finance costs from advances after December 31, 2017 were charged to interest expense directly because the maturity date had passed.

On May 19, 2017, we received a 45-day non-convertible loan of \$630,000 from the Investor. The loan provided guaranteed interest of \$63,000 and had an origination fee of \$32,000. We paid a broker \$31,500 in connection with this loan. The unamortized debt discount as of June 30, 2018 was zero.

Conversion of October 26, 2016 Revolving Note and May 19, 2017 Promissory Note

On June 11, 2018, the Company entered into a Letter Agreement with the Investor to convert a total of \$5,500,000 in principal and interest due to the Investor pursuant to the Revolving Note and the May 19, 2017 promissory note into 2,200 shares of Series AA Convertible Preferred Stock with a conversion price of \$2.50 per share. The Company also amended the Line of Credit Warrants held by the Investor. The Company lowered the Line of Credit Warrants’ exercise price from \$12.00 per share to \$3.50 per share. The fair value of \$82,904 relating to the reduction in exercise price was treated as a loan modification and recorded as a charge against the extinguishment of debt.

The Company also issued a new warrant to the Investor with an exercise price of \$3.50 per share to purchase 2,200,000 shares of common stock (the number of shares of common stock issuable upon conversion of the Series AA Convertible Preferred Stock shares received as a result of the conversion of a total of \$5,500,000). In connection with the Letter Agreement, the Investor also waived \$520,680 of interest and fees owed as of June 30, 2018. We recognized \$520,680 as a gain on extinguishment of debt.

The following table provides a summary of the changes in convertible debt and revolving note payable, net of unamortized discounts, during 2018:

Balance at January 1,	\$ 11,787,776
Issuance of convertible debt, face value	4,029,750
Deferred financing cost	(326,800)
Debt discount related to one-time interest charge	(132,000)
Contingent beneficial conversion feature on convertible note	(253,000)
Debt discount from warrants issued with debt	(162,023)
Debt discount from shares issued with the notes	(170,745)
Conversion of debt into equity	(10,962,634)
Payments	(1,518,500)
Accretion of interest and amortization of debt discount to interest expense through June 30,	930,343
Balance at June 30,	<u>3,222,167</u>
Less: current portion	<u>3,222,167</u>
Convertible debt, long-term portion	<u>\$ -</u>

Other Notes

In March 2018, we received non-convertible loans totaling \$150,000 from private investors. The loans include one-year term and 10% guaranteed interest. We converted these loans into Series AA Units. See below.

In April 2018, we received a non-convertible loan for \$10,000 from a private investor. The loan includes a one-year term and 10% guaranteed interest. We converted this loan into Series AA Units. See below.

On March 21, 2017, we received an eight-month, non-convertible loan of \$170,000 from an accredited investor. The loan earns an annual interest rate of 10% and includes a 10% original issue discount. We also agreed to issue the investor 5,667 shares of restricted common stock. We recorded the fair value of the shares amounting to \$35,079 as a debt discount that will be amortized to interest expense during the term of the loan. The loan still remains outstanding as of June 30, 2018 with a balance of \$170,000. The lender extended the term to December 31, 2017 and further to March 31, 2018 in exchange for a total of 9,500 shares of common stock with a fair value of \$28,490 recorded as interest expense. The lender further extended the term to September 30, 2018 in exchange for 7,200 shares yet to be issued. We fully amortized \$52,079 of the original debt discount in the year ended December 31, 2017.

On August 1, 2017, we signed a non-convertible installment loan with a lender. Under the agreement we received a loan of \$75,000 with a weekly repayment of \$3,500 until payment in full. The loan includes \$18,750 representing an original issue discount, interest and fees resulting in a total payable of \$93,750. The loan was paid off entirely as of June 30, 2018.

On September 12, 2017, we received a 9-month non-convertible loan of \$225,000 from a privately-held investment firm. The loan earns an annual interest rate of 10%. The Company paid total fees of \$25,000 including original issue discount and other costs related to this loan. We agreed to issue 3,333 shares at closing. We recorded the fair value of the shares as a debt discount that will be amortized to interest expense during the term of the loan. We amortized the entire debt discount of \$38,000 as of June 30, 2018. In the event of default and at the option of the holder, the loan is convertible into common stock at a 35% discount to the average of the two lowest daily volume weighted average closing stock price for the 20 trading days prior to conversion. The loan was paid off entirely as of June 30, 2018.

In June 2018, we received a non-convertible loan of \$15,000 from a private investor. The loan includes a one-year term and 10% guaranteed interest.

Conversion of Non-Convertible Notes

On June 11, 2018, the Company entered into Letter Agreements with certain private investors to convert a total of \$176,000 in principal and interest due to the private investors pursuant to certain loan documents into 70.4 Series AA Units representing 70.4 shares of Series AA Convertible Preferred Stock with a conversion price of \$2.50 per share and warrants to purchase 70,400 shares of common stock.

Merchant Agreements

We have signed various Merchant Agreements which entitle the lenders to our customer receipts. We accounted for the Merchant Agreements as loans under ASC 860 because while we provided rights to current and future receipts, we still had control over the receipts. The following table shows our Merchant Agreements as of June 30, 2018.

Inception Date	Purchase Price	Purchased Amount	Outstanding Balance	Daily Payment	Interest Rate	Deferred Finance Fees
September 29, 2017	75,000	102,000	\$ -	1,200.00	15%	1,500
October 25, 2017	110,000	153,890	-	1,539.00	15%	8,800
December 7, 2017	160,000	212,800	-	1,251.76	25%	5,799
December 12, 2017	160,000	212,800	-	1,251.76	15%	5,258
February 27, 2018	110,000	147,400	-	921.25	25%	1,650
April 11, 2018	140,000	187,600	96,503	1,275.00	13%	2,800
May 11, 2018	180,000	243,000	151,542	1,518.75	25%	2,599
May 15, 2018	180,000	244,800	156,067	1,530.00	15%	3,600
June 29, 2018	140,000	190,400	140,000	1,269.33	25%	2,100
	<u>\$ 1,255,000</u>	<u>\$ 1,694,690</u>	<u>\$ 544,112</u>			<u>\$ 34,106</u>

We amortized \$55,811 and \$168,860 of debt discounts during the six months ended June 30, 2018 and 2017, respectively for all non-convertible notes. The total unamortized discount for all non-convertible notes as of June 30, 2018 was \$25,982.

Related Party Notes

On March 14, 2018, we received a one-year, non-convertible loan of \$50,000 from a related party who was a member of the Company's Board of Directors. This loan is included in net proceeds from non-convertible debt in the Statement of Cash Flows. The amount of \$50,000 was converted on June 11, 2018 into 20 shares of Series AA Convertible Preferred Stock and 20,000 warrants to purchase common stock. The \$7,500 guaranteed interest on the loan was recorded as a debt discount and amortized over the term of the debt. The interest is outstanding as of June 30, 2018.

On May 31, 2018, we received two short-term loans of \$46,500 and \$5,600 from two members of the Company's Board of Directors, respectively. We repaid both loans in full during June 2018 and paid interest of \$6,975.

On June 11, 2018, the Company entered into a Letter Agreement with one non-employee member of the Board, to convert \$50,000 in principal due to the board member pursuant to a certain loan document into 20 Series AA Units representing 20 shares of Series AA Convertible Preferred Stock with a conversion price of \$2.50 per share and warrants to purchase 20,000 shares of common stock.

7) Stockholders' Deficit

Preferred Stock

We are authorized to issue 1,000,000 shares of preferred stock with a par value of \$0.01. Of the 1,000,000 shares of preferred stock:

- 1) 20,000 shares have been designated as Series A Junior Participating Preferred Stock ("Junior A")
- 2) 313,960 shares have been designated as Series A Convertible Preferred Stock ("Series A")
- 3) 279,256 shares have been designated as Series B Convertible Preferred Stock ("Series B")
- 4) 88,098 shares have been designated as Series C Convertible Preferred Stock ("Series C")
- 5) 850 shares have been designated as Series D Convertible Preferred Stock ("Series D")
- 6) 500 shares have been designated as Series E Convertible Preferred Stock ("Series E")
- 7) 240,000 shares have been designated as Series G Convertible Preferred Stock ("Series G")
- 8) 10,000 shares have been designated as Series H Convertible Preferred Stock ("Series H")
- 9) 21 shares have been designated as Series H2 Convertible Preferred Stock ("Series H2")
- 10) 6,250 shares have been designated as Series J Convertible Preferred Stock ("Series J")
- 11) 15,000 shares have been designated as Series K Convertible Preferred Stock ("Series K")
- 12) 10,000 shares have been designated as Series AA Convertible Preferred Stock ("Series AA")

As of June 30, 2018, there were no shares of Junior A, and Series A, B, C, and E issued and outstanding. See our Annual Report on Form 10-K for the year ended December 31, 2017 for the pertinent disclosures of preferred stock.

Series AA Convertible Preferred Stock and Warrants

On May 2, 2018, the Company entered into a Securities Purchase Agreement with an existing shareholder pursuant to which the Company sold an aggregate of 100 shares of Series AA Convertible Preferred Stock, each preferred share convertible into 1,000 shares of the Company's common stock, par value \$0.01 per share, for an aggregate Purchase Price of \$250,000. Each share of Series AA Convertible Preferred Stock will receive a cumulative dividend at the annual rate of eight percent (8%) payable quarterly commencing on September 30, 2018 on those shares of Series AA Convertible Preferred Stock purchased from the Company.

We issued to the shareholder a new warrant to purchase 100,000 shares of common stock with an exercise price of \$3.50 per share. The Warrant will expire on the fifth-year anniversary after issuance. The exercise price is also subject to adjustment in the event that we issue any shares of common stock or common stock equivalents at a per share price that is lower than the exercise price for the Series AA Warrants then in effect. Upon any such issuance, subject to certain exceptions, the exercise price will be reduced to the per share price at which such shares of common stock or common stock equivalents are issued.

On May 14, 2018, we entered into Letter Agreements with 22 Debenture Holders holding Debentures and Debenture Warrants whereby the Debenture Holders agreed to convert a total of \$6,220,500 in principal and original issue discount due them under the Debentures into 2,448.20 shares of Series AA Convertible Preferred Stock with a conversion price of \$2.50 per share. The Debenture Holders were also: (a) issued amended Debenture Warrants such that the exercise price will be \$3.50 per share; and (b) issued a new warrant with an exercise price of \$3.50 per share to purchase 2,448,200 shares of common stock (the number of shares of common stock issuable upon conversion of the Series AA Convertible Preferred Stock shares received as a result of the Debenture conversions).

On June 1, 2018, the Company entered into a Securities Purchase Agreement with accredited investors pursuant to which the Company sold an aggregate of 20 shares of Series AA Convertible Preferred Stock, each preferred share convertible into 1,000 shares of the Company's common stock, par value \$0.01 per share, for an aggregate Purchase Price of \$50,000. We issued to the shareholders a new warrant to purchase 20,000 shares of common stock with an exercise price of \$3.50 per share.

On June 11, 2018, the Company entered into additional Letter Agreements with 15 Debenture Holders whereby the Debenture Holders agreed to convert a total of \$742,134 in principal and original issue discount due them under the Debentures into 296.80 shares of Series AA Convertible Preferred Stock with a conversion price of \$2.50 per share. The Debenture Holders were also: (a) issued amended Debenture Warrants such that the exercise price will be \$3.50 per share; and (b) issued a new warrant with an exercise price of \$3.50 per share to purchase 296,800 shares of common stock (the number of shares of common stock issuable upon conversion of the Series AA Convertible Preferred Stock shares received as a result of the Debenture conversions).

The issuances of our convertible preferred stock and common stock purchase warrants are accounted for under the fair value and relative fair value method.

The warrant is first analyzed per its terms as to whether it has derivative features or not. If the warrant is determined to be a derivative, then it is measured at fair value using the Black Scholes Option Model and recorded as a liability on the balance sheet. The warrant is re-measured at its then current fair value at each subsequent reporting date (it is "marked-to-market").

If the warrant is determined to not have derivative features, it is recorded into equity at its fair value using the Black Scholes option model, however, limited to a relative fair value based upon the percentage of its fair value to the total fair value including the fair value of the convertible preferred stock.

We analyzed these warrants and determined that they were not considered derivatives and therefore recorded the aggregate relative fair value of \$7,037,424 into equity relating to the 5,195,400 warrants and 11,000 broker warrants issued.

The convertible preferred stock is recorded at its fair value, limited to a relative fair value based upon the percentage of its fair value to the total fair value including the fair value of the warrant. Further, the convertible preferred stock is examined for any intrinsic beneficial conversion feature ("BCF") of which the convertible price of the preferred stock is less than the closing stock price on date of issuance. If the relative fair value method is used to value the convertible preferred stock and there is an intrinsic BCF, a further analysis is undertaken of the BCF using an effective conversion price which assumes the conversion price is the relative fair value divided by the number of shares of common stock the convertible preferred stock is converted into by its terms. The adjusted BCF value of \$10,532,291 was accounted for as a deemed dividend within equity and was included in the earnings per share calculation.

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, 2018, options to acquire 32,605 shares were outstanding under the Plan.

At the Company's December 12, 2013 Special Meeting, the shareholders approved the 2013 Equity Incentive Plan (the "2013 Plan") pursuant to which 3,000,000 shares of our common stock were reserved for issuance upon exercise of stock options or other equity awards. Under the 2013 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, 2018, options to acquire 81,925 shares were outstanding under the Plan with 2,917,519 shares available for future grant under the 2013 Plan.

On November 29, 2015 the Company's Board of Directors adopted the 2015 Nonqualified Stock Option Plan (the "2015 Plan") pursuant to which 5,000,000 shares of our common stock were reserved for issuance upon exercise of non-qualified stock options. Under

the 2015 Plan, we may award non-qualified stock options 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, 2018, non-qualified options to acquire 129,937 shares were outstanding under the Plan.

All of the outstanding non-qualified options had an exercise price that was at or above the Company's common stock share price at time of issuance.

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

	Stock Options		Warrants		Total	
	Weighted Average		Weighted Average			
	Shares	Price per share	Shares	Price per share	Shares	Exercisable
Balance outstanding, 12/31/17	<u>247,692</u>	\$ 10.95	<u>899,542</u>	\$ 12.03	<u>1,147,234</u>	<u>1,073,850</u>
Granted	-	-	5,376,734	3.50	5,376,734	
Exercised	-	-	-	-	-	
Expired	-	-	(12,669)	12.00	(12,669)	
Forfeited	<u>(3,225)</u>	16.04	-	-	<u>(3,225)</u>	
Balance outstanding, 6/30/2018	<u>244,467</u>	\$ 10.88	<u>6,263,607</u>	\$ 3.58	<u>6,508,074</u>	<u>6,460,810</u>

Range of Exercise Prices	Options Outstanding			Options Exercisable		
	Weighted Average			Weighted Average		
	Number of Options	Remaining Contractual Life (Years)	Exercise Price	Number of Options	Remaining Contractual Life (Years)	Exercise Price
\$ 7.50 - \$11.99	133,024	7.8	\$ 8.63	96,160	7.4	\$ 8.72
12.00 - 14.99	88,705	7.2	12.00	78,305	7.2	12.00
15.00 - 17.99	5,879	4.2	15.00	5,879	4.2	15.00
18.00 - 20.99	12,187	1.7	18.00	12,187	1.7	18.00
21.00 - 30.00	4,672	2.4	30.00	4,672	2.4	30.00
\$ 7.50 - \$30.00	244,467	7.1	\$ 10.88	197,203	6.8	\$ 11.29

As of June 30, 2018, total unrecognized compensation cost related to the unvested stock-based awards was \$249,107, which is expected to be recognized over weighted average period of 1.45 years. The aggregate intrinsic value associated with the options outstanding and exercisable as of June 30, 2018 was zero. The aggregate intrinsic value associated with the warrants outstanding and exercisable as of June 30, 2018 was approximately \$2.7 million.

The loans from November 13, 2017 and May 17, 2018 included Warrants that contains a price protection provision such that if we issue a warrant with any term more favorable to the holder of such warrant that was not similarly provided in these loans, then we shall notify the lender of such additional or more favorable term and such term, shall become a part of the loan agreements. The fair value of the reduction in exercise price was recorded as a deemed dividend of \$5,113 in additional paid in capital.

The Company, pursuant to a price protection provision triggered on May 2, 2018 with the sale of Series AA units, amended the Debentures and Warrants to purchase Common Stock held by the Debenture Holders entered into between July 22, 2015 and March 31, 2016 as first disclosed in the Company's Current Report on Form 8-K filed on July 28, 2015. The fair value of \$207,899 relating to the reduction in exercise price was treated as a deemed dividend and recorded as a charge against additional paid-in capital within equity. The amended Debenture conversion price was exempt from revaluation because a beneficial conversion feature had already been recorded on the Debenture at issuance.

Common Stock Issuances

During the six months ended June 30, 2018, we issued to Debenture holders 25,243 shares of common stock for quarterly interest of \$95,121 issued in stock in lieu of cash. Of the 25,243 shares issued, 1,092 shares were issued to members of the Company's Board of Directors, who are also Debenture holders.

On January 19, 2018, we received a six-month, convertible loan of \$150,000 from an accredited investor. The loan earns a one-time interest of 10% and includes a 10% original issue discount. We also issued the investor 4,000 shares of restricted common stock with a relative fair value of \$12,267 recorded as a debt discount to be amortized over the six-month term. The loan can be converted at any time into common stock at a conversion price of \$7.50.

On February 12, 2018, we received a six-month, convertible loan of \$100,000 from an accredited investor. The loan earns a one-time interest of 10%. \$50,000 of the proceeds were used to pay off the outstanding balance of a previous loan from this lender. The loan can be converted at any time into common stock at a conversion price of \$7.50. We issued the investor 5,000 shares of restricted common stock with a relative fair value of \$18,274 of which \$10,474 was recorded as a debt discount to be amortized over the six-month term while \$7,800 was recorded to interest expense immediately because it related to the previous loan paid off.

On February 12, 2018, we issued 3,500 shares of restricted common stock to an accredited investor to extend the maturity date of our eight-month, non-convertible loan of \$170,000 originated on March 21, 2017 to February 15, 2018. The accredited investor agreed to a further extension to March 31, 2018 in exchange for 3,500 shares of restricted common stock issued on March 27, 2018. The lender further extended the term to September 30, 2018 in exchange for 7,200 shares yet to be issued. The total fair value of \$28,490 relating to these stock issuances were recorded as interest expense as compensation for the loan extensions.

On March 12, 2018, we received a six-month, convertible loan of \$253,000 from an accredited investor. The loan has an original issue discount of \$53,000. The loan can be converted at any time into common stock at a conversion price of \$7.50. We agreed to issue the investor 6,750 shares of restricted common stock with a relative fair value of \$28,722 recorded as a debt discount to be amortized over the six-month term.

On April 2, 2018, we issued 1,150 shares of restricted common stock with a fair value of \$5,183 to the lender in connection with the March 12, 2018 5% one-year, convertible loan of \$85,000. The fair value of the stock was recorded as a debt discount to be amortized over the one-year term.

On April 12, 2018, we received a 15% six-month, convertible loan of \$100,000 from an accredited investor. The loan includes total costs of \$24,000 representing guaranteed interest, an original issue discount and legal fees. The loan can be converted at any time into common stock at a conversion price of \$7.50. We agreed to issue the investor 2,000 shares of restricted common stock with a fair value of \$7,218 recorded as a debt discount to be amortized over the six-month term.

On April 25, 2018, we received a 4% one-year, convertible loan of \$105,000 from an accredited investor. The note is convertible on issuance date at \$7.50 per share and after 180 days to be 60% of the lowest trading price for the common stock during the 20-trading day period prior to conversion. The loan includes \$5,000 in fees. We agreed to issue the investor 1,200 shares of restricted common stock with a fair value of \$4,590 recorded as a debt discount to be amortized over the one-year term.

On April 25, 2018, we received another 4% one-year, convertible loan of \$105,000 from an accredited investor. The note is convertible on issuance date at \$7.50 per share and after 180 days to be 60% of the lowest trading price for the common stock during the 20-trading day period prior to conversion. The loan includes \$5,000 in fees. We agreed to issue the investor 1,200 shares of restricted common stock with a fair value of \$4,590 recorded as a debt discount to be amortized over the one-year term.

On May 9, 2018, we received a 10% six-month, convertible loan of \$250,000 from an accredited investor. The loan includes total costs of \$62,500 representing guaranteed interest, an original issue discount and legal fees. The loan can be converted at any time into common stock at a conversion price of \$7.50. We agreed to issue the investor 8,000 shares of restricted common stock with a fair value of \$26,466 recorded as a debt discount to be amortized over the six-month term.

On May 14, 2018, we received a 15% nine-month, convertible loan of \$50,000 from an accredited investor. The loan includes total costs of \$12,500 representing guaranteed interest, an original issue discount and legal fees. The loan can be converted at any time into common stock at a conversion price of \$7.50. We agreed to issue the investor 1,000 shares of restricted common stock with a fair value of \$3,704 recorded as a debt discount to be amortized over the nine-month term.

On May 24, 2018, we received a 4% one-year, convertible loan of \$50,000 from an accredited investor. The loan includes an original issue discount of \$2,500. The note is convertible on issuance date at \$7.50 per share and after 180 days to be 60% of the lowest trading price for the common stock during the 20-trading day period prior to conversion. We agreed to issue the investor 600 shares of restricted common stock with a fair value of \$2,075 recorded as a debt discount to be amortized over the one-year term.

On May 25, 2018, we received a 4% one-year, convertible loan of \$75,000 from an accredited investor. The loan includes legal fees of \$3,750. The note is convertible on issuance date at \$7.50 per share and after 180 days to be 60% of the lowest trading price for the common stock during the 20-trading day period prior to conversion. We agreed to issue the investor 900 shares of restricted common stock with a fair value of \$3,112 recorded as a debt discount to be amortized over the one-year term.

On May 30, 2018, we received an 8% two-month, convertible loan of \$150,000 from an accredited investor. The loan includes guaranteed interest of \$12,000. The loan can be converted at any time into common stock at a conversion price of \$7.50. We agreed to issue the investor 2,000 shares of restricted common stock with a fair value of \$6,870 recorded as a debt discount to be amortized over the two-month term.

On June 4, 2018, we received a 5% one-year, convertible loan of \$75,000 from an accredited investor. The loan includes total costs of \$9,500 representing an original issue discount and legal fees. The note is convertible after 180 days to be 60% of the lowest trading price for the common stock during the 20-trading day period prior to conversion. We agreed to issue the investor 1,360 shares of restricted common stock with a fair value of \$3,869 recorded as a debt discount to be amortized over the one-year term.

On June 8, 2018, we received a 15% 6-month, convertible loan of \$50,000 from an accredited investor. The loan includes total costs of \$12,500 representing guaranteed interest, an original issue discount and legal fees. The loan can be converted at any time into common stock at a conversion price of \$7.50. We agreed to issue the investor 1,000 shares of restricted common stock with a fair value of \$3,271 recorded as a debt discount to be amortized over the 6-month term.

On June 11, 2018, the Company entered into a Letter Agreement with an accredited investor in which we agreed to issue 110,833 additional shares of common stock at \$2.50 per share to the investor. The fair value was recorded as other charge of \$340,257. We also issued 110,833 additional warrants with an exercise price of \$3.50 and an expiration period of five years from the original issue date. The fair value was recorded as other charges of \$312,637. The Company also amended 29,167 Warrants held by the Investor. The Company lowered the Warrants' exercise price from \$15.00 per share to \$3.50 per share. The fair value of \$10,236 relating to the reduction in exercise price was treated as an equity modification and recorded as a charge to other expenses.

On June 14, 2018, we received a 10% nine-month, convertible loan of \$250,000 from an accredited investor. The loan includes total costs of \$30,000 representing an original issue discount and legal fees. The note is convertible after 180 days to be 65% of the average of the two lowest trading prices for the common stock during the 25-trading day period prior to conversion. We agreed to issue the investor 5,000 shares of restricted common stock with a fair value of \$17,573 recorded as a debt discount to be amortized over the nine-month term.

On June 26, 2018, we received a 5% 3-month, convertible loan of \$150,000 from an accredited investor. The loan includes total costs of \$7,500 representing guaranteed interest. The loan can be converted at any time into common stock at a conversion price of \$7.50. We agreed to issue the investor 6,000 shares of restricted common stock with a fair value of \$20,242 recorded as a debt discount to be amortized over the 3-month term.

On June 28, 2018, we received a 5% 6-month, convertible loan of \$50,000 from an accredited investor. The loan includes \$2,500 monthly guaranteed interest. The loan can be converted at any time into common stock at a conversion price of \$7.50. We agreed to issue the investor 4,000 shares of restricted common stock with a fair value of \$10,518 recorded as a debt discount to be amortized over the 6-month term.

8) Subsequent Events

On July 1, 2018, we signed a six-month agreement with a firm to provide consulting services. We issued 24,000 shares of restricted common stock at inception of contract. The stock's fair value of \$93,600 based on the trading stock price on contract date will be

amortized to expense over 6 months in 2018.

On July 2, 2018, we received a 4% one-year, convertible loan of \$125,000 from an accredited investor. The note is convertible on issuance date at \$7.50 per share and after 180 days to be 60% of the lowest trading price for the common stock during the 15-trading day period prior to conversion. The loan includes \$6,250 in fees. We issued the investor 1,500 shares of restricted common stock with a fair value of \$5,850 recorded as a debt discount to be amortized over the one-year term.

On July 3, 2018, the Company entered into a Securities Purchase Agreement with several accredited investors pursuant to which the Company sold an aggregate of 148 shares of Series AA Convertible Preferred Stock, each preferred share convertible into 1,000 shares of the Company's common stock, par value \$0.01 per share, for an aggregate Purchase price of \$370,000. We issued to the investors warrants to purchase an aggregate 148,000 shares of common stock with an exercise price of \$3.50 per share.

On July 5, 2018, we paid off the entire outstanding balance on our December 29, 2017 5% one-year, convertible loan of \$95,000.

On July 5, 2018, we signed a six-month agreement with a firm to provide consulting services. We are committed to pay the firm 24,000 shares of restricted common stock at inception of contract. The stock's fair value of \$79,920 based on the trading stock price on contract date will be amortized to expense over 6 months in 2018.

On July 10, 2018, we received a 5% one-year, convertible loan of \$95,000 from an accredited investor. The loan can be converted into common stock after 180 calendar days at a discount of 40% of the lowest trading price for the common stock during the 20-trading day period prior to conversion. The loan includes \$6,750 in fees.

On July 13, 2018, we paid off the entire outstanding balance on our June 12, 2018 5% one-month, convertible loan of \$100,000.

On July 13, 2018, we received a 12% nine-month, convertible loan of \$103,000 from an accredited investor. The loan can be converted into common stock after 180 calendar days at a discount of 42% of the average of the lowest two trading prices for the common stock during the 15-trading day period prior to conversion. The loan includes \$3,000 in fees.

On July 16, 2018 we signed a Merchant Agreement with a lender. Under the agreement we received \$180,000, of which approximately \$103,450 was used to pay off the outstanding balance on a previous loan dated April 11, 2018 from this lender, in exchange for rights to all customer receipts until the lender is paid \$246,600, which is collected at the rate of \$1,790.00 per business day. The \$66,600 imputed interest will be recorded as interest expense when paid each day. Fees of \$3,600 were deducted from the initial advance. The payments were secured by second position rights to all customer receipts until the loan has been paid in full. We accounted for the Merchant Agreement as a secured loan under ASC 860 because while we provided rights to current and future receipts, we still had control over the receipts.

On July 17, 2018, we received a 15% three-month, convertible loan for \$100,000 from an accredited investor. The loan can be converted at any time into common stock at a conversion price of \$7.50. We agreed to issue the investor 2,000 shares monthly over three months for a total of 6,000 shares of restricted common stock with a fair value of \$16,944 that was recorded as a debt discount to be amortized over the three-month term. We issued the first installment of 2,000 shares already on July 17, 2018.

On July 18, 2018, we paid \$13,125 that was recorded as interest expense to a lender to postpone the loan conversion option to August 31, 2018 on the January 16, 2018 convertible note with face value of \$131,250.

On July 18, 2018, the Board of Directors approved the immediate termination of outstanding stock options (approximately 247,000 shares) held by current officers, employees and board members and the issuance of new stock options to the same holders with an exercise price of \$3.40 per share equal to the closing market price on July 18, 2018 and an expiration date of July 18, 2028. The new stock options for board members will vest 1/12th per month for 12 months. The new stock options for officers and employees will vest 1/36th per month for 36 months. The compensation value created by the termination and issuance of new stock options, as determined under the Black Scholes method, was approximately \$58,000 and under current accounting rules results in a non-cash expense in current and future periods not to exceed the vesting periods of the stock options. The Board of Directors also awarded 126,267 to officers, employees and board members separately based on the annual compensation committee recommendation.

On July 19, 2018, we refinanced the January 19, 2018 10% one-year, convertible loan of \$150,000 with an accredited investor. The refinanced loan will now be due on January 19, 2019. We paid \$36,000 in interest and fees on the January 19, 2018 loan in connection with the refinancing. We agreed to issue the investor 4,500 shares of restricted common stock with a fair value of \$15,350 recorded as a debt discount to be amortized over the one-year term.

On July 26, 2018, we issued the monthly installment of 2,000 shares of restricted common stock to the lender for the June 26, 2018 loan.

On July 27, 2018, we issued the monthly installment of 667 shares of restricted common stock to the lender for the June 27, 2018 loan.

On July 30, 2018, we received a 6% one-year, convertible loan of \$80,000 from an accredited investor. The note is convertible on issuance date at \$7.50 per share and after 180 days to be 60% of the lowest trading price for the common stock during the 15-trading day period prior to conversion. The loan includes \$4,000 in fees.

On July 31, 2018, we refinanced the May 30, 2018 8% two-month, convertible loan of \$150,000 with an accredited investor. The refinanced loan will now be due on October 31, 2018 and has 12% guaranteed interest. We paid \$12,000 in interest and fees on the May 30, 2018 loan in connection with the refinancing. We issued the investor 2,000 shares of restricted common stock with a fair value of \$6,578 recorded as a debt discount to be amortized over the three-month term.

On August 2, 2018, we issued 3,154 shares of common stock based on the 10-day VWAP prior to quarter end to holders of the Debentures in payment of quarterly interest.

On August 8, 2018, we refinanced the February 9, 2018 15% six-month, convertible loan of \$100,000 with an accredited investor. The refinanced loan will now be due on February 8, 2019. The refinanced loan will now be due on February 8, 2019 and has a 5% monthly guaranteed interest rate. We paid \$23,500 in interest and fees on the February 9, 2018 loan in connection with the refinancing. We agreed

to issue the investor 1,300 shares of restricted common stock per month over the six-month term. The shares have a total fair value of \$21,590 that will be recorded as a debt discount to be amortized over the six-month term.

On August 8, 2018, the Company entered into a Securities Purchase Agreement with several accredited investors pursuant to which the Company sold an aggregate of 52 shares of Series AA Convertible Preferred Stock, each preferred share convertible into 1,000 shares of the Company's common stock, par value \$0.01 per share, for an aggregate Purchase price of \$130,000. We issued to the investors warrants to purchase an aggregate 52,000 shares of common stock with an exercise price of \$3.50 per share.

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

CAUTIONARY 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, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The events described in forward-looking statements contained in this Quarterly Report may not occur. We caution you that these statements are not guarantees of future performance or events and are subject to a number of uncertainties, risks and other influences, many of which are beyond our control, which may influence the accuracy of the statements and the projections upon which the statements are based. In some cases, forward-looking statements are identified by terms such as "may," "will," "should," "could," "would," "expects," "plans," "anticipates," "believes," "estimates," "projects," "predicts," "potential" and similar expressions intended to identify forward-looking statements. Such statements include, without limitation, statements regarding:

- our need for, and our ability to raise, additional equity or debt financing on acceptable terms, if at all;
- our need to take additional cost reduction measures, cease operations or sell our operating assets, if we are unable to obtain sufficient additional financing;
- our belief that we have sufficient liquidity to finance normal operations;
- the options we may pursue in light of our financial condition;
- the amount of cash necessary to operate our business;
- the anticipated uses of grant revenue and the potential for increased grant revenue in future periods;
- our plans and expectations with respect to our continued operations;
- our belief that PCT has achieved initial market acceptance in the mass spectrometry and other markets;
- the expected increase in the number of pressure cycling technology ("*PCT*") and constant pressure ("*CP*") based units installed and the increase in revenues from the sale of consumable products and extended service contracts;
- the expected development and success of new instrument and consumables product offerings;
- the potential applications for our instrument and consumables product offerings;
- the expected expenses of, and benefits and results from, our research and development efforts;
- the expected benefits and results from our collaboration programs, strategic alliances and joint ventures;
- our expectation of obtaining additional research grants from the government in the future;
- our expectations of the results of our development activities funded by government research grants;
- the potential size of the market for biological sample preparation;
- general economic conditions;
- the anticipated future financial performance and business operations of our company;
- our reasons for focusing our resources in the market for genomic, proteomic, lipidomic and small molecule sample preparation;
- the importance of mass spectrometry as a laboratory tool;
- the advantages of PCT over other current technologies as a method of biological sample preparation in biomarker discovery, forensics, and histology and for other applications;
- the capabilities and benefits of our PCT sample preparation system, consumables and other products;
- our belief that laboratory scientists will achieve results comparable with those reported to date by certain research scientists who have published or presented publicly on PCT and our other products;
- our ability to retain our core group of scientific, administrative and sales personnel; and
- our ability to expand our customer base in sample preparation and for other applications of PCT and our other products.

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 Quarterly Report on Form 10-Q. 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 Quarterly Report on Form 10-Q 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. Factors that could cause or contribute to differences in our future financial and other results include those discussed in the risk factors set forth in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2017. We qualify all of our forward-looking statements by these cautionary statements.

OVERVIEW

We are focused on solving the challenging problems inherent in biological sample preparation, a crucial laboratory step performed by scientists worldwide working in biological life sciences research. Sample preparation is a term that refers to a wide range of activities that precede most forms of scientific analysis. Sample preparation is often complex, time-consuming and, in our belief, one of the most error-prone steps of scientific research. It is a widely-used laboratory undertaking – the requirements of which drive what we believe is a large and growing worldwide market. We have developed and patented a novel, enabling technology platform that can control the sample preparation process. It is based on harnessing the unique properties of high hydrostatic pressure. This process, which we refer to as Pressure Cycling Technology, or PCT, uses alternating cycles of hydrostatic pressure between ambient and 45,000 psi or greater to safely, conveniently and reproducibly control the actions of molecules in biological samples, such as cells and tissues from human, animal, plant and microbial sources.

Our pressure cycling technology uses internally developed instrumentation that is capable of cycling pressure between ambient and ultra-high levels at controlled temperatures and specific time intervals, to rapidly and repeatedly control the interactions of bio-molecules, such as deoxyribonucleic acid (“DNA”), ribonucleic acid (“RNA”), proteins, lipids and small molecules. Our laboratory instrument, the Barocycler[®], and our internally developed consumables product line, which include our Pressure Used to Lyse Samples for Extraction (“PULSE”) tubes, and other processing tubes, and application specific kits such as consumable products and reagents, together make up our PCT Sample Preparation System (“PCT SPS”).

We have experienced negative cash flows from operations with respect to our pressure cycling technology business since our inception. As of June 30, 2018, we did not have adequate working capital resources to satisfy our current liabilities and as a result we have substantial doubt about our ability to continue as a going concern. Based on our current projections, including equity financing subsequent to June 30, 2018, we believe we will have the cash resources that will enable us to continue to fund normal operations into the foreseeable future.

We need substantial additional capital to fund normal operations in future periods. 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 have 14 United States granted patents and one foreign granted patent (Japan: 5587770, EXTRACTION AND PARTITIONING OF MOLECULES) covering multiple applications of PCT in the life sciences field. We also own eight patents as a result of our purchase of the assets of BaroFold in December 2017. PBI also has 19 pending patents in the USA, Canada, Europe, Australia, China, and Taiwan. PCT employs a unique approach that we believe has the potential for broad use in a number of established and emerging life sciences areas, which include, but are not limited to:

- biological sample preparation – including but not limited to sample extraction, homogenization, and digestion - in such study areas as genomic, proteomic, lipidomic, metabolomic and small molecules;
- pathogen inactivation;
- protein purification;
- control of chemical reactions, particularly enzymatic; and
- immunodiagnostics.

We reported a number of accomplishments in the first six months of 2018, including:

On February 14, 2018, the Company announced it had signed a two-year, global co-marketing and distribution agreement with ISS, Inc., a designer and manufacturer of advanced scientific instrumentation.

On May 3, 2018, the Company announced receipt of the first contract utilizing the high-pressure patents and other IP acquired from BaroFold, Inc. in the Company's December 2017 Asset Acquisition. The contract related to evaluating the ability of the acquired PreEMT™ technology platform to enhance the manufacturing process and improve the quality of a specific protein therapeutic drug candidate of the third-party.

On May 15, 2018, the Company announced the conversion of \$6.39 million of debt into equity.

On June 12, 2018, the Company announced the conversion of an additional \$7.24 million of debt into equity.

Results of Operations

Revenues

Product revenues for the three- and six-month periods ended June 30, 2018 and 2017 were as follows:

(in thousands, except percentages)	Three months ended June 30,				Six months ended June 30,			
	2018	2017	\$ Change	% Change	2018	2017	\$ Change	% Change
Product and other revenue	\$ 618	\$ 480	\$ 138	29%	\$ 1,204	\$ 1,006	\$ 198	20%
Grant revenue	21	60	(39)	(66)%	46	85	(39)	(46)%
Total revenues	<u>\$ 639</u>	<u>\$ 540</u>	<u>\$ 99</u>	18%	<u>\$ 1,250</u>	<u>\$ 1,091</u>	<u>\$ 159</u>	15%

Products and services revenues increased 29% and 20% in the current three- and six-month periods, respectively, compared to the corresponding periods in the prior year. This increase was primarily due to increases in orders for our Barocycler 2320 Extreme units and consumables, in addition to new revenues of \$52,600 from the PreEMT™ high-pressure protein refolding technology services, acquired in the 2017 BaroFold asset acquisition. Sales of consumables increased to \$64,098 for Q2 2018 compared to \$52,365 during the same period in 2017, an increase of 22%. Sales of consumables increased to \$138,796 for the current six-month period compared to \$115,629 during the same period in 2017, an increase of 20%. Products, Services, and Other Revenue included \$77,472 and \$97,422 from non-cash instrument transactions in the current quarter and the six-month period, respectively while the six-month period in the prior year included \$17,088 of similar revenue. Revenue from non-cash instrument transactions was recognized on the fair value of the assets involved per ASC 845.

Costs and operating expenses

Total costs and operating expenses for the three- and six-month periods ended June 30, 2018 and 2017 were comprised of the following:

(in thousands, except percentages)	Three months ended June 30,				Six months ended June 30,			
	2018	2017	\$ Change	% Change	2018	2017	\$ Change	% Change
Cost of product revenue	\$ 270	\$ 287	\$ (17)	(6)%	\$ 595	\$ 523	\$ 72	14%
Research and development	324	242	82	34%	649	505	144	28%
Selling and marketing	225	300	(75)	(25)%	499	513	(14)	(3)%
General and administrative	741	915	(175)	(19)%	1,536	1,754	(218)	(12)%
Total costs and operating expenses	<u>\$ 1,560</u>	<u>\$ 1,745</u>	<u>\$ (185)</u>	(11)%	<u>\$ 3,279</u>	<u>\$ 3,295</u>	<u>\$ (16)</u>	(1)%

Gross profit margin on products and services increased to 58% from 47% during the three months ended June 30, 2017. The gross profit margin of 52% stayed steady for the current six-month period compared to the same period in the prior year. This increase is primarily due to the introduction of scientific services for protein refolding with minimal incremental costs. Gross margins may fluctuate in the third and fourth quarters of 2018 based on expected production volume, services offered and product mix.

Research and development expenses increased 34% and 28% in the current three- and six-month periods, respectively, compared to the corresponding periods in the prior year. This increase is primarily related to the optical cell product development project and costs relating to data research performed by collaboration partners. Expenses generally include personnel costs, external development costs, supplies and other expenses related to our new products in development.

Selling and marketing expenses decreased 25% and 3% in the current three- and six-month periods, respectively, compared to the corresponding periods in the prior year. This decrease is primarily due to the completion of a contract to obtain qualified leads and the one-time costs in the prior period relating to a co-marketing campaign with our European dealer.

General and administrative expenses decreased 19% and 12% in the current three- and six-month periods, respectively, compared to the corresponding periods in the prior year. This decrease is primarily from reduced use of outside investor and public relations services offset to a certain extent by costs related to the quarterly amortization of our BaroFold patent values.

Interest expense

Interest expense for the three- and six-month periods ended June 30, 2018 and 2017 was as follows:

(in thousands, except percentages)	Three months ended June 30,				Six months ended June 30,			
	2018	2017	\$ Change	% Change	2018	2017	\$ Change	% Change
Interest expense	\$ (1,159)	\$ (1,983)	\$ 824	42%	\$ (2,282)	\$ (3,510)	\$ 1,228	35%

Decreases in interest expense in the current three- and six-month periods, respectively, compared to the corresponding periods in the prior year are attributable to the discontinuation of interest expense related to the Revolving Note issued in October 2016 that converted into equity in June 2018.

Other expense

Other expense for the three- and six-month periods ended June 30, 2018 and 2017 was as follows:

(in thousands, except percentages)	Three months ended June 30,				Six months ended June 30,			
	2018	2017	\$ Change	% Change	2018	2017	\$ Change	% Change
Other expense	\$ (10)	\$ -	\$ (10)	(100)%	\$ (14)	\$ (7)	(7)	(101)%

Changes in other expense in the current three- and six-month periods, respectively, compared to the corresponding periods in the prior year are primarily attributable to foreign currency exchange losses.

Gain on extinguishment of debt

Gain on extinguishment of debt for the three- and six-month periods ended June 30, 2018 and 2017 was as follows:

(in thousands, except percentages)	Three months ended June 30,				Six months ended June 30,			
	2018	2017	\$ Change	% Change	2018	2017	\$ Change	% Change
Gain on extinguishment of debt	\$ 471	\$ -	\$ 471	100%	\$ 476	\$ -	476	100%

Gains on extinguishment of debt in the current three- and six-month periods, respectively, compared to the corresponding periods in the prior year are primarily attributable to interest forgiveness of \$520,680 on the Revolving Note, the Debenture Warrant modifications valued at \$33,020 offset by \$82,904 in charges relating to the amendment of the Revolving Note Warrants for a reduced exercise price.

Incentive shares/warrants

Incentive shares/warrants for the three- and six-month periods ended June 30, 2018 and 2017 was as follows:

(in thousands, except percentages)	Three months ended June 30,				Six months ended June 30,			
	2018	2017	\$ Change	% Change	2018	2017	\$ Change	% Change
Incentive shares/warrants	\$ (663)	\$ (187)	\$ (476)	(255)%	\$ (663)	\$ (187)	\$ (476)	(255)%

Changes in incentive shares/warrants in the current three- and six-month periods, respectively, compared to the corresponding periods in the prior year are primarily attributable to the fair value of 110,833 shares of common stock and 110,833 warrants to purchase common stock issued to an accredited investor on June 11, 2018. The prior year amount represents the fair value of common stock warrants issued to investors as an incentive to exercise warrants.

Change in fair value of derivative liabilities

No derivative instruments existed in 2018.

During the three months ended June 30, 2017, we recorded non-cash income of \$1,018,507 for warrant revaluation in our consolidated statements of operations due to a decrease in the fair value of the warrant liability related to warrants issued in our private placement offerings. During the three months ended June 30, 2017, we recorded non-cash income of \$1,772,018 for conversion option revaluation expense in our consolidated statements of operations due to a decrease in the fair value of the conversion option liability related to convertible debt.

During the six months ended June 30, 2017, we recorded non-cash charges of \$314,900 for warrant revaluation in our consolidated statements of operations due to an overall increase in the fair value of the warrant liability related to warrants issued in our 2015/16 private placement. During the six months ended June 30, 2017, we recorded non-cash income of \$43,673 for conversion option revaluation in our consolidated statements of operations due to decreases in the fair value of the conversion option liability related to convertible debt.

Liquidity and Financial Condition

We have experienced negative cash flows from operations with respect to our pressure cycling technology business since our inception. As of June 30, 2018, we did not have adequate working capital resources to satisfy our current liabilities and as a result, we have substantial doubt regarding our ability to continue as a going concern. We have been successful in raising cash through debt and equity offerings in the past and as described in Note 6 of the accompanying consolidated financial statements, we received \$4.8 million in net proceeds from loans and \$226,000 in net proceeds from sales of preferred stock in the first half of 2018. We have efforts in place to continue to raise cash through debt and equity offerings.

We will need substantial additional capital to fund our operations in future periods. If 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, 2018 was \$2,603,039 as compared to \$2,339,698 for the six months ended June 30, 2017. We agreed to issue 110,833 additional shares of common stock at \$2.50 per share to an investor. The fair value was recorded as other charge of \$340,257. We also issued 110,833 additional warrants with an exercise price of \$3.50 and an expiration period of five years from the original issue date. The fair value was recorded as other charges of \$312,637. We also paid interest toward loans in 2018.

Net cash used in investing activities for the six months ended June 30, 2018 was none compared to \$16,617 in the prior period. Cash capital expenditures in the prior year included laboratory equipment and IT equipment.

Net cash provided by financing activities for the six months ended June 30, 2018 was \$2,540,497 as compared to \$2,419,285 for the same period in the prior year. The cash from financing activities in the period ended June 30, 2018 included \$226,091 net proceeds from sales of preferred stock, \$460,000 from our Revolving Note and \$3,242,950 from convertible debt, net of fees and less payment on convertible debt of \$1,518,500. We also received \$963,600 from non-convertible debt, net of fees, less payment on non-convertible debt of \$952,501. Related parties also lent us \$102,100 in short-term non-convertible loans of which we repaid \$52,100 back. The cash from financing activities in the period ending June 30, 2017 included \$1,610,000 from our Revolving Note and \$140,215 from warrant exercises. We also received \$1,987,752 from non-convertible debt, net of fees, less payment on non-convertible debt of \$478,141 and payment on convertible debt of \$840,541.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

This Item 3 is not applicable to us as a smaller reporting company and has been omitted.

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 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, 2018, we carried out an evaluation, under the supervision and with the participation of our management, including our Principal Executive Officer and Principal Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934. Based upon that evaluation, our Principal Executive Officer and Principal Financial Officer concluded that our disclosure controls and procedures were not effective.

Our conclusion that our disclosure controls and procedures were not effective as of June 30, 2018 is due to the continued presence of the material weaknesses in our internal control over financial reporting identified in our Annual Report on Form 10-K for the year ended December 31, 2017. These material weaknesses are the following:

- We identified a lack of sufficient segregation of duties. Specifically, this material weakness is such that the design over these areas relies primarily on detective controls and could be strengthened by adding preventative controls to properly safeguard Company assets.
- Management has identified a lack of sufficient personnel in the accounting function due to our limited resources with appropriate skills, training and experience to perform the review processes to ensure the complete and proper application of generally accepted accounting principles, particularly as it relates to valuation of warrants and other complex debt /equity transactions. Specifically, this material weakness resulted in audit adjustments to the annual consolidated financial statements and revisions to related disclosures, valuation of warrants and other equity transactions.
- Limited policies and procedures that cover recording and reporting of financial transactions.
- Lack of multiple levels of review over the financial reporting process

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

- Improve the effectiveness of the accounting group by augmenting our existing resources with additional consultants or employees to assist in the analysis and recording of complex accounting transactions, and to simultaneously achieve desired organizational structuring for improved segregation of duties. We plan to mitigate this identified deficiency by hiring an independent consultant once we generate significantly more revenue or raise significant additional working capital.
- Improve expert review and achieve desired segregation procedures by strengthening cross approval of various functions including quarterly internal audit procedures where appropriate.

During the period covered by this Report, we implemented and performed additional substantive procedures, such as supervisory review of work papers and consistent use of financial models used in equity valuations, to ensure our consolidated financial statements as of and for the three-month period ended June 30, 2018, are fairly stated in all material respects in accordance with GAAP. We have not, however, been able to fully remediate the material weaknesses due to our limited financial resources. Our remediation efforts are largely dependent upon our securing additional financing to cover the costs of implementing the changes required. If we are unsuccessful in securing such funds, remediation efforts may be adversely affected in a material manner.

Except as described above, there have been no changes in our internal controls over financial reporting that occurred during the period ended June 30, 2018 that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

We are not currently involved in any litigation that we believe could have a material adverse effect on our financial condition or results of operations. We may, however, from time to time, be named as a defendant or are a plaintiff in various legal actions that arise in the normal course of business. There is no action, suit, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the executive officers of our company or any of our subsidiaries, threatened against or affecting our company, our common stock, any of our subsidiaries or of our companies or our subsidiaries' officers or directors in their capacities as such, in which an adverse decision could have a material adverse effect.

Item 1A. 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, 2017. 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 the Company. If any of the risks actually occur, our business, results of operations, cash flows or financial condition could suffer.

There have been no material changes to the risk factors set forth in Item 1 of our Annual Report on Form 10-K for the year ended December 31, 2017.

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

Except where noted, all the securities discussed in this Part II, Item 2 were issued in reliance on the exemption under Section 4(a)(2) of the Securities Act. This Part II, Item 2 does not discuss issuances previously disclosed in Form 8-Ks filed by the Company.

On April 2, 2018, we issued 1,150 shares of restricted common stock with a fair value of \$5,183 to the lender in connection with the March 12, 2018 5% one-year, convertible loan of \$85,000. The fair value of the stock was recorded as a debt discount to be amortized over the one-year term.

On April 12, 2018, we received a 15% six-month, convertible loan of \$100,000 from an accredited investor. The loan includes total costs of \$24,000 representing guaranteed interest, an original issue discount and legal fees. The loan can be converted at any time into common stock at a conversion price of \$7.50. We agreed to issue the investor 2,000 shares of restricted common stock with a fair value of \$7,218 recorded as a debt discount to be amortized over the six-month term.

On April 25, 2018, we received a 4% one-year, convertible loan of \$105,000 from an accredited investor. The note is convertible on issuance date at \$7.50 per share and after 180 days to be 60% of the lowest trading price for the common stock during the 20-trading day period prior to conversion. The loan includes \$5,000 in fees. We agreed to issue the investor 1,200 shares of restricted common stock.

On April 25, 2018, we received another 4% one-year, convertible loan of \$105,000 from an accredited investor. The note is convertible on issuance date at \$7.50 per share and after 180 days to be 60% of the lowest trading price for the common stock during the 20-trading day period prior to conversion. The loan includes \$5,000 in fees. We agreed to issue the investor 1,200 shares of restricted common stock.

On May 2, 2018, the Company entered into a Securities Purchase Agreement with an existing shareholder pursuant to which the Company sold an aggregate of 100 shares of Series AA Convertible Preferred Stock for an aggregate Purchase Price of \$250,000. We issued to the shareholder a new warrant to purchase 100,000 shares of common stock with an exercise price of \$3.50 per share.

On May 9, 2018, we received a 10% six-month, convertible loan of \$250,000 from an accredited investor. The loan includes total costs of \$62,500 representing guaranteed interest, an original issue discount and legal fees. The loan can be converted at any time into common stock at a conversion price of \$7.50. We agreed to issue the investor 8,000 shares of restricted common stock with a fair value of \$26,466 recorded as a debt discount to be amortized over the six-month term.

On May 14, 2018, we received a 15% nine-month, convertible loan of \$50,000 from an accredited investor. The loan includes total costs of \$12,500 representing guaranteed interest, an original issue discount and legal fees. The loan can be converted at any time into common stock at a conversion price of \$7.50. We agreed to issue the investor 1,000 shares of restricted common stock with a fair value of \$3,704 recorded as a debt discount to be amortized over the nine-month term.

On May 24, 2018, we received a 4% one-year, convertible loan of \$50,000 from an accredited investor. The loan includes an original issue discount of \$2,500. The note is convertible on issuance date at \$7.50 per share and after 180 days to be 60% of the lowest trading price for the common stock during the 20-trading day period prior to conversion. We agreed to issue the investor 600 shares of restricted common stock with a fair value of \$2,075 recorded as a debt discount to be amortized over the one-year term.

On May 25, 2018, we received a 4% one-year, convertible loan of \$75,000 from an accredited investor. The loan includes legal fees of \$3,750. The note is convertible on issuance date at \$7.50 per share and after 180 days to be 60% of the lowest trading price for the common stock during the 20-trading day period prior to conversion. We agreed to issue the investor 900 shares of restricted common stock with a fair value of \$3,112 recorded as a debt discount to be amortized over the one-year term.

On May 30, 2018, we received an 8% two-month, convertible loan of \$150,000 from an accredited investor. The loan includes guaranteed interest of \$12,000. The loan can be converted at any time into common stock at a conversion price of \$7.50. We agreed to issue the investor 2,000 shares of restricted common stock with a fair value of \$6,870 recorded as a debt discount to be amortized over the two-month term.

On June 1, 2018, the Company entered into a Securities Purchase Agreement with accredited investors pursuant to which the Company sold an aggregate of 20 shares of Series AA Convertible Preferred Stock for an aggregate Purchase Price of \$50,000. We issued to the shareholders a new warrant to purchase 20,000 shares of common stock with an exercise price of \$3.50 per share.

On June 4, 2018, we received a 5% one-year, convertible loan of \$75,000 from an accredited investor. The loan includes total costs of \$9,500 representing an original issue discount and legal fees. The note is convertible after 180 days to be 60% of the lowest trading price for the common stock during the 20-trading day period prior to conversion. We agreed to issue the investor 1,360 shares of restricted common stock with a fair value of \$3,869 recorded as a debt discount to be amortized over the one-year term.

On June 8, 2018, we received a 15% 6-month, convertible loan of \$50,000 from an accredited investor. The loan includes total costs of \$12,500 representing guaranteed interest, an original issue discount and legal fees. The loan can be converted at any time into common stock at a conversion price of \$7.50. We agreed to issue the investor 1,000 shares of restricted common stock with a fair value of \$3,271 recorded as a debt discount to be amortized over the 6-month term.

On June 11, 2018, we agreed to issue 110,833 additional shares of common stock at \$2.50 per share. The fair value was recorded as an other charge of \$340,257. We also issued 110,833 additional warrants with an exercise price of \$3.50 and an expiration period of five years from the original issue date. The fair value was recorded as other charges of \$312,637.

On June 14, 2018, we received a 10% nine-month, convertible loan of \$280,000 from an accredited investor. The loan includes total costs of \$30,000 representing an original issue discount and legal fees. The note is convertible after 180 days to be 65% of the average of the two lowest trading prices for the common stock during the 20-trading day period prior to conversion. We agreed to issue the investor 5,000 shares of restricted common stock with a fair value of \$17,573 recorded as a debt discount to be amortized over the nine-month term.

On June 26, 2018, we received a 5% 3-month, convertible loan of \$150,000 from an accredited investor. The loan includes total costs of \$7,500 representing guaranteed interest. The loan can be converted at any time into common stock at a conversion price of \$7.50. We agreed to issue the investor 2,000 shares monthly over 3 months for a total of 6,000 shares of restricted common stock with a fair value of \$20,242 that was recorded as a debt discount to be amortized over the 3-month term.

On June 28, 2018, we received a 5% 6-month, convertible loan of \$50,000 from an accredited investor. The loan includes \$2,500 monthly guaranteed interest. The loan can be converted at any time into common stock at a conversion price of \$7.50. We agreed to issue the investor 667 shares monthly over the 6-month term for a total of 4,000 shares of restricted common stock with a fair value of \$10,518 that was recorded as a debt discount to be amortized over the 6-month term.

On various dates for the six months ended June 30, 2018, the Company issued 25,243 shares of common stock based on the 10-day VWAP prior to quarter end to holders of the Debentures in payment of the quarterly interest accrued from the Debentures first anniversary date through December 31, 2017 for an aggregate amount of \$95,121. We recognized a \$5,101 gain on extinguishment of debt by calculating the difference of the shares valued on the issuance date and the amount of accrued interest through December 31, 2017.

Item 3. Defaults upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibits

- 3.1 [Certificate of Designation of Series AA Convertible Preferred Stock, filed May 1, 2018 \(incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K with the United States Securities and Exchange Commission on May 15, 2018\).](#)
- 4.1 [Form of Warrant issued in connection with the debt conversion \(incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on Form 8-K with the United States Securities and Exchange Commission on June 15, 2018\).](#)
- 4.2 [Form of Warrant issued in connection with August 2015 Private Placement Offering \(incorporated herein by reference to Exhibit 4.2 of the Company's Current Report filed on Form 8-K with the United States Securities and Exchange Commission on July 28, 2015\).](#)
- 4.3 [Form of Warrant issued in connection with the Line of Credit \(incorporated herein by reference to Exhibit 4.1 of the Company's Current Report filed on Form 8-K with the United States Securities and Exchange Commission on November 3, 2016\).](#)
- 10.1 [Form of Letter Agreement to Convert May 2017 Promissory Note \(incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on Form 8-K with the United States Securities and Exchange Commission on June 15, 2018\).](#)
- 10.2 [Form of Letter Agreement to Convert Debentures \(incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on Form 8-K with the United States Securities and Exchange Commission on June 15, 2018\).](#)
- 10.3 [Form of Letter Agreement to Convert Line of Credit \(incorporated herein by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on Form 8-K with the United States Securities and Exchange Commission on June 15, 2018\).](#)
- 31.1* [Principal Executive Officer Certification Pursuant to Item 601\(b\)\(31\) of Regulation S-K, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.](#)
- 31.2* [Principal Financial Officer Certification Pursuant to Item 601\(b\)\(31\) of Regulation S-K, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.](#)
- 32.1** [Principal Executive 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.](#)
- 32.2** [Principal Financial Officer Certification Pursuant to Item 601\(b\)\(32\) of Regulation S-K, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.](#)
- 101.INS* XBRL Instance Document
- 101.SCH* XBRL Taxonomy Extension Schema Document
- 101.CAL* XBRL Taxonomy Extension Calculation Linkbase Document
- 101.DEF* XBRL Taxonomy Extension Definition Linkbase Document
- 101.LAB* XBRL Taxonomy Extension Label Linkbase Document
- 101.PRE* XBRL Taxonomy Extension Presentation Linkbase Document

* Filed herewith.

** In accordance with SEC Release 33-8238, Exhibits 32.1 and 32.2 are furnished and not filed.

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 14, 2018

By: /s/ Richard T. Schumacher

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

Date: August 14, 2018

By: /s/ Joseph L. Damasio, Jr.

Joseph L. Damasio, Jr.
Vice President of Finance & Chief Financial Officer
(Principal Financial Officer)

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

I, Richard T. Schumacher, certify that:

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

Dated: August 14, 2018

/s/ Richard T. Schumacher

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

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

I, Joseph L. Damasio, Jr., certify that:

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

Dated: August 14, 2018

/s/ Joseph L. Damasio, Jr.

Joseph L. Damasio, Jr.
Vice President of Finance & Chief Financial Officer
(Principal Financial Officer)

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

In connection with the Quarterly Report on Form 10-Q of Pressure BioSciences, Inc., a Massachusetts corporation (the "Company") for the period ended June 30, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Richard T. Schumacher, President and Chief Executive Officer of the Company, do hereby certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code) that:

- (1) The Report of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 14, 2018

By: */s/ Richard T. Schumacher*

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

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

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

In connection with the Quarterly Report on Form 10-Q of Pressure BioSciences, Inc., a Massachusetts corporation (the "Company") for the period ended June 30, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Joseph L. Damasio, Jr., Principal Financial Officer of the Company, do hereby certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code) that:

- (1) The Report of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 14, 2018

By: /s/ Joseph L. Damasio, Jr.

Joseph L. Damasio, Jr.
Vice President & Chief Financial Officer
(Principal Financial Officer)

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