UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2018

| 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 04-2652826 (State or other jurisdiction of (I.R.S. Employer incorporation or organization) Identification No.) 14 Norfolk Avenue South Easton, Massachusetts 02375 (Address of principal executive offices) (Zip Code) (508) 230-1828 (Registrant's telephone number, including area code) Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. [X] 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). [X] Yes [] No Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one): Large accelerated filer [] Accelerated filer Non-accelerated Smaller reporting company Emerging growth filer [] company [] (Do not check if a smaller reporting 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 [X] No

The number of shares outstanding of the Issuer's common stock as of May 11, 2018 was 1,392,560.

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PART I - FINANCIAL INFORMATION

Item 1. Financial Statements

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

	March 31, 2018	December 31, 2017
ASSETS		
CURRENT ASSETS	\$ 81.162	¢ 91.022
Cash and cash equivalents Accounts receivable	\$ 81,162 322,584	\$ 81,033 206,848
Inventories, net of \$159,650 reserve at March 31, 2018 and \$179,600 at December	322,364	200,646
31, 2017	892,407	857,662
Prepaid expenses and other current assets	199,272	222,158
Total current assets	1,495,425	1,367,701
Intangible assets, net of amortization of \$21,635 and \$0, respectively	728,365	750,000
Investment in available-for-sale equity securities	15,095	19,825
Property and equipment, net	20,798	22,662
TOTAL ASSETS	\$ 2,259,683	\$ 2,160,188
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LIABILITIES AND STOCKHOLDERS' DEFICIT		
CURRENT LIABILITIES Accounts payable	\$ 641,086	\$ 589,263
Accrued employee compensation	353,032	368,700
Accrued employee compensation Accrued professional fees and other	796,487	800,620
Other current liabilities	2,003,603	1,536,507
Deferred revenue	235,311	263,106
Revolving note payable	4,000,000	3,500,000
Related party debt, net of debt discount of \$7,151 and \$0, respectively	42,849	-
Related party convertible debt, net of debt discount of \$34,973 and \$31,372,		
respectively	256,161	259,762
Convertible debt, net of unamortized debt discounts of \$327,170 and \$401,856,		
respectively	8,914,450	8,028,014
Other debt, net of unamortized discounts of \$30,175 and \$48,194, respectively	1,448,673	1,379,863
Total current liabilities	18,691,652	16,725,835
LONG TERM LIABILITIES	40.505	55 4.40
Deferred revenue	49,537	57,149
TOTAL LIABILITIES	18,741,189	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 March 31, 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 March 31, 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 March 31, 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 March 31, 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 March 31, 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 March 31, 2018 and December 31, 2017,		
respectively	68	68
Series AA Convertible Preferred Stock, \$.01 par value; 10,000 shares authorized; 0		
shares issued and outstanding on March 31, 2018 and December 31, 2017,		
respectively	-	-
Common stock, \$.01 par value; 100,000,000 shares authorized; 1,388,214 and		
1,342,858 shares issued and outstanding on March 31, 2018 and December 31, 2017,		
respectively	13,882	13,429
Warrants to acquire common stock	9,996,929	9,878,513
Additional paid-in capital Accumulated deficit	31,087,624	30,833,549
Accommutated deficit	(57,580,953)	(55,349,299)

(16,481,506) 2,259,683 \$ \(\frac{14.622.796}{2,160,188}\)

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

	March,			
		2018		2017
Revenue:				
Products, services, other	\$	585,244	\$	525,998
Grant revenue		25,530		25,359
Total revenue		610,774		551,357
Costs and expenses:				
Cost of products and services		324,789		235,997
Research and development		324,976		263,456
Selling and marketing		274,468		213,009
General and administrative		794,605		837,998
Total operating costs and expenses		1,718,838		1,550,460
Operating loss		(1,108,064)		(999,103)
Other (expense) income:				
Interest expense, net		(1,123,145)		(1,240,373)
Other expense		-		(959)
Impairment loss on investment		(4,730)		(6,069)
Gain on extinguishment of debt		4,285		
Total other expense	_	(1,123,590)		(1,247,401)
Net loss		(2,231,654)		(2,246,504)
Net loss per share – basic and diluted	\$	(1.64)	\$	(2.16)
Weighted average common stock shares outstanding used in the basic and diluted net loss per share calculation		1,363,326		1,040,769
The accompanying notes are an integral part of these unaudited consolidate	d finan	cial statements		
4				

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

For the Three Months Ended March 31,

		March 31,		
		2018		2017
CASH FLOWS FROM OPERATING ACTIVITIES:				
Net loss	\$	(2,231,654)	\$	(2,246,504)
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		23,499		2,450
Accretion of interest and amortization of debt discount		459,232		1,021,630
Inventory reserve recovery		(19,950)		-
Gain on extinguishment of debt		(4,285)		-
Stock-based compensation expense		86,020		74,529
Amortization of third party fees paid in common stock and warrants		-		15,558
Shares issued with debt		7,800		-
Impairment loss on investment		4,730		6,069
Changes in operating assets and liabilities:				
Accounts receivable		(115,736)		(237,407)
Inventories		(14,795)		(35,099)
Prepaid expenses and other assets		22,886		50,358
Accounts payable		51,823		265,480
Accrued employee compensation		(15,668)		443
Deferred revenue and other accrued expenses		440,096		(92,917)
Net cash used in operating activities		(1,277,512)		(1,165,410)
CACH ELONG EROM DIVERTING A CENTIFIE				
CASH FLOWS FROM INVESTING ACTIVITIES:				(4 -
Purchases of property plant and equipment		-		(15,608)
Net cash used in investing activities		<u>-</u>		(15,608)
CASH FLOWS FROM FINANCING ACTIVITIES:				
Net proceeds from revolving note payable		460,000		920,000
Net proceeds from convertible debt		819,350		-
Net proceeds from non-convertible debt – third party		298,600		773,000
Net proceeds from non-convertible debt – related party		50,000		-
Payments on convertible debt		(102,500)		(300,000)
Payments on non-convertible debt		(247,809)		(228,907)
Net cash provided by financing activities		1,277,641		1,164,093
Not easily provided by Imaheing activities	_	1,277,041	_	1,104,073
NET DECREASE IN CASH		129		(16,925)
CASH AT BEGINNING OF YEAR		81,033		138,363
CASH AT END OF PERIOD	\$	81,162	\$	121,438
	Ψ	01,102	Ψ	121,.00
SUPPLEMENTAL INFORMATION				
Interest paid in cash	\$	120,970	\$	62,802
NON CASH TRANSACTIONS:	Ψ	120,570	Ψ	02,002
Common stock issued in lieu of cash for interest		80,755		287,920
Common stock issued with debt		51,463		125,443
Discount from warrants issued with convertible debt		118,416		123,443
Discount from one-time interest		72,500		100,000
Reclassification of derivative liabilities to equity and cumulative effect of adoption of ASU		72,500		100,000
2017-11		-		1,712,699

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

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARY NOTES TO CONSOLIDATED FINANCIAL STATEMENTS MARCH 31, 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 three months ended March 31, 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 March 31, 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 March 31, 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 ended March 31, 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 December 15, 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 December 15, 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.

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 in 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 Barocycler®s 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:

- The fair value of the asset or service involved is not determinable.
- 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.
- 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 Barocycler® instrument. The depreciation expense associated with assets under lease agreement is included in the "Cost of PCT products and services" line item in our 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.

In thousands of US dollars (\$)

Primary geographical markets	Q1 2018	Q1 2017
North America	365	326
Europe	155	157
Europe Asia	91	68
	611	551
		0

Major products/services lines	Q1 2018	Q1 2017
Instruments	420	396
Grants	25	25
Consumables	75	63
Others	91	67
	611	551
Timing of revenue recognition	Q1 2018	Q1 2017
Products transferred at a point in time	576	514
Products and services transferred over time	35	37
	611	551

Contract balances

In thousands of US dollars (\$)	March 31, 2018	December 31, 2017
Receivables, which are included in 'Accounts Receivable'	323	207
Contract liabilities (deferred revenue)	285	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.

In thousands of US dollars (\$)	2018	2019	2020	Total
Extended warranty service	235	50		285

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 ended March 31, 2018 and 2017. The Top Five Customers category may include federal agency revenues if applicable.

		For the Three Months Ended March 31,		
	2018	2017		
Top Five Customers	40%	61%		
Federal Agencies	4%	5%		

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

	March 31, 2018	December, 31, 2017
Top Five Customers	75%	85%
Federal Agencies	1%	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 March 31, 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 March 31, 2018, our consolidated balance sheet reflected the fair value of our investment in Everest to be approximately \$15,000, based on the closing price of Everest shares of \$0.15 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 \$4,730 as an impairment loss in the first quarter 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 ended March 31, 2018 and 2017:

		For the Three Months Ended			
		March 31,			
	·	2018		2017	
Numerator:					
Net loss	\$	(2,231,654)	\$	(2,246,504)	
Denominator for basic and diluted loss per share:					
Weighted average common stock shares outstanding		1,363,326		1,040,769	
Loss per common share – basic and diluted	\$	(1.64)	\$	(2.16)	
	1	2			

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 and 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 M	arch 31,
	2018	2017
Stock options	247,136	260,475
Convertible debt	1,020,603	868,910
Common stock warrants	928,541	846,640
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
	2,696,072	2,477,783

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 \$86,020 and \$74,529 for the three months ended March 31, 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	Mon	ths Ended
	 Marc	h 31	,
	2018		2017
Research and development	\$ 15,499	\$	15,970
Selling and marketing	7,197		10,886
General and administrative	 63,324		47,673
Total stock-based compensation expense	\$ 86,020	\$	74,529

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.

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.

The Company generally defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price). The Company uses a three-tier fair value hierarchy, which classifies the inputs used in measuring fair values. These tiers include: Level 1, defined as observable inputs such as quoted prices for identical instruments in active markets; Level 2, defined as inputs other than quoted prices in active markets that are either directly or indirectly observable; and Level 3, defined as unobservable inputs in which little or no market data exists, therefore requiring the Company to develop its own assumptions. A slight change in an unobservable input like volatility could have a significant impact on the fair value measurement of the derivative liability.

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:

	Convertible debt, current portion	d	onvertible ebt, long term portion	Warrant Derivative Liability	onversion Option Liability	Warrants to acquire common stock	Additional Paid-in Capital	Accumulated deficit
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)	\$ 4,775,018	\$	683,894	\$ -	\$ _	\$8,961,338	\$28,990,276	\$ (44,633,738)

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 March 31, 2018:

			r value measuremei March 31, 2018 usir	
	March 31, 2018	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Available-For-Sale Equity Securities	15,095	15,095	-	-
Total Financial Assets	\$ 15,095	\$ 15,095	\$ -	\$ -

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:

		Fair value measurements at December 31, 2017 using:						
	December 3	31, 2017	Quoted prices Significant in other Significal unobserva markets inputs inputs (Level 1) (Level 2) (Level 3					
Available-For-Sale Equity Securities	<u> </u>	19,825		19,825				
Total Financial Assets	\$	19,825	\$	19,825	\$ -	\$ -		
	1:	5						

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 three months ended March 31, 2018 and 2017 we incurred \$46,723 and \$30,896 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 March 31, 2018:

2018	\$ 124,765
2019	82,953
2020	82,953
2021	-
Thereafter	-
	\$ 290,671

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

Senior Secured Convertible Debentures and Warrants

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

The Company issued a principal aggregate amount of \$6,962,504 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.

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.

ASC 470-20 states that the proceeds from the issuance of debt with detachable stock warrants should be allocated between the debt and warrants based on their relative fair market values. The debt discount will be amortized to interest expense over the two-year term of these loans. For the three months ended March 31, 2018, the Company recognized amortization expense related to the Debenture discounts of \$129,768.

On various dates for the three months ended March 31, 2018, the Company issued 22,606 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 \$85,040. We recognized a \$4,285 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.

At any time after the Issuance Date, the Company has the option, subject to certain conditions, to redeem some or all of the then outstanding principal amount of the Debenture for cash in an amount equal to the sum of (i) 120% of the then outstanding principal amount of the Debenture, (ii) accrued but unpaid interest and (iii) any liquidated damages and other amounts due in respect of the Debenture.

On September 11, 2017, we notified Debenture holders that their Debentures will be extended 180 days beyond the original maturity date as permitted in the Debenture agreement. We will continue to pay interest on the Debentures until the extended maturity date. We accounted for the Debenture extensions as debt modifications and not extinguishment of debt since the changes in fair value are not substantial in accordance with ASC 470-50. We started amortizing the remaining unamortized discount as of September 11, 2017 over the new term, which extends 180 days beyond the original maturity date. We continue to pay interest on the Debentures that matured 180 days beyond the maturity date. For the three months ended March 31, 2018, the Company recognized amortization expense related to the convertible debt discounts indicated above of \$129,768.

Other convertible notes

On various dates during the quarter ended March 31, 2018, the Company issued convertible notes for net proceeds of \$819,350 with the following terms: a) maturity ranging from 3 to 12 months; b) annual interest rates 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 or warrants which were fair valued at issuance dates. The aggregate relative fair value of \$51,463 of the shares or warrants 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 March 31, 2018.

The specific terms of the convertible notes and outstanding balances as of March 31, 2018 are listed in the tables below.

Convertible Notes

Data	Inception Date	Term	Loan Amount	Outstanding Balance	Original Issue Discount	Interest Rate	(Co	nversion Price onvertible Inception Date)	Deferred Finance Fees	rela co fe	Discount ated to fair value of onversion ature and rants/shares
September 25, 2015 30 months 1,210,000 1,210,000 10,0002 10% \$ \$ 8.40 185,956 1,022,052 October 2, 2015 30 months 165,000 165,000 15,0002 10% \$ \$ 8.40 26,345 140,832 October 1, 2015 30 months 33,000 33,000 10% \$ \$ 8.40 43,079 222,723 November 2, 2015 30 months 55,000 55,000 25,0002 10% \$ \$ 8.40 43,079 222,723 November 10, 2015 30 months 275,000 25,0002 10% \$ \$ 8.40 43,079 222,723 November 10, 2015 30 months 25,000 55,000 21,5002 10% \$ \$ 8.40 8,790 46,984 November 10, 2015 30 months 20,000 220,000 20,0002 10% \$ \$ 8.40 38,518 212,399 November 20, 2015 30 months 220,000 220,000 20,0002 10% \$ \$ 8.40 37,185 200,000 December 4, 2015 30 months 187,000 187,000 17,0002 10% \$ \$ 8.40 37,185 200,000 December 11, 2015 30 months 187,000 187,000 17,0002 10% \$ \$ 8.40 37,185 200,000 December 13, 2015 30 months 10,000 10,0002 10% \$ \$ 8.40 37,185 200,000 December 14, 2015 30 months 10,000 10,0002 10% \$ \$ 8.40 43,775 449 360,000 December 13, 2015 30 months 10,000 110,000 10,0002 10% \$ \$ 8.40 11,714 55,000 December 14, 2016 30 months 110,000 110,000 10,0002 10% \$ \$ 8.40 20,634 100,000 December 14, 2016 30 months 155,000 55,000 10% \$ \$ 8.40 24,966 80,034 Danuary 20, 2016 30 months 35,000 30,000 10% \$ \$ 8.40 43,952 156,048 Danuary 20, 2016 30 months 35,000 30,000 10% \$ \$ 8.40 43,952 156,048 Danuary 20, 2016 30 months 17,334 1											_
October 2, 2015 30 months! 165,000 165,000 15,0002 10%3 \$ 8.40 26,345 140,832 October 14, 2015 30 months! 33,000 35,000 3,0002 10%3 \$ 8.40 8,954 49,377 November 2, 2015 30 months! 275,000 25,0002 10%3 \$ 8.40 43,079 222,723 November 10, 2015 30 months! 255,000 5,0002 10%3 \$ 8.40 43,079 222,723 November 12, 2015 30 months! 236,500 236,500 21,5002 10%3 \$ 8.40 35,518 212,399 November 20, 2015 30 months! 236,500 21,5002 10%3 \$ 8.40 37,185 200,000 December 13, 2015 30 months! 187,000 17,0002 10%3 \$ 8.40 37,185 200,000 December 14, 2015 30 months! 110,000 190,000 10%3 \$ 8.40 17,144 55,000 Decembe	-								,	φ	
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November 20, 2015 30 months! 220,000 220,000 20,0002 10%3 \$ 8.40 37,185 200,000 December 4, 2015 30 months! 187,000 187,000 17,0002 10%3 \$ 8.40 37,352 170,000 December 11, 2015 30 months! 396,000 366,000 366,000 10%3 \$ 8.40 75,449 360,000 December 18, 2015 30 months! 10,000 110,000 10,0002 10%3 \$ 8.40 11,714 55,000 December 31, 2015 30 months! 110,000 110,000 10,0002 10%3 \$ 8.40 24,966 80,034 January 21, 2016 30 months! 35,000 55,000 5,0002 10%3 \$ 8.40 24,966 80,034 January 20, 2016 30 months! 330,000 330,000 10%3 \$ 8.40 60,887 239,113 February 26, 2016 30 months! 220,000 220,000 20,0002 10%3 \$ 8.40 43,952 156,048 March 10, 2016 30 months! 37,500 37,500 12,5002 10%3 \$ 8.40 43,952 156,048 March 18, 2016 30 months! 37,500 37,500 12,5002 10%3 \$ 8.40 94,992 265,008 March 24, 2016 30 months! 396,000 396,000 36,0002 10%3 \$ 8.40 94,992 265,008 March 24, 2016 30 months! 117,334 117,334 10,6672 10%3 \$ 8.40 15,427 91,240 March 31, 2016 30 months! 195,670 195,670 17,7882 10%3 \$ 8.40 15,427 91,240 March 31, 2016 30 months! 103,000 100,000 - 12% - 3,000 October 25, 2017 6 months 150,000 150,000 - 5% \$ 7.50 7.500 - 6,000 October 25, 2017 6 months 100,000 100,000 10,000 12% - 2,000 - 2,	November 10, 2015	30 months1	55,000	55,000	5,0002	10% ³	\$	8.40	8,790		46,984
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March 12, 2018 6 months 253,000 253,000 53,000 0% - 28,722	3 /				1,150		-				-
			253,000					-			28,722
									\$1,265,858	\$	

^{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 July 22, 2015 Debentures of \$3,773,000 is currently past due as of March 19, 2018. The affected Debenture holders signed letter agreements on May 15, 2018 to waive default penalties relating to the maturity date.

As of March 31, 2018, a total of approximately \$291,000 convertible debentures were purchased by related parties who were members of the Company's Board of Directors and management and their family members.

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 three months ended March 31, 2018, the Company recognized amortization expense related to the convertible debt discounts indicated above of \$425,864. The unamortized debt discounts as of March 31, 2018 related to the convertible debentures and other convertible notes amounted to \$362,143.

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

^{3.} The annual interest started accruing in the second year.

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 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 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 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.

In the event that a Qualified Offering had not 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 shall pay a cash fee equal to five percent (5%) of the total outstanding amount owed by the Company to the Holder 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 Maturity Date divided by (y) the VWAP of the Company's common stock for the last ten trading days preceding the Maturity Date. 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.

The Revolving Note was still outstanding as of March 31, 2018 and is currently past due. We continue to accrue interest on the note based on the default rate of 20% and drew down an additional \$500,000 during the first quarter of 2018 in connection with the amendment on January 30, 2018.

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

	2018
Balance at January 1,	\$ 11,787,776
Issuance of convertible debt, face value	1,414,250
	(134,900)
Deferred financing cost	
Debt discount related to one-time interest charge	(50,000)
Debt discount from warrants issued with debt	(118,416)
Debt discount from shares and warrants issued with the notes	(51,463)
Payments	(102,500)

Assistion of debt discount to interest expense through March 31,	13,476,864
Less: current portion	13,170,611
Convertible debt, long-term portion	\$ _
10	

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.

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 March 31, 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. We fully amortized \$52,079 of the debt discount in the year ended December 31, 2017.

On May 19, 2017, we received a 45-day non-convertible loan of \$630,000 from a private investor. The loan provides guaranteed interest of \$63,000 and has an origination fee of \$32,000. We paid a broker \$31,500 in connection with this loan. The unamortized debt discount as of December 31, 2017 was zero. We used these proceeds to pay off in full our September 2016 loan of \$589,189. The loan remains outstanding and is currently past due. We continue to accrue interest at the 20% default rate from the maturity date.

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 March 31, 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 \$12,527 of debt discounts in the quarter ended March 31, 2018. The unamortized debt discount as of March 31, 2018 was \$10,161. 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 outstanding balance was \$168,750 as of March 31, 2018.

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 March 31, 2018.

	Purchase	Purchased	Outstanding	Daily	Interest	Deferred
Inception Date	Price	Amount	Balance	Payment	Rate	Finance Fees
September 29, 2017	75,000	102,000	\$ -	1,200.00	15%	1,500
October 25, 2017	110,000	153,890	(7,705)	1,539.00	15%	8,800
December 7, 2017	160,000	212,800	118,918	1,251.76	25%	5,799
December 12, 2017	160,000	212,800	122,674	1,251.76	15%	5,258
February 27, 2018	110,000	147,400	126,211	921.25	25%	1,650
	\$ 615,000	\$ 828,890	\$ 360,098			\$ 23,007

We amortized \$33,368 and \$40,802 of debt discounts during the three months ended March 31, 2018 and 2017, respectively for all non-convertible notes. The total unamortized discount for all non-convertible notes as of March 31, 2018 was \$37,326.

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 outstanding as of March 31, 2018 and includes \$7,500 guaranteed interest that was recorded as debt discount and amortized over the term of the debt.

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 on May 1, 2018 as Series AA Convertible Preferred Stock ("Series AA")

As of March 31, 2018, there were no shares of Junior A, and Series A, B, C, E and AA 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.

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 March 31, 2018, options to acquire 35,274 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 March 31, 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 March 31, 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 Weighted Average			Warr Weig Aver	hted			Total
	Shares		Price er share	Shares		Price er share	Shares	Exercisable
Balance outstanding, 12/31/17	247,692	\$	10.95	899,542	\$	12.03	1,147,234	1,073,850
Granted			-	41,667		12.00	41,667	
Exercised	-		-	-		-	-	
Expired	-		-	(12,668)		12.00	(12,668)	
Forfeited	(556)		8.40	-		-	(556)	
Balance outstanding, 3/31/2018	247,136	\$ 10.95		928,541	\$	12.03	1,175,677	1,118,186
			21					

			options Outstanding	Options Exercisable				
			Weighted Average			Teighted AverageRemaining Contractual Life (Years)Exercise Price7.6 7.48.73 12.00		
			Remaining			Remaining		
	Range of	Number of	Contractual	Exercise	Number of	Contractual]	Exercise
I	Exercise Prices	Options	Life (Years)	Price	Options	Life (Years)		Price
\$	7.50 - \$11.99	133,024	8.0	\$ 8.63	91,132	7.6	\$	8.73
	12.00 - 14.99	88,705	7.5	12.00	73,106	7.4		12.00
	15.00 - 17.99	7,547	4.4	15.00	7,547	4.4		15.00
	18.00 - 20.99	12,854	1.9	18.00	12,854	1.9		18.00
	21.00 - 30.00	5,006	2.4	30.00	5,006	2.4		30.00
\$	7.50 - \$30.00	247,136	7.3	\$ 10.95	189,645	6.9	\$	11.43

Ontions Exercisable

Ontions Outstanding

As of March 31, 2018, total unrecognized compensation cost related to the unvested stock-based awards was \$311,352, which is expected to be recognized over weighted average period of 1.53 years. The aggregate intrinsic value associated with the options outstanding and exercisable as of March 31, 2018 was zero. The aggregate intrinsic value associated with the warrants outstanding and exercisable as of March 31, 2018 was zero.

Common Stock Issuances

During the three months ended March 31, 2018, we issued to Debenture holders 22,606 shares of common stock for quarterly interest of \$85,040 issued in stock in lieu of cash. Of the 22,606 shares issued, 1,092 shares were issued to members of the Company's Board of Directors, who are also Debenture holders.

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 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 total fair value of \$28,490 relating to these stock issuances were recorded as interest expense as compensation for the loan extensions.

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.

8) Subsequent Events

On May 14, 2018, we entered into 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 \$6,390,634 in principal and original issue discount due them under the Debentures into 2,557 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 such number of shares of common stock as equal 100% of 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.

On May 14, 2018, we received a one-year, non-convertible loan of \$50,000 from a private investor.

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 units for an aggregate Purchase Price of \$250,000. The units purchased consists of shares of Series AA Convertible Preferred Stock. 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 April 2, 2018 and May 14, 2018, we paid approximately \$112,500 toward the outstanding balance on our September 12, 2017 9-month, non-convertible loan of \$225,000.

On May 11, 2018 we signed a Merchant Agreement with a lender. Under the agreement we received \$180,000, of which approximately \$82,000 was used to pay off the outstanding balance on a previous loan dated December 7, 2017 from this lender, in exchange for rights to all customer receipts until the lender is paid \$243,000, which is collected at the rate of \$1,518.75 per business day. The \$63,000 imputed interest will be recorded as interest expense when paid each day. Fees of \$2,600 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 loan under ASC 860 because while we provided rights to current and future receipts, we still had control over the receipts.

On May 11, 2018, we received a 5% one-year, convertible loan of \$161,250 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 an original discount of \$11,250 and \$10,000 in fees.

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 \$37,500 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 7, 2018, we paid off the entire outstanding balance on our October 27, 2017 5% one-year, convertible loan of \$170,000.

On April 30, 2018, we paid off the entire outstanding balance on our October 20, 2017 5% one-year, convertible loan of \$150,000.

On April 25, 2018, we received a 6% one-year, convertible loan of \$130,000 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 \$6,500 in fees.

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 April 23, 2018, we received a 12% nine-month, convertible loan of \$103,000 from an accredited investor. The proceeds were used to pay off the outstanding balance of \$103,000 on a previous loan dated October 25, 2017 from this lender. 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 April 23, 2018, we received a 12% one-year, convertible loan of \$77,000 from an accredited investor. The loan can be converted into common stock after 180 days at a conversion price of \$7.50. The loan includes \$2,000 in fees.

On April 23, 2018, we received a 5% one-year, convertible loan of \$65,000 from an accredited investor. The loan can be converted into common stock after 180 calendar days at 60% of the lowest trading price for the common stock during the 20-trading day period prior to conversion. The loan includes an original discount of \$6,500 and \$2,000 in fees.

On April 12, 2018, we paid off the December 6, 2017 convertible loan of \$100,000. The accredited investor also received \$5,000 for the one-month extension to April 5, 2018.

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 11, 2018 we signed a Merchant Agreement with a lender. Under the agreement we received \$140,000 in exchange for rights to all customer receipts until the lender is paid \$187,600, which is collected at the rate of \$1,275 per business day. The \$47,600 imputed interest will be recorded as interest expense when paid each day. 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 loan under ASC 860 because while we provided rights to current and future receipts, we still had control over the receipts.

On April 10, 2018, we received a one-year, non-convertible loan of \$10,000 from a private investor.

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.

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"). 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 March 31, 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 March 31, 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 an accomplishment in the first three months of 2018:

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.

Results of Operations

Comparison for the three months ended March 31, 2018 ("O1 2018") and 2017 ("O1 2017")

Total Revenue

We recognized total revenue of \$610,774 for Q1 2018 compared to \$551,357 for Q1 2017, an increase of \$59,417 or 11%. This increase was primarily attributable to increases in both instrument and consumable sales.

Products, Services, Other. Revenue from the sale of products and services increased 11% to \$585,244 for Q1 2018 compared to \$525,998 for the same period in 2017. Sales of consumables increased to \$74,698 for Q1 2018 compared to \$63,264 during the same period in 2017, an increase of 18%. Products, Services, and Other Revenue included \$19,950 from non-cash instrument transactions in the current quarter. Revenue from non-cash instrument transactions was recognized on the fair value of the assets involved per ASC 845.

Grant Revenue. During the three months ended March 31, 2018, we recorded grant revenue of \$25,530 compared to grant revenue of \$25,359 in the comparable period in 2017.

Cost of Products and Services

The cost of products and services was \$324,789 for the three months ended March 31, 2018 compared to \$235,997 for the comparable period in 2017. Gross profit margin on products and services decreased to 47% for Q1 2018 compared to 57% for the prior year period. The current period margin was affected by discounted sales to our foreign distributors and discounted sales to key customer partners.

Research and Development

Research and development expenditures were \$324,976 during the three months ended March 31, 2018 as compared to \$263,456 in the same period in 2017, an increase of \$61,520 or 23%. The current period expenses included costs relating to data research performed by collaboration partners.

Research and development expense recognized in the three months ended March 31, 2018 and 2017 included \$15,499 and \$15,970 of non-cash, stock-based compensation expense, respectively.

Selling and Marketing

Selling and marketing expenses increased to \$274,468 for the three months ended March 31, 2018 from \$213,009 for the comparable period in 2017, an increase of \$61,459 or 29%. This increase was primarily attributable to expansion of the company's sales force from one to four field sales directors during 2017, plus recruitment fees and business development efforts.

During the three months ended March 31, 2018 and 2017, selling and marketing expense included \$7,197 and \$10,886 of non-cash, stock-based compensation expense, respectively.

General and Administrative

General and administrative costs totaled \$794,605 for Q1 2018 compared to \$837,998 for the comparable period in 2017. This decrease included reduced use of investor and public relations offset by costs related to the hire of a chief financial officer and quarterly amortization of our BaroFold patent values.

During the three months ended March 31, 2018 and 2017, general and administrative expense included \$63,324 and \$47,673 of non-cash, stock-based compensation expense, respectively.

Operating Loss

Our operating loss was \$1,108,064 for the three months ended March 31, 2018 compared to \$999,103 for the comparable period in 2017. This increase was due primarily to the headcount increases in sales and marketing during 2017 and research collaboration costs incurred.

Other Income (Expense), Net

Interest (Expense) Income

Interest expense was \$1,123,145 for the three months ended March 31, 2018 compared to interest expense of \$1,240,373 for the three months ended March 31, 2017. Interest expense reflected amortization of debt discounts related primarily to the sale of senior secured convertible debentures and our Revolving Note (as defined in Note 6 of the accompanying consolidated financial statements). The decrease is primarily from the deferred finance charges fully amortized in 2017 on our Revolving Note.

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 March 31, 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 \$1.5 million in net proceeds from loans in the first three months 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 three months ended March 31, 2018 was \$1,277,512 as compared to \$1,165,410 for the three months ended March 31, 2017. We had a slightly higher operating loss in the current period because of the reasons previously detailed, plus additional interest expense.

Net cash used in investing activities for the three months ended March 31, 2018 was none compared to \$15,608 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 three months ended March 31, 2018 was \$1,277,641 as compared to \$1,164,093 for the same period in the prior year. The cash from financing activities in the period ended March 31, 2018 included \$460,000 from our Revolving Note and \$819,350 from convertible debt, net of fees and less payment on convertible debt of \$102,500. We also received \$348,600 from non-convertible debt, net of fees, less payment on non-convertible debt of \$247,809. The prior period included \$920,000 from our Revolving Note. We also received \$773,000 from non-convertible debt, net of fees, less payment on non-convertible debt of \$228,907.

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 March 31, 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 March 31, 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 March 31, 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 March 31, 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. 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.

For the three months ended March 31, 2018, we received \$500,000 pursuant to the Revolving Note as amended and we issued to the Investor warrants to purchase 41,667 shares of our Common Stock at an exercise price per share equal to \$12.00 per share.

During the three months ended March 31, 2018, we issued to Debenture holders 22,606 shares of common stock for quarterly interest of \$85,040 issued in stock in lieu of cash. Of the 22,606 shares issued, 1,092 shares were issued to members of the Company's Board of Directors, who are also Debenture holders.

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.

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.

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 yet to be issued.

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. The loan can be converted at any time into common stock at a conversion price of \$7.50.

Item 3. Defaults upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

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.

Item 6. Exhibits

Exhibits

3.1*	Certificate of Designation of Series AA Convertible Preferred Stock, filed May 1, 2018
10.1*	Amendment Number 3 to October 26, 2016 Promissory Note, dated January 30, 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: May 15, 2018 By:/s/ Richard T. Schumacher

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

Date: May 15, 2018 By:/s/Joseph L. Damasio, Jr.

Joseph L. Damasio, Jr.

Vice President of Finance & Chief Financial Officer

(Principal Financial Officer)

1. Series AA Preferred Stock Designation and Rank.

(a) <u>Designation</u>. The designation of such series of the Preferred Stock shall be the Series AA Convertible Preferred Stock, par value \$0.01 per share (the "Series AA Preferred Stock"). The maximum number of shares of Series AA Preferred Stock shall be Ten Thousand (10,000) shares.

(b) <u>Rank</u>. The Series AA Preferred Stock shall rank prior to the common stock, par value \$0.01 per share (the "Common Stock"), and to all other classes and series of equity securities of the Company which by its terms does not rank on a parity with or senior to the Series AA Preferred Stock ("Junior Stock"). The Series AA Preferred Stock shall be subordinate to and rank junior to all indebtedness of the Company now or hereafter outstanding.

2. Dividends.

(a) Quarterly Dividends. The holders of shares of the Series AA Preferred Stock shall be entitled to receive, out of funds legally available therefor, dividends at an annual rate equal to 8% of the Liquidation Preference Amount (as defined below), calculated on the basis of a 360 day year, consisting of twelve 30-day months, and shall accrue on a daily basis from [], 2018. Accrued and unpaid dividends shall compound on a quarterly basis, and shall be, except as set forth in Section 2(b) below, payable in cash. The first such dividend payment shall be due and payable on September 30, 2018, with a subsequent dividend payment due and payable on December 31. Each year thereafter, dividend payments shall be due and payable on March 31, June 30, September 30, and December 31 (each a "Dividend Payment Date"). All accrued and unpaid dividends, if any, shall be mandatorily paid immediately prior to the earlier to occur of (i) a liquidation, dissolution or winding up (or deemed liquidation, dissolution or winding up under Section 4(b) hereof) of the Company (a "Liquidation"), or (ii) a Voluntary Conversion pursuant to Section 5 hereof (the "Mandatory Dividend Payment Date").

(b) <u>Payment of Dividends</u>. At the option of the Company in compliance with this Section 2(b), the Company may pay dividends on the Series AA Preferred Stock in shares of Common Stock, with each share of Common Stock being valued for this purpose as the VWAP (as hereafter defined) of the Common Stock for the five trading days immediately prior to the Dividend Payment date. In order to pay the dividends in Common Stock, the Company must provide the holders of the Series AA Preferred Stock with at least 10 days' notice, prior to the Dividend Payment Date, of its election to pay a regularly scheduled dividend in shares of Common Stock (the Company may indicate in such notice that the election contained in such notice shall continue for later periods until revised by a subsequent notice). In the event the Company fails to provide such notice, the dividend shall be payable in cash. Notwithstanding the above, no dividend shall be paid in Common Stock (i) in connection with a Liquidation, (ii) if such payment would cause the limitations on beneficial ownership set forth in Section 7 hereof to be exceeded or (iii) unless the shares of Common Stock received upon such payment shall be freely salable by the recipient pursuant to a then effective registration statement.

(c) <u>Junior Stock Dividends</u>. The Company shall not declare or pay any cash dividends on, or make any other distributions with respect to or redeem, purchase or otherwise acquire for consideration, any shares of Junior Stock unless and until all accrued and unpaid dividends on the Series AA Preferred Stock have been paid in full. In all events, Junior Stock dividends shall be subject to the restrictions set forth in Section 3(a) below.

3. Voting Rights.

(a) Class Voting Rights. The Series AA Preferred Stock shall have the following class voting rights (in addition to the voting rights set forth in Section 3(b) hereof). So long as more than ten percent (10%) of the Series AA Preferred Stock remain outstanding, the Company shall not, and shall not permit any subsidiary to, without the affirmative vote or consent of the holders of at least 75% of the shares of the Series AA Preferred Stock outstanding at the time, given in person or by proxy, either in writing or at a meeting, in which the holders of the Series AA Preferred Stock vote separately as a class: (i) authorize, create, issue or increase the authorized or issued amount of any class or series of stock, including but not limited to the issuance of any more shares of previously authorized Preferred Stock, ranking prior to the Series AA Preferred Stock, with respect to the distribution of assets on liquidation, dissolution or winding up; (ii) amend, alter or repeal the provisions of the Series AA Preferred Stock, whether by merger, consolidation or otherwise, so as to adversely affect any right, preference, privilege or voting power of the Series AA Preferred Stock; (iii) repurchase, redeem or pay dividends on (whether in cash, in kind, or otherwise), shares of the Company's Junior Stock; (iv) amend the Articles of Incorporation or By-Laws of the Company so as to affect materially and adversely any right, preference, privilege or voting power of the Series AA Preferred Stock; (v) effect any distribution with respect to Junior Stock or parity stock; (vi) reclassify the Company's outstanding securities; or (vii) effect a transaction with one or more persons or entities whereby such other persons or entities will own more than the 50% of the outstanding shares of Common Stock following such transaction ("Change in Control Transaction").

(b) <u>General Voting Rights</u>. Except with respect to transactions upon which the Series AA Preferred Stock shall be entitled to vote separately as a class pursuant to Section 3(a) above and except as otherwise required by Massachusetts law, the Series AA Preferred Stock shall have no voting rights. The Common Stock into which the Series AA Preferred Stock is convertible shall, upon issuance, have all of the same voting rights as other issued and outstanding Common Stock of the Company.

4. Liquidation Preference.

(a) In the event of the liquidation, dissolution or winding up of the affairs of the Company, whether voluntary or involuntary, the holders of shares of the Series AA Preferred Stock then outstanding shall be entitled to receive, out of the assets of the Company whether such assets are capital or surplus of any nature, an amount equal to \$2,500.00 per share (the "Liquidation Preference Amount") of the Series AA Preferred Stock, on a pro rata and pari passu basis with any parity stock (the "Pari Passu Preferred Stock"), together with all accrued but unpaid dividends, before any payment shall be made or any assets distributed to the holders of the Common Stock or any other Junior Stock. If the assets of the Company are not sufficient to pay in full the Liquidation Preference Amount payable to the holders of outstanding shares of the Series AA Preferred Stock and any series of preferred stock or any other class of stock on a parity as to rights on liquidation, dissolution or winding up, with the Series AA Preferred Stock, then all of said assets will be distributed among the holders of the Series AA Preferred Stock, the Pari Passu Preferred Stock and the other classes of stock on a parity with the Series AA Preferred Stock, if any, ratably in accordance with the respective amounts that would be payable on such shares if all amounts payable thereon were paid in full. The liquidation payment with respect to each outstanding fractional share of Series AA Preferred Stock shall be equal to a ratably proportionate amount of the liquidation payment with respect to each outstanding share of Series AA Preferred Stock. All payments for which this Section 4(a) provides shall be in cash, property (valued at its fair market value as determined by an independent appraiser reasonably acceptable to the holders of a majority of the Series AA Preferred Stock) or a combination thereof; provided, however, that no cash shall be paid to holders of Junior Stock unless each holder of the outstanding shares of Series AA Preferred Stock has been paid in cash the full Liquidation Preference Amount to which such holder is entitled as provided herein. After payment of the full Liquidation Preference Amount to which each holder is entitled, such holders of shares of Series AA Preferred Stock will not be entitled to any further participation as such in any distribution of the assets of the Company.

Notwithstanding the foregoing, at the option of the holder of Series AA Preferred Shares, such holder may elect to convert the entire Liquidation Preference Amount into shares of Common Stock pursuant to a Voluntary Conversion as set forth in Section 5(a), effective immediately prior to liquidation event.

(b) A consolidation or merger of the Company with or into any other corporation or corporations, or a sale or transfer of more than 50% of the assets of the Company, or the effectuation by the Company of a transaction or series of transactions in which more than 50% of the voting shares of the Company is disposed of or conveyed, shall be, at the election of the holders of 75% of the Series AA Preferred Stock, deemed to be a liquidation, dissolution, or winding up within the meaning of this Section 4. In the event of the merger or consolidation of the Company with or into another corporation that is not treated as a liquidation pursuant to this Section 4(b), the Series AA Preferred Stock shall maintain its relative powers, designations and preferences provided for herein and no merger shall result inconsistent therewith.

(c) Written notice of any voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Company, stating a payment date and the place where the distributable amounts shall be payable, shall be given by mail, postage prepaid, no less than thirty (30) days prior to the payment date stated therein, to the holders of record of the Series AA Preferred Stock at their respective addresses as the same shall appear on the books of the Company.

- 5. Conversion. The holder of Series AA Preferred Stock shall have the following conversion rights (the "Conversion Rights"):
- (a) Right to Convert. At any time on or after the Issuance Date, the holder of any such shares of Series AA Preferred Stock may, at such holder's option, subject to the limitations set forth in Section 7 herein, elect to convert (a "Voluntary Conversion") all or any portion of the shares of Series AA Preferred Stock held by such person, together with accrued but unpaid dividends thereon, into a number of fully paid and nonassessable shares of Common Stock (the "Conversion Shares") equal to the quotient of (i) the Liquidation Preference Amount of the shares of Series AA Preferred Stock being converted thereon divided by (ii) the Conversion Price (as defined in Section 5(d) below) then in effect as of the date of the delivery by such holder of its notice of election to convert. The Company shall keep written records of the conversion of the shares of Series AA Preferred Stock converted by each holder. A holder shall be required to deliver the original certificates representing the shares of Series AA Preferred Stock upon complete conversion of the Series AA Preferred Stock.
- (b) <u>Mechanics of Conversion</u>. The Voluntary Conversion of Series AA Preferred Stock shall be conducted in the following manner:
- (i) <u>Holder's Delivery Requirements</u>. To convert Series AA Preferred Stock into full shares of Common Stock on any date (the "Voluntary Conversion Date"), the holder thereof shall (A) transmit by facsimile (or otherwise deliver), for receipt on or prior to 5:00 p.m., New York time on such date, a copy of a fully executed notice of conversion in the form attached hereto as <u>Exhibit I</u> (the "Conversion Notice"), to the Company, and (B) with respect to the final conversion of shares of Series AA Preferred Stock held by any holder, such holder shall surrender to a common carrier for delivery to the Company as soon as practicable following such Conversion Date but in no event later than five (5) business days after such date the original certificates representing the shares of Series AA Preferred Stock being converted (or an indemnification undertaking with respect to such shares in the case of their loss, theft or destruction) (the "Preferred Stock Certificates").
- (ii) Company's Response. Within two (2) business days following the Conversion Notice delivery date (the "Registered Share Delivery Date"), the Company shall transmit the shares of Common Stock to the holder by crediting the account of the holder's prime broker with The Depository Trust Company through its Deposit or Withdrawal at Custodian system ("DWAC") if the Company is then a participant in such system and there is an effective registration statement permitting the issuance of the shares to or resale of the shares by the holder. Within three (3) business days following the Conversion Notice delivery date (the "144 Share Delivery Date"), the Company shall transmit the shares of Common Stock to the holder by crediting the account of the holder's prime broker with The Depository Trust Company through the DWAC system if the Company is then a participant in such system and the shares are eligible for resale by the holders without volume or manner-of-sale limitations pursuant to Rule 144, and otherwise by physical delivery to the holder. In case of conversion under this Section 5 of only a part of the shares of Series AA Preferred Stock represented by a certificate surrendered to the Company, the Company shall issue and deliver a new certificate for the number of shares of Series AA Preferred Stock which have not been converted, upon receipt of the original certificate or certificates representing shares of Series AA Preferred Stock so converted. Until such time as the certificate or certificates representing shares of Series AA Preferred Stock which have been converted are surrendered to the Company and a certificate or certificates representing the Common Stock into which such shares of Series AA Preferred Stock have been converted have been issued and delivered, the certificate or certificates representing the shares of Series AA Preferred Stock which have been converted shall represent the shares of Common Stock into which such shares of Series AA Preferred Stock have been converted. The Company shall pay all documentary, stamp or similar issue or transfer tax due on the issue of shares of Common Stock issuable upon conversion of the Series AA Preferred Stock.

(iii) Dispute Resolution. In the case of a dispute as to the arithmetic calculation of the number of shares of Common Stock to be issued upon conversion, the Company shall promptly issue to the holder the number of shares of Common Stock that is not disputed and shall submit the arithmetic calculations to the holder via facsimile as soon as possible, but in no event later than three (3) business days after receipt of such holder's Conversion Notice. If such holder and the Company are unable to agree upon the arithmetic calculation of the number of shares of Common Stock to be issued upon such conversion within three (3) business day submit via facsimile the disputed arithmetic calculation being submitted to the holder, then the Company shall within three (3) business day submit via facsimile the disputed arithmetic calculation of the number of shares of Common Stock to be issued upon such conversion to the Company's independent, outside accountant. The Company shall cause the accountant to perform the calculations and notify the Company and the holder of the results no later than seventy-two (72) hours from the time it receives the disputed calculations. Such accountant's calculation shall be binding upon all parties absent manifest error. The reasonable expenses of such accountant in making such determination shall be paid by the Company, in the event the holder's calculation was correct, or equally by the Company and the holder in the event that neither the Company's or the holder's calculation was correct. The period of time in which the Company is required to effect conversions or redemptions under this Certificate of Designation shall be tolled with respect to the subject conversion or redemption pending resolution of any dispute by the Company made in good faith and in accordance with this Section 5(b)(iii).

(iv) <u>Record Holder</u>. The person or persons entitled to receive the shares of Common Stock issuable upon a conversion of the Series AA Preferred Stock shall be treated for all purposes as the record holder or holders of such shares of Common Stock on the Conversion Date.

(v) Company's Failure to Timely Convert. If within three (3) business days of the Company's receipt of the Conversion Notice (the "Share Delivery Period") the Company shall fail to issue and deliver to a holder the undisputed number of shares of Common Stock to which such holder is entitled upon such holder's conversion of the Series AA Preferred Stock (a "Conversion Failure"), in addition to all other available remedies which such holder may pursue, the Company shall pay additional damages to such holder on each business day after such third (3rd) business day that such conversion is not timely effected in an amount equal 0.5% of the product of (A) the sum of the number of shares of Common Stock not issued to the holder on a timely basis pursuant to Section 5(b)(ii) and to which such holder is entitled and (B) the VWAP (as defined below) of the Common Stock on the last possible date which the Company could have issued such Common Stock to such holder without violating Section 5(b)(ii). If the Company fails to pay the additional damages set forth in this Section 5(b)(v) within five (5) business days of the date incurred, then such payment shall bear interest at the rate of 2% per month (pro rated for partial months) until such payments are made. "VWAP" means, for any security as of any date, the dollar volume-weighted average price for such security on the principal market or exchange during the period beginning at 9:30:01 a.m., New York time, and ending at 4:00:00 p.m., New York time, as reported by Bloomberg through its "Volume at Price" function or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York time, and ending at 4:00:00 p.m., New York time, as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in the "pink sheets" by OTC Markets Group Inc. (formerly Pink Sheets LLC). If VWAP cannot be calculated for such security on such date on any of the foregoing bases, the VWAP of such security on such date shall be the fair market value as mutually determined by the Company and the holder. If the Company and the holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 5(b)(iii) above. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during such period.

(c) <u>Company Forced Conversion</u>. The Company shall have the right, subject to satisfaction of the conditions in this Section 5(c), to cause the conversion of all shares of Series AA Preferred Stock into Common Stock ("Forced Conversion"). The Company shall deliver prior written notice to the Holder at least ten (10) business days ("Forced Conversion Notice") prior to the effective date (the "Forced Conversion Effective Date") of such Forced Conversion. Following the effectiveness of a registration statement permitting the resale of the Conversion Shares held by holders of the Series AA Preferred Stock the Company may effectuate a Forced Conversion if either of the following conditions are satisfied as of the Forced Conversion Effective Date: (i) the VWAP of the Common Stock shall equal or exceed 300% of the Conversion Price for either 10 consecutive trading days, or 15 of 25 consecutive trading days immediately preceding the date of the Forced Conversion Notice; or (ii) listing of the Common Stock on any national securities exchange (NYSE, NYSE American or Nasdaq). The Company shall not have an obligation to register the Conversion Shares of the shares of Series AA Preferred Stock that are issued pursuant to any exchange of previously issued securities.

Upon any Forced Conversion, all accrued but unpaid dividends shall be paid and the Company shall transmit the shares of Common Stock to the holder by crediting the account of the holder's prime broker with The Depository Trust Company through DWAC if the Company is then a participant in such system, and otherwise by physical delivery to the holder. If within three (3) business days of the Forced Conversion Effective Date, the Company shall fail to issue and deliver to a holder the number of shares of Common Stock to which such holder is entitled upon such Forced Conversion, in addition to all other available remedies which such holder may pursue, the Company shall pay additional damages to such holder on each business day after such third (3rd) business day that such conversion is not timely effected in an amount equal 0.5% of the product of (A) the sum of the number of shares of Common Stock not issued to the holder on a timely basis pursuant to Section 5(c) and to which such holder is entitled, and (B) the VWAP of the Common Stock on the last possible date which the Company could have issued such Common Stock to such holder without violating Section 5(c). If the Company fails to pay the additional damages set forth in this Section 5(c) within five (5) business days of the date incurred, then such payment shall bear interest at the rate of 2% per month (pro rated for partial months) until such payments are made.

If any shares of Series AA Preferred Stock cannot be fully converted into Common Stock of the Company upon a Forced Conversion due to the Conversion Restriction, such shares of Series AA Preferred Stock shall remain unconverted. However, upon such Forced Conversion until such time as the shares of Series AA Preferred Stock are in fact converted into Common Stock, the following rights, preferences, and privileges of the Series AA Preferred Stock shall be of no further force or effect: dividend rights pursuant to Section 2; anti-dilution rights pursuant to Section 5(e)(vi); liquidation preference pursuant to Section 4; and the additional covenants set forth in Section 8.

(d) Conversion Price. The term "Conversion Price" shall mean \$2.50 per share, subject to adjustment under Section 5(e)

hereof.

(e) Adjustments of Conversion Price.

(i) Adjustments for Stock Splits and Combinations. If the Company shall at any time or from time to time after the Issuance Date, effect a stock split of the outstanding Common Stock, the Conversion Price shall be proportionately decreased. If the Company shall at any time or from time to time after the Issuance Date, combine the outstanding shares of Common Stock, the Conversion Price shall be proportionately increased. Any adjustments under this Section 5(e)(i) shall be effective at the close of business on the date the stock split or combination occurs.

(ii) <u>Adjustments for Certain Dividends and Distributions</u>. If the Company shall at any time or from time to time after the Issuance Date, make or issue or set a record date for the determination of holders of Common Stock entitled to receive a dividend or other distribution payable in shares of Common Stock, then, and in each event, the Conversion Price shall be decreased as of the time of such issuance or, in the event such record date shall have been fixed, as of the close of business on such record date, by multiplying, as applicable, the Conversion Price then in effect by a fraction:

(1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date; and

(2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

(iii) Adjustment for Other Dividends and Distributions. If the Company shall at any time or from time to time after the Issuance Date, make or issue or set a record date for the determination of holders of Common Stock entitled to receive a dividend or other distribution payable in securities of the Company other than shares of Common Stock, then, and in each event, an appropriate revision to the applicable Conversion Price shall be made and provision shall be made (by adjustments of the Conversion Price or otherwise) so that the holders of Series AA Preferred Stock shall receive upon conversions thereof, in addition to the number of shares of Common Stock receivable thereon, the number of securities of the Company which they would have received had their Series AA Preferred Stock been converted into Common Stock immediately prior to such event (or the record date for such event, if applicable) and had thereafter, during the period from the date of such event to and including the Conversion Date, retained such securities (together with any distributions payable thereon during such period), giving application to all adjustments called for during such period under this Section 5(e)(iii) with respect to the rights of the holders of the Series AA Preferred Stock.

(iv) Adjustments for Reclassification, Exchange or Substitution. If the Common Stock issuable upon conversion of the Series AA Preferred Stock at any time or from time to time after the Issuance Date shall be changed to the same or different number of shares of any class or classes of stock, whether by reclassification, exchange, substitution or otherwise (other than by way of a stock split or combination of shares or stock dividends provided for in Sections 5(e)(i), (ii) and (iii), or a reorganization, merger, consolidation, or sale of assets provided for in Section 5(e)(v)), then, and in each event, an appropriate revision to the Conversion Price shall be made and provisions shall be made (by adjustments of the Conversion Price or otherwise) so that the holder of each share of Series AA Preferred Stock shall have the right thereafter to convert such share of Series AA Preferred Stock into the kind and amount of shares of stock and other securities receivable upon reclassification, exchange, substitution or other change, by holders of the number of shares of Common Stock into which such share of Series AA Preferred Stock might have been converted immediately prior to such reclassification, exchange, substitution or other change, all subject to further adjustment as provided herein.

(v) Adjustments for Reorganization, Merger, Consolidation or Sales of Assets. If at any time or from time to time after the Issuance Date there shall be a capital reorganization of the Company (other than by way of a stock split or combination of shares or stock dividends or distributions provided for in Section 5(e)(i), (ii) and (iii), or a reclassification, exchange or substitution of shares provided for in Section 5(e)(iv)), or a merger or consolidation of the Company with or into another corporation, or the sale of all or substantially all of the Company's properties or assets to any other person that is not deemed a liquidation pursuant to Section 4(b) (an "Organic Change"), then as a part of such Organic Change an appropriate revision to the Conversion Price shall be made and provision shall be made (by adjustments of the Conversion Price or otherwise) so that the holder of each share of Series AA Preferred Stock shall have the right thereafter to convert such share of Series AA Preferred Stock into the kind and amount of shares of stock and other securities or property of the Company or any successor corporation resulting from the Organic Change as the holder would have received as a result of the Organic Change and if the holder had converted its Series AA Preferred Stock into the Company's Common Stock prior to the Organic Change. In any such case, appropriate adjustment shall be made in the application of the provisions of this Section 5(e)(v) with respect to the rights of the holders of the Series AA Preferred Stock after the Organic Change to the end that the provisions of this Section 5(e)(v) (including any adjustment in the Conversion Price then in effect and the number of shares of stock or other securities deliverable upon conversion of the Series AA Preferred Stock) shall be applied after that event in as nearly an equivalent manner as may be practicable.

(vi) Subsequent Equity Sales. If, at any time while shares of Series AA Preferred Stock are outstanding, the Company or any subsidiary, as applicable, sells or grants any option to purchase or sells or grants any right to reprice outstanding securities, or otherwise disposes of or issues (or announces any sale, grant or any option to purchase or other disposition), any Common Stock or any security convertible or exchangeable into Common Stock (a "Common Stock Equivalent"), entitling any Person to acquire shares of Common Stock at an effective price per share that is lower than the then Conversion Price (such lower price, the "Base Conversion Price") and such issuances, collectively, a "Dilutive Issuance") (if the holder of the Common Stock or Common Stock Equivalents so issued shall at any time, whether by operation of purchase price adjustments, reset provisions, floating conversion, exercise or exchange prices or otherwise, or due to warrants, options or rights per share which are issued in connection with such issuance, be entitled to receive shares of Common Stock at an effective price per share that is lower than the Conversion Price, such issuance shall be deemed to have occurred for less than the Conversion Price on such date of the Dilutive Issuance), then the Conversion Price shall be reduced to equal the Base Conversion Price. Such adjustment shall be made whenever such Common Stock or Common Stock Equivalents are issued. Notwithstanding the foregoing, no adjustment will be made under this Section in respect of an Exempt Issuance (as hereafter defined). The Company shall notify the Holder in writing, no later than the Trading Day following the issuance of any Common Stock or Common Stock Equivalents subject to this Section, indicating therein the applicable issuance price, or applicable reset price, exchange price, conversion price and other pricing terms (such notice, the "Dilutive Issuance Notice"). For purposes of clarification, whether or not the Company provides a Dilutive Issuance Notice, upon the occurrence of any Dilutive Issuance, the Holder is entitled to receive a number of Conversion Shares based upon the Base Conversion Price on or after the date of such Dilutive Issuance, regardless of whether the Holder accurately refers to the Base Conversion Price in the Notice of Conversion. Notwithstanding the foregoing, if any shares of Series AA Preferred Stock cannot be fully converted into Common Stock of the Company upon a Forced Conversion due to the Conversion Restriction, such shares of Series AA Preferred Stock shall remain unconverted. However, upon such Forced Conversion this Section 5(e)(vi); shall be of no further force or effect in accordance with Section 5(c).

(h) For the purposes hereof, an Exempt Issuance shall mean: the issuance of (a) shares of Common Stock or options or other stock based awards to employees, officers or directors and consultants of the Company pursuant to the Company's stock or option plans existing as of the date hereof, to employees, officers or directors and consultants of the Company pursuant to a written agreement, provided that such shares of Common Stock are not registered and carry no registration rights other than on Form S-8, (b) securities upon the exercise or exchange of or conversion of any Securities issued hereunder and/or other securities exercisable or exchangeable for or convertible into shares of Common Stock issued and outstanding on the original Issue Date of this Warrant, provided that such securities have not been amended since the date of this Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of such securities, and (c) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Company, provided that any such issuance shall only be to a Person (or to the equity holders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Company and shall provide to the Company additional benefits in addition to the investment of funds, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities. An Exempt Issuance shall not include any Change in Control Transaction.

(vii) <u>Consideration for Stock</u>. In case any shares of Common Stock or convertible securities other than the Series AA Preferred Stock, or any rights or warrants or options to purchase any such Common Stock or Convertible securities, shall be issued or sold in connection with any merger or consolidation in which the Company is the surviving corporation (other than any consolidation or merger in which the previously outstanding shares of Common Stock of the Company shall be changed to or exchanged for the stock or other securities of another corporation), the amount of consideration therefor shall be deemed to be the fair value, as determined reasonably and in good faith by the Board of Directors of the Company, of such portion of the assets and business of the nonsurviving corporation as such Board may determine to be attributable to such shares of Common Stock, Convertible securities, rights or warrants or options, as the case may be.

(viii) <u>Record Date</u>. In case the Company shall take record of the holders of its Common Stock or any other Preferred Stock for the purpose of entitling them to subscribe for or purchase Common Stock or Convertible securities, then the date of the issue or sale of the shares of Common Stock shall be deemed to be such record date.

(f) No Impairment. The Company shall not, by amendment of its Articles of Incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Company, but will at all times in good faith, assist in the carrying out of all the provisions of this Section 5 and in the taking of all such action as may be necessary or appropriate in order to protect the Conversion Rights of the holders of the Series AA Preferred Stock against impairment. In the event a holder shall elect to convert any shares of Series AA Preferred Stock as provided herein, the Company cannot refuse conversion based on any claim that such holder or any one associated or affiliated with such holder has been engaged in any violation of law, unless, an injunction from a court, on notice, restraining and/or enjoining conversion of all or of said shares of Series AA Preferred Stock shall have been issued and the Company posts a surety bond for the benefit of such holder in an amount equal to 130% of the Liquidation Preference Amount of the Series AA Preferred Stock such holder has elected to convert, which bond shall remain in effect until the completion of arbitration/litigation of the dispute and the proceeds of which shall be payable to such holder in the event it obtains judgment.

- (g) <u>Certificates as to Adjustments</u>. Upon occurrence of each adjustment or readjustment of the Conversion Price or number of shares of Common Stock issuable upon conversion of the Series AA Preferred Stock pursuant to this Section 5, the Company at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of such Series AA Preferred Stock a certificate setting forth such adjustment and readjustment, showing in detail the facts upon which such adjustment or readjustment is based. The Company shall, upon written request of the holder of such affected Series AA Preferred Stock, at any time, furnish or cause to be furnished to such holder a like certificate setting forth such adjustments and readjustments, the Conversion Price in effect at the time, and the number of shares of Common Stock and the amount, if any, of other securities or property which at the time would be received upon the conversion of a share of such Series AA Preferred Stock. Notwithstanding the foregoing, the Company shall not be obligated to deliver a certificate unless such certificate would reflect an increase or decrease of at least one percent of such adjusted amount.
- (h) <u>Issue Taxes</u>. The Company shall pay any and all issue and other taxes, excluding federal, state or local income taxes, that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of shares of Series AA Preferred Stock pursuant thereto; <u>provided</u>, <u>however</u>, that the Company shall not be obligated to pay any transfer taxes resulting from any transfer requested by any holder in connection with any such conversion.
- (i) Notices. All notices and other communications hereunder shall be in writing and shall be deemed given if delivered personally or by facsimile or three (3) business days following being mailed by certified or registered mail, postage prepaid, return-receipt requested, addressed to the holder of record at its address appearing on the books of the Company. The Company will give written notice to each holder of Series AA Preferred Stock at least twenty (20) days prior to the date on which the Company closes its books or takes a record (I) with respect to any dividend or distribution upon the Common Stock, (II) with respect to any pro rata subscription offer to holders of Common Stock or (III) for determining rights to vote with respect to any Organic Change, dissolution, liquidation or winding-up and in no event shall such notice be provided to such holder prior to such information being made known to the public. The Company will also give written notice to each holder of Series AA Preferred Stock at least twenty (20) days prior to the date on which any Organic Change, dissolution, liquidation or winding-up will take place and in no event shall such notice be provided to such holder prior to such information being made known to the public.

- (j) <u>Fractional Shares</u>. No fractional shares of Common Stock shall be issued upon conversion of the Series AA Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Company shall at its option either (i) pay cash equal to the product of such fraction multiplied by the average of the VWAP of the Common Stock for the five (5) consecutive trading days immediately preceding the Voluntary Conversion Date, or (ii) in lieu of issuing such fractional shares issue one additional whole share to the holder.
- (k) Reservation of Common Stock. The Company shall, so long as any shares of Series AA Preferred Stock are outstanding, reserve and keep available out of its authorized and unissued Common Stock, solely for the purpose of effecting the conversion of the Series AA Preferred Stock, such number of shares of Common Stock as shall from time to time be sufficient to effect the conversion of all of the Series AA Preferred Stock then outstanding; provided that the number of shares of Common Stock so reserved shall at no time be less than 120% of the number of shares of Common Stock for which the shares of Series AA Preferred Stock are at any time convertible (without regard to the limitations on conversion set forth in Section 7 hereof). The initial number of shares of Common Stock reserved for conversions of the Series AA Preferred Stock and each increase in the number of shares so reserved shall be allocated pro rata among the holders of the Series AA Preferred Stock based on the number of shares of Series AA Preferred Stock held by each holder at the time of issuance of the Series AA Preferred Stock or increase in the number of reserved shares, as the case may be. In the event a holder shall sell or otherwise transfer any of such holder's shares of Series AA Preferred Stock, each transferee shall be allocated a pro rata portion of the number of reserved shares of Common Stock reserved for such transferor. Any shares of Common Stock reserved and which remain allocated to any person or entity which does not hold any shares of Series AA Preferred Stock shall be allocated to the remaining holders of Series AA Preferred Stock, pro rata based on the number of shares of Series AA Preferred Stock then held by such holder.
- (1) <u>Retirement of Series AA Preferred Stock</u>. Conversion of Series AA Preferred Stock shall be deemed to have been effected on the applicable Voluntary Conversion Date or upon the Forced Conversion Effective Date. The Company shall keep written records of the conversion of the shares of Series AA Preferred Stock converted by each holder. A holder shall be required to deliver the original certificates representing the shares of Series AA Preferred Stock upon complete conversion of the Series AA Preferred Stock.
- (m) Regulatory Compliance. If any shares of Common Stock to be reserved for the purpose of conversion of Series AA Preferred Stock require registration or listing with or approval of any governmental authority, stock exchange or other regulatory body under any federal or state law or regulation or otherwise before such shares may be validly issued or delivered upon conversion, the Company shall, at its sole cost and expense, in good faith and as expeditiously as possible, endeavor to secure such registration, listing or approval, as the case may be.

6. No Preemptive Rights. No holder of the Series AA Preferred Stock shall be entitled to rights to subscribe for, purchase or receive any part of any new or additional shares of any class, whether now or hereinafter authorized, or of bonds or debentures, or other evidences of indebtedness convertible into or exchangeable for shares of any class, but all such new or additional shares of any class, or any bond, debentures or other evidences of indebtedness convertible into or exchangeable for shares, may be issued and disposed of by the Board of Directors on such terms and for such consideration (to the extent permitted by law), and to such person or persons as the Board of Directors in their absolute discretion may deem advisable.

7. Conversion Restriction.

Notwithstanding anything to the contrary set forth in Section 5 of this Certificate of Designation, at no time may a holder of shares of Series AA Preferred Stock convert shares of the Series AA Preferred Stock if the number of shares of Common Stock to be issued pursuant to such conversion would exceed, when aggregated with all other shares of Common Stock owned by such holder at such time, the number of shares of Common Stock which would result in such holder beneficially owning (as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended, and the rules thereunder) in excess of 4.99% of all of the Common Stock outstanding at such time (the "Conversion Restriction"); provided, however, that upon a holder of Series AA Preferred Stock providing the Company with sixty-one (61) days' notice (pursuant to Section 5(i) hereof) (the "Waiver Notice") that such holder would like to waive Section 7 of this Certificate of Designation with regard to any or all shares of Common Stock issuable upon conversion of Series AA Preferred Stock, this Section 7 shall be of no force or effect with regard to those shares of Series AA Preferred Stock referenced in the Waiver Notice.

8. Additional Covenants. For as long as there has not been a Forced Conversion, the Company shall not: (i) issue any variable priced equity or variable priced equity linked securities; or (ii) issue any additional shares of preferred or convertible debt that rank in terms of liquidation preference or any other priority senior to the Series AA Preferred Stock, without prior written permission of holder of 75% of the then outstanding shares of Series AA Preferred Stock. In addition, the Company agrees that upon listing of the Common Stock on any national securities exchange (NYSE, NYSE American or Nasdaq), the Company will not issue any Common Stock or Common Stock equivalents at a price below the initial listing price on any such exchange for a period of 12 months from the date of listing.

9. Inability to Fully Convert.

(a) <u>Holder's Option if Company Cannot Fully Convert</u>. If, upon the Company's receipt of a Conversion Notice, the Company cannot issue shares of Common Stock registered for resale or such shares cannot be sold pursuant to Rule 144 for any reason, including, without limitation, because the Company (x) does not have a sufficient number of shares of Common Stock authorized and available, (y) is otherwise prohibited by applicable law or by the rules or regulations of any stock exchange, interdealer quotation system or other self-regulatory organization with jurisdiction over the Company or its securities from issuing all of the Common Stock which is to be issued to a holder of Series AA Preferred Stock pursuant to a Conversion Notice or (z) fails to have a sufficient number of shares of Common Stock registered for resale in such holder's name, then the Company shall issue as many shares of Common Stock as it is able to issue in accordance with such holder's Conversion Notice and pursuant to Section 5(b)(ii) above and, with respect to the unconverted Series AA Preferred Stock, the holder, solely at such holder's option, can elect, in addition to other remedies available to such holder, within five (5) business days after receipt of notice from the Company thereof to:

(i) require the Company to redeem from such holder those shares of Series AA Preferred Stock for which the Company is unable to issue Common Stock in accordance with such holder's Conversion Notice ("Mandatory Redemption") at a price per share equal to 120% of the Liquidation Preference Amount as of such Conversion Date (the "Mandatory Redemption Price");

(ii) if the Company's inability to fully convert Series AA Preferred Stock pursuant to Section 9(a)(z) above, require the Company to issue restricted shares of Common Stock in accordance with such holder's Conversion Notice and pursuant to Section 5(b)(ii) above;

(iii) void its Conversion Notice and retain or have returned, as the case may be, the shares of Series AA Preferred Stock that were to be converted pursuant to such holder's Conversion Notice (provided that a holder's voiding its Conversion Notice shall not effect the Company's obligations to make any payments which have accrued prior to the date of such notice).

In the event a Holder shall elect to convert any shares of Series AA Preferred Stock as provided herein, the Company cannot refuse conversion based on any claim that such Holder or any one associated or affiliated with such Holder has been engaged in any violation of law, violation of an agreement to which such Holder is a party or for any reason whatsoever, unless, an injunction from a court, on notice, restraining and or enjoining conversion of all or of said shares of Series AA Preferred Stock shall have issued and the Company posts a surety bond for the benefit of such Holder in an amount equal to 130% of the amount of shares of Series AA Preferred Stock the Holder has elected to convert, which bond shall remain in effect until the completion of arbitration/litigation of the dispute and the proceeds of which shall be payable to such Holder in the event it obtains judgment.

(b) Mechanics of Fulfilling Holder's Election. The Company shall immediately send via facsimile to a holder of Series AA Preferred Stock, upon receipt of a facsimile copy of a Conversion Notice from such holder which cannot be fully satisfied as described in Section 9(a) above, a notice of the Company's inability to fully satisfy such holder's Conversion Notice (the "Inability to Fully Convert Notice"). Such Inability to Fully Convert Notice shall indicate (i) the reason why the Company is unable to fully satisfy such holder's Conversion Notice, (ii) the number of Series AA Preferred Stock which cannot be converted and (iii) the applicable Mandatory Redemption Price. Such holder shall notify the Company of its election pursuant to Section 9(a) above by delivering written notice via facsimile to the Company ("Notice in Response to Inability to Convert").

- (c) Payment of Redemption Price. If such holder shall elect to have its shares redeemed pursuant to Section 9(a)(i) above, the Company shall pay the Mandatory Redemption Price to such holder within thirty (30) days of the Company's receipt of the holder's Notice in Response to Inability to Convert, provided that prior to the Company's receipt of the holder's Notice in Response to Inability to Convert the Company has not delivered a notice to such holder stating, to the satisfaction of the holder, that the event or condition resulting in the Mandatory Redemption has been cured and all shares of Common Stock issuable to such holder can and will be delivered to the holder in accordance with the terms of Section 2(c). If the Company shall fail to pay the applicable Mandatory Redemption Price to such holder on a timely basis as described in this Section 9(c) (other than pursuant to a dispute as to the determination of the arithmetic calculation of the Redemption Price), in addition to any remedy such holder of Series AA Preferred Stock may have, such unpaid amount shall bear interest at the rate of 1.5% per month (prorated for partial months) until paid in full. Until the full Mandatory Redemption Price is paid in full to such holder, such holder may (i) void the Mandatory Redemption with respect to those Series AA Preferred Stock for which the full Mandatory Redemption Price has not been paid, (ii) receive back such Series AA Preferred Stock, and (iii) require that the Conversion Price of such returned Series AA Preferred Stock be adjusted to the lesser of (A) the Conversion Price and (B) the lowest VWAP of the Common Stock during the period beginning on the Conversion Date and ending on the date the holder voided the Mandatory Redemption.
- (d) <u>Pro-rata Conversion and Redemption</u>. In the event the Company receives a Conversion Notice from more than one holder of Series AA Preferred Stock on the same day and the Company can convert and redeem some, but not all, of the Series AA Preferred Stock pursuant to this Section 9, the Company shall convert and redeem from each holder of Series AA Preferred Stock electing to have Series AA Preferred Stock converted and redeemed at such time an amount equal to such holder's pro-rata amount (based on the number shares of Series AA Preferred Stock held by such holder relative to the number shares of Series AA Preferred Stock being converted and redeemed at such time.
- 10. <u>Vote to Change the Terms of or Issue Preferred Stock</u>. The affirmative vote at a meeting duly called for such purpose or the written consent without a meeting, of the holders of not less than 75% of the then outstanding shares of Series AA Preferred Stock, shall be required (a) for any change to this Certificate of Designation or the Company's Articles of Incorporation which would amend, alter, change or repeal any of the powers, designations, preferences and rights of the Series AA Preferred Stock or (b) for the issuance of shares of Series AA Preferred Stock.
- 11. Lost or Stolen Certificates. Upon receipt by the Company of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of any Preferred Stock Certificates representing the shares of Series AA Preferred Stock, and, in the case of loss, theft or destruction, of any indemnification undertaking by the holder to the Company and, in the case of mutilation, upon surrender and cancellation of the Preferred Stock Certificate(s), the Company shall execute and deliver new preferred stock certificate(s) of like tenor and date.

- 12. Remedies, Characterizations, Other Obligations, Breaches and Injunctive Relief. The remedies provided in this Certificate of Designation shall be cumulative and in addition to all other remedies available under this Certificate of Designation, at law or in equity (including a decree of specific performance and/or other injunctive relief), no remedy contained herein shall be deemed a waiver of compliance with the provisions giving rise to such remedy and nothing herein shall limit a holder's right to pursue actual damages for any failure by the Company to comply with the terms of this Certificate of Designation. Amounts set forth or provided for herein with respect to payments, conversion and the like (and the computation thereof) shall be the amounts to be received by the holder thereof and shall not, except as expressly provided herein, be subject to any other obligation of the Company (or the performance thereof). The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the holders of the Series AA Preferred Stock and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the holders of the Series AA Preferred Stock shall be entitled, in addition to all other available remedies, to an injunction restraining any breach, without the necessity of showing economic loss and without any bond or other security being required.
- 13. Specific Shall Not Limit General; Construction. No specific provision contained in this Certificate of Designation shall limit or modify any more general provision contained herein. This Certificate of Designation shall be deemed to be jointly drafted by the Company and all initial purchasers of the Series AA Preferred Stock and shall not be construed against any person as the drafter hereof.
- 14. <u>Failure or Indulgence Not Waiver</u>. No failure or delay on the part of a holder of Series AA Preferred Stock in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privilege.

IN WITNESS WHEREOF, the undersigned has executed and subscribed this Certificate and does affirm the foregoing as true this ___ day of April, 2018.

PRESSURE BIOSCIENCES, INC. CONVERSION NOTICE

Reference is made to the Certificate of Designation of the Relative Rights and Preferences of the Series AA Preferred Stock of Pressure BioSciences, Inc. (the "Certificate of Designation"). In accordance with and pursuant to the Certificate of Designation, the undersigned hereby elects to convert the number of shares of Series AA Preferred Stock, par value \$0.01 per share (the "Preferred Shares"), of Pressure BioSciences, Inc., a Massachusetts corporation (the "Company"), indicated below into shares of Common Stock, par value \$0.01 per share (the "Common Stock"), of the Company, by tendering the stock certificate(s) representing the share(s) of Preferred Shares specified below as of the date specified below.

	Date of Conversion:		
	Number of Preferred Shares to be converted:		
	Stock certificate no(s). of Preferred Shares to be converted	:	
YES	The Common Stock have been sold pursuant to the RegNO	istratio	n Statement (as defined in the Registration Rights Agreement):
	The holder wishes to exercise on a cashless basis: YES	_ 1	4O
Please c	onfirm the following information:		
	Conversion Price:		
	Number of shares of Common Stock to be issued:		
			ned beneficially owned by the Holder on the Date of Conversion nge Act of 1934, as amended:
	ssue the Common Stock into which the Preferred Shares are apany in the following name and to the following address:	e being	converted and, if applicable, any check drawn on an account of
	Issue to:		
	Facsimile Number:		
	Authorization:	By:	
		Title:	

NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS PROMISSORY NOTE NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE EXERCISABLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL (WHICH COUNSEL SHALL BE SELECTED BY THE HOLDER), IN A GENERALLY ACCEPTABLE FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD PURSUANT TO RULE 144 OR RULE 144A UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.

PRESSURE BIOSCIENCES, INC.

AMENDMENT NUMBER 3 TO OCTOBER 26, 2016 PROMISSORY NOTE

Original Principal: US\$2,000,000	Original Issue Date: October 26, 2016
Amendment No. 1 Principal: US\$3,000,000	Amendment No. 1 Issue Date: May 2, 2017
Amendment No. 2 Principal: US\$3,500,000	Amendment No. 2 Issue Date: August 18, 2017
Amendment No. 3 Principal: US\$4,000,000	Amendment No. 3 Issue Date:January 30, 2018
Massachusetts and located at 14 Norfolk Avenue, South Eastor	a corporation incorporated under the laws of the Commonwealth of a, MA 02375 (the "Company") previously issued a Promissory Note (the ate"), in favor of, an individual residing at (the ollars (US\$2,000,000);
, ,	e Original Note on May 2, 2017 (the " <u>Amendment Number 1 Issue Date</u> "), ree Million United States Dollars (US\$3,000,000) (" <u>Amendment Number</u>
WHEREAS, the Company and the Holder wish to aga	in amend the Original Note with such amendment having an issue date of

August 18, 2017 (this "Amendment Number 2"), the Original Note having the Original Issue Date, and Amendment Number 1 having the

Amendment Number 1 Issue Date.

WHEREAS, the Company and the Holder wish to again amend the Original Note with such amendment having an issue date of January 30, 2018 (this "Amendment Number 3"), the Original Note having the Original Issue Date, Amendment Number 1 having the Amendment Number 2 having the Amendment Number 2 Issue Date.

NOW, THEREFORE, in consideration of, among other things, the premises, representations, respective covenants and agreements contained herein, each party hereby agrees to the following:

- 1. Capitalized terms used, but not defined, herein, shall have the meanings ascribed to such terms in the Original Note as amended by Amendment Number 3.
- 2. The definition of Principal Amount in the Original Note as amended by Amendment Number 3 is changed to Four Million United States Dollars (US\$4,000,000).
- 3. All other terms and conditions of the Original Note as amended by Amendment Number 3 shall remain in full force and effect.
- 4. This Amendment Number 3 may be executed in any number of counterparts and by the different signatories hereto on separate counterparts, each of which, when so executed, shall be deemed an original, but all such counterparts shall constitute but one and the same instrument. This Amendment Number 3 may be executed by facsimile transmission, PDF, electronic signature or other similar electronic means with the same force and effect as if such signature page were an original thereof.

[Signature page follows]

specif	WITNESS WHEREOF, this Amendment Number 3 has been executed and delivered on the Amendment No. 3 Issue Date bove.
	COMPANY:
	PRESSURE BIOSCIENCES, INC.
	By: Name: Richard T. Schumacher Title: President and CEO
	HOLDER:

[signature page to Amendment Number 3]

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: May 15, 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: May 15, 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 March 31, 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: May 15, 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 March 31, 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: May 15, 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.