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, 2019

or

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

For the transition period from _____________ to _____________

Commission File Number 001-38185

PRESSURE BIOSCIENCES, INC.
(Exact name of registrant as specified in its charter)

Massachusetts	**04-2652826**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
14 Norfolk Avenue South Easton, Massachusetts	**02375**
(Address of principal executive offices)	(Zip Code)

(508) 230-1828
(Registrant's telephone number, including area code)

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

[X] Yes [ ] No

Indicate by check mark whether the registrant has submitted electronically 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 filer	[X]	Smaller reporting company	[X]
Emerging Growth Company	[ ]		

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

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

[ ] Yes [X] No

The number of shares outstanding of the Issuer's common stock as of May 15, 2019 was 1,852,691.

PRESSURE BIOSCIENCES, INC.

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PART I - FINANCIAL INFORMATION

Item 1. Financial Statements

PRESSURE BIOSCIENCES, INC.
CONSOLIDATED BALANCE SHEETS
(UNAUDITED)

	March 31, 2019	December 31, 2018
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	$ 269,714	$ 103,118
Accounts receivable	443,162	474,830
Inventories, net of $273,547 reserve at March 31, 2019 and at December 31, 2018	753,132	765,478
Prepaid expenses and other current assets	183,341	170,734
Total current assets	1,649,349	1,514,160
Investment in equity securities	16,643	16,643
Property and equipment, net	79,932	69,272
Right of use asset	122,792	136,385
Intangible assets, net	641,827	663,462
TOTAL ASSETS	$ 2,510,543	$ 2,399,922
LIABILITIES AND STOCKHOLDERS’ DEFICIT		
CURRENT LIABILITIES		
Accounts payable	$ 474,418	$ 658,856
Accrued employee compensation	394,980	456,932
Accrued professional fees and other	1,172,115	1,112,995
Other current liabilities	1,584,507	1,233,325
Deferred revenue	36,952	20,623
Operating lease liability	63,614	59,799
Convertible debt, net of unamortized debt discounts of $239,675 and $156,180, respectively	4,504,188	4,000,805
Other debt, net of unamortized discounts of $10,011 and $9,118, respectively	944,374	852,315
Related party debt other	15,000	15,000
Total current liabilities	9,190,148	8,410,650
LONG TERM LIABILITIES		
Operating lease liability, net of current portion	59,178	76,586
Deferred revenue	33,958	37,757
TOTAL LIABILITIES	9,283,284	8,524,993
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, 2019 and December 31, 2018, 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, 2019 and December 31, 2018, respectively	806	806
Series H Convertible Preferred Stock, $.01 par value; 10,000 shares authorized; 10,000 shares issued and outstanding on March 31, 2019 and December 31, 2018, respectively	100	100
Series H2 Convertible Preferred Stock, $.01 par value; 21 shares authorized; 21 shares issued and outstanding on March 31, 2019 and December 31, 2018, respectively	-	-
Series J Convertible Preferred Stock, $.01 par value; 6,250 shares authorized; 3,458 shares issued and outstanding on March 31, 2019 and December 31, 2018, respectively	35	35
Series K Convertible Preferred Stock, $.01 par value; 15,000 shares authorized; 6,880 shares issued and outstanding on March 31, 2019 and December 31, 2018, respectively	68	68
Series AA Convertible Preferred Stock, $.01 par value; 10,000 shares authorized; 7,059 and 6,499 shares issued and outstanding on March 31, 2019 and December 31, 2018, respectively	71	65
Common stock, $.01 par value; 100,000,000 shares authorized; 1,768,492 and 1,684,182 shares issued and outstanding on March 31, 2019 and December 31, 2018, respectively	17,685	16,842
Warrants to acquire common stock	20,706,539	19,807,247
Additional paid-in capital	40,640,273	39,777,301
Accumulated deficit	(68,138,321)	(65,727,538)
Total stockholders’ deficit	(6,772,741)	(6,125,071)
TOTAL LIABILITIES AND STOCKHOLDERS’ DEFICIT	$ 2,510,543	$ 2,399,922

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

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

	For the Three Months Ended March,	
	2019	2018
Revenue:		
Products, services, other	$ 510,240	$ 585,244
Grant revenue	-	25,530
Total revenue	510,240	610,774
Costs and expenses:		
Cost of products and services	309,712	324,789
Research and development	264,704	324,976
Selling and marketing	188,215	274,468
General and administrative	1,144,421	794,605
Total operating costs and expenses	1,907,052	1,718,838
Operating loss	(1,396,812)	(1,108,064)
Other (expense) income:		
Interest expense, net	(512,706)	(872,328)
Other expense	(104,845)	(250,817)
Impairment loss on investment	-	(4,730)
(Loss) Gain on extinguishment of debt	(40,810)	4,285
Total other expense	(658,361)	(1,123,590)
Net loss	(2,055,173)	(2,231,654)
Deemed dividends on beneficial conversion feature	(1,060,199)	-
Preferred stock dividends	(355,610)	-
Net loss attributable to common shareholders	(3,470,982)	2,231,654
Net loss per share – basic and diluted	$ (2.01)	$ (1.64)
Weighted average common stock shares outstanding used in the basic and diluted net loss per share calculation	1,723,557	1,363,326

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

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

	For the Three Months Ended March 31, 2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$ (2,055,173)	$ (2,231,654)
Adjustments to reconcile net loss to net cash used in operating activities:		
Right of use asset	13,593	-
Common stock issued for debt extension	-	28,490
Depreciation and amortization	23,590	23,499
Accretion of interest and amortization of debt discount	103,933	459,232
Inventory reserve recovery	-	(19,950)
Loss/(gain) on extinguishment of debt	40,810	(4,285)
Stock-based compensation expense	245,392	86,020
Shares issued for services	168,000	-
Shares issued with debt	-	7,800
Impairment loss on investment	-	4,730
Changes in operating assets and liabilities:		
Accounts receivable	31,668	(115,736)
Inventories	12,346	(14,795)
Prepaid expenses and other assets	(12,606)	22,886
Accounts payable	(184,438)	51,823
Accrued employee compensation	(61,952)	(15,668)
Operating lease liability	(13,593)	-
Deferred revenue and other accrued expenses	70,506	440,096
Net cash used in operating activities	(1,617,924)	(1,277,512)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property plant and equipment	(12,615)	-
Net cash used in investing activities	(12,615)	-
CASH FLOWS FROM FINANCING ACTIVITIES:		
Net proceeds from revolving note payable	-	460,000
Net proceeds from preferred stock	1,260,000	-
Net proceeds from convertible debt	1,490,368	819,350
Net proceeds from non-convertible debt – third party	644,000	298,600
Net proceeds from non-convertible debt – related party	-	50,000
Payments on convertible debt	(1,040,185)	(102,500)
Payments on non-convertible debt	(557,048)	(247,809)
Net cash provided by financing activities	1,797,135	1,277,641
NET INCREASE IN CASH	166,596	129
CASH AT BEGINNING OF YEAR	103,118	81,033
CASH AT END OF PERIOD	$ 269,714	$ 81,162
SUPPLEMENTAL INFORMATION		
Interest paid in cash	$ 299,192	$ 120,970
NON CASH TRANSACTIONS:		
Common stock issued in lieu of cash for interest	-	80,755
Common stock issued with debt	50,733	51,463
Discount from warrants issued with convertible debt	-	118,416
Discount from one-time interest	-	72,500
Preferred stock dividend	355,610	-
Deemed dividend-beneficial conversion feature	1,060,199	-

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

PRESSURE BIOSCIENCES, INC.
CONSOLIDATED STATEMENTS OF EQUITY
(UNAUDITED)

	Series D Preferred Stock		Series G Preferred Stock		Series H Preferred Stock		Series H(2)Preferred Stock		Series J Preferred Stock		Series K Preferred Stock		Series AA Preferred Stock		Common Stock		Stock	Additional Paid-In	Accumulated other comprehensive	Accumulated	Total Stockholders’
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Warrants	Capital	loss	Deficit	Deficit
BALANCE, December 31, 2017	300	$ 3	80,570	$ 806	10,000	$ 100	21	$ -	3,458	$ 35	6,880	68.	$ -	-	1,342,858	$ 13,429	$ 9,878,513	$ 30,833,549	$ -	$ (55,349,299)	$ (14,622,796)
Stock-based compensation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	86,020	-	-	86,020
Issuance of common stock for services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Down round feature triggered	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-
Warrant exercise	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Series AA Preferred Stock dividend	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Issuance of warrants for services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Conversion of debt and interest for preferred stock	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Issuance of common stock for dividends paid-in-kind	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22,606	226	-	80,529	-	-	80,755
Deemed dividend-beneficial conversion feature	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Conversion of Series AA convertible preferred stock	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preferred Stock offering	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Offering costs for issuance of preferred stock	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Common Stock issued for debt extension															7,000	70	-	28,420	-	-	28,490
Stock issued with debt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15,750	157	-	59,106	-	-	59,263
Warrants issued with debt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	118,416	-	-	-	118,416
Unrealized loss on investments, net of tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(2,231,654)	(2,231,654)
BALANCE, March 31, 2018	300	$ 3	80,570	$ 806	10,000	$ 100	21	$ -	3,458	$ 35	6,880	$ 68	-	$ -	1,388,214	$ 13,882	$ 9,996,929	$ 31,087,624	$ -	$ (57,580,953)	$ (16,481,506)

	Series D Preferred Stock		Series G Preferred Stock		Series H Preferred Stock		Series H(2)Preferred Stock		Series J Preferred Stock		Series K Preferred Stock		Series AA Preferred Stock		Common Stock		Stock	Additional Paid-In	Accumulated other comprehensive	Accumulated	Total Stockholders’
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Warrants	Capital	loss	Deficit	Deficit
BALANCE, December 31, 2018	300	$ 3	80,570	$ 806	10,000	$ 100	21	$ -	3,458	$ 35	6,880	65	6,499	65.00	1,684,184	$ 16,842	$ 19,807,247	$ 39,777,301		$ (65,727,538)	$ (6,125,071)
Stock-based compensation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	245,392	-	-	245,392
Issuance of common stock for services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Series AA Preferred Stock dividend	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	(355,610)	(355,610)
Warrant exercise	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
Series AA Preferred Stock dividend	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Issuance of shares for services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50,000	500		167,500	-	-	168,000
Conversion of debt and interest for preferred stock	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Issuance of common stock for dividends paid-in-kind	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beneficial conversion feature on Series AA convertible preferred stock	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,060,199
Deemed dividend-beneficial conversion feature	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,060,199
Conversion of Series AA convertible preferred stock	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Preferred Stock offering	-	-	-	-	-	-	-	-	-	-	-	-	560	6	-	-	738,528	661,466	-	-	1,400,000

Offering costs for issuance of preferred stock	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	160,764	(300,764)	-	-	(140,000)
Common Stock issued for debt extension															16,350	164	-	38,824	-	-	38,988
Stock issued with debt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17,958	180	-	50,553	-	-	50,733
Warrants issued with debt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unrealized loss on investments, net of tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net loss	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(2,055,173)	(2,055,173)
BALANCE, March 31, 2019	300	$ 3	80,570	$ 806	10,000	$ 100	21	$ -	3,458	$ 35	6,880	$ 68	7,059	$ 71	1,768,492	$ 17,685	$ 20,706,539	$ 40,640,273	$ -	$ (68,138,321)	$ (6,772,741)

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, 2019
(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, 2019 or in fiscal year 2018.

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, 2019, 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 and equity financing after March 31, 2019 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.

3) Interim Financial Reporting

The accompanying unaudited consolidated balance sheet as of December 31, 2018, 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, 2018 as filed with the Securities and Exchange Commission on April 16, 2019.

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

From time to time, new accounting pronouncements are issued by the FASB or other standard setting bodies and adopted by the Company as of the specified effective date. Unless otherwise discussed, the Company believes that the impact of recently issued standards that are not yet effective will not have a material impact on its financial position or results of operations upon adoption.

In February 2016, the FASB issued ASU 2016-02, Leases (ASC 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. The Company early adopted ASC 842 for 2018.

In May 2017, the FASB issued ASU 2017-09, *Compensation – Stock Compensation (Topic 718) Scope of Modification Accounting*, which clarifies that an entity should account for the effects of a modification unless the fair value, vesting terms and classification as liability or equity of the modified and original awards do not change on the modification date. This ASU is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. The Company adopted this ASU effective on January 1, 2018, on a prospective basis which did not have a material impact on the Company's condensed consolidated financial statements and related disclosures.

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.

In July 2018, the FASB issued ASU 2018-07, Compensation- Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting as an amendment and update expanding the scope of Topic 718. The amendment specifies that Topic 718 now applies to all share-based payment transactions, even non-employee awards, in which a grantor acquires goods or services to be used or consumed in a grantor's own operations by issuing share-based payment awards. Under the new guidance, awards to nonemployees are measured on the grant date, rather than on the earlier of the performance commitment date or the date at which the nonemployee's performance is complete. Also, the awards would be measured by estimating the fair value of the equity instruments to be issued, rather than the fair value of the goods or services received or the fair value of the equity instruments issued, whichever can be measured more reliably. In addition, entities may use the expected term to measure nonemployee awards or elect to use the contractual term as the expected term, on an award-by-award basis. The new guidance is effective for the Company in annual periods beginning after December 15, 2018, and interim periods within those annual periods, with early adoption permitted. Based on the new guidance, the Company will measure its nonemployee stock awards at grant date not when the stock awards are vested. This new guidance did not have a material impact on the Company's 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:

a) The fair value of the asset or service involved is not determinable.

b) The transaction is an exchange of a product or property held for sale in the ordinary course of business for a product or property to be sold in the same line of business to facilitate sales to customers other than the parties to the exchange.

c) The transaction lacks commercial substance.

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

In accordance with FASB ASC 842, *Leases*, we account for our lease agreements under the operating method. The new standard provides a number of optional practical expedients in transition. We elected the 'package of practical expedients' for our instrument leases, which permits us not to reassess under the new standard our prior conclusions about lease identification, lease classification and initial direct costs.

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 2019**	**Q1 2018**
North America	224	365
Europe	40	155
Asia	246	91
	510	611
Major products/services lines	**Q1 2019**	**Q1 2018**
Instruments	138	420
Grants	0	25
Consumables	62	75
Others	310	91
	510	611
Timing of revenue recognition	**Q1 2019**	**Q1 2018**
Products transferred at a point in time	501	576
Products and services transferred over time	9	35
	510	611

Contract balances

In thousands of US dollars ($)	**March 31, 2019**	**December 31, 2018**
Receivables, which are included in 'Accounts Receivable'	443	475
Contract liabilities (deferred revenue)	71	59

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 ($)	**2019**	**2020**	**2021**	**Total**
Extended warranty service	37	34	-	71

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, 2019 and 2018. The Top Five Customers category may include federal agency revenues if applicable.

	For the Three Months Ended March 31,	
	2019	2018
Top Five Customers	73%	40%
Federal Agencies	18%	4%

The following table illustrates the level of concentration as a percentage of net accounts receivable balance as of March 31, 2019 and December 31, 2018. The Top Five Customers category may include federal agency receivable balances if applicable.

	March 31, 2019	December, 31, 2018
Top Five Customers	77%	54%
Federal Agencies	18%	5%

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 outsourced manufacturing relationships such as that with CBM and outsource manufacturing of the entire Barocycler® product line, future instruments, and other products to CBM.

Investment in Equity Securities

As of March 31, 2019, 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 321 *"Investments —Equity Securities"*. ASC 321 requires equity investments with readily determinable fair values to be measured at fair value with changes in fair value recognized in net income. On March 31, 2019, our consolidated balance sheet reflected the fair value of our investment in Everest to be approximately $17,000. We recorded $3,182 as realized losses in 2018 for the changes in market value.

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, 2019 and 2018:

	For the Three Months Ended March 31,	
	2019	2018
Numerator:		
Net loss attributable to common shareholders	$ (3,470,982)	$ (2,231,654)
Denominator for basic and diluted loss per share:		
Weighted average common stock shares outstanding	1,723,557	1,363,326
Loss per common share – basic and diluted	$ (2.01)	$ (1.64)

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, Series K Convertible Preferred Stock and Series AA Convertible Preferred Stock are presented below as if they were converted into common shares according to the conversion terms.

	As of March 31,	
	2019	2018
Stock options	366,734	247,136
Convertible debt	471,015	1,020,603
Common stock warrants	8,380,875	928,541
Convertible preferred stock:		
Series D Convertible Preferred Stock	25,000	25,000
Series G Convertible Preferred Stock	26,857	26,857
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	115,267
Series K Convertible Preferred Stock	229,334	229,334
Series AA Convertible Preferred Stock	7,059,822	-
	16,778,238	2,696,072

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 $245,392 and $86,020 for the three months ended March 31, 2019 and 2018, respectively. The following table summarizes the effect of this stock-based compensation expense within each of the line items of our costs and expenses within our Consolidated Statements of Operations:

	For the Three Months Ended March 31,	
	2019	2018
Cost of sales	$ 8,316	$ -
Research and development	34,624	15,499
Selling and marketing	22,119	7,197
General and administrative	180,333	63,324
Total stock-based compensation expense	$ 245,392	$ 86,020

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.

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, 2019:

		Fair value measurements at March 31, 2019 using:		
	March 31, 2019	**Quoted prices in active markets (Level 1)**	**Significant other observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**
Equity Securities	16,643	16,643	-	-
Total Financial Assets	$ 16,643	$ 16,643	$ -	$ -

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, 2018:

		Fair value measurements at December 31, 2018 using:		
	December 31, 2018	**Quoted prices in active markets (Level 1)**	**Significant other observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**
Equity Securities	16,643	16,643	-	-
Total Financial Assets	$ 16,643	$ 16,643	$ -	$ -

Adoption of ASU No. 2016-02

The Company has early adopted ASU No. 2016-02, Leases (Topic 842). The amendment requires companies to recognize leased assets and liabilities on the balance sheet and to disclose key information regarding lease arrangements. This guidance is effective for annual periods, and interim periods within those annual periods, after December 15, 2018. Early application of this amendment is permitted for all entities. While we do not anticipate that going forward, leases will be material to our balance sheet, we chose to early-adopt as of December 31, 2018. We have one lease that is required to be included on our balance sheet under the new standard. This lease is an operating lease and, therefore, will have no income statement impact resulting from the adoption of this standard.

5) Commitments and Contingencies

Operating Leases

As disclosed in Note 4, the Company early adopted ASC 842 to our existing leases. The Company has elected to apply the short-term lease exception to leases of one year or less. Consequently, as a result of adoption of ASC 842, we recognized an operating liability of $136,385 with a corresponding Right-Of-Use ("ROU") asset of the same amount based on present value of the minimum rental payments of the lease which is included in non-current assets and long-term liabilities in the consolidated balance sheet. The discount rate used for leases accounted for under ASC 842 is the Company's estimated borrowing rate of 25%.

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 28, 2018, that expires December 31, 2019, 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 $7,130.50 subject to annual cost of living increases. The lease can be extended by the Company for an additional three years unless either party terminates at least six months prior to the expiration of the current lease term.

Rental costs are expensed on a straight-line basis subject to future cost of living increases that are not known until the anniversary date of each year. During the three months ended March 31, 2019 and 2018 we incurred $44,241 and $46,723 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, 2019:

2019	$	62,215
2020		82,953
2021		
2022		-
Thereafter		-
	$	145,168

6) Convertible Debt and Other Debt

Conversion of Notes

We issued 5,075.40 shares of our Series AA Convertible Preferred Stock in satisfaction of $12,688,635 of convertible promissory notes, Revolving Note and short-term loans issued:

		Debt converted to stock
Current liabilities		
Convertible Debentures, face value	$	6,962,635
Revolving Note with interest		4,750,000
May 19, 2017 Promissory Note with interest		750,000
Other Notes with interest		226,000
Total debt converted during the year 2018	$	12,688,635

Senior Secured Convertible Debentures and Warrants

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

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

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

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

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

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

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

Conversion of Debentures

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

On June 11, 2018, the Company entered into additional Letter Agreements with 15 Debenture Holders whereby the Debenture Holders agreed to convert a total of $742,135 in principal and original issue discount due them under the Debentures into 296.80 shares of Series AA Convertible Preferred Stock with a conversion price of $2.50 per share. The Debenture Holders were also: (a) issued amended Debenture Warrants such that the exercise price will be $3.50 per share; and (b) issued a new warrant with an exercise price of $3.50 per share to purchase 296,800 shares of common stock (the number of shares of common stock issuable upon conversion of the Series AA Convertible Preferred Stock shares received as a result of the Debenture conversions). The Debenture Holders also agreed to waive any and all defaults or events of default by the Company with respect to any failure by the Company to comply with any covenants contained in the Debentures. The fair value of $3,155 relating to the adjustment in exercise price was treated as a loan modification and recorded as a gain toward the extinguishment of debt.

In connection with the above Debenture conversions and cancellation of the debt term, the Company recorded the full amount of the remaining unamortized Debenture discounts of $157,908 as interest expense by June 11, 2018. The Company recorded $287,676 of the Debenture discounts during 2018 through the cancellation date of June 11, 2018.

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.

Convertible notes

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

On various dates during the quarter ended March 31, 2019, the Company issued convertible notes for net proceeds of approximately $1.5 million which contained varied terms and conditions as follows: a) maturity dates ranging from 2 to 12 months; b) interest rates that accrue per annum ranging from 4% to 15%; c) convertible to the Company's common stock at issuance at a fixed rate of $7.50 or convertible at variable conversion rates either after 6 months after issuance or in the event of a default. Certain of these notes were issued with shares of common stock or warrants to purchase common stock that were fair valued at issuance dates. The aggregate relative fair value of $47,459 of the shares of common stock to purchase common stock issued with the notes was recorded as a debt discount and amortized over the term of the notes. We then computed the effective conversion price of the notes, noting that no beneficial conversion feature exists. We also evaluated the convertible notes for derivative liability treatment and determined that the notes did not qualify for derivative accounting treatment as of March 31, 2019.

The specific terms of the convertible notes and outstanding balances as of March 31, 2019 are listed in the tables below.

Inception Date	Term	Loan Amount	Outstanding Balance with OID	Original Issue Discount	Interest Rate	Conversion Price (Convertible at Inception Date)	Deferred Finance Fees	Discount related to fair value of conversion feature and warrants/shares
February 15, 2018 [1]	6 months	100,000	100,000	-	15%	$ 7.50	9,000	10,474
April 11, 2018 [1]	6 months	100,000	100,000	4,000	15%	$ 7.50	20,000	7,218
April 24, 2018 [1]	9 months	77,000	77,000	-	12%	$ 7.50	2,000	-
April 25, 2018 [1]	12 months	105,000	105,000	-	4%	$ 7.50	5,000	4,590
April 25, 2018 [1]	12 months	105,000	105,000	-	4%	$ 7.50	5,000	4,590
May 17, 2018 [1]	12 months	380,000	380,000	15,200	8%	$ 7.50	15,200	43,607
May 30, 2018 [1]	2 months	150,000	100,000	-	8%	$ 7.50	-	6,870
June 4, 2018	12 months	75,000	75,000	7,500	5%	-	2,000	3,869
June 8, 2018 [1]	6 months	50,000	50,000	2,500	15%	$ 7.50	2,500	3,271
June 12, 2018 [1]	6 months	100,000	100,000	-	5%	$ 7.50	5,000	-
June 16, 2018 [1]	9 months	130,000	101,500	-	5%	-	-	-
June 16, 2018 [1]	6 months	110,000	101,500	-	5%	-	-	-
June 26, 2018 [1]	3 months	150,000	75,000	-	15%	$ 7.50	-	20,242
June 28, 2018 [1]	6 months	50,000	50,000	-	15%	$ 7.50	-	10,518
July 17, 2018 [1]	3 months	100,000	100,000	15,000	15%	$ 7.50	-	16,944
July 19, 2018	12 months	184,685	150,000	34,685	10%	$ 7.50	-	-
September 7, 2018 [1]	6 months	85,000	75,000	-	5%	-	-	4,364
October 1, 2018	6 months	118,800	118,800	8,800	25%	$ 7.50	3,000	
October 19, 2018	6 months	100,000	100,000	-	5%	$ 7.50		
October 23, 2018	6 months	103,000	103,000		12%	-	3,000	
October 29, 2018	6 months	77,000	77,000		12%	$ 7.50	2,000	
November 5, 2018	6 months	105,000	105,000		4%	-	5,000	3,872
November 5, 2018	6 months	130,000	130,000		6%	$ 7.50	6,500	
November 7, 2018	6 months	205,000	205,000		4%	$ 7.50	5,000	17,906
November 13, 2018	6 months	75,000	75,000	7,500	5%	-	2,000	4,656
November 13, 2018	6 months	200,000	185,000		15%	$ 7.50		30,026
November 21, 2018	9 months	103,000	103,000		12%	-	3,000	
November 27, 2018	12 months	70,000	70,000		4%	-	2,500	1,922
January 2, 2019	12 months	125,000	125,000		4%	$ 7.50	6,250	6,620
January 9, 2019	12 months	105,000	105,000		4%	$ 7.50	5,000	2,416
January 9, 2019	12 months	118,750	118,750		5%	$ 7.50	8,750	
January 11, 2019	9 months	103,000	103,000		8%	-	3,000	
January 31, 2019	12 months	100,000	100,000		6%	$ 7.50	5,000	
January 31, 2019	12 months	108,000	108,000	8,000	4%	$ 7.50	3,000	
February 8, 2019	12 months	237,500	237,500	14,750	5%	$ 7.50	7,000	
February 21, 2019	12 months	215,000	215,000		4%	$ 7.50	15,000	18,582
February 22, 2019	12 months	65,500	65,000	6,500	5%	$ 7.50	2,000	4,198
February 22, 2019	9 months	115,563	115,563	8,063	7%	$ 7.50	2,500	
February 27, 2019	10 months	103,000	103,000		8%	-	3,000	
March 18, 2019	6 months	100,000	100,000		4%	$ 7.50	-	10,762
March 19, 2019	12 months	131,250	131,250		4%	$ 7.50	6,250	4,509
		$ 4,966,048	$ 4,743,863	$ 132,498			$ 164,450	$ 242,046

1) The notes were extended for an additional term.

For the three months ended March 31, 2019, the Company recognized amortization expense related to the debt discounts indicated above of $101,752. The unamortized debt discounts as of March 31, 2019 related to the convertible debentures and other convertible notes amounted to $239,675.

Revolving Note Payable and May 19,2017 Promissory Note

On October 28, 2016, an accredited investor (the "*Investor*") purchased from us a promissory note in the aggregate principal amount of up to $2,000,000 (the "*Revolving Note*") due and payable on the earlier of October 28, 2017 (the "*Maturity Date*") or on the seventh business day after the closing of a Qualified Offering (as defined in the Revolving Note). Although the Revolving Note is dated October 26, 2016, the transaction did not close until October 28, 2016, when we received its initial $250,000 advance pursuant to the Revolving Note. As a result, on the same day and pursuant to the Revolving Note, we issued to the Investor a Common Stock Purchase Warrant 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.

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

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

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

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

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

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

Convertible Loan Modifications and Extinguishments

We refinanced certain convertible loans during the quarter ended March 31, 2019 at substantially the same terms for extensions of six months. We amortized any remaining unamortized debt discount as of the modification date over the remaining, extended term of the new loans. We applied ASC 470 of modification accounting to the debt instruments which were modified during the quarter or those settled with new notes issued concurrently for the same amounts but different maturity dates. The terms such as the interest rate, prepayment penalties, and default rates will be the same over the new extensions. According to ASC 470, an exchange of debt instruments between or a modification of a debt instrument by a debtor and a creditor in a nontroubled debt situation is deemed to have been accomplished with debt instruments that are substantially different if the present value of the cash flows under the terms of the new debt instrument is at least 10 percent different from the present value of the remaining cash flows under the terms of the original instrument. If the terms of a debt instrument are changed or modified and the cash flow effect on a present value basis is less than 10 percent, the debt instruments are not considered to be substantially different and will be accounted for as modifications.

The cash flows of new debt exceeded 10% of the remaining cash flows of the original debt on three loans. We recorded losses on debt extinguishment of $40,810 per income statement on these three loans by calculating the difference of the fair value of the new debt and the carrying value of the old debt. The loss was primarily from the fair value of common stock issued in connection with these refinancings and cash fees paid.

The following table provides a summary of the changes in convertible debt and revolving note payable, net of unamortized discounts, during 2019:

		2019
Balance at January 1,	$	4,000,805
Issuance of convertible debt, face value		1,627,063
Deferred financing cost		(136,695)
Debt discount from shares issued with the notes		(48,552)
Payments		(1,040,185)
Accretion of interest and amortization of debt discount to interest expense		101,752
Balance at March 31,		4,504,188
Less: current portion		4,504,188
Convertible debt, long-term portion	$	-

Other Notes

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

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

In January 2019, we received a non-convertible loan for $50,000 from a private investor. The loan includes a six-month term and 15% guaranteed interest.

On January 1, 2019, the Company and the holder of the $170,000 convertible loan issued in May 2017 agreed to extend the terms of the loan until September 30, 2019. The Company agreed to issue 1,200 shares of its common stock per month while the note remains outstanding. The loan will continue to earn 10% annual interest.

On February 28, 2019 we signed a Merchant Agreement with a lender. Under the agreement we received $600,000, of which approximately $349,000 was used to pay off the outstanding balances on two merchant agreements, in exchange for rights to all customer receipts until the lender is paid $804,000, which is collected at the rate of $4,020.00 per business day. The $240,000 imputed interest will be recorded as interest expense when paid each day. Fees of $6,000 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.

Conversion of Non-Convertible Notes

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

Merchant Agreements

We have signed various Merchant Agreements which entitle the lenders to our customer receipts. We accounted for the Merchant Agreements as loans under ASC 860 because while we provided rights to current and future receipts, we still had control over the receipts. Certain of these loans are guaranteed by an officer of the Company. The following table shows our Merchant Agreements as of March 31, 2019.

Inception Date	Purchase Price	Purchased Amount	Outstanding Balance	Daily Payment	Deferred Finance Fees
December 18, 2018	250,000	335,000	181,533	1,675.00	3,912
February 28, 2019	600,000	804,000	552,853	4,020.00	6,000
	$ 2,330,000	$ 3,124,600	$ 734,386		$ 31,761

We amortized $2,181 and $33,368 of debt discounts during the three months ended March 31, 2019 and 2018, respectively for all non-convertible notes. The total unamortized discount for all non-convertible notes as of March 31, 2019 was $10,011.

Related Party Notes

On March 14, 2018, we received a one-year, non-convertible loan of $50,000 from a related party (a member of the Company's Board of Directors). This loan is included in net proceeds from non-convertible debt in the Statement of Cash Flows. The amount of $50,000 was converted on June 11, 2018 into 20 shares of Series AA Convertible Preferred Stock and a Warrant to purchase 20,000 shares of common stock. The $7,500 guaranteed interest on the loan was recorded as a debt discount and amortized over the term of the debt. The interest is outstanding as of December 31, 2018.

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

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

7) Stockholders' Deficit

Preferred Stock

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

1) 20,000 shares have been designated as Series A Junior Participating Preferred Stock ("*Junior A*")

2) 313,960 shares have been designated as Series A Convertible Preferred Stock ("*Series A*")

3) 279,256 shares have been designated as Series B Convertible Preferred Stock ("*Series B*")

4) 88,098 shares have been designated as Series C Convertible Preferred Stock ("*Series C*")

5) 850 shares have been designated as Series D Convertible Preferred Stock ("*Series D*")

6) 500 shares have been designated as Series E Convertible Preferred Stock *("Series E")*

7) 240,000 shares have been designated as Series G Convertible Preferred Stock ("*Series G*")

8) 10,000 shares have been designated as Series H Convertible Preferred Stock ("*Series H*")

9) 21 shares have been designated as Series H2 Convertible Preferred Stock ("*Series H2*")

10) 6,250 shares have been designated as Series J Convertible Preferred Stock ("*Series J*")

11) 15,000 shares have been designated as Series K Convertible Preferred Stock ("*Series K*")

12) 10,000 shares have been designated as Series AA Convertible Preferred Stock ("*Series AA*")

As of March 31, 2019, 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, 2018 for the pertinent disclosures of preferred stock.

Series AA Convertible Preferred Stock and Warrants

During the three months ended March 31, 2019, the Company entered into Securities Purchase Agreements with shareholders pursuant to which the Company sold an aggregate of 560 shares of Series AA Convertible Preferred Stock, each preferred share convertible into 1,000 shares of the Company's common stock, par value $0.01 per share, for an aggregate Purchase Price of $1,400,000. Each share of Series AA Convertible Preferred Stock will receive a cumulative dividend at the annual rate of eight percent (8%) payable quarterly commencing on March 31, 2019 on those shares of Series AA Convertible Preferred Stock purchased from the Company. Broker fees amounted to $140,000.

We issued to the shareholders warrants to purchase 560,000 shares of common stock with an exercise price of $3.50 per share. The Warrant will expire on the fifth-year anniversary after issuance. The exercise price is also subject to adjustment in the event that we issue any shares of common stock or common stock equivalents at a per share price that is lower than the exercise price for the Series AA Warrants then in effect. Upon any such issuance, subject to certain exceptions, the exercise price will be reduced to the per share price at which such shares of common stock or common stock equivalents are issued.

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. The Plan has expired and on July 18, 2018, the outstanding options to acquire 32,605 shares were transferred as discussed below to one of the other plans.

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, 2019, options to acquire 366,734 shares were outstanding under the Plan with 2,633,266 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.

On July 18, 2018, the Board of Directors approved the immediate termination of 244,467 outstanding stock options held by current officers, employees and board members (32,605 stock options under the 2005 Plan, 81,925 stock options under the 2013 Plan, and 129,937 stock options under the 2015 Plan) and the issuance of new stock options to the same holders with an exercise price of $3.40 per share equal to the closing market price on July 18, 2018 and an expiration date of July 18, 2028. The new stock options for board members will vest 1/12th per month for 12 months. The new stock options for officers and employees will vest 1/36th per month for 36 months. The 2005 Plan expired in 2015 so of the 32,605 terminated stock options, 16,641 stock options were issued under the 2013 Plan and 15,964 stock options were issued under the 2015 Plan (in addition to the reissuance of 81,925 stock options under the 2013 Plan, and 129,937 stock options under the 2015 Plan). The Board of Directors also awarded 101,267 stock options to officers, employees and board members separately based on the annual compensation committee recommendation. Of the 101,267 stock options issued, 51,934 stock options were issued under the 2013 Plan and 49,333 stock options were issued under the 2015 Plan.

On November 5, 2018 the Board of Directors approved the closing of the 2015 Plan and moved the 203,734 options outstanding in the 2015 Plan into the 2013 Plan which was then the only option plan still active. The unamortized expense related to this transfer is $108,400 which will be amortized over the remaining life of the options.

We evaluated this exchange and concluded that it was a modification under ASU 2017-09. Under ASU 2017-09, a cancelled equity award accompanied by the concurrent grant of (or offer to grant) a replacement award or other valuable consideration shall be accounted for as a modification of the terms of the cancelled award. Therefore, incremental compensation cost shall be measured as the excess of the fair value of the replacement award or other valuable consideration over the fair value of the cancelled award at the cancellation date in accordance with paragraph ASC 718-20-35-3. The total compensation cost measured at the date of a cancellation and replacement shall be the portion of the grant-date fair value of the original award for which the requisite service is expected to be rendered (or has already been rendered) at that date plus the incremental cost resulting from the cancellation and replacement. The compensation value created by the termination and issuance of new stock options, as determined under the Black Scholes method, was approximately $759,469 and under ASU 2017-09 results in a non-cash expense in current and future periods not to exceed the vesting periods of the stock options.

As of March 31, 2019, total unrecognized compensation cost related to the unvested stock-based awards was $714,218, which is expected to be recognized over weighted average period of 1.03 years. The aggregate intrinsic value associated with the options outstanding and exercisable and the aggregate intrinsic value associated with the warrants outstanding and exercisable as of March 31, 2019, based on the March 29, 2019 closing stock price of $3.51, was $156,349.

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

	Stock Options		Warrants			
		Weighted Average		Weighted Average		Total
	Shares	Price per share	Shares	Price per share	Shares	Exercisable
Balance outstanding, 12/31/18	366,734	$ 3.39	7,764,821	$ 3.50	8,131,555	7,792,570
Granted	-	-	616,000	3.50	616,000	
Exercised	-	-	-	-	-	
Expired	-	-	-	-	-	
Forfeited	-	-	-	-	-	
Balance outstanding, 3/31/2019	366,734	$ 3.39	8,380,821	$ 3.55	8,747,555	8,493,987

Range of Exercise Prices	Options Outstanding: Number of Options	Options Outstanding: Weighted Average Remaining Contractual Life (Years)	Options Outstanding: Weighted Average Exercise Price	Options Exercisable: Number of Options	Options Exercisable: Weighted Average Remaining Contractual Life (Years)	Options Exercisable: Weighted Average Exercise Price
$ 2.00 - $3.40	366,734	9.6	$ 3.39	113,166	9.6	$ 3.40
$ 2.00 - $3.40	366,734	9.6	$ 3.39	113,166	9.6	$ 3.40

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.

On various dates in the three months ended March 31, 2019, the Company issued a total of 34,308 shares of common stock with a fair value of $89,721 in connection with the issuance of new loans and the extension of loans with existing noteholders and 50,000 shares with a fair value of $168,000 were issued for services rendered.

8) Subsequent Events

From April 1, 2019 through May 11, 2019 the Company issued Convertible notes for a total of $706,800. The notes required 6,181 shares of the Company's common stock and included interest at rates ranging from 4% to 18% and are for terms of six to twelve months. The Company also extended four notes (see below schedule) that required 6,000 shares of common stock. On April 19, 2019 and on May 8, 2019 the Company entered into merchant loan agreements for a total of $325,000.

On April 17, 2019, we received a short-term, non-convertible loan of $35,000 with 10% interest from a related party (a member of the Company's Board of Directors).

From April 1, 2019 through May 11, 2019 the Company issued 120 shares of Series AA Convertible Preferred Stock at $2,500 per share and received $270,000 net of $30,000 of broker fees. Each share of Series AA Convertible Preferred Stock carries 1,000 warrants to purchase Common Stock at $3.50 per share and is convertible into 1,000 shares of Common Stock.

Convertible Loan Modifications and Extinguishments

Subsequent to March 31, 2019, the Company modified or paid off the following loans:

Loan inception date	Principal	Modification date/Pay off date	Principal and interest paid	Extinguished or extended
October 5, 2018	$ 118,800	April 5, 2019	$ 150,786	Paid in full
April 11, 2018	100,000	April 11, 2019	9,000	Negotiating new terms
July 9, 2018	150,000	April 18, 2019	22,500	Extended to October 18, 2019
July 17, 2018	100,000	April 17, 2019	30,000	Extended to May 17, 2019
October 19, 2018	100,000	April 19, 2019	5,000	Extended to May 19, 2019
October 23, 2018	103,000	April 22, 2019	145,287	Paid in full
October 23, 2018	77,000	April 25, 2019	112,483	Paid in full
October 25, 2018	105,000	April 26, 2019	143,844	Paid in full
November 1, 2018	100,000	May 1, 2019	12,000	Extended to August 1, 2019
October 29, 2018	77,000	May 3, 2019	107,074	Paid in full
November 5, 2018	130,000	May 6, 2019	179,389	Paid in full
November 7, 2018	105,000	May 7, 2019	143,885	Paid in full
November 7, 2018	205,000	May 10, 2019	15,000	Conversion period extended to June 6th, 2019

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 will have sufficient liquidity to finance normal operations for the foreseeable future;
- the options we may pursue in light of our financial condition;
- the potential applications for Ultra Shear Technology (*UST*);
- the potential applications of the BaroFold high-pressure protein refolding and disaggregation technology
- 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;
- the expected increase in the number of pressure cycling technology (*"PCT")* and constant pressure (*"CP"*) based units that we believe will be installed and the expected increase in revenues from the sale of consumable products, extended service contracts, and biopharma contract services;
- our belief that PCT has achieved initial market acceptance in the mass spectrometry and other markets;
- 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, biopharma contract services and ultra shear technology;
- 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 and protein characterization in biomarker discovery, forensics, and histology, as well as 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 and services;
- 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 and services.

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, 2018. 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, 2019, 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, 2019, 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.

PBI has 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. 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 are also the exclusive distributor, throughout the Americas for Constant System's cell disruption equipment, parts, and consumables. CS, a British company located several hours northwest of London, England, has been providing niche biomedical equipment, related consumable products, and services to a global client base since 1989. CS designs, develops, and manufactures high pressure cell disruption equipment required by life sciences laboratories worldwide, particularly disruption systems for the extraction of proteins. The CS equipment provides a constant and controlled cell disruptive environment, giving the user superior, constant, and reproducible results whatever the application. CS has over 900 units installed in over 40 countries worldwide. The CS cell disruption equipment has proven performance in the extraction of cellular components, such as protein from yeast, bacteria, mammalian cells, and other sample types.

The CS pressure-based cell disruption equipment and our PCT-based instrumentation complement each other in several important ways. While both the CS and our technologies are based on high pressure, each product line has fundamental scientific capabilities that the other does not offer. Our PCT Platform uses certain patented pressure mechanisms to achieve small-scale, molecular level effects. CS's technology uses different, proprietary pressure mechanisms for larger-scale, non-molecular level processing. In a number of routine laboratory applications, such as protein extraction, both effects can be critical to success. Therefore, for protein extraction and a number of other important scientific applications, we believe laboratories will benefit by using the CS and our products, either separately or together.

We reported the following accomplishments during the first quarter and April 2019:

On April 2, 2019, the Company released a new, short video demonstrating the ability of the Company's proprietary UST platform to create water-soluble CBD oil that disperses instantly when infused into soft drinks, sports drinks, and beer for enhanced quality and absorption.

On March 27, 2019, the Company announced the establishment of a Center of Excellence at Dr. Christine Vogel's laboratory at New York University's Center for Genomics and Systems Biology.

On March 4, 2019, the Company announced a collaboration with The Steinbeis Centre for Biopolymer Analysis & Biomedical Mass Spectrometry, a world-renown German research organization, to develop a revolutionary method based on optimizing disease-fighting antibodies.

On February 21, 2019, the Company released scientific analyses confirming important benefits from processing CBD Oil with PBI's UST Platform: analyses showed UST-prepared CBD Oil solutions met challenging nanoemulsion specifications and exhibited minimal loss during processing.

On February 13, 2019, the Company announced the release of a short video demonstrating the use of its prototype UST Platform to make water-soluble CBD Oil, offering a solution to CBD absorption issues in food and beverages.

On January 29, 2019, the Company announced a collaboration with nutraceutical manufacturer NutraLife Biosciences for the development of high quality, water-soluble nanoemulsion-based nutraceuticals.

On January 24, 2019, the Company announced that a record number of scientific papers citing the significant benefits of PBI's PCT technology platform were published in 2018, some by global Key Opinion Leaders (KOLs).

On January 7, 2019, the Company launched the commercial launch of its unique biopharmaceuticals contract services business, offering improved manufacturing for protein therapeutic candidates, a $250 billion global market.

Results of Operations

Comparison for the three months ended March 31, 2019 ("Q1 2019") and 2018 ("Q1 2018")

Products, Services, and Grant Revenue

We recognized total revenue of $510,240 for Q1 2019 compared to $610,774 for Q1 2018, a decrease of $100,533 or 16%. This decrease was primarily attributable to decreases in instrument and consumable sales and the end of a $1 million dollar NIH grant award in Q4 2018. Consequently, there were no Grant revenues in Q1 2019.

Products and Services. Revenue from the sale of products and services decreased 13% to $510,240 for Q1 2019 compared to $585,244 for the same period in 2018. Sales of consumables decreased to $62,038 for Q1 2019 compared to $74,698 during the same period in 2018, a decrease of 17%. Products and Services Revenue included $35,235 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.

	Three Months Ended March 31, in thousands		
	2019	**2018**	$ Variance
Pressure Cycling Technology (PCT) Product Sales	272	585	(313)
BaroFold (Biopharma) Services	88	0	88
Ultra Shear Technology (UST) Services	150	0	150
	510	**585**	**(75)**

Cost of Products and Services

The cost of products and services was $309,712 for the three months ended March 31, 2019 compared to $324,789 for the comparable period in 2018. Gross profit margin on products and services decreased to 39% for Q1 2019 compared to 47% for the prior year period. The current period margin was affected by discounted sales to our foreign distributors, discounted sales to key customer partners and increased manufacturing headcount. Cost of products and services recognized in the three months ended March 31, 2019 included $8,316 of non-cash, stock-based compensation expense.

Research and Development

Research and development expenditures were $264,704 during the three months ended March 31, 2019 as compared to $324,976 in the same period in 2018, a decrease of $60,272 or 19%. The R&D team's cost in performing work on BioPharma (BaroFold) Services was charged to cost of goods and services.

Research and development expense recognized in the three months ended March 31, 2019 and 2018 included $34,624 and $15,499 of non-cash, stock-based compensation expense, respectively.

Selling and Marketing

Selling and marketing expenses decreased to $188,215 for the three months ended March 31, 2019 from $274,468 for the comparable period in 2018, a decrease of $86,253 or 31%. This decrease was primarily attributable to the retirement of our Vice President of Marketing and Sales, augmented by a concomitant decrease in sales personnel.

During the three months ended March 31, 2019 and 2018, selling and marketing expense included $22,119 and $7,197 of non-cash, stock-based compensation expense, respectively.

General and Administrative

General and administrative costs totaled $1,144,421 for Q1 2019 compared to $794,605 for the comparable period in 2018. This increase included increased use of investor and public relations services, non-cash stock compensation relating to renewed vesting and repricing of stock options, and employee costs relating to the hire of a chief commercial officer with related travel for business development.

During the three months ended March 31, 2019 and 2018, general and administrative expense included $180,333 and $63,324 of non-cash, stock-based compensation expense, respectively.

Operating Loss

Operating loss was $1,396,812 for the three months ended March 31, 2019 compared to $1,108,064 for the comparable period in 2018. This increase was due primarily to the added expenses detailed in the Company's operating activities above.

Other Income (Expense), Net

Other Expense

Debt discount amortization was $104,845 for the three months ended March 31, 2019 compared to $250,817 recorded for the three months ended March 31, 2018.

Interest (Expense) Income

Interest expense was $512,706 for the three months ended March 31, 2019 compared to interest expense of $1,123,145 for the three months ended March 31, 2018. Interest expense reflected interest on the GSS Debentures and the Revolving Note that were converted into equity on May 14, 2018 and June 11, 2018, respectively.

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, 2019, 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 2019. 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, 2019 was $1,617,924 as compared to $1,277,512 for the three months ended March 31, 2018. 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, 2019 was $12,615 while there was none in the prior period.

Net cash provided by financing activities for the three months ended March 31, 2019 was $1,797,135 as compared to $1,277,641 for the same period in the prior year. The cash from financing activities in the period ended March 31, 2019 included $1,260,000 net proceeds from the sale of preferred stock, $1,490,368 from convertible debt, net of fees and less payment on convertible debt of $1,040,185. We also received $644,000 from non-convertible debt, net of fees, less payment on non-convertible debt of $557,048. The prior period 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.

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, 2019, 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, 2019 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, 2018. 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, 2019, 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, 2019 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, 2018. 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 1A of our Annual Report on Form 10-K for the year ended December 31, 2018.

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.

On various dates in the three months ended March 31, 2019, the Company issued a total of 34,308 shares of common stock with a fair value of $89,721 in connection with the issuance of new loans and the extension of loans with existing noteholders and 50,000 shares with a fair value of $168,000 were issued for services rendered.

Item 3. Defaults upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

As previously reported in a Current Report on Form 8-K filed on February 15, 2019, the Company's Vice President of Finance and Chief Financial Officer, Mr. Joseph L. Damasio Jr., resigned on February 13th and the Company appointed Mr. Richard P. Thomley as the Company's Acting Chief Financial Officer.

On April 15, 2019, Mr. Thomley resigned as the Company's Acting Chief Financial Officer. Mr. Schumacher, our CEO, has served as the Company's Principal Financial Officer since April 15th.

Item 6. Exhibits

Exhibits

3.1	Amended Certificate of Designation of Series AA Convertible Preferred Stock, filed February 14, 2019 (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the United States Securities and Exchange Commission on February 15, 2019).
31.1*	Certification by the Principal Executive Officer of Registrant pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Rule 13a-14(a) or Rule 15d-14(a))
31.2*	Certification by the Principal Financial Officer of Registrant pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Rule 13a-14(a) or Rule 15d-14(a))
32.1**	Certification by the Principal Executive Officer pursuant to 18 U.S.C. 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002*
32.2**	Certification by the Principal Financial Officer pursuant to 18 U.S.C. 1350 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, 2019

By: */s/ Richard T. Schumacher*

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

EXHIBIT 31.1

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

I, Richard T. Schumacher, certify that:

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

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rule 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiary, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal controls over financial reporting, or caused such internal controls over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: May 15, 2019

/s/ Richard T. Schumacher

Richard T. Schumacher
President and Chief Executive Officer
Principal Financial Officer

EXHIBIT 31.2

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, 2019

/s/ Richard T. Schumacher

Richard T. Schumacher
Principal Financial Officer

EXHIBIT 32.1

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

In connection with the Quarterly Report on Form 10-Q of Pressure BioSciences, Inc., a Massachusetts corporation (the “Company”) for the period ended March 31, 2019 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, 2019

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.

EXHIBIT 32.2

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, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Richard T. Schumacher, 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, 2019	By:	*/s/ Richard T. Schumacher*
		Richard T. Schumacher President & Chief Executive 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.