PRESSURE BIOSCIENCES INC
Form 10-K
April 05, 2016

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

(Mark One)

[X] Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended December 31, 2015 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 000-21615

PRESSURE BIOSCIENCES, INC.

(Exact Name of Registrant as Specified in its Charter)

Massachusetts (State or Other Jurisdiction of Incorporation or Organization)	**04-2652826** (I.R.S. Employer Identification No.)
14 Norfolk Avenue **South Easton, Massachusetts** (Address of Principal Executive Offices)	**02375** (Zip Code)

(508) 230-1828
(Registrant's Telephone Number, Including Area Code)

Securities registered pursuant to Section 12(b) of the Act:

(Title of Class)
None

Securities registered pursuant to Section 12(g) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, par value $.01 per share	**OTC Markets Group, Inc.**
Preferred Share Purchase Rights	

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes [ ] No [X]

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes [ ] No [X]

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

Yes [X] No [ ]

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

Yes [X] No [ ]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [ ]

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

Large accelerated filer [ ]	Accelerated filer [ ]
Non-accelerated filer [ ] (Do not check if smaller reporting company)	Smaller reporting company [X]

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes [ ] No [X]

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant as of June 30, 2015 was $4,249,932 based on the closing price of $0.23 per share of Pressure BioSciences, Inc. common stock as quoted on the OTC Markets QB exchange on that date.

As of April 1, 2016, there were 23,209,898 shares of the registrant’s common stock outstanding.

Documents Incorporated by Reference

N/A.

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Introductory Comment

Throughout this Annual Report on Form 10-K, the terms "we," "us," "our," "the Company" and "our Company" refer to Pressu BioSciences, Inc., a Massachusetts corporation, and unless the context indicates otherwise, also includes our wholly-owned subsidiary.

PART I

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K 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 si 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 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 installed and the increase in revenues from the sale of consumable products and extended service contracts;
- 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;
- general economic conditions;
- the anticipated future financial performance and business operations of our company;

- our reasons for focusing our resources in the market for genomic, proteomic, lipidomic and small molecule sample preparation;
- the importance of mass spectrometry as a laboratory tool;
- the advantages of PCT over other current technologies as a method of biological sample preparation in biomarker discovery, forensics, and histology and for other applications;
- the capabilities and benefits of our PCT sample preparation system, consumables and other products;
- our belief that laboratory scientists will achieve results comparable with those reported to date by certain research scientists who have published or presented publicly on PCT and our other products;
- our ability to retain our core group of scientific, administrative and sales personnel; and
- our ability to expand our customer base in sample preparation and for other applications of PCT and our other products.

These forward-looking statements are only predictions and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements, expressed or implied, by such forward-looking statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date of this Annual Report on Form 10-K. 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 Annual Report on Form 10-K 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 this Annual Report on Form 10-K as well as those discussed elsewhere in this Annual Report on Form 10-K. We qualify all of our forward-looking statements by these cautionary statements.

ITEM 1. BUSINESS.

Throughout this document we use the following terms: Barocycler®, PULSE®, and BioSeq®, which are registered trademarks of the Company. We also use the terms ProteoSolve™, ProteoSolve$_{LRS}$™, the Power of PCT™, the PCT Shredder™, HUB440™, HUB880™, micro-Pestle™, PCT-HD™, Barozyme™ and BaroFlex™ Strips, all of which are unregistered trademarks of the Company.

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, called pressure cycling technology, or PCT, uses alternating cycles of hydrostatic pressure between ambient and ultra-high levels i.e., 35,000 pounds per square inch ("*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 hold 14 United States and 10 foreign patents covering multiple applications of PCT in the life sciences field. Our pressure cycling technology employs a unique approach that we believe has the potential for broad use in a number of established and emerging life sciences areas, which include:

biological sample preparation – including but not limited to sample extraction, homogenization, and digestion - in such study areas as genomic, proteomic, lipidomic, metabolomic and small molecule;

pathogen inactivation;

protein purification;

control of chemical reactions, particularly enzymatic; and

immunodiagnostics.

We are also the exclusive distributor throughout all of the Americas for the Constant Systems cell disruption equipment, parts, and consumables. Constant Systems, Ltd. (“CS”), a British company located about 90 minutes 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 the PBI PCT-based instrumentation complement each other in several important ways. While both the CS and PBI technologies are based on high pressure, each product line has fundamental scientific capabilities that the other does not offer. PBI’s 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 PBI products, either separately or together.

Within the broad field of biological sample preparation, we focus the majority of our PCT and constant pressure ("CP") product development efforts in three specific areas: biomarker discovery (primarily through mass spectrometric analysis at the present time), forensics and histology.

Biomarker Discovery - Mass Spectrometry. A biomarker is any substance (e.g., protein, DNA) that can be used (i) as an indicator of the presence or absence of a particular disease-state or condition, (ii) to measure disease progression, and (iii) to measure the effects of therapy. Biomarkers can help in the diagnosis, prognosis, therapy, prevention, surveillance, control, and cure of diseases and medical conditions.

A mass spectrometer is one of the laboratory instruments used in the analysis of biological samples, primarily proteins, in life sciences research. It is frequently used to help discover biomarkers. According to a recently published market report by marketing firm Transparency Market Research (www.transparencymarketresearch.com) "*Spectrometry Market (Atomic, Molecular and Mass Spectrometry) - Global Scenario, Trends, Industry Analysis, Size, Share & Forecast 2011 – 2017*," the global spectrometry market was worth $10.2 billion in 2011 and is expected to reach $15.2 billion in 2017, growing at a compound annual growth rate of 6.9% from 2011 to 2017. In the overall global market, the North American market is expected to maintain its lead position in terms of revenue until 2017 and is expected to have approximately 36.2% of the market revenue share in 2017, followed by Europe. We believe that both PCT and CP-based products offer significant advantages in speed and quality compared to current techniques used in the preparation of samples for mass spectrometric analysis.

Forensics. The detection of DNA has become a part of the analysis of forensic samples by laboratories and criminal justice agencies worldwide in their efforts to identify the perpetrators of violent crimes and missing persons. Scientists from the University of North Texas and Florida International University have reported improvements in DNA yield from forensic samples e.g., bone, and hair, using PCT in the sample preparation process. We believe PCT may be capable of differentially extracting DNA from sperm and female epithelial cells in swabs collected from rape victims and stored in rape kits. According to the Joyful Arts Foundation's website, an organization focused on bringing justice to all victims of rape cases that remain unsolved (http://endthebacklog.org/whatisthebacklog.htm), "Experts in the federal government estimate that there are hundreds of thousands of untested rape kits in police and crime lab storage facilities throughout the United States." We believe this backlog exists for reasons such as cost, processing time, and quality of results. We further believe that the ability to differentially extract DNA from the sperm cells while not extracting DNA from the female epithelial cells could reduce the cost of such testing, while increasing the quality, safety and speed of the testing process.

Histology. The most commonly used technique worldwide for the preservation of biopsies of cancer and other tissues for subsequent pathology evaluation is formalin-fixation followed by paraffin-embedding ("*FFPE*"). We believe that the quality and analysis of FFPE tissues is highly problematic. We believe PCT offers significant advantages over current processing methods. These advantages include standardization, speed, biomolecule recovery, and safety.

Our customers include researchers at academic laboratories, government agencies, biotechnology, pharmaceutical and other life sciences companies in the United States, and distribution partners in foreign countries.

We have experienced negative cash flows from operations with respect to our business since inception. As of December 31, 2015, we did not have adequate working capital resources to satisfy our current liabilities. Based on our current projections, including equity and debt financing subsequent to December 31, 2015, we believe our current and projected cash resources will enable us to extend our cash resources for the foreseeable future.

The audit report issued by our independent registered public accounting firm on our audited consolidated financial statements for the fiscal year ended December 31, 2015, contains an explanatory paragraph regarding our ability to continue as a going concern. The audit report issued by our independent registered public accounting firm for our financial statements for the fiscal year ended December 31, 2015 states that our auditing firm has substantial doubt in our ability to continue as a going concern due to the risk that we may not have sufficient cash and liquid assets to cover our operating and capital requirements for the next twelve-month period; and, if sufficient cash cannot be obtained, we would have to substantially alter, or possibly even discontinue, operations. The accompanying financial statements do not include any adjustments that might result from the outcome of this uncertainty.

The conditions described above could adversely affect our ability to obtain additional financing on favorable terms, if at all, and may cause investors to have reservations about our long-term prospects, and may adversely affect our relationships with customers. There can be no assurance that our auditing firm will not issue the same opinion in the future. If we cannot successfully continue as a going concern, our stockholders may lose their entire investment in us.

Developments

We reported a number of accomplishments during 2015 including:

December 31, we closed on two additional subscriptions totaling $155,000 in our $5 Million PIPE transaction, bringing the total to $4,910,000.

December 15, we reported the close of an additional $730,000 in our $5 Million PIPE transaction, bringing the total to $4,755,000. We also reported the repayment of 100% of the floorless loans previously owed by PBI.

November 12, we announced Q3 2015 financial results, including record revenue for the quarter and nine-month periods ended September 30, a 55% increase in total revenue compared to the same quarter in 2014, and a 13.4% decrease in operating loss for the third quarter of 2015.

October 16, the Company announced a collaboration agreement with Florida International University to co-develop an improved rape kit test method, based on the Company’s patented PCT platform. With a backlog of untested rape kits estimated at approximately 400,000, and with an estimated 180,000 new sexual assaults each year, an improved testing method is vitally needed.

September 1, we announced that a recent publication in a peer-reviewed journal indicated that PBI’s PCT platform could play a significant role in personalized/precision medicine, including cancer tissue biopsies.

August 17, we announced Q2 2015 financial results, including increases in all major revenue categories for the second quarter, and record total revenue for the six month period ended June 30, 2015.

August 14, DM WDM, a small cap investment bank, announced the exchange of 1M shares of PBI (valued at $0.50/share) for 601,500 shares of Everest Investments Holdings, the formation of Pressure BioSciences Europe, and $250,000 of market support for PBI by WDM.

July 23, we announced the close of a $2.18M initial tranche of a $5 Million Private Placement.

July 15, we announced that PCT was a key workflow component in a study to discover potential biomarkers and underlying pathways in the emergence and progression of COPD-associated lung cancer.

July 13, we reported that Chinese and Swiss researchers suggested a workflow that included the PCT platform that they believed could potentially accelerate the discovery of new biomarkers for the early diagnosis and prediction of complications in diabetes.

July 7, we announced promising results when our PCT Platform was incorporated in a new method for improving the extraction of DNA from rape kits and other forensic samples.

June 29, we announced that scientists from the Institute of Molecular Systems Biology in Zurich, Switzerland presented data on an improved method for the proteomic profiling and classification of prostate cancer tissue biopsy samples at an important international scientific conference.

May 4, we announced the publication of three scientific articles that show key advantages of the PCT platform in drug discovery & design, cancer detection, and in the analysis of microbial communities in soil.

April 30, we announced that scientists from Northwestern University had successfully extracted cotinine (metabolite of nicotine) from dried blood spots and theorized that the Company’s new Barozyme High-throughput system might also improve the extraction of other chemical toxins and carcinogens as well.

April 14, we announced a collaboration agreement with Southern University at New Orleans for improving and extending applications of the PCT platform for DNA detection in forensic samples.

March 31, we announced FY 2014 financial results, including an almost 30% increase in products and services revenue compared to FY 2013.

March 12, we released PCT-HD, “the Next Generation Protein Preparation System” in two separate presentations at a major international scientific meeting in Tempe, Arizona.

February 19, we announced the award of a $1 million NIH SBIR Phase II Grant to develop a high-throughput, high pressure-based DNA Shearing System for Next Generation Sequencing (“NGS”).

February 10, we received the first Purchase Order for our Barozyme HT48 High-Throughput System.

January 21, we announced the receipt of over $1.16 million during the past two months from equity investments, and that we planned to expand our marketing, sales, and operations capabilities.

Liquidity

Management has developed a plan to continue operations. This plan includes controlling expenses, streamlining operations, and obtaining capital through equity and/or debt financing. We have been successful in raising cash through debt and equity offerings in the past and as described in this annual report. We closed $4,910,000 of a $5 million PIPE through December 31, 2015, and have closed additional subscriptions subsequent to December 31, 2015. We have efforts in place to continue to raise cash through debt and equity offerings.

Although we have successfully completed equity financings and reduced expenses in the past, we cannot assure our investors that our plans to address these matters in the future will be successful. Additional financing may not be available to us on a timely basis or on terms acceptable to us, if at all. In the event we are unable to raise sufficient funds on terms acceptable to us, we may be required to:

severely limit or cease our operations or otherwise reduce planned expenditures and forego other business opportunities, which could harm our business. The accompanying financial statements do not include adjustments that may be required in the event of the disposal of assets or the discontinuation of the business;

obtain financing with terms that may have the effect of diluting or adversely affecting the holdings or the rights of the holders of our capital stock; or

obtain funds through arrangements with future collaboration partners or others that may require us to relinquish rights to some or all of our technologies or products.

Corporate Information

We were incorporated in the Commonwealth of Massachusetts in August 1978 as Boston Biomedica, Inc. In September 2004, we completed the sale of Boston Biomedica's core business units and began to focus exclusively on the development and commercialization of the PCT platform. Following this change in business strategy, we changed our legal name from Boston Biomedica, Inc. to Pressure BioSciences, Inc. ("*PBI*"). We began operations as PBI in February 2005, research and development activities in April 2006, early marketing and selling activities of our Barocycler instruments in late 2007, and marketing and selling of our PCT-based instrument platform in 2012.

Available Information

Our Internet website address is http://www.pressurebiosciences.com. Through our website, we make available, free of charge, reports we file with the Securities and Exchange Commission ("*SEC*"), which include, but are not limited to, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any and all amendments to such reports, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. These SEC reports can be also accessed through the investor relations section of our website. The information found on our website is not part of this or any other report we file with or furnish to the SEC.

You may read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website that contains reports, proxy and information statements and other information regarding Pressure BioSciences and other issuers that file electronically with the SEC. The SEC's Internet website address is http://www.sec.gov.

Sample Preparation for Genomic, Proteomic, Lipidomic and Small Molecule Studies

The Market

Since February 2005, we have focused substantially all of our research and development and commercialization efforts on sample preparation for genomic, proteomic, lipidomic, and small molecule studies. This market is comprised of academic and government research institutions, biotechnology and pharmaceutical companies, and other public and private laboratories that are engaged in studying genomic, proteomic and small molecule material within plant and animal cells and tissues. We elected to initially focus our resources in the market of genomic, proteomic and small molecule sample preparation because we believe it is an area that:

- is a rapidly growing market;
- has a large and immediate need for better technology;
- is comprised mostly of research laboratories, which are subject to minimal governmental regulation;
- is the least technically challenging application for the development of our products;
- is compatible with our technical core competency; and
- we currently have strong patent protection.

We believe that our existing PCT and CP-based instrumentation and related consumable products fill an important and growing need in the sample preparation market for the safe, rapid, versatile, reproducible and quality extraction of nucleic acids, proteins and small molecules from a wide variety of plant and animal cells and tissues.

Biomarker Discovery - Mass Spectrometry

A biomarker is any substance (e.g., protein, DNA) that can be used as an indicator of the presence or absence of a particular disease-state or condition, and to measure the progression and effects of therapy. Biomarkers can help in the diagnosis, prognosis, therapy, prevention, surveillance, control, and cure of diseases and medical conditions.

A mass spectrometer is a laboratory instrument used in the analysis of biological samples, often focused on proteins, in life sciences research. It is frequently used to help discover biomarkers. According to a recently published market report by Transparency Market Research (www.transparencymarketresearch.com) “Spectrometry Market (Atomic, Molecular and Mass Spectrometry) - Global Scenario, Trends, Industry Analysis, Size, Share & Forecast 2011 – 2017,” the global spectrometry market was worth $10.2 billion in 2011 and is expected to reach $15.2 billion in 2017, growing at a compound annual growth rate of 6.9% from 2011 to 2017. In the overall global market, the North American market is expected to maintain its lead position in terms of revenue till 2017 and is expected to have approximately 36.2% of the market revenue share in 2017, followed by Europe. We believe PCT and CP-based products offer significant advantages in speed and quality compared with current techniques used in the preparation of samples for mass spectrometry analysis.

Our plan is to focus primarily on the application of PCT-enhanced protein extraction and CP-based digestion for the mass spectrometry market and the advantages of PCT and CP in this market, and on the use of PCT and CP in biomarker discovery, soil and plant biology, counter bio-terrorism and tissue pathology applications.

Forensics

The detection of DNA has become a part of the analysis of forensic samples by laboratories and criminal justice agencies worldwide in their efforts to identify the perpetrators of violent crimes and missing persons. Scientists from the University of North Texas and Florida International University have reported improvements in DNA yield from forensic samples (e.g., bone and hair) using PCT in the sample preparation process. We believe that PCT may be capable of differentially extracting DNA from sperm cells and female epithelial cells in swabs collected from rape victims and stored in rape kits. We also believe that there are many completed rape kits that remain untested for reasons such as cost, time and quality of results. We further believe that the ability to differentially extract DNA from sperm and not epithelial cells could reduce the cost of such testing, while increasing the quality, safety and speed of the testing process.

Histology

The most commonly used technique worldwide for the preservation of cancer and other tissues for subsequent pathology evaluation is formalin-fixation followed by paraffin-embedding, or FFPE. We believe that the quality and analysis of FFPE tissues is highly problematic, and that PCT offers significant advantages over current processing methods, including standardization, speed, biomolecule recovery, and safety.

Sample Extraction Process

The process of preparing samples for genomic, proteomic and small molecule studies includes a crucial step called sample extraction or sample disruption. This is the process of extracting nucleic acid i.e., DNA and/or RNA, proteins or small molecules from the plant or animal cells and tissues that are being studied. Sample preparation is widely regarded as a significant impediment to research and discovery and sample extraction is generally regarded as one of the key parts of sample preparation. Our current commercialization efforts are based upon our belief that pressure cycling technology provides a superior solution to sample extraction compared with other available technologies or procedures and can thus significantly improve the quality of sample preparation, and thus the quality of the test result.

Collaboration Program

Our collaboration program is an important element of our business strategy. Initiating a collaboration with a researcher involves the installation of a Barocycler instrument for an agreed upon period of time of approximately three to twelve months, and the execution of an agreed upon work plan. Our primary objectives for entering into a collaboration agreement include:

- the development of a new application for PCT and CP in sample preparation;
- the advancement and validation of our understanding of PCT and CP within an area of life sciences in which we already offer products;
- the demonstration of the effectiveness of PCT and CP by specific research scientists, particularly Key Opinion Leaders (“KOLs”), who we believe can have a positive impact on market acceptance of PCT; and
- the expectation of peer-reviewed publications and/or presentations at scientific meetings by a third party on the merits of PCT and CP.

Since we initiated our collaboration program in June 2005, third party researchers have cited the use of our PCT platform in multiple publications and presentations. We believe that this program has provided and continues to provide us with independent and objective data about PCT from well-respected laboratories in the United States and throughout the rest of the world.

Company Products

We believe our PCT and CP products allow researchers to improve scientific research studies in the life sciences field. Our products are developed with the expectation of meeting or exceeding the needs of research scientists while enhancing the safety, speed and quality that is available to them with existing sample preparation methods.

Barocycler Instrumentation

Our Barocycler product line consists of laboratory instrumentation that subjects a sample to cycles of pressure from ambient (approximately 14.5 psi) to ultra-high levels (35,000 psi or greater) and then back to ambient; all in a precisely controlled manner. Our instruments (the Barocycler NEP3229, the Barocycler NEP2320, and the HUB440) use cycles of high, hydrostatic pressure to quickly and efficiently break up the cellular structures of a specimen to release nucleic acids, proteins, lipids and small molecules from the specimen into our consumable processing tube, referred to as our PULSE Tubes and MicroTubes. Our Barocycler instrumentation is designed to fit on a laboratory bench top, inside a biological safety cabinet, or on the shelf of a laboratory cold room. Our instruments have an external chiller hook-up (to control temperature during the PCT process), automatic fill and dispensing valves, and an integrated micro-processor keypad or a laptop computer. The microprocessor or laptop computer are capable of saving specific PCT protocols, so the researcher can achieve maximum reproducibility for the preparation of nucleic acids, proteins, lipids, or small molecules from various biological samples. Our Barocycler instruments and our consumable products make up our current PCT Sample Preparation System (see below).

Barocycler NEP3229 – The Barocycler NEP3229 contains two units – a user interface and a power source – comprised primarily of a 1.5 horsepower motor and pump assembly (hydraulic). Combined, the two components of the NEP3229 weigh approximately 350 pounds. The Barocycler NEP3229 is capable of processing up to three samples simultaneously using our specially designed, single-use PULSE Tubes and up to 48 samples simultaneously using our specially-designed MicroTubes.

Barocycler NEP2320 – The Barocycler NEP2320 is a smaller, more compact version of our NEP3229 unit. It weighs approximately 80 pounds (with accessories) and works on compressed air (pneumatic) instead of hydraulics like the larger NEP3229 unit. Because this instrument is pneumatic, the NEP2320 can be easily attached by an air hose to a typical 85-psi air compressor found in most scientific laboratories, as well as to many consumer-sold portable compressors or even to bottled gas. This instrument is used by our sales staff as a demonstration instrument and is marketed as a second instrument alternative to our PCT SPS. The Barocycler NEP2320 is capable of processing one sample at a time using our specially designed, single-use PULSE Tubes and up to 16 samples simultaneously using our specially-designed MicroTubes.

Barocycler HUB440 – The Barocycler HUB440 was introduced to collaborators in the electron paramagnetic resonance ("EPR") market in 2011 for testing in a laboratory environment, and to elicit feedback from research scientists on performance and capabilities. The Barocycler HUB440 is capable of creating and controlling hydrostatic pressure from 500 psi to 58,000 psi. It is computer controlled, and runs on software that was specially-written by PBI in LabVIEW (software from National Instruments Corporation). PBI owns the rights and has a license to use the specialty LabVIEW software. The Barocycler HUB440 is the first portable, ready to use pressure generator for the laboratory bench. We believe that over the coming years, the Barocycler HUB440 may become the main instrument in the Company's pressure-based instrument line.

PCT MicroTube Adapter Kit – The PCT MicroTube Adapter Kit includes an ergonomically designed, space-saving Workstation, PCT MicroTubes and MicroCaps, and specialized tools to enable the user to process up to forty-eight samples simultaneously in our PCT SPS, as compared to three with the Barocycler NEP3229.

The Shredder SG3 –The Shredder SG3 is a low shear mechanical homogenization system for use with tough, fibrous and other difficult-to-disrupt tissues and organisms. The Shredder SG3 System uses a variety of Shredder PULSE Tubes to directly and rapidly grind a biological sample which, when combined with selected buffers, can provide effective extraction of proteins, DNA, RNA, lipids and small molecules from tissues and organisms. The Shredder SG3 features a three position force setting lever, which enables the operator to select and apply reproducible force to the sample during the shredding process and eliminates the need for the operator to exert force for long periods when processing one or more samples.

Barocycler HUB880 - The Barocycler HUB880 is a new instrument expected to be available for sale during the second half of 2016. It is a compact, portable, bench-top, ultra-high pressure generator that uses an air pressure-to-liquid pressure intensifier allowing the user to generate fluid pressure as high as 90,000 psi with input air pressure of just 126 psi. The HUB880 can be operated through a simple front panel or controlled using an optional external Data Acquisition and Control Module for dynamic pressure control. We believe that the HUB880 will be well accepted by scientists that need to achieve super high pressure, such as those working in the food and vaccine industries.

Barozyme HT48 - The Barozyme HT48 is a high throughput bench-top instrument designed for accelerated enzymatic digestion of proteins at high pressure. The Barozyme HT48 uses an air-pressure-to-liquid-pressure intensifier system, with a pressure amplification ratio of 160:1, to reach an output pressure of 20,000 psi. The Barozyme HT48 is capable of processing up to 48 samples at a time in six single-use BaroFlex 8-well Strips in the Barozyme Sample Carrier. Typical trypsin digestion times can be reduced from hours to minutes.

BaroFlex 8-well Processing Strips - Baroflex 8-well Strips are used in the Barozyme HT48 (See Specification Sheet) for pressure-enhanced enzymatic digestion at 20,000 psi. BaroFlex 8-well Strips are made of special high density polyethylene (HDPE) and hold up to 140µl when capped with the BaroFlex Cap Strips or Mats. BaroFlex 8-Cap Strips and BaroFlex 24-Cap Mats are made of silicone. These single-use caps are designed to seal BaroFlex 8-well Strips tightly and to prevent fluid exchange between the sample and the Barozyme chamber fluid during pressure cycling. The silicone caps are available as strips of 8, or mats of 24 caps.

PCT-HD - The PCT-HD System combines two of the Company's unique products: the recently released, patent-pending µPestle consumable with an enhanced Barocycler NEP2320 instrument. This combination enables faster, less cumbersome and higher quality homogenization, extraction, and digestion of proteins. PCT-HD was developed by the Company's scientists and engineers in collaboration with Professor Ruedi Aebersold and Dr. Tiannan Guo of the Institute of Molecular Systems Biology, ETH Zurich, and the University of Zurich, both in Zurich, Switzerland. Drs. Aebersold and Guo combined PCT-HD with AB SCIEX's SWATH-Mass Spectrometry – calling the resulting method "PCT-SWATH". This protocol can yield analytical results within 12 hours from the start of processing tissue. Although Drs. Aebersold and Guo developed protocols for the combination of PCT-HD with SWATH-MS, the PCT-HD System is not limited to any specific mass spectrometer or method of data analysis. Subsequently, we believe the PCT-HD System can provide most researchers with unprecedented speed and reproducibility for biomarker discovery.

Cell Disruption Instrumentation

We are also the exclusive distributor throughout all of the Americas for the Constant Systems cell disruption equipment, parts, and consumables. Constant Systems, Ltd ("CS"), a British company located about 90 minutes 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 the PBI PCT instrumentation complement each other in several important ways. While both the CS and PBI technologies are based on high pressure, each product line has fundamental scientific capabilities that the other does not offer. PBI's 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 PBI products, either separately or together.

Barocycler Consumable Products

PULSE Tubes (FT500) – The FT500 PULSE Tube is a specially-designed, plastic, single-use, processing container with two chambers separated by a small disk with small holes. This small disk is referred to as a Lysis Disk. PULSE Tubes transmit the power of PCT from the Barocycler instrument to the sample. In sample extraction, the specimen is placed on the Lysis Disk. Buffers are added to the PULSE tube and the PULSE Tube is capped and placed in the pressure chamber of the Barocycler instrument. The pressure chamber fluid then is added and pressurization begins. As pressure increases, a small moveable piston pushes the specimen from the top (sample) chamber, through the Lysis Disk and into the bottom (fluid retention) chamber. When pressure is released, the sample, which is now partially homogenized, is pulled back through the Lysis Disk by the receding ram. The combination of physical passage through the Lysis Disk, rapid pressure changes and other biophysical mechanisms related to cycled pressure break up the cellular structures of the specimen to quickly and efficiently release nucleic acids, proteins, lipids and small molecules.

Non-Disk PULSE Tubes (FT500-ND) – The FT500-ND PULSE Tube is a specially-designed, plastic, single-use, processing container with one chamber. The FT500-ND is similar to the FT500 in look and feel, except there is no

Lysis Disk separating the body of the processing container into two chambers, as in the FT500. The design change was based on market demand for a PCT consumable for the rapid and reproducible processing of solutions and suspensions that do not require partial homogenization by passage through a Lysis Disk and for a consumable that could accept smaller sample volumes. The FT500-ND offers variable sample volumes with a range five times that of the existing FT500.

ProteoSolve - SB – (ProteoSolve for Systems Biology) is a PCT-dependent method for the simultaneous extraction, isolation and fractionation of nucleic acids (DNA and RNA), proteins and lipids from animal and plant samples routinely used in laboratory research. This patent-pending kit contains proprietary reagents, consumable processing containers (PULSE Tubes) and instructions for use. It is intended to be used with our patented PCT Sample Preparation System. The kit is based on an approach to a “systems biology” sample preparation method that was first unveiled during early 2008 in collaboration with Dr. Alexander Ivanov, who was then with the Harvard School of Public Health.

ProteoSolve - CE – (ProteoSolve for Conventional Extraction) is a PCT-dependent kit for the extraction of proteins from a variety of samples using optimized detergent-based reagent system compatible with two-dimensional electrophoresis or two-dimensional chromatographic separation for proteomic analysis. The kit contains the reagents and instructions necessary for the extraction of either denatured or non-denatured proteins, which can then be used for the analysis of protein structure and function.

Mitochondria Isolation Kits – These kits contain the chemical ingredients necessary for a scientist to extract mitochondria from skeletal muscle and lung tissue for subsequent analysis. Mitochondria play a major role in generating the energy required to power most cell processes and are involved in other important cell functions. Mitochondria have been implicated in several human diseases, including heart disease, stroke, Parkinson’s disease, cancer and other mitochondrial diseases.

Micro-Pestle (µPestles) - PCT µPestles, in conjunction with PCT MicroTubes, are designed to enhance the extraction of protein, DNA, RNA and small molecules from minute amounts (0.5 – 3.0 mg) of solid tissue in extraction reagent volumes as low as 20-30 µL. PCT MicroTubes and PCT µPestles use Pressure Cycling Technology (PCT) to effectively disrupt soft tissues and lyse their cells. As a result, the tissue sample trapped between the MicroTube end and the µPestles tip is crushed on every pressure cycle. This mechanical action, combined with the extraction ability of the buffer under high pressure, result in effective homogenization and extraction.

PCT µPestles and PCT MicroTubes, together with a PBI Barocycler, comprise the PCT Micro-Pestle System, which provides a faster, safer, and more efficient means of extraction from extremely small amounts of solid samples such as soft animal tissues or biopsies. The PCT µPestle System can be used in any PBI Barocycler.

PCT µPestles are made from Polytetrafluoroethylene (PTFE), a synthetic fluoropolymer of tetrafluoroethylene, also known as Teflon (by DuPont Co). PTFE is practically inert; the only chemicals known to affect it are certain alkali metals and most highly-reactive fluorinating agents.

We believe our development of these products has helped, and will continue to help, drive the adoption of PCT within the life sciences market.

Company Services

Government Grants and Contracts

We view federal agency grants to be an important part of our business plan. These types of grants allow us to bill the federal agency for work that we are planning to perform as part of the development and commercialization of our technology. We generally start by submitting initial grant requests that are in response to requests for proposals ("*RFPs*") from the federal government through their Small Business Innovation Research ("*SBIR*") program. Initial ("*SBIR Phase I*") grants are meant to fund approved research projects for six months, and generally have budgets of approximately $100,000 to $150,000. Because our work in SBIR Phase I grants has been successful, we have applied, and may in the future apply for larger National Institutes of Health ("NIH") SBIR Phase II grants. Such larger grants are typically for a two-year period and can offer as much as $1,000,000 to support significant research projects in areas we would otherwise expect to support with internal funds should SBIR Phase II grants not be awarded. To date, we have been awarded five NIH SBIR Phase I grants and three SBIR Phase II grants. The data on three of the NIH SBIR Phase I grants were the basis for the submission, and subsequent award. Of the three NIH SBIR Phase II grants awarded to us: one was in the approximate amount of $850,000 in August 2008, the second was in the approximate amount of $850,000 in September 2011, and the third award was in the approximate amount of $1,020,000 awarded in

November 2014. All three of the NIH SBIR Phase I grants and the August 2008 and September 2011, NIH SBIR Phase II grants have been completed.

The 2008 SBIR Phase II grant (2R44GM079059) was awarded to us by the NIH for work in the area of using PCT to extract protein biomarkers, sub-cellular molecular complexes, and organelles, with the expectation that these studies might ultimately lead to the release of a new, commercially available PCT-based system, with validated protocols, end-user kits, and other consumables intended for the extraction of clinically important protein biomarkers, sub-cellular molecular complexes, and organelles from human and animal tissues. The 2011 SBIR II contract (W81XWH-10-C-0-175) was awarded to us by the U.S. Army for the development of a universal method for the inactivation, extraction, and enrichment of pathogens in diagnostic samples, including arthropod hosts of military importance. The work covered by this grant was significant in helping us develop the recently released Barozyme HT48 High Throughput System. The 2014 SBIR Phase II grant (2R44HG007136) was awarded to us by the National Human Genome Research Institute of the National Institutes of Health (“NIH”). Entitled “High Pressure Sample Preparation Instrumentation for DNA Sequencing”, this grant will help fund the development of an automated, high-throughput, high pressure system (instrument and consumables), to enable significantly better control of DNA fragmentation - a critical step in the preparation of samples for Next Generation Sequencing platforms. This system will be based on significant technological advancements over the classic hydrodynamic DNA shearing approach that has been successfully and widely used in the field of DNA sequencing for many years.

Extended Service Contracts

We offer extended service contracts on our laboratory instrumentation to all of our customers. These service contracts allow a customer who purchases a Barocycler instrument to receive on-site scheduled preventative maintenance, on-site repair and replacement of all worn or defective component parts, and telephone support, all at no incremental cost for the life of the service contract. We offer one-year and four-year extended service contracts to customers who purchase Barocycler instruments.

Other Applications of Pressure Cycling Technology

PCT is an enabling, platform technology based on a physical process that had not previously been used to control bio-molecular interactions. During its early development, under the legacy business of Boston Biomedica, Inc., our scientists were researching and developing applications of pressure cycling technology in many areas of the life sciences, including genomic, proteomic and small molecule sample preparation. The data generated during these early years, combined with the data generated since we began focusing on PCT operations in February 2005, form the basis of knowledge that we believe will allow us to successfully commercialize PCT both within and outside of the sample preparation market.

Our research and development efforts have shown that, in addition to genomic, proteomic and small molecule sample preparation, PCT is potentially beneficial in a number of other areas of the life sciences, including pathogen inactivation, protein purification, control of chemical (particularly enzymatic) reactions, and immunodiagnostics. Other applications in the sample preparation market include forensics and histology, as we discuss above. Our pursuit of these markets, however, depends on a number of factors, including our success in commercializing PCT in the area of sample preparation, our judgment regarding the investment required to be successful in these areas, the value of these markets to our Company, and the availability of sufficient financial resources. Below is a brief explanation of each of these additional potential applications and a short description of why we believe PCT can be used to improve scientific studies in these areas.

Pathogen Inactivation

Biological products manufactured for human use, such as blood, vaccines and drugs, are put through rigorous processing protocols in an effort to minimize the potential of that product to transmit disease. These protocols may include methods to remove infectious materials such as pre-processing testing, filtration or chromatography, or methods to inactivate infectious materials that are not captured in the removal steps such as pasteurization, irradiation and solvent detergent inactivation. Notwithstanding current diligence in both the removal and inactivation steps, significant concern remains that some bacteria and viruses capable of transmitting infection to recipients may not be

removed or inactivated with current procedures. In addition, some removal and inactivation methods may not be useful because of cost, safety, ease-of-use or other practical concerns. To that end, we believe that a new inactivation method is needed that can safely, rapidly and inexpensively inactivate pathogens in blood, vaccines and drugs without the need for chemical or other potentially toxic additives. We believe we have successfully generated proof-of-concept that PCT can satisfy this need. We believe that compared with current procedures, a process that uses PCT has the potential to increase safety and yield, lower cost and decrease the potential side effects of current methods. We have been issued U.S., European, and Japanese patents for this PCT-dependent inactivation technology.

Protein Purification

Many vaccines and drugs are comprised of proteins. These proteins need to be purified from complex mixtures as part of the manufacturing process. Current purification techniques often result in the loss of a significant amount of the protein. Therefore, any method that could increase the amount of protein being recovered in the purification step, could subsequently lead to a reduction in cost to the manufacturer. We believe we have successfully generated proof-of-concept that PCT can satisfy this need. We believe that compared with current purification procedures, a process that uses PCT has the potential to increase protein recovery, increase the quality of the product, and lower production costs. We have been issued U.S. and European patents in this area.

Control of Chemical (Particularly Enzymatic) Reactions

Chemical reactions encompass many important interactions in nature. Methods used to control chemical reactions could have a positive effect on the quality, speed, and overall result of the reaction. The control and detection of chemical reactions is particularly useful in the biotechnology field for synthesizing and characterizing such molecules as nucleic acids and polypeptides. We believe that PCT offers distinct advantages in controlling chemical reactions over current methods, since PCT can provide precise, automated control over the timing and synchronization of chemical reactions, particularly enzymatic reactions. We have been issued U.S. and European patents in this area.

Immunodiagnostics

Many tests used in the clinical laboratory today are based on the formation of a complex between two proteins, such as an antigen and an antibody. Such "immunodiagnostic" methods are used for the detection of infectious agents such as the human immunodeficiency virus ("*HIV*"), hepatitis viruses, West Nile virus, and others, as well as for endocrine, drug testing and cancer diagnostics. We have generated proof-of-concept that PCT may be used to control biomolecular interactions between proteins, such as antigens and antibodies. We believe this capability may provide a greater degree of sensitivity and quantitative accuracy in immunodiagnostic testing than that offered by methods that are available today. We have been issued U.S. and European patents in this area.

Customers

Our customers include researchers at academic laboratories, government agencies, biotechnology companies, pharmaceutical companies and other life science institutions in the United States. Our customers also include a number of foreign distribution partners. Our goal is to continue our market penetration in these target groups and releasing products in our publicized product pipeline. We also believe that there is a significant opportunity to sell and/or lease additional Barocycler instrumentation to additional laboratories at current customer institutions.

If we are successful in commercializing PCT in applications beyond our current focus area of genomic, proteomic, and small molecule sample preparation and if we are successful in our attempts to attract additional capital, our potential customer base could expand to include hospitals, reference laboratories, blood banks and transfusion centers, plasma collection centers, pharmaceutical manufacturing plants and other sites involved in each specific application. If we are successful in forensics, our potential customers could be laboratories, military and other government agencies. If we are successful in histology, our potential customers could be pharmaceutical companies, hospitals, and laboratories focused on drug discovery or correlation of disease states.

Competition

We compete with companies that have existing technologies for the extraction of nucleic acids, proteins and small molecules from cells and tissues, including methods such as mortar and pestle grinding, sonication, rotor-stator homogenization, French Press, bead beating, freezer milling, enzymatic digestion and chemical dissolution. We believe that there are a number of significant issues related to the use of these methods, including: complexity, sample containment, cross-contamination, shearing of biomolecules of interest, and limited applicability to different sample types, ease-of-use, reproducibility, and cost. We believe that our PCT Sample Preparation System offers a number of significant advantages over these methods, including:

labor reduction	versatility
temperature control	efficiency
precision	simplicity
reproducibility	safety

To be competitive in the industry, we believe we must be able to clearly and conclusively demonstrate to potential customers that our products provide these improved performance capabilities. We strongly believe that our PCT Sample Preparation System is a novel and enabling system for genomic, proteomic, and small molecule sample preparation. As such, many users of current manual techniques will need to be willing to challenge their existing methods of sample preparation and invest time to evaluate a method that could change their overall workflow in the sample preparation process, prior to adopting our technology.

Further, we are aware that the cost of the PCT Sample Preparation System may be greater than the cost of many of the other methods currently employed. Consequently we are focusing our sales efforts on those product attributes that we believe will be most important and appealing to potential customers, namely versatility, reproducibility, quality and safety.

Manufacturing and Supply

BIT Group USA, formerly Source Scientific, LLC, currently provides all of the manufacturing and assembly services for our Barocycler NEP2320 and Barocycler NEP3229 instrumentation products under an informal, unwritten understanding. We currently manufacture and assemble the Barocycler HUB440, the Shredder SG3, and the MicroTubes at our South Easton facility. We plan to continue to utilize BIT Group USA as our primary assembler and contract manufacturer of our current, and future, Barocycler NEP 2320 and 3229 instruments. Until we develop a broader network of manufacturers and subcontractors, obtaining alternative sources of supply or manufacturing services could involve significant delays and other costs and challenges, and may not be available to us on reasonable terms, if at all. The failure of a supplier or contract manufacturer to provide sufficient quantities, acceptable quality and timely products at an acceptable price, or an interruption of supplies from such a supplier could harm our business and prospects.

Research and Development

Our research and development activities are split into two functional areas: Applications and Engineering.

1. *Applications Research and Development*: Our highly educated and trained staff has years of experience in molecular and cellular biology, virology, and proteomics. Our team of scientists focuses on the development of our PCT Sample Preparation System and further commercialization of PCT-dependent genomic, proteomic, and small molecule sample preparation methods. Dr. Alexander Lazarev, our vice president of Research & Development, meets regularly with our sales, marketing, and engineering staff to discuss market needs and trends. Our applications research and development team is responsible for the technical review of all scientific collaborations, for the support of our marketing and sales departments through the generation of internal data in a number of areas of market interest, and in the development of commercially-viable PCT-dependent products.

2. *Engineering Research and Development:* Our engineering research and development team is focused on the design and development of new and improved instrumentation and consumable products to support the commercialization of PCT. Our engineering department is led by Dr. Edmund Ting, our senior vice president of engineering. The primary focus of our engineering group is to ensure seamless production processes, perform installations and field service, and work with our application scientists to complete the development of a high throughput sample processing system for the mass spectrometry market.

Product Pipeline

The following instruments are in our research and development pipeline:

Barocycler NEP2320 Extreme – we have designed a major upgrade to our number one selling Barocycler unit, the NEP2320. The NEP2320 Extreme will use a laptop computer (instead of the current microprocessor), will be able to reach 45,000 psi on a routine basis (compared to 35,000 psi for the NEP2320), will have a larger pressure chamber, better temperature and pressure control, and better ergonomics (compared to the NEP2320).

Barocycler FFPE Protein Extraction Instrument System - A PCT-based system offering the enhanced extraction of proteins from formalin-fixed, paraffin-embedded ("*FFPE*") samples using a modified Barocycler instrument that combines the advantages of pressure cycling, high temperature and certain reagents.

XstreamPCT™ HPLC Digestion Module - For automated, in-line, on-demand PCT-enhanced protein digestion; the first module in PBI's PCT-based HPLC platform.

Sales and Marketing

Our sales and marketing efforts are centered on using the independent data developed and disseminated by our collaboration partners to help drive the installed base of our PCT Sample Preparation System. The development of scientific data by our partners and our internal researchers provides our sales and marketing staff with additional tools that are essential in selling a new technology such as PCT.

Sales

Direct US Sales Force

Our domestic sales force currently consists of one full-time sales director and one part-time salesperson. We believe that hiring seasoned sales professionals with significant industry experience will allow us to penetrate the market more effectively than with a small, focused sales force. We may increase the number of sales professionals if our financial resources permit and if we believe that doing so will accelerate our commercialization efforts.

Foreign Distributor Network

Currently, we have multiple distribution arrangements covering countries in Europe, Asia and Australia. In June 2008, we entered into a distribution agreement with Veritas Corporation ("*Veritas*") of Tokyo, Japan pursuant to which we granted Veritas exclusive distribution rights to all of our products in Japan. This agreement terminated on December 31, 2015. We are currently interviewing new companies who have indicated an interest in distributing our products in Japan. In October 2011, we entered into a distribution agreement with IUL Instruments GmbH ("*IUL*") of Germany pursuant to which we granted IUL exclusive distribution rights to all of our products in Germany and Switzerland through March 31, 2014. IUL currently distributes PBI products through our agreement with Constant Systems. In November 2011, we entered into a distributor agreement with Oroboros Instruments Corp. ("*Oroboros*") of Austria pursuant to which we granted Oroboros non-exclusive world-wide distribution rights to the PBI Shredder SG3 System and related products through December 31, 2015. We are currently negotiating an extension to the Oroboros agreement. In March and July 2012, we entered into a distribution agreement with six companies pursuant to which we granted non-exclusive distribution rights to certain PCT products in six European and Asian countries and Australia through December 2013. Currently all six companies distribute PBI products through our agreement with Constant Systems. In October 2012, we entered into a supply agreement with Cole Parmer Corporation pursuant to which we granted Cole Parmer non-exclusive, worldwide distribution rights to our PBI Shredder SG3 System and related consumables through December 2014. This supply agreement has now expired. In November 2012, we entered into a distribution agreement with UK-based Constant Systems ("*CS*"), pursuant to which we granted Constant Systems non-exclusive distribution rights to certain of our PCT SPS product line in 12 European and Asian countries. In June 2013, CS and PBI signed an expanded Distribution Agreement that made PBI the exclusive distributor of CS products throughout all of the Americas. Both of these agreements were extended to May 31, 2017. We expect these agreements will be extended for a minimum of two additional years.

Marketing and Sales

Our marketing and sales function is led by Dr. Nathan Lawrence, our vice president of Marketing and Sales. Dr. Lawrence oversees and directs marketing and sales activities such as trade show attendance and sponsorship, on-line advertising, website maintenance and improvement, search engine optimization, creation and dissemination of a PCT newsletter, market research initiatives, the arrangement of on-location seminars, lectures, and demonstrations of PCT capabilities, and the supervision of our two-person sales force. Dr. Lawrence is also responsible for the overall coordination of our collaboration programs, from initial set-up, research plan design, and training, service, and data analysis. Some of these responsibilities are shared with other PBI departments such as Research and Development, but marketing and sales drives the collaborative process. Dr. Lawrence is also responsible for the continued coordination and support of our foreign and domestic distribution partners.

In January 2016, SCIEX, a global leader in life science analytical technologies, announced an exclusive two-year co-marketing agreement with PBI. In their press release, SCIEX stated that the relationship with PBI will uniquely position SCIEX to address a major challenge in complex sample preparation by marketing a complete solution to

increase the depth, breadth, and reproducibility of protein extraction, digestion, and quantitation in all tissue types, including challenging samples like tumors. Under the agreement, PBI and SCIEX will promote PCT Sample Preparation Systems such as PCT-HD with SWATH® Acquisition-based next generation proteomics, TripleTOF® Systems, QTRAP® Systems, and Triple Quad Systems. This focus on improved sample preparation, a crucial step performed in research laboratories worldwide, will enable scientists to extract more proteins reproducibly from complex sample types, potentially yielding superior biological insights and discoveries.

In January and May 2012, we entered into co-marketing/selling and research and development agreements with Digilab, a provider of products for life sciences, analytical chemistry and diagnostic markets, and LEAP Technologies, a provider of automation equipment for the genomic and proteomic industries. These agreements have recently ended.

Intellectual Property

We believe that protection of our patents and other intellectual property is essential to our business. Subject to the availability of sufficient financial resources, our practice is to file patent applications to protect technology, inventions, and improvements to inventions that are important to our business development. We also rely on trade secrets, know-how, and technological innovations to develop and maintain our potential competitive position.

To date, we have been granted 14 United States and 10 foreign patents. Our issued patents expire between 2015 and 2027. Our failure to obtain and maintain adequate patent protection may adversely affect our ability to enter into, or affect the terms of, any arrangement for the marketing or sale of any of our PCT products. It may also allow our competitors to duplicate our products without our permission and without compensation.

License Agreements Relating to Pressure Cycling Technology

BioMolecular Assays, Inc.

In 1996, we acquired our initial equity interest in BioSeq, Inc., which at the time was developing our original pressure cycling technology. BioSeq, Inc. acquired its pressure cycling technology from BioMolecular Assays, Inc. under a technology transfer and patent assignment agreement. In 1998, we purchased all of the remaining outstanding capital stock of BioSeq, Inc., and at such time, the technology transfer and patent assignment agreement was amended to require us to pay BioMolecular Assays, Inc., a 5% royalty on our sales of products or services that incorporate or utilize the original pressure cycling technology that BioSeq, Inc. acquired from BioMolecular Assays, Inc. We are also required to pay BioMolecular Assays, Inc. 5% of the proceeds from any sale, transfer or license of all or any portion of the original pressure cycling technology. These payment obligations terminate in 2016. During the years ended December 31, 2015 and 2014, we incurred approximately $31,301 and $31,835, respectively, in royalty

expense associated with our obligation to BioMolecular Assays, Inc.

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

Battelle Memorial Institute

In December 2008, we entered into an exclusive patent license agreement with the Battelle Memorial Institute ("*Battelle*"). The licensed technology is the subject of a patent application filed by Battelle in 2008 and relates to a method and a system for improving the analysis of protein samples, including through an automated system utilizing pressure and a pre-selected agent to obtain a digested sample in a significantly shorter period of time than current methods, while maintaining the integrity of the sample throughout the preparatory process. In addition to royalty payments on net sales on "licensed products," we are obligated to make minimum royalty payments for each year that we retain the rights outlined in the patent license agreement and we are required to have our first commercial sale of the licensed products within one year following the issuance of the patent covered by the licensed technology. After re-negotiating the terms of the contract in 2013 the minimum annual royalty was $1,200 and $2,900 for the years ended 2015 and 2014, respectively.

Regulation

Many of our activities are subject to regulation by governmental authorities within the United States and similar bodies outside of the United States. The regulatory authorities may govern the collection, testing, manufacturing, safety, efficacy, labeling, storage, record keeping, transportation, approval, advertising, and promotion of our products, as well as the training of our employees.

All of our commercialization efforts to date are focused in the area of genomic, proteomic and small molecule sample preparation. We do not believe that our current Barocycler products used in sample preparation are considered "medical devices" under the United States Food, Drug and Cosmetic Act (the "FDA Act") and we do not believe that we are subject to the law's general control provisions that include requirements for registration, listing of devices, quality regulations, labeling and prohibitions against misbranding and adulteration. We also do not believe that we are subject to regulatory inspection and scrutiny. If, however, we are successful in commercializing PCT in applications beyond our current focus area of genomic, proteomic and small molecule sample preparation, such as protein purification,

pathogen inactivation and immunodiagnostics, our products may be considered “medical devices” under the FDA Act, at which point we would be subject to the law’s general control provisions and regulation by the U.S. Food and Drug Administration (the “*FDA*”) that include requirements for registration listing of devices, quality regulations, labeling, and prohibitions against misbranding and adulteration. The process of obtaining approval to market these devices in the other potential applications of PCT would be costly and time consuming and could prohibit us from pursuing such markets.

We may also become subject to the European Pressure Equipment Directive, which requires certain pressure equipment meet certain quality and safety standards. We do not believe that we are currently subject to this directive because our Barocycler instruments are below the threshold documented in the text of the directive. If our interpretation were to be challenged, we could incur significant costs defending the challenge, and we could face production and selling delays, all of which could harm our business.

We self-certified that our Barocycler instrumentation was electromagnetically compatible, or “CE” compliant, which means that our Barocycler instruments meet the essential requirements of the relevant European health, safety and environmental protection legislation. In order to maintain our CE Marking, a requirement to sell equipment in many countries of the European Union, we are obligated to uphold certain safety and quality standards.

Employees

At December 31, 2015, we had eleven (11) full-time employees and three (3) part-time employees. All employees enter into confidentiality agreements intended to protect our proprietary information. We believe that our relations with our employees are good. None of our employees are represented by a labor union. Our performance depends on our ability to attract and retain qualified professional, scientific and technical staff. The level of competition among employers for skilled personnel is high. Subject to our limited financial resources, we attempt to maintain employee benefit plans to enhance employee morale, professional commitment and work productivity and provide an incentive for employees to remain with us.

ITEM 1A. RISK FACTORS.

This Annual Report on Form 10-K contains forward-looking statements that involve risks and uncertainties, such as statements of our objectives, expectations and intentions. The cautionary statements made in this Annual Report on Form 10-K should be read as applicable to all forward-looking statements wherever they appear in this report. Our actual results could differ materially from those discussed herein. Factors that could cause or contribute to such differences include those discussed below, as well as those discussed elsewhere in this Annual Report on Form 10-K.

We have received an opinion from our independent registered public accounting firm expressing substantial doubt regarding our ability to continue as a going concern.

The audit report issued by our independent registered public accounting firm on our audited consolidated financial statements for the fiscal year ended December 31, 2015 contains an explanatory paragraph regarding our ability to continue as a going concern. The audit report states that our auditing firm has substantial doubt in our ability to continue as a going concern due to the risk that we may not have sufficient cash and liquid assets at December 31, 2015 to cover our operating and capital requirements for the next twelve-month period; and if sufficient cash cannot be obtained, we would have to substantially alter, or possibly even discontinue, operations. The accompanying consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Management has developed a plan to continue operations. This plan includes continued control of expenses and obtaining equity or debt financing. Although we have successfully completed equity financings and reduced expenses in the past, we cannot assure you that our plans to address these matters in the future will be successful.

The factors described above could adversely affect our ability to obtain additional financing on favorable terms, if at all, and may cause investors to have reservations about our long-term prospects, and may adversely affect our relationships with customers. There can be no assurance that our auditing firm will not issue the same opinion in the future. If we cannot successfully continue as a going concern, our stockholders may lose their entire investment in us.

Our revenue is dependent upon acceptance of our products by the market. The failure of such acceptance will cause us to curtail or cease operations.

Our revenue comes from the sale of our products. As a result, we will continue to incur operating losses until such time as sales of our products reach a mature level and we are able to generate sufficient revenue from the sale of our products to meet our operating expenses. There can be no assurance that customers will adopt our technology and products, or that businesses and prospective customers will agree to pay for our products. In the event that we are not able to significantly increase the number of customers that purchase our products, or if we are unable to charge the necessary prices, our financial condition and results of operations will be materially and adversely affected.

Our business could be adversely affected if we fail to implement and maintain effective disclosure controls and procedures and internal control over financial reporting.

We concluded that as of December 31, 2015, our disclosure controls and procedures and our internal control over financial reporting were not effective. As described in Item 9A of this Annual Report on Form 10-K, we have determined that we have limited resources for adequate personnel to prepare and file reports under the Securities Exchange Act of 1934 within the required time periods and that material weaknesses in our internal control over financial reporting exist relating to our accounting for complex equity transactions. If we are unable to implement and maintain effective disclosure controls and procedures and remediate the material weaknesses in a timely manner, or if we identify other material weaknesses in the future, our ability to produce accurate and timely financial statements and public reports could be impaired, which could adversely affect our business and financial condition. 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 preventive controls to properly safeguard assets. In addition, investors may lose confidence in our reported information and the market price of our common stock may decline.

We will need a greater amount of additional capital than we currently expect to need if we experience unforeseen costs or expenses, unanticipated liabilities or delays in implementing our business plan, developing our products and achieving commercial sales.

We need substantial capital to implement our sales distribution strategy for our current products and to develop and commercialize future products using our pressure cycling technology products and services in the sample preparation area, as well as for applications in other areas of life sciences. Our capital requirements will depend on many factors, including but not limited to:

- the problems, delays, expenses, and complications frequently encountered by early-stage companies;
- market acceptance of our pressure cycling technology products and services for sample preparation;
- the success of our sales and marketing programs; and
- changes in economic, regulatory or competitive conditions in the markets we intend to serve.

To satisfy our potential capital requirements to cover the cost of implementing our sales distribution strategy for our current products and services and to develop and commercialize future products and services using our pressure cycling technology relating to sample preparation and other life science applications, we need to raise additional funds in the public or private capital markets. We may seek to raise any necessary additional funds through the issuance of warrants, equity or debt financings or executing collaborative arrangements with corporate partners or other sources,

which may be dilutive to existing stockholders or otherwise have a material effect on our current or future business prospects. Additional financing may not be available to us on a timely basis, if at all, or on terms acceptable to us. If adequate funds are not available or if we fail to obtain acceptable additional financing, we may be required to:

- severely limit or cease our operations or otherwise reduce planned expenditures and forego other business opportunities, which could harm our business;
- obtain financing with terms that may have the effect of substantially diluting or adversely affecting the holdings or the rights of the holders of our capital stock; or
- obtain funds through arrangements with future collaboration partners or others that may require us to relinquish rights to some or all of our technologies or products.

Our actual results and performance, including our ability to raise additional capital, may be adversely affected by current economic conditions.

Our actual results and performance could be adversely affected by the current economic conditions in the global economy, which continue to pose a risk to the overall demand for our products from our customers who may elect to defer or cancel purchases of, or decide not to purchase, our products in response to continuing tightness in the credit markets, negative financial news and general uncertainty in the economy. In addition, our ability to obtain additional financing, on acceptable terms, if at all, may be adversely affected by the uncertainty in the current economic climate.

We have a history of operating losses, anticipate future losses and may never be profitable.

We have experienced significant operating losses in each period since we began investing resources in PCT and CP. These losses have resulted principally from research and development, sales and marketing, and general and administrative expenses associated with the development of our PCT business. During the year ended December 31, 2015, we recorded a net loss applicable to common shareholders of $7,438,492, or ($0.36) per share, as compared with $6,251,726, or ($0.44) per share, of the corresponding period in 2014. We expect to continue to incur operating losses until sales of our PCT and CP products increase substantially. We cannot be certain when, if ever, we will become profitable. Even if we were to become profitable, we might not be able to sustain such profitability on a quarterly or annual basis.

Our financial results depend on revenues from our pressure cycling technology products and services, and from government grants.

We currently rely on revenues from our PCT and CP technology products and services in the sample preparation area and from revenues derived from grants awarded to us by governmental agencies, such as the National Institutes of Health. We have been unable to achieve market acceptance of our product offerings to the extent necessary to achieve significant revenue. Competition for government grants is very intense, and we can provide no assurance that we will continue to be awarded grants in the future. If we are unable to increase revenues from sales of our pressure cycling technology products and services and government grants, our business will fail.

We may be unable to obtain market acceptance of our pressure cycling technology products and services.

Many of our initial sales of our pressure cycling technology products and services have been to our collaborators, following their use of our products in studies undertaken in sample preparation for genomics, proteomics and small molecules studies. Later sales have been to key opinion leaders. Our technology requires scientists and researchers to adopt a method of sample extraction that is different than existing techniques. Our PCT sample preparation system is also more costly than existing techniques. Our ability to obtain market acceptance will depend, in part, on our ability to demonstrate to our potential customers that the benefits and advantages of our technology outweigh the increased cost of our technology compared with existing methods of sample extraction. If we are unable to demonstrate the benefits and advantages of our products and technology as compared with existing technologies, we will not gain market acceptance and our business will fail.

Our business may be harmed if we encounter problems, delays, expenses, and complications that often affect companies that have not achieved significant market acceptance.

Our pressure cycling technology business continues to face challenges in achieving market acceptance. If we encounter problems, delays, expenses and complications, many of which may be beyond our control or may harm our business or prospects. These include:

- availability of adequate financing;
- unanticipated problems and costs relating to the development, testing, production, marketing, and sale of our products;
- delays and costs associated with our ability to attract and retain key personnel; and

competition.

The sales cycle of our pressure cycling technology products is lengthy. We have incurred and may continue to incur significant expenses and we may not generate any significant revenue related to those products.

Many of our current and potential customers have required between three and six months or more to test and evaluate our pressure cycling technology products. This increases the possibility that a customer may decide to cancel its order or otherwise change its plans, which could reduce or eliminate our sales to that potential customer. As a result of this lengthy sales cycle, we have incurred and may continue to incur significant research and development, selling and marketing, and general and administrative expense related to customers from whom we have not yet generated any revenue from our products, and from whom we may never generate the anticipated revenue if a customer is not satisfied with the results of the evaluation of our products or if a customer cancels or changes its plans.

Our business could be harmed if our products contain undetected errors or defects.

We are continuously developing new and improving our existing, pressure cycling technology products in sample preparation and we expect to do so in other areas of life sciences depending upon the availability of our resources. Newly introduced products can contain undetected errors or defects. In addition, these products may not meet their performance specifications under all conditions or for all applications. If, despite internal testing and testing by our collaborators, any of our products contain errors or defects or fail to meet customer specifications, then we may be required to enhance or improve those products or technologies. We may not be able to do so on a timely basis, if at all, and may only be able to do so at considerable expense. In addition, any significant reliability problems could result in adverse customer reaction, negative publicity or legal claims and could harm our business and prospects.

Our success may depend on our ability to manage growth effectively.

Our failure to manage growth effectively could harm our business and prospects. Given our limited resources and personnel, growth of our business could place significant strain on our management, information technology systems, sources of manufacturing capacity and other resources. To properly manage our growth, we may need to hire additional employees and identify new sources of manufacturing capabilities. Failure to effectively manage our growth could make it difficult to manufacture our products and fill orders, as well as lead to declines in product quality or increased costs, any of which would adversely impact our business and results of operations.

Our success is substantially dependent on the continued service of our senior management.

Our success is substantially dependent on the continued service of our senior management. We do not have long-term employment agreements with our key employees. The loss of the services of any of our senior management has made, and could make it more difficult to successfully operate our business and achieve our business goals. In addition, our failure to retain existing engineering, research and development and sales personnel could harm our product development capabilities and customer and employee relationships, delay the growth of sales of our products and could result in the loss of key information, expertise or know-how.

We may not be able to hire or retain the number of qualified personnel, particularly engineering and sales personnel, required for our business, which would harm the development and sales of our products and limit our ability to grow.

Competition in our industry for senior management, technical, sales, marketing, finance and other key personnel is intense. If we are unable to retain our existing personnel, or attract and train additional qualified personnel, either because of competition in our industry for such personnel or because of insufficient financial resources, our growth may be limited. Our success also depends in particular on our ability to identify, hire, train and retain qualified engineering and sales personnel with experience in design, development and sales of laboratory equipment.

Our reliance on a single third party for all of our manufacturing, and certain of our engineering, and other related services could harm our business.

We currently rely on BIT Group USA ("*BIT Group*"), a third party contract manufacturer, to manufacture our PCT instrumentation, provide engineering expertise, and manage the majority of our sub-contractor supplier relationships. Because of our dependence on one manufacturer, our success will depend, in part, on the ability of BIT Group to manufacture our products cost effectively, in sufficient quantities to meet our customer demand, if and when such

demand occurs, and meeting our quality requirements. If BIT Group experiences manufacturing problems or delays, or if BIT Group decides not to continue to provide us with these services, our business may be harmed. While we believe other contract manufacturers are available to address our manufacturing and engineering needs, if we find it necessary to replace BIT Group, there will be a disruption in our business and we would incur additional costs and delays that would harm our business.

Our failure to manage current or future alliances or joint ventures effectively may harm our business.

We have entered into business relationships with 11 distribution partners and one co-marketing partner, and we may enter into additional alliances, joint ventures or other business relationships to further develop, market and sell our pressure cycling technology product line. We may not be able to:

- identify appropriate candidates for alliances, joint ventures or other business relationships;
- assure that any candidate for an alliance, joint venture or business relationship will provide us with the support anticipated;
- successfully negotiate an alliance, joint venture or business relationship on terms that are advantageous to us; or
- successfully manage any alliance or joint venture.

Furthermore, any alliance, joint venture or other business relationship may divert management time and resources. Entering into a disadvantageous alliance, joint venture or business relationship, failing to manage an alliance, joint venture or business relationship effectively, or failing to comply with any obligations in connection therewith, could harm our business and prospects.

We may not be successful in growing our international sales.

We cannot guarantee that we will successfully develop our international sales channels to enable us to generate significant revenue from international sales. We currently have 11 international distribution agreements that cover 22 countries in Europe, Asia and Australia. We have generated limited sales to date from international sales and cannot guarantee that we will be able to increase our sales. As we expand, our international operations may be subject to numerous risks and challenges, including:

- multiple, conflicting and changing governmental laws and regulations, including those that regulate high pressure equipment;
- reduced protection for intellectual property rights in some countries;
- protectionist laws and business practices that favor local companies;
- political and economic changes and disruptions;
- export and import controls;
- tariff regulations; and
- currency fluctuations.

Our operating results are subject to quarterly variation. Our operating results may fluctuate significantly from period to period depending on a variety of factors, including but not limited to the following:

- our ability to increase our sales of our pressure cycling technology products for sample preparation on a consistent quarterly or annual basis;
- the lengthy sales cycle for our products;
- the product mix of the Barocycler instruments we install in a given period, and whether the installations are completed pursuant to sales, rental or lease arrangements, and the average selling prices that we are able to command for our products;
- our ability to manage our costs and expenses;
- our ability to continue our research and development activities without incurring unexpected costs and expenses; and
- our ability to comply with state and federal regulations without incurring unexpected costs and expenses.

Our instrumentation operates at high pressures and may therefore become subject to certain regulations in the European Community. Regulation of high pressure equipment may limit or hinder our development and sale of future instrumentation.

Our Barocycler instruments operate at high pressures. If our Barocycler instruments exceed certain pressure levels, our products may become subject to the European Pressure Equipment Directive, which requires certain pressure equipment meet certain quality and safety standards. We do not believe that we are subject to this directive because our Barocycler instruments are currently below the threshold documented in the text of the directive. If our interpretation were to be challenged, we could incur significant costs defending the challenge, and we could face production and selling delays, all of which could harm our business.

We expect that we will be subject to regulation in the United States, such as the Food and Drug Administration, and overseas, if and when we begin to invest more resources in the development and commercialization of PCT in applications outside of sample preparation for the research field.

Our current pressure cycling technology products in the area of sample preparation for the research field are not regulated by the FDA. Certain applications in which we intend to develop and commercialize pressure cycling technology, such as protein purification, pathogen inactivation and immunodiagnostics, are expected to require regulatory approvals or clearances from regulatory agencies, such as the FDA, prior to commercialization, when we expand our commercialization activities outside of the research field. We expect that obtaining these approvals or clearances will require a significant investment of time and capital resources and there can be no assurance that such investments will receive approvals or clearances that would allow us to commercialize the technology for these applications.

If we are unable to protect our patents and other proprietary technology relating to our pressure cycling technology products, our business will be harmed.

Our ability to further develop and successfully commercialize our products will depend, in part, on our ability to enforce our patents, preserve our trade secrets, and operate without infringing the proprietary rights of third parties. We currently have 14 United States and 10 foreign patents. The patents expire between 2015 and 2027.

There can be no assurance that (a) any patent applications filed by us will result in issued patents; (b) patent protection will be secured for any particular technology; (c) any patents that have been or may be issued to us will be valid or enforceable; (d) any patents will provide meaningful protection to us; (e) others will not be able to design around our patents; and (f) our patents will provide a competitive advantage or have commercial value. The failure to obtain adequate patent protection would have a material adverse effect on us and may adversely affect our ability to enter into, or affect the terms of, any arrangement for the marketing or sale of any product.

Our patents may be challenged by others.

We could incur substantial costs in patent proceedings, including interference proceedings before the United States Patent and Trademark Office, and comparable proceedings before similar agencies in other countries, in connection with any claims that may arise in the future. These proceedings could result in adverse decisions about the patentability of our inventions and products, as well as about the enforceability, validity, or scope of protection afforded by the patents.

If we are unable to maintain the confidentiality of our trade secrets and proprietary knowledge, others may develop technology and products that could prevent the successful commercialization of our products.

We rely on trade secrets and other unpatented proprietary information in our product development activities. To the extent we rely on trade secrets and unpatented know-how to maintain our competitive technological position, there can be no assurance that others may not independently develop the same or similar technologies. We seek to protect our trade secrets and proprietary knowledge, in part, through confidentiality agreements with our employees, consultants, advisors and contractors. These agreements may not be sufficient to effectively prevent disclosure of our confidential information and may not provide us with an adequate remedy in the event of unauthorized disclosure of such information. If our employees, consultants, advisors, or contractors develop inventions or processes independently that may be applicable to our products, disputes may arise about ownership of proprietary rights to those inventions and processes. Such inventions and processes will not necessarily become our property, but may remain the property of those persons or their employers. Protracted and costly litigation could be necessary to enforce and determine the scope of our proprietary rights. Failure to obtain or maintain trade secret protection, for any reason, could harm our business.

If we infringe on the intellectual property rights of others, our business may be harmed.

It is possible that the manufacture, use or sale of our pressure cycling technology products or services may infringe patent or other intellectual property rights of others. We may be unable to avoid infringement of the patent or other intellectual property rights of others and may be required to seek a license, defend an infringement action, or challenge the validity of the patents or other intellectual property rights in court. We may be unable to secure a license on terms and conditions acceptable to us, if at all. Also, we may not prevail in any patent or other intellectual property rights litigation. Patent or other intellectual property rights litigation is costly and time-consuming, and there can be no assurance that we will have sufficient resources to bring any possible litigation related to such infringement to a successful conclusion. If we do not obtain a license under such patents or other intellectual property rights, or if we are found liable for infringement, or if we are unsuccessful in having such patents declared invalid, we may be liable for significant monetary damages, may encounter significant delays in successfully commercializing and developing our pressure cycling technology products, or may be precluded from participating in the manufacture, use, or sale of our pressure cycling technology products or services requiring such licenses.

We may be unable to adequately respond to rapid changes in technology and the development of new industry standards.

The introduction of products and services embodying new technology and the emergence of new industry standards may render our existing pressure cycling technology products and related services obsolete and unmarketable if we are unable to adapt to change. We may be unable to allocate the funds necessary to improve our current products or introduce new products to address our customers' needs and respond to technological change. In the event that other companies develop more technologically advanced products, our competitive position relative to such companies would be harmed.

We may not be able to compete successfully with others that are developing or have developed competitive technologies and products.

A number of companies have developed, or are expected to develop, products that compete or will compete with our products. We compete with companies that have existing technologies for the extraction of nucleic acids, proteins and small molecules from cells and tissues, including but not limited to methods such as mortar and pestle, sonication, rotor-stator homogenization, French press, bead beating, freezer milling, enzymatic digestion, and chemical dissolution.

We are aware that there are additional companies pursuing new technologies with similar goals to the products developed or being developed by us. Some of the companies with which we now compete, or may compete in the future, have or may have more extensive research, marketing, and manufacturing capabilities, more experience in genomics and proteomics sample preparation, protein purification, pathogen inactivation, immunodiagnostics, and DNA sequencing and significantly greater technical, personnel and financial resources than we do, and may be better positioned to continue to improve their technology to compete in an evolving industry. To compete, we must be able to demonstrate to potential customers that our products provide improved performance and capabilities. Our failure to compete successfully could harm our business and prospects.

We will need to increase the size of our organization, and may experience difficulties in managing growth.

We are a small company with minimal employees. We expect to experience a period of expansion in headcount, facilities, infrastructure and overhead and anticipate that further expansion will be required to address potential growth and market opportunities. Future growth will impose significant added responsibilities on members of management, including the need to identify, recruit, maintain and integrate new managers. Our future financial performance and its ability to compete effectively will depend, in part, on its ability to manage any future growth effectively.

Provisions in our articles of organization and bylaws may discourage or frustrate stockholders' attempts to remove or replace our current management.

Our articles of organization and bylaws contain provisions that may make it more difficult or discourage changes in our management that our stockholders may consider to be favorable. These provisions include:

- a classified board of directors;
- advance notice for stockholder nominations to the board of directors;
- limitations on the ability of stockholders to remove directors; and
- a provision that allows a majority of the directors to fill vacancies on the board of directors.

These provisions could prevent or frustrate attempts to make changes in our management that our stockholders consider to be beneficial and could limit the price that our stockholders might receive in the future for shares of our common stock.

The costs of compliance with the reporting obligations of the Exchange Act, and with the requirements of the Sarbanes-Oxley Act of 2002 and the Dodd-Frank Wall Street Reform and Consumer Protection Act, may place a strain on our limited resources and our management's attention may be diverted from other business concerns.

As a result of the regulatory requirements applicable to public companies, we incur legal, accounting, and other expenses that are significant in relation to the size of our Company. In addition, the Sarbanes-Oxley Act of 2002 and the Dodd-Frank Wall Street Reform and Consumer Protection Act, as well as rules subsequently implemented by the SEC and OTC Markets Group, Inc., have required changes in corporate governance and financial disclosure practices

of public companies, some of which are currently applicable to us and others will or may become applicable to us in the future. These rules and regulations have increased and will continue to increase our legal and financial compliance costs and may make some activities more time-consuming. These requirements have placed and will continue to place a strain on our systems and on our management and financial resources.

Certain of our net deferred tax assets could be substantially limited if we experience an ownership change as defined in the Internal Revenue Code.

Certain of our net operating losses ("*NOLs*") give rise to net deferred tax assets. Our ability to utilize NOLs and to offset our future taxable income and/or to recover previously paid taxes would be limited if we were to undergo an "ownership change" within the meaning of Section 382 of the Internal Revenue Code (the "*Code*"). In general, an "ownership change" occurs whenever the percentage of the stock of a corporation owned by "5 percent shareholders," within the meaning of Section 382 of the Code, increases by more than 50 percentage points over the lowest percentage of the stock of such corporation owned by such "5 percent shareholders" at any time over the preceding three years.

An ownership change under Section 382 of the Code would establish an annual limitation on the amount of NOLs we could utilize to offset our taxable income in any single taxable year to an amount equal to (i) the product of a specified rate, which is published by the U.S. Treasury, and the aggregate value of our outstanding stock plus; and (ii) the amount of unutilized limitation from prior years. The application of these limitations might prevent full utilization of the deferred tax assets attributable to our NOLs. We may have or will have experienced an ownership change as defined by Section 382 through the sale of equity and, therefore, we will consider whether the sale of equity units will result in limitations of our net operating losses under Section 382 when we start to generate taxable income. However, whether a change in ownership occurs in the future is largely outside of our control, and there can be no assurance that such a change will not occur.

Risks Related to Share Ownership:

The holders of our Common Stock could suffer substantial dilution due to our corporate financing practices.

The holders of our common stock could suffer substantial dilution due to our corporate financing practices, which, in the past few years, have included private placements and a registered direct offering. As of December 31, 2015, we have issued shares of Series A Convertible Preferred Stock, Series B Convertible Preferred Stock, Series C Convertible Preferred Stock, Series D Convertible Preferred Stock, Series E Convertible Preferred Stock, Series G Convertible Preferred Stock, Series H Convertible Preferred Stock, Series H2 Convertible Preferred Stock, Series J Convertible Preferred Stock and Series K Convertible Preferred Stock.

As of December 31, 2015, all of the shares of Series A Convertible Preferred Stock, Series B Convertible Preferred Stock, Series C Convertible Preferred Stock, and Series E Convertible Preferred Stock had been converted into shares of common stock. As of December 31, 2015 only shares of Series D Convertible Preferred Stock, Series G Convertible Preferred Stock, Series H Convertible Preferred Stock, Series H2 Convertible Preferred Stock, Series J Convertible Preferred Stock and Series K Convertible Preferred Stock were outstanding. Further, in connection with those private placements and the Series D registered direct offering, we issued warrants to purchase common stock. In addition, as of December 31, 2015, the Company has issued notes convertible into common stock at prices ranging from $0.28 to $0.45 per common share. If all of the outstanding shares of Series D Convertible Preferred Stock, Series G Convertible Preferred Stock, Series H Convertible Preferred Stock, Series H2 Convertible Preferred Stock, Series J Convertible Preferred Stock and Series K Convertible Preferred Stock were converted into shares of common stock and all outstanding options and warrants to purchase shares of common stock were exercised and all notes were converted, each as of December 31, 2015, an additional 88,113,929 shares of common stock would be issued and outstanding. This additional issuance of shares of common stock would cause immediate and substantial dilution to our existing stockholders and could cause a significant reduction in the market price of our common stock.

Sales of a significant number of shares of our common stock in the public market or the perception of such possible sales, could depress the market price of our common stock.

Sales of a substantial number of shares of our common stock in the public markets, which include an offering of our preferred stock or common stock could depress the market price of our common stock and impair our ability to raise capital through the sale of additional equity or equity-related securities. We cannot predict the effect that future sales of our common stock or other equity-related securities would have on the market price of our common stock.

Our share price could be volatile and our trading volume may fluctuate substantially.

The price of common stock has been and may in the future continue to be extremely volatile, with the sale price fluctuating from a low of $0.13 to a high of $0.78 since January 1, 2014. Many factors could have a significant impact on the future price of our shares of common stock, including:

- our inability to raise additional capital to fund our operations, whether through the issuance of equity securities or debt;
- our failure to successfully implement our business objectives;
- compliance with ongoing regulatory requirements;
- market acceptance of our products;
- technological innovations and new commercial products by our competitors;
- changes in government regulations;
- general economic conditions and other external factors;
- actual or anticipated fluctuations in our quarterly financial and operating results; and
- the degree of trading liquidity in our shares of common stock.

A decline in the price of our shares of common stock could affect our ability to raise further working capital and adversely impact our ability to continue operations.

The relatively low price of our shares of common stock, and a decline in the price of our shares of common stock, could result in a reduction in the liquidity of our common stock and a reduction in our ability to raise capital. Because a significant portion of our operations has been and will continue to be financed through the sale of equity securities, a decline in the price of our shares of common stock could be especially detrimental to our liquidity and our operations. Such reductions and declines may force us to reallocate funds from other planned uses and may have a significant negative effect on our business plans and operations, including our ability to continue our current operations. If the price for our shares of common stock declines, it may be more difficult to raise additional capital. If we are unable to raise sufficient capital, and we are unable to generate funds from operations sufficient to meet our obligations, we will not have the resources to continue our operations.

The market price for our shares of common stock may also be affected by our ability to meet or exceed expectations of analysts or investors. Any failure to meet these expectations, even if minor, may have a material adverse effect on the market price of our shares of common stock.

If we issue additional securities in the future, it will likely result in the dilution of our shares of existing stockholders.

Our restated articles of organization, as amended, currently authorize the issuance of up to 65,000,000 shares of common stock and 1,000,000 shares of preferred stock. As of March 31, 2016, we had 23,209,898 shares of common stock issued and outstanding; 300 units of Series D issued and outstanding (convertible into 750,000 shares of common stock); 86,750 shares of Series G Convertible Preferred Stock (convertible into 865,700 shares of common stock); 3,546 shares of Series J Convertible Preferred Stock (convertible into 3,546,000 shares of common stock); 10,000 shares of Series H Convertible Preferred Stock (convertible into 1,000,000 shares of common stock); 21 shares of Series H2 Convertible Preferred Stock (convertible into 2,100,000 shares of common stock); 11,416 shares of Series K Convertible Preferred Stock (convertible into 11,416,000 shares of common stock); outstanding options and warrants to purchase an aggregate of 34,863,199 shares of common stock; and convertible debt convertible into 19,289,286 shares of common stock. From time to time, we also may increase the number of shares available for issuance in connection with our equity compensation plan, we may adopt new equity compensation plans, and we may issue awards to our employees and others who provide services to us outside the terms of our equity compensation plans. Our board of directors may fix and determine the designations, rights, preferences or other variations of each class or series of preferred stock and may choose to issue some or all of such shares to provide additional financing in the future.

The issuance of any securities for acquisition, licensing or financing efforts, upon conversion of any preferred stock or exercise of warrants, pursuant to our equity compensation plans, or otherwise may result in a reduction of the book value and market price of the outstanding shares of our common stock. If we issue any such additional securities, such

issuance will cause a reduction in the proportionate ownership and voting power of all current stockholders. Further, such issuance may result in a change in control of our Company.

Financial Industry Regulatory Authority ("FINRA") sales practice requirements may also limit a stockholder's ability to buy and sell our common stock.

FINRA has adopted rules that require that in recommending an investment to a customer, a broker-dealer must have reasonable grounds for believing that the investment is suitable for that customer. Prior to recommending speculative low-priced securities to their non-institutional customers, broker-dealers must make reasonable efforts to obtain information about the customer's financial status, tax status, investment objectives and other information. Under interpretations of these rules, FINRA believes that there is a high probability that speculative low-priced securities will not be suitable for at least some customers. FINRA requirements make it more difficult for broker-dealers to recommend that their customers buy our common stock, which may limit your ability to buy and sell our common stock and have an adverse effect on the market for our shares.

Our Common Stock is subject to the "Penny Stock" rules of the SEC and the trading market in our securities is limited, which makes transactions in our stock cumbersome and may reduce the value of an investment in our stock.

The Securities and Exchange Commission has adopted Rule 15g-9 which establishes the definition of a "penny stock," for the purposes relevant to us, as any equity security that has a market price of less than $5.00 per share or with an exercise price of less than $5.00 per share, subject to certain exceptions. For any transaction involving a penny stock, unless exempt, the rules require:

That a broker or dealer approve a person's account for transactions in penny stocks; and

The broker or dealer receives from the investor a written agreement to the transaction, setting forth the identity and quantity of the penny stock to be purchased.

In order to approve a person's account for transactions in penny stocks, the broker or dealer must:

Obtain financial information and investment experience objectives of the person; and

Make a reasonable determination that the transactions in penny stocks are suitable for that person and the person has sufficient knowledge and experience in financial matters to be capable of evaluating the risks of transactions in penny stocks.

The broker or dealer must also deliver, prior to any transaction in a penny stock, a disclosure schedule prescribed by the Commission relating to the penny stock market, which, in highlight form:

Sets forth the basis on which the broker or dealer made the suitability determination; and

That the broker or dealer received a signed, written agreement from the investor prior to the transaction.

Generally, brokers may be less willing to execute transactions in securities subject to the "penny stock" rules. This may make it more difficult for investors to dispose of our common stock and cause a decline in the market value of our stock.

Disclosure also has to be made about the risks of investing in penny stocks in both public offerings and in secondary trading and about the commissions payable to both the broker-dealer and the registered representative, current quotations for the securities and the rights and remedies available to an investor in cases of fraud in penny stock

transactions. Finally, monthly statements have to be sent disclosing recent price information for the penny stock held in the account and information on the limited market in penny stocks.

We have never declared or paid a cash dividend on our common stock and we do not expect to pay cash dividends on our common stock in the foreseeable future.

Our shares of Series D Convertible Preferred Stock are entitled to certain rights, privileges and preferences over our common stock, including a preference upon a liquidation of our Company, which will reduce amounts available for distribution to the holders of our common stock.

The holders of our shares of Series D are entitled to payment, prior to payment to the holders of common stock in the event of liquidation of the Company. If we are dissolved, liquidated or wound up at a time when the Series D Preferred Stock remain outstanding, the holders of the Series D Preferred Stock will be entitled to receive only an amount equal to the liquidation preference (as it may be adjusted from time to time), plus any accumulated and unpaid dividends, to the extent that we have funds legally available. Any remaining assets will be distributable to holders of our other equity securities.

Shares eligible for *future sale may adversely affect the market.*

From time to time, certain of our stockholders may be eligible to sell all or some of their shares of common stock by means of ordinary brokerage transactions in the open market pursuant to Rule 144 promulgated under the Securities Act, subject to certain limitations. In general, pursuant to amended Rule 144, non-affiliate stockholders may sell freely after six months subject only to the current public information requirement. Affiliates may sell after six months subject to the Rule 144 volume, manner of sale (for equity securities), current public information and notice requirements. Any substantial sales of our common stock pursuant to Rule 144 may have a material adverse effect on the market price of our common stock.

We could issue additional common stock, which might dilute the book value of our Common Stock.

Our Board of Directors has authority, without action or vote of our shareholders, to issue all or a part of our authorized but unissued shares. Such stock issuances could be made at a price that reflects a discount or a premium from the then-current trading price of our common stock. In addition, in order to raise capital, we may need to issue securities that are convertible into or exchangeable for our common stock. These issuances would dilute the percentage ownership interest, which would have the effect of reducing your influence on matters on which our shareholders vote, and might dilute the book value of our common stock. You may incur additional dilution if holders of stock warrants or options, whether currently outstanding or subsequently granted, exercise their options, or if warrant holders exercise their warrants to purchase shares of our common stock.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

Not Applicable.

ITEM 2. PROPERTIES.

Our corporate office is currently located at 14 Norfolk Avenue, South Easton, Massachusetts 02375. We are currently paying $4,800 per month, on a lease extension, signed on December 29, 2015, that expires December 31, 2016, for our corporate office.

On November 1, 2014 we signed a lease for lab space in Medford, MA. We subsequently expanded our space in Medford. The lease expires December 30, 2017 and requires monthly payments of $5,385 subject to annual cost of living increases.

ITEM 3. 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, or proceeding 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 our subsidiary, threatened against or affecting our Company, our common stock, our subsidiary or of our companies or our subsidiary’s officers or directors in their capacities as such, in which an adverse decision could have a material adverse effect.

ITEM 4. MINE SAFETY DISCLOSURES.

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES.

Our common stock is currently traded on the OTCQB tier of the OTC Markets under the trading symbol "PBIO."

The following table sets forth, for the periods indicated, the high and low sales price and the high and low bids, as applicable, per share of common stock, as reported by the OTC Markets from January 1, 2014 through December 31, 2015.

	Year Ended December 31, 2015	
	High	Low
First Quarter	$0.45	$0.17
Second Quarter	$0.38	$0.20
Third Quarter	$0.32	$0.20
Fourth Quarter	$0.49	$0.20

	Year Ended December 31, 2014	
	High	Low
First Quarter	$0.78	$0.23
Second Quarter	$0.64	$0.32
Third Quarter	$0.40	$0.24
Fourth Quarter	$0.35	$0.13

Authorized Capital

As of December 31, 2015, we were authorized to issue 100,000,000 shares of common stock, $.01 par value, and 1,000,000 shares of preferred stock, $.01 par value. Of the 1,000,000 shares of preferred stock, 20,000 shares were designated as Series A Junior Participating Preferred Stock, 313,960 shares as Series A Convertible Preferred Stock, 279,256 shares as Series B Convertible Preferred Stock, 88,098 shares as Series C Convertible Preferred Stock, 850 shares as Series D Convertible Preferred Stock, 500 shares as Series E Convertible Preferred Stock, 240,000 shares as

Series G Convertible Preferred Stock, 10,000 shares as Series H Convertible Preferred Stock, 21 shares as Series H2 Convertible Preferred Stock, 6,250 shares as Series J Convertible Preferred Stock and 15,000 shares as Series K Convertible Preferred Stock.

As of December 31, 2015, there were 23,004,898 shares of common stock issued and outstanding. Similarly, at such time, there were no shares of Series A Junior Participating Preferred Stock; Series A Convertible Preferred Stock; Series B Convertible Preferred Stock; Series C Convertible Preferred Stock; Series E Convertible Preferred Stock. As of December 31, 2015 there were 300 shares of Series D Convertible Preferred Stock issued and outstanding and convertible into 750,000 shares of common stock, 86,570 shares of Series G Convertible Preferred Stock issued and outstanding convertible into 865,700 shares of common stock, 10,000 shares of Series H Convertible Preferred Stock issued and outstanding convertible into 1,000,000 shares of common stock, 21 shares of Series H2 Convertible Preferred Stock issued and outstanding convertible into 2,100,000 shares of common stock, 3,546 shares of Series J Convertible Preferred Stock issued and outstanding convertible into 3,546,000 shares of common stock, and 11,416 shares of Series K Convertible Preferred Stock issued and outstanding convertible into 11,416,000 shares of common stock.

Approximate Number of Equity Security Holders

As of December 31, 2015, there were approximately 212 stockholders of record. Because shares of our common stock are held by depositaries, brokers and other nominees, the number of beneficial holders of our shares is substantially larger than the number of stockholders of record.

Dividends

We have never declared or paid any cash dividends on common stock and do not plan to pay any cash dividends on common stock in the foreseeable future.

As of December 31, 2015, dividends issued or to be issued on convertible preferred stock for the years ended December 31, 2015 and 2014 are outlined in the table below.

Dividends paid in common stock or cash For The Year Ended December 31,			Dividends payable For The Year Ended December 31,		
	2015	2014		2015	2014
Series D	$ -	$ -	Series D	$ -	$ -
Series E	-	-	Series E	-	-
Series G	-	58,268	Series G	1,200	1,200
Series H	-	-	Series H	-	-
Series H2	-	-	Series H2	-	-
Series J	-	24,648	Series J	83,926	83,926
Series K	14,894	-	Series K	170,607	163,733
	$ 14,894	$ 82,916		$ 255,733	$ 248,859

ITEM 6. SELECTED FINANCIAL DATA.

Not Applicable.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATION.

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, called pressure cycling technology, or PCT, uses alternating cycles of hydrostatic pressure between ambient and ultra-high levels (35,000 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 and MicroTubes, other processing tubes, and application specific kits (which include consumable products and reagents) together make up our PCT Sample Preparation System, or PCT SPS.

We have experienced negative cash flows from operations with respect to our PCT business since our inception. As of December 31, 2015, we did not have adequate working capital resources to satisfy our current liabilities. Based on our current projections, including equity financing subsequent to December 31, 2015, we believe our current and projected cash resources will enable us to extend our cash for the foreseeable future.

The audit report issued by our independent registered public accounting firm on our consolidated audited financial statements for the fiscal year ended December 31, 2015 contains an explanatory paragraph regarding our ability to continue as a going concern. The audit report issued by our independent registered public accounting firm for our financial statements for the fiscal year ended December 31, 2015 states that there is substantial doubt in our ability to continue as a going concern due to the risk that we may not have sufficient cash and liquid assets at December 31, 2015 to cover our operating and capital requirements for the next twelve-month period; and, if sufficient cash cannot be obtained, we would have to substantially alter or possibly discontinue operations. The accompanying financial statements do not include any adjustments that might result from the outcome of this uncertainty.

The conditions described above could adversely affect our ability to obtain additional financing on favorable terms, if at all. Such factors may cause investors to have reservations about our long-term prospects and may adversely affect our relationships with customers. There can be no assurance that our auditing firm will not issue the same opinion in the future. If we cannot successfully continue as a going concern, our stockholders may lose their entire investment in us.

Management has developed a plan to continue operations. This plan includes continued control on expenses, streamlining operations, and obtaining capital through equity and/or debt financing.

We have entered into various fixed rate convertible debentures ($5M PIPE) throughout 2015 for net proceeds of $4,910,000. We also received approximately $1,400,000 of net proceeds from non-convertible debt lenders of which $600,000 was invested in the $5M PIPE, $746,000 was paid off in 2015, and $154,000 remained due on December 31, 2015.

Although we have successfully completed equity financings and reduced expenses in the past, we cannot assure you that our plans to address these matters in the future will be successful. Additional financing may not be available to us on a timely basis, if at all, or on terms acceptable to us. In the event we are unable to raise sufficient funds on terms acceptable to us, we may be required to:

severely limit or cease our operations or otherwise reduce planned expenditures and forego other business opportunities, which could harm our business. The accompanying financial statements do not include adjustments that may be required in the event of the disposal of assets or the discontinuation of the business;

obtain financing with terms that may have the effect of diluting or adversely affecting the holdings or the rights of the holders of our capital stock; or

obtain funds through arrangements with future collaboration partners or others that may require us to relinquish rights to some or all of our technologies or products.

We currently focus the majority of our resources in the area of biological sample preparation, referring to a wide range of activities that precede scientific analysis performed by scientists worldwide working in biological life sciences research. Within the broad field of biological sample preparation, we focus the majority of our product development efforts in three specific areas: mass spectrometry, forensics, and histology.

Biomarker Discovery - Mass Spectrometry. A biomarker is any substance (e.g., protein) that can be used as an indicator of the presence or absence of a particular disease-state or condition, and to measure the progression and effects of therapy. Biomarkers can help in the diagnosis, prognosis, therapy, prevention, surveillance, control, and cure of diseases and medical conditions. A number of laboratory instruments are used to help discover biomarkers; a leader among these is the mass spectrometer. The mass spectrometer is one of the laboratory instruments frequently used to help discover biomarkers.

A mass spectrometer is a laboratory instrument used in the analysis of biological samples, frequently for proteins, in life sciences research. According to a recently published market report by Transparency Market Research (www.transparencymarketresearch.com) "*Spectrometry Market (Atomic, Molecular and Mass Spectrometry) - Global Scenario, Trends, Industry Analysis, Size, Share & Forecast 2011 – 2017*," the global spectrometry market was worth $10.2 billion in 2011 and is expected to reach $15.2 billion in 2017, growing at a compounded annual growth rate of 6.9% from 2011 to 2017. In the overall global market, the North American market is expected to maintain its lead position in terms of revenue until 2017 and is expected to have approximately 36.2% of the market revenue share in 2017 followed by Europe. We believe PCT offers significant advantages in speed and quality compared with current techniques used in the preparation of samples for mass spectrometry analysis.

Forensics. The detection of DNA has become a part of the analysis of forensic samples by laboratories and criminal justice agencies worldwide in their efforts to identify the perpetrators of violent crimes and missing persons. Scientists from the University of North Texas and Florida International University have reported improvements in DNA yield from forensic samples e.g., bone and hair using PCT in the sample preparation process. We believe that that PCT may be capable of differentially extracting DNA from sperm cells and (female) epithelial cells in swabs collected from rape victims and stored in rape kits. We believe that there are many completed rape kits that remain untested for reasons such as cost, time, and quality of results. We further believe that the ability to differentially extract DNA from sperm cells and not epithelial cells could reduce the cost of such testing, while increasing the quality, safety, and speed of the testing process.

Histology. The most commonly used technique worldwide for the preservation of cancer and other tissues for subsequent pathology evaluation is formalin-fixation followed by paraffin-embedding. We believe that the quality and analysis of FFPE tissues is highly problematic, and that PCT offers significant advantages over current processing methods, including standardization, speed, biomolecule recovery, and safety.

We view federal agency grants to be an important part of our business plan. These types of grants allow us to bill the federal agency for work that we are planning to perform as part of the development and commercialization of our technology. We generally start by submitting initial grant requests that are in response to requests for proposals ("*RFPs*") from the federal government through their Small Business Innovation Research ("*SBIR*") program. Initial ("*SBIR Phase I*") grants are meant to fund approved research projects for six months, and generally have budgets of approximately $100,000 to $150,000. Because our work in SBIR Phase I grants has been successful, we have applied, and may in the future apply for larger National Institutes of Health ("NIH") SBIR Phase II grants. Such larger grants are

typically for a two-year period and can offer as much as $1,000,000 to support significant research projects in areas we would otherwise expect to support with internal funds should SBIR Phase II grants not be awarded. To date, we have been awarded four NIH SBIR Phase I grants and three SBIR Phase II grants. The data on three of the NIH SBIR Phase I grants were the basis for the submission, and subsequent award, of all three of the NIH SBIR Phase II grants awarded to us: one was in the approximate amount of $850,000 in August 2008, the second was in the approximate amount of $850,000 in September 2011, and the third award was in the approximate amount of $1,020,000 awarded in November 2014. All three of the NIH SBIR Phase I grants and the August 2008 and September 2011 NIH SBIR Phase II grants have been completed.

The 2008 SBIR Phase II grant (2R44GM079059) was awarded to us by the NIH for work in the area of using PCT to extract protein biomarkers, sub-cellular molecular complexes, and organelles, with the expectation that these studies might ultimately lead to the release of a new, commercially available PCT-based system, with validated protocols, end-user kits, and other consumables intended for the extraction of clinically important protein biomarkers, sub-cellular molecular complexes, and organelles from human and animal tissues. The 2011 SBIR II contract (W81XWH-10-C-0-175) was awarded to us by the US Army for the development of a universal method for the inactivation, extraction, and enrichment of pathogens in diagnostic samples, including arthropod hosts of military importance. The work covered by this grant was significant in helping us develop the recently released Barozyme HT48 High Throughput System. The 2014 SBIR Phase II grant (2R44HG007136) was awarded to us by the National Human Genome Research Institute of the National Institutes of Health ("NIH"). Entitled "High Pressure Sample Preparation Instrumentation for DNA Sequencing", this grant will help fund the development of an automated, high-throughput, high pressure system (instrument and consumables), to enable significantly better control of DNA fragmentation - a critical step in the preparation of samples for Next Generation Sequencing platforms. This system will be based on significant technological advancements over the classic hydrodynamic DNA shearing approach that has been successfully and widely used in the field of DNA sequencing for many years.

We offer extended service contracts on our laboratory instrumentation to all of our customers. These service contracts allow a customer who purchases a Barocycler instrument to receive on-site scheduled preventative maintenance, on-site repair and replacement of all worn or defective component parts, and telephone support, all at no incremental cost for the life of the service contract. We offer one-year and four-year extended service contracts to customers who purchase Barocycler instruments.

On January 28, 2016 in a report focused on the exclusive co-marketing agreement between SCIEX and PBI, Emerging Growth LLC indicates the combination of the two company's technologies could result in superior biological insights and discoveries and in rapid and dramatic revenue growth for PBI.

On February 3, 2016 SCIEX and Children's Hospital Medical Research Institute (Sydney, Australia) announced they had joined forces to advance the promise of precision medicine. The partners stated they would benefit from SCIEX's exclusive collaborators, including Pressure BioSciences, and PBI's PCT platform for increased protein quantitation and reproducibility.

On March 14, 2016 the Company announced that it would participate in a SCIEX workshop on new innovations towards industrialized proteomics at the US HUPO scientific conference in Boston.

RESULTS OF OPERATIONS

Year Ended December 31, 2015 as compared with December 31, 2014

Revenue

We had total revenue of $1,797,691, in the year ended December 31, 2015 as compared with $1,374,744 in the prior year, a 31% increase. The increase was due to product sales growth and new government grant supported activities.

Products, Services, and Other. Revenue from the sale of products and services was $1,409,991 in the year ended December 31, 2015 compared with $1,350,150 in the year ended December 31, 2014, a 4.4% increase. Revenue included sales of both PBI and Constant Systems pressure-based products. Sales of instrumentation increased in 2015 by $36,139 or 5%, from $799,472 for FY 2014 to $835,611 for FY 2015. Sales of consumables were $146,408 for the year ended December 31, 2015 compared to $167,380 for the same period in 2014, a decrease of $20,972 or 13%. Products, Services, and Other revenue included $78,743 from non-cash transactions with no non-cash transactions in 2014. Revenue from non-cash transactions was $78,743 in 2015 recognized on the fair value of the assets involved, per ASC 845.

Grant Revenue. During 2015, we recorded $387,700 of grant revenue as compared with $24,594 in 2014. In December 2014 the Company was awarded a $1,020,969 SBIR Phase II grant (2R44HG007136) from the National Human Genome Research Institute of the National Institutes of Health (“NIH”). Entitled “High Pressure Sample Preparation Instrumentation for DNA Sequencing”, this. T grant is helping to fund the development of an automated, high-throughput, high pressure system (instrument and consumables) to enable significantly better control of DNA fragmentation - a critical step in the preparation of samples for Next Generation Sequencing platforms. This system will be based on significant technological advancements over the classic hydrodynamic DNA shearing approach that has been successfully and widely used in the field of DNA sequencing for many years.

Cost of Products and Services

The cost of products and services was $609,054 for the year ended December 31, 2015, compared with $652,438 in 2014. Our gross profit margin on products and services was 66% for FY 2015 vs. 48% for FY 2014. The favorable margin improvement was helped with the sale of preownedPBI Barocycler instruments that we repurchased, refurbished, and then resold at better than usual gross margins. The relationship between the cost of products and services and revenue depends greatly on the mix of instruments we sell, the quantity of such instruments, and the mix of consumable products and instrument accessories that we sell in a given period.

Research and Development

Research and development expenditures were $1,105,295 for 2015 compared to $952,555 in 2014, an increase of $152,740 or 16%. This increase in FY 2015 R&D expenses resulted primarily from additional research activities funded through our SBIR Phase II grant, with the aim to develop a new pressure-based system for the extraction of high quality DNA from samples for analysis. We also added much needed electrical engineering and computer software support to help enhance our entire line of pressure-based instrument systems. In FY 2015, we incurred increased consulting expense due to our on-going collaborations with Key Opinion Leaders in several academic laboratories. Research and development expense also included $50,617 and $30,550 of non-cash, stock-based compensation in 2015 and 2014, respectively.

Selling and Marketing

Selling and marketing expenses were $745,574 in 2015 compared to $721,229 in 2014, an increase of $24,345, or 3%. This increase was primarily due to a more aggressive customer outreach program unveiled in 2015. Selling and marketing expense included $32,704 and $19,792 of non-cash stock based compensation expense in 2015 and 2014, respectively.

General and Administrative

General and administrative costs were $2,902,950 in the year ended December 31, 2015, as compared with $2,386,872 in 2014, an increase of $516,078 or 22%. We increased spending on investor relations and patent/trademark activities, as well as in outside consulting services and other investment relations costs to augment our 2015 fund raising efforts. During the years ended December 31, 2015 and 2014, general and administrative expense included $125,668 and $50,783 of non-cash, stock-based compensation expense, respectively.

Operating Loss

Our operating loss was $3,565,182 for the year ended December 31, 2015 as compared with $3,338,350 for the prior year, an increase of $226,832 or 7%. This increase in operating loss was due primarily to increases in R&D and G&A expenses, and by the award of director and employee stock options, off-set to a certain extent by increases in total revenue and product gross margins.

Other income (expense), net

Interest Expense Net interest expense totaled $4,146,416 for the year ended December 31, 2015 as compared with interest expense of $1,303,129 for the year ended December 31, 2014. In connection with full payments of loans, we accelerated amortization of deferred financing costs and imputed interest against the debt discount on short-term loans relating to the prepayment penalties issued with the loans in 2015.

Other income (expense) net

We recognized $36,879 in expense during 2015, compared to $169,554 of expense from the initial fair value calculation on the conversion option on our convertible debt instruments in 2014.

Gain on extinguishment of embedded derivative liabilities

In connection with full payments of convertible debt, we recorded non-cash gains of $2,555,180 on short-term loans relating to the conversion options issued with the loans in 2015.

Change in fair value of derivative liabilities

During the year ended December 31, 2015, we recorded non-cash expense of $2,222,001 from warrant and conversion option liability revaluation in our consolidated statements of operations due to an increase in the fair value of the derivative warrants and the conversion option liabilities on our debt. This increase in fair value was primarily due to an increase in the price per share of our common stock. During the year ended December 31, 2014, we recorded non-cash income of $198,493 for warrant and conversion option liability revaluation due to a decrease in fair value of the liabilities.

Income Taxes

We did not record an income tax benefit or provision for the years ended December 31, 2015 or 2014.

Net Loss

During the year ended December 31, 2015, we recorded a net loss applicable to common stockholders of $7,438,492 or $(0.36) per share, as compared with $6,251,726 or $(0.44) per share during the year ended December 31, 2014. Although the net loss applicable to common stockholders increased in 2015 due to the amortization to interest expense, the gains relating to the full payment of the loans offset the interest impact. See Note 2 of the accompanying Notes to Consolidated Financial Statements under the “Computation of Loss per Share” heading.

LIQUIDITY AND FINANCIAL CONDITION

As of December 31, 2015, we did not have adequate working capital resources to satisfy our current liabilities. We have been successful in raising cash through debt and equity offerings in the past; we recently completed subscriptions totaling $4,910,000 of a $5 million PIPE through December 31, 2015. As of March 18, 2016, total closed subscriptions in our $5 million PIPE now equal $6,040,000. We have efforts in place to continue to raise cash through debt and equity offerings.

We believe our current and projected capital raising plans, and our projected continued increases in revenue, will enable us to extend our cash resources for the foreseeable future. Although we have successfully completed equity and debt financings and reduced expenses in the past, we cannot assure you that our plans to address these matters in the future will be successful.

We believe we will need approximately $5 million in additional capital to fund our three-pronged operational plan, which was designed to help increase revenues and reach profitability, by:

A. implementing a next-generation upgrade to our product line and offering a superior instrument with greater net margins;

B. gaining additional non-dilutive monies from governmental research and development applications, and/or engineering projects; and

C. hiring a small team of sales and marketing persons to target research facilities and academic institutions, and cultivate our current customer list of pharmaceutical, military and paramilitary organizations.

However, if we are unable to obtain such funds through sales, the capital markets or other source of 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. These conditions raise substantive doubt about our ability to continue as a going concern.

Net cash used in operating activities was $3,819,746 for the year ended December 31, 2015 as compared with $3,210,578 for the year ended December 31, 2014. Our accounts payable balance was $941,389 as of December 31, 2015, as compared with to $1,035,781 as of December 31, 2014, a decrease of $94,392 for 2015. Accounts payable should continue to become more current as we continue to secure more capital and funds from operations allow for more timely payment of our vendors.

We invested $9,412 in fixed assets during the year ended December 31, 2015 as compared with $7,139 investment in fixed assets in the prior year.

Net cash provided by financing activities for the year ended December 31, 2015 was $3,471,993 as compared with $3,660,248 in the prior year.

In 2015, we raised approximately:

A $5,558,537 in aggregate net proceeds from sales of convertible debentures. In connection with our still open private placement, we raised an aggregate of $4,910,000 and issued senior secured convertible debentures that are convertible into 19,289,286 shares of the Common Stock and also issued warrants to the lenders to purchase an aggregate 8,767,857 shares of the Common Stock, at an exercise price of $0.40 per share, expiring five years after the issuance date. Of the $4,910,000 invested in the private placement, $4,310,000 was received in cash and $600,000 was from the conversion of outstanding principal and interest on convertible promissory notes we issued in 2014.

B Loans in the aggregate amount of approximately $1,257,418 were received during the year and we made payments on new and existing debt of $587,949 and converted $396,919 of debt to equity.

Our common stock is listed on the Over-the-Counter QB market under the ticker symbol PBIO.

COMMITMENTS AND CONTINGENCIES

Royalty Commitments

In 1996, we acquired our initial equity interest in BioSeq, Incorporated ("*BioSeq*"). At the time, BioSeq was developing our original pressure cycling technology. They acquired its pressure cycling technology from BioMolecular Assays, Inc. ("*BMA*") under a technology transfer and patent assignment agreement. In 1998, we purchased all of the remaining, outstanding capital stock of BioSeq; and, consequently, the technology transfer and patent assignment agreement was amended to require us to pay BMA a 5% royalty on our sales of products or services that incorporate or utilize the original pressure cycling technology that BioSeq acquired from BMA. Similarly, the Company is required to pay BMA 5% of the proceeds from any sale, transfer or license of all or any portion of the original pressure cycling technology. These payment obligations terminate in 2016. During the year ended December 31, 2015 and 2014, we incurred approximately $31,301 and $31,835, respectively, in royalty expense associated with our obligation to BMA.

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

Battelle Memorial Institute

In December 2008, we entered into an exclusive patent license agreement with the Battelle Memorial Institute ("*Battelle*"). The licensed technology is described in the patent application filed by Battelle on July 31, 2008 (US serial number 12/183,219). This application includes subject matter related to a method and a system for improving the analysis of protein samples including, through an automated system, utilizing pressure and a pre-selected agent to obtain a digested sample in a significantly shorter period of time than current methods, while maintaining the integrity of the sample throughout the preparatory process. Pursuant to the terms of the agreement, we paid Battelle a non-refundable initial fee of $35,000. In addition to royalty payments on net sales on "licensed products," we are obligated to make minimum royalty payments for each year we retain the rights outlined in the patent license agreement; and, we are required to have our first commercial sale of the licensed products within one year following the issuance of the patent covered by the licensed technology. After re-negotiating the terms of the contract in 2013 the minimum annual royalty was $1,200 and $2,900 for the years ended 2015 and 2014, respectively.

Target Discovery Inc.

In March 2010, we signed a strategic product licensing, manufacturing, co-marketing, and collaborative research and development agreement with Target Discovery Inc. ("*TDI*"). Under the terms of the agreement, we have been licensed by TDI to manufacture and sell a highly innovative line of chemicals used in the preparation of tissues for scientific analysis ("*TDI reagents*"). The TDI reagents were designed for use in combination with our pressure cycling technology. The respective companies believe that the combination of PCT and the TDI reagents can fill an existing need in life science research for an automated method for rapid extraction and recovery of intact, functional proteins associated with cell membranes in tissue samples. We did not incur any royalty obligation under this agreement in 2015 or 2014.

Severance and Change of Control Agreements

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

Each of these executive officers, other than Mr. Schumacher, is entitled to receive a change of control payment in an amount equal to one year of such executive officer's annualized base salary compensation, accrued paid time off, and medical and dental coverage, in the event of a change of control of the Company. In the case of Mr. Schumacher, this payment would be equal to two years of annualized base salary compensation, accrued paid time off, and two years of medical and dental coverage. The severance payment is meant to induce the executive to become an employee of the Company and to remain in the employ of the Company, in general; and particularly in the occurrence of a change in control, as a disincentive to the control change.

Lease Commitments

We lease building space under non-cancelable leases in South Easton, MA and lab space in Medford, MA. Rental costs are expensed as incurred. During 2015 and 2014 we incurred $105,169 and $98,600, respectively, in rent expense 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 December 31, 2015:

2016	$122,220
Thereafter	64,620
	$186,840

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements as of December 31, 2015 and December 31, 2014.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Principles of Consolidation

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

Use of Estimates

To prepare our consolidated financial statements in conformity with accounting principles generally accepted in the United States of America, we are required to make significant estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial

statements and the reported amounts of revenues and expenses during the reporting period. In addition, significant estimates were made in projecting future cash flows to quantify impairment of assets, deferred tax assets, the costs associated with fulfilling our warranty obligations for the instruments that we sell, and the estimates employed in our calculation of fair value of stock options awarded. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from the estimates and assumptions used.

Revenue Recognition

We recognize revenue in accordance with FASB ASC 605, *Revenue Recognition*. Revenue is recognized when realized or when realizable and earned when all the following criteria have been met: persuasive evidence of an arrangement exists; goods were shipped, delivery of service has occurred and risk of loss has passed to the customer; the seller's price to the buyer is fixed or determinable; and collectability is reasonably assured.

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

The Company applies 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.

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

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

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

Deferred revenue represents amounts received from grants and the Company's 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.

Our transactions sometimes involve multiple elements i.e., products and services. Revenue under multiple element arrangements is recognized in accordance with FASB ASC 605-25 *Multiple-Element Arrangements ("ASC 605").* When vendor specific objective evidence or third party evidence of selling price for deliverables in an arrangement cannot be determined, the Company develops a best estimate of the selling price to separate deliverables, and allocates arrangement consideration using the relative selling price method. Additionally, this guidance eliminates the residual method of allocation. If an arrangement includes undelivered elements that are not essential to the functionality of the delivered elements, we defer the fair value of the undelivered elements with the residual revenue allocated to the delivered elements. Fair value is determined based upon the price charged when the element is sold separately. If there is not sufficient evidence of the fair value of the undelivered elements, no revenue is allocated to the delivered elements and the total consideration received is deferred until delivery of those elements for which objective and reliable evidence of the fair value is not available. We provide certain customers with extended service contracts with revenue recognized ratably over the life of the contract.

Intangible Assets

We have classified as intangible assets, costs associated with the fair value of certain assets of businesses acquired. Intangible assets relate to the remaining value of acquired patents associated with PCT. The cost of these acquired patents is amortized on a straight-line basis over sixteen years. We annually review our intangible assets for impairment. When impairment is indicated, any excess of carrying value over fair value is recorded as a loss. An impairment analysis of intangible assets as of December 31, 2015 concluded they were not impaired.

Long-Lived Assets and Deferred Costs

In accordance with FASB ASC 360-10-05, *Property, Plant, and Equipment*, if indicators of impairment exist, we assess the recoverability of the affected long-lived assets by determining whether the carrying value of such assets can be recovered through the undiscounted future operating cash flows related to the long-lived assets. If impairment is indicated, we measure the amount of such impairment by comparing the carrying value of the asset to the fair value of the asset and record the impairment as a reduction in the carrying value of the related asset and a charge to operating results. While our current and historical operating losses and cash flow are indicators of impairment, we performed an impairment analysis at December 31, 2015 and determined that our long-lived assets were not impaired.

Warrant Derivative Liability

The warrants issued in connection with the registered direct offering of Series D Convertible Preferred Stock (the "Series D Warrants") and issued with the $5 million PIPE convertible debentures (the "Debenture Warrants") are measured at fair value and liability-classified because the Series D Warrants Debenture Warrants contained "down-round protection" and therefore, did not meet the scope exception for treatment as a derivative under ASC 815, *Derivatives and Hedging*. Since "down-round protection" is not an input into the calculation of the fair value of the warrants, the warrants cannot be considered indexed to the Company's own stock which is a requirement for the scope exception as outlined under ASC 815. The estimated fair value of the warrants was determined using the binomial model, resulting in an allocation of the gross proceeds of $283,725 to the warrants issued in the Series D registered direct offering.

In connection with the sales of convertible debentures in 2015, the estimated fair value of the warrants was determined using the binomial model, resulting in an allocation of the gross proceeds of $1,933,375 to the warrants issued with convertible debentures. The fair value will be affected by changes in inputs to that model including our stock price, expected stock price volatility, the contractual term, and the risk-free interest rate. We will continue to classify the fair value of the warrants as a liability until the warrants are exercised, expire or are amended in a way that would no longer require these warrants to be classified as a liability, whichever comes first.

The down-round protection for the Debenture Warrants and Series D Warrants survives for the life of the Warrants, which end starting in May 2017.

Conversion Option Liability

The Company has signed convertible notes and has determined that conversion options are embedded in the notes and it is required to bifurcate the conversion option from the host contract under ASC 815 and account for the derivatives at fair value. The estimated fair value of the conversion options was determined using the binomial model. The fair value of the conversion options will be classified as a liability until the debt is converted by the note holders or paid back by the Company. The fair value will be affected by changes in inputs to that model including our stock price, expected stock price volatility, the contractual term, and the risk-free interest rate. We will continue to classify the fair value of the conversion options as a liability until the conversion options are exercised, expire or are amended in a way that would no longer require these conversion options to be classified as a liability, whichever comes first. The Company has adopted a sequencing policy that reclassifies contracts (from equity to liabilities) with the most recent inception date first. Thus any available shares are allocated first to contracts with the most recent inception dates.

Accounts Receivable and Allowance for Doubtful Accounts

We maintain allowances for estimated losses resulting from the inability of our customers to make required payments. Judgments are used in determining the allowance for doubtful accounts and are based on a combination of factors. Such factors include historical collection experience, credit policy and specific customer collection issues. In circumstances where we are aware of a specific customer’s inability to meet its financial obligations to us (e.g., due to a bankruptcy filing), we record a specific reserve for bad debts against amounts due to reduce the net recognized receivable to the amount we reasonably believe will be collected. We perform ongoing credit evaluations of our customers and continuously monitor collections and payments from our customers. While actual bad debts have historically been within our expectations and the provisions established, we cannot guarantee that we will continue to experience the same bad debt rates that we have in the past. A significant change in the liquidity or financial position of any of our customers could result in the uncollectability of the related accounts receivable and could adversely impact our operating cash flows in that period.

Inventories

We value our inventories at lower of cost or market. Cost is determined by the first-in, first-out (FIFO) method, including material, labor and factory overhead. In assessing the ultimate realization of inventories, management judgment is required to determine the reserve for obsolete or excess inventory. Inventory on hand may exceed future demand either because the product is obsolete, or because the amount on hand is more than can be used to meet future needs. We provide for the total value of inventories that we determine to be obsolete or excess based on criteria such as customer demand and changing technologies. We historically have not experienced significant inaccuracies in computing our reserves for obsolete or excess inventory.

Equity Transactions

We evaluate the proper classification of our equity instruments that embody an unconditional obligation requiring the issuer to redeem it by transferring assets at a determinable date or that contain certain conditional obligations, typically classified as equity, be classified as a liability. We record financing costs associated with our capital raising efforts in our statements of operations. These include amortization of debt issue costs such as cash, warrants and other securities issued to finders and placement agents, and amortization of preferred stock discount created by in-the-money conversion features on convertible debt and allocates the proceeds amongst the securities based on relative fair values or based upon the residual method. We based our estimates and assumptions on the best information available at the time of valuation; however, changes in these estimates and assumptions could have a material effect on the valuation of the underlying instruments.

Stock-Based Compensation

We account for employee and non-employee director stock-based compensation using the fair value method of accounting. Compensation cost arising from stock options to employees and non-employee directors is recognized using the straight-line method over the vesting period, which represents the requisite service or performance period. The calculation of stock-based compensation requires us to estimate several factors, most notably the term, volatility and forfeitures. We estimate the option term using historical terms and estimate volatility based on historical volatility of our common stock over the option’s expected term. Expected forfeitures based on historical forfeitures are used in calculating the expense related to stock-based compensation associated with stock awards. Our estimates and assumptions are based on the best information available at the time of valuation; however, changes in these estimates and assumptions could have a material effect on the valuation of the underlying instruments.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Not Applicable

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of

Pressure BioSciences, Inc. and Subsidiary

South Easton, Massachusetts

We have audited the consolidated balance sheet of Pressure BioSciences, Inc. and Subsidiary (collectively, the "Company") as of December 31, 2015, and the related consolidated statements of operations, comprehensive loss, changes in stockholders' deficit, and cash flows for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Pressure BioSciences, Inc. and Subsidiary as of December 31, 2015, and the results of their operations and their cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the consolidated financial statements, the Company has a working capital deficit and has incurred recurring net losses and negative cash flows from operations. These conditions raise substantial

doubt about its ability to continue as a going concern. Management's plans regarding those matters also are described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ MaloneBailey LLP

Houston, Texas
April 5, 2016

Report of Independent Registered Public Accounting Firm

To the Board of Directors of

Pressure BioSciences, Inc. and Subsidiary:

We have audited the consolidated balance sheet of Pressure BioSciences, Inc. and Subsidiary (the "Company") as of December 31, 2014, and the related consolidated statement of operations, changes in stockholders' equity, and cash flows for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Pressure BioSciences, Inc. and Subsidiary as of December 31, 2014, and the results of their operations and their cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company has had recurring net losses and continues to experience negative cash flows from operations. These conditions raise substantial doubt about its ability to continue as a going concern. Management's plans regarding those matters also are described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ MARCUM LLP

Boston, Massachusetts

March 31, 2015

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARY

CONSOLIDATED BALANCE SHEETS

DECEMBER 31, 2015 AND 2014

	December 31, 2015	December 31, 2014
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	$116,783	$473,948
Accounts receivable	113,256	272,022
Inventories, net of $50,000 reserve at December 31, 2015 and December 31, 2014	1,038,371	850,552
Prepaid income taxes	7,381	7,381
Prepaid expenses and other current assets	213,926	104,204
Total current assets	1,489,717	1,708,107
Investment in available-for-sale equity securities	294,522	-
Property and equipment, net	20,149	36,025
TOTAL ASSETS	$1,804,388	$1,744,132
LIABILITIES AND STOCKHOLDERS' DEFICIT		
CURRENT LIABILITIES		
Accounts payable	$941,389	$1,035,781
Accrued employee compensation	176,009	157,347
Accrued professional fees and other	821,088	719,432
Deferred revenue	140,878	27,117
Convertible debt, net of unamortized discounts of $0 and $328,681, respectively	100,000	1,004,513
Other debt, net of unamortized discounts of $3,041 and $0, respectively	151,628	80,480
Warrant derivative liabilities	3,295,976	159,875
Conversion option derivative liabilities	3,940,791	590,341
Total current liabilities	9,567,759	3,774,886
LONG TERM LIABILITIES		
Convertible debt, net of unamortized discounts of $5,223,658 and $0, respectively	177,342	-
Deferred revenue	36,935	28,977
TOTAL LIABILITIES	9,782,036	3,803,863
COMMITMENTS AND CONTINGENCIES (Note 7)		
STOCKHOLDERS' DEFICIT		
Series D Convertible Preferred Stock, $.01 par value; 850 shares authorized; 300 shares issued and outstanding on December 31, 2015 and 2014, respectively (Liquidation value of $300,000)	3	3
Series G Convertible Preferred Stock, $.01 par value; 240,000 shares authorized; 86,570 shares issued and outstanding on December 31, 2015 and 2014, respectively	866	866
Series H Convertible Preferred Stock, $.01 par value; 10,000 shares authorized; 10,000 shares issued and outstanding on December 31, 2015 and 2014, respectively	100	100
Series H2 Convertible Preferred Stock, $.01 par value; 21 shares authorized; 21 shares issued and outstanding on December 31, 2015 and 2014, respectively	-	-

Series J Convertible Preferred Stock, $.01 par value; 6,250 shares authorized; 3,546 shares issued and outstanding on December 31, 2015 and 2014, respectively	36	36
Series K Convertible Preferred Stock, $.01 par value; 15,000 shares authorized; 11,416 shares issued and outstanding on December 31, 2015 and 2014, respectively	114	114
Common stock, $.01 par value; 100,000,000 shares authorized; 23,004,898 and 18,673,390 shares issued and outstanding on December 31, 2015 and 2014, respectively	230,050	186,734
Warrants to acquire common stock	5,416,681	5,253,566
Additional paid-in capital	26,036,733	24,617,564
Accumulated other comprehensive income	(105,025)	-
Accumulated deficit	(39,557,206)	(32,118,714)
Total stockholders' deficit	(7,977,648)	(2,059,731)
TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT	$1,804,388	$1,744,132

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

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF OPERATIONS

FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

	For the Year Ended December 31,	
	2015	**2014**
Revenue:		
Products, services, other	$1,409,991	$1,350,150
Grant revenue	387,700	24,594
Total revenue	1,797,691	1,374,744
Costs and expenses:		
Cost of products and services	609,054	652,438
Research and development	1,105,295	952,555
Selling and marketing	745,574	721,229
General and administrative	2,902,950	2,386,872
Total operating costs and expenses	5,362,873	4,713,094
Operating loss	(3,565,182)	(3,338,350)
Other (expense) income:		
Interest expense	(4,146,416)	(1,303,129)
Other expense	(36,879)	(169,554)
Gain on extinguishment of embedded derivative liabilities	2,555,180	-
Change in fair value of derivative liabilities	(2,222,001)	198,493
Total other (expense) income	(3,850,116)	(1,274,190)
Net loss	(7,415,298)	(4,612,540)
Accrued dividends on convertible preferred stock	(23,194)	(143,771)
Deemed dividends on convertible preferred stock	-	(1,495,415)
Net loss applicable to common shareholders	$(7,438,492)	$(6,251,726)
Net loss per share attributable to common stockholders - basic and diluted	$(0.36)	$(0.44)
Weighted average common stock shares outstanding used in the basic and diluted net loss per share calculation	20,726,205	14,264,753

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

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

	For the Year Ended December 31,	
	2015	2014
Comprehensive Loss		
Net loss	$(7,415,298)	$(4,612,540)
Other comprehensive loss		
Unrealized loss on marketable securities	(105,025)	-
Comprehensive loss	$(7,520,323)	$(4,612,540)

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' DEFICIT

FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

	Series D Preferred Stock		Series G Preferred Stock		Series H Preferred Stock		Series H(2) Preferred Stock		Series J Preferred Stock	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount
BALANCE, December 31, 2013	300	3	145,320	1,453	10,000	100	-	-	5,088	51
Stock-based compensation	-	-	-	-	-	-	-	-	-	-
Conversion of Series G convertible preferred stock	-	-	(58,750)	(587)	-	-	-	-	-	-
Conversion of Series J convertible preferred stock	-	-	-	-	-	-	-	-	(1,542)	(15)
Conversion of Series K convertible preferred stock	-	-	-	-	-	-	-	-	-	-
Issuance of Series K convertible preferred stock	-	-	-	-	-	-	-	-	-	-
Issuance of common stock for services	-	-	-	-	-	-	-	-	-	-
Exercise of warrants										
Warrant exercise - reset	-	-	-	-	-	-	-	-	-	-
Offering costs for issuance of preferred stock	-	-	-	-	-	-	-	-	-	-
Issuance of warrants	-	-	-	-	-	-	-	-	-	-
Issuance of warrants for services	-	-	-	-	-	-	-	-	-	-
Issuance of stock in lieu of cash for Board of Director fees	-	-	-	-	-	-	-	-	-	-
Deemed dividend associated with beneficial conversion of preferred stock	-	-	-	-	-	-	-	-	-	-
Conversion of debt for commons stock	-	-	-	-	-	-	-	-	-	-
Conversion of preferred stock to common stock	-	-	-	-	-	-	-	-	-	-
Conversion of common stock to Series H2 preferred stock	-	-	-	-	-	-	21	-	-	-
Dividends earned	-	-	-	-	-	-	-	-	-	-
Warrants issued with debt	-	-	-	-	-	-	-	-	-	-
Write off of Series D warrant liability	-	-	-	-	-	-	-	-	-	-
Write off of conversion option	-	-	-	-	-	-	-	-	-	-
Issuance of common stock for dividends paid in kind	-	-	-	-	-	-	-	-	-	-

Net loss	-	-	-	-	-	-	-	-	-	-
BALANCE, December 31, 2014	300	3	86,570	866	10,000	100	21	-	3,546	36
Stock-based compensation	-	-	-	-	-	-	-	-	-	-
Issuance of common stock for services	-	-	-	-	-	-	-	-	-	-
Warrant exercise - reset	-	-	-	-	-	-	-	-	-	-
Issuance of warrants	-	-	-	-	-	-	-	-	-	-
Issuance of warrants for services	-	-	-	-	-	-	-	-	-	-
Conversion of debt for commons stock	-	-	-	-	-	-	-	-	-	-
Dividends earned	-	-	-	-	-	-	-	-	-	-
Unrealized loss on investments, net of tax										
Net loss	-	-	-	-	-	-	-	-	-	-
BALANCE, December 31, 2015	300	3	86,570	866	10,000	100	21	-	3,546	36

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

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' DEFICIT (CONTINUED)

FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

	Series K Preferred Stock		Common Stock		Stock	Additional Paid-In	Accumulated other comprehensive	Accumulated	Total Stockholder (Deficit)
	Shares	Amount	Shares	Amount	Warrants	Capital	loss	Deficit	Equity
BALANCE, December 31, 2013	4,000	$40	12,024,267	$120,243	$4,267,402	$19,509,921	$-	$(25,866,988)	$(1,967,775
Stock-based compensation	-	-	-	-	-	101,125		-	101,125
Conversion of Series G convertible preferred stock	-	-	587,500	5,875	-	(5,288)		-	-
Conversion of Series J convertible preferred stock	-	-	1,541,000	15,410	-	(15,395)		-	-
Conversion of Series K convertible preferred stock	(1,099)	(11)	1,099,000	10,990	-	(10,980)		-	-
Issuance of Series K convertible preferred stock	8,176	82	-	-	654,845	1,592,432		-	2,247,359
Issuance of common stock for services	-	-	588,830	5,888	-	208,304		-	214,192
Exercise of warrants			596,658	5,967	-	143,198		-	149,165
Warrant exercise - reset	-	-	3,612,000	36,120	163,654	662,745		-	862,519
Offering costs for issuance of preferred	-	-	-	-	-	(8,000)		-	(8,000

stock								
Stock exchange with Everest Investments	-	-	-	-	49,599	-	-	49,599
Issuance of warrants for services	-	-	-	-	93,488	-	-	93,488
Issuance of stock in lieu of cash for Board of Director fees	339	3	-	-	24,578	60,169	-	84,750
Deemed dividend associated with beneficial conversion of preferred stock	-	-	-	-	-	1,495,415	(1,495,415)	-
Conversion of debt for commons stock	-	-	510,000	5,100	-	131,400	-	136,500
Conversion of preferred stock to common stock	-	-	-	-	-	-	-	-
Conversion of common stock to Series H2 preferred stock	-	-	(2,100,000)	(21,000)	-	21,000	-	-
Dividends earned	-	-	-	-	-	-	(143,771)	(143,771
Warrants issued with debt	-	-	-	-	-	-	-	-
Write off of Series D warrant liability	-	-	-	-	-	330,405	-	330,405
Write off of conversion option	-	-	-	-	-	320,338	-	320,338
Issuance of common stock for dividends paid in kind	-	-	214,135	2,141	-	80,774	-	82,916
Net loss	-	-	-	-	-	-	(4,612,540)	(4,612,540

BALANCE, December 31, 2014	11,416	114	18,673,390	186,734	5,253,566	24,617,564	-	(32,118,714)	(2,059,731
Stock-based compensation	-	-	-	-	-	208,989	-	-	208,989
Issuance of common stock for services	-	-	1,755,091	17,551	-	439,479	-	-	457,030
Warrant revaluation	-	-	-	-	69,627	-	-	-	69,627
Stock exchange with Everest Investments	-	-	1,000,000	10,000	-	389,547	-	-	399,547
Issuance of warrants for services	-	-	-	-	93,488	-	-	-	93,488
Conversion of debt and interest for commons stock	-	-	1,576,417	15,765	-	381,154	-	-	396,919
Dividends earned	-	-	-	-	-	-	-	(23,194)	(23,194
Unrealized loss on investments, net of tax							(105,025)		(105,025
Net loss	-	-	-	-	-	-	-	(7,415,298)	(7,415,298
BALANCE, December 31, 2015	11,416	$114	23,004,898	$230,050	$5,416,681	$26,036,733	$(105,025)	$(39,557,206)	$(7,977,648

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

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF CASH FLOWS

FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

	For the Year Ended December 31,	
	2015	2014
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$(7,415,298)	$(4,612,540)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	25,288	65,714
Accretion of interest and amortization of debt discount	2,989,765	1,310,351
Stock-based compensation expense	208,989	101,125
Warrant expense	163,115	—
Amortization of third party fees paid in common stock	457,030	307,013
Amortization of board of director fees paid in preferred stock	—	84,750
Gain on extinguishment of embedded derivative liabilities	(2,555,180)	—
Change in fair value of derivative liabilities	2,222,001	(198,493)
Changes in operating assets and liabilities:		
Accounts receivable	158,766	(124,387)
Inventories	(187,820)	(113,876)
Prepaid expenses and other assets	(15,722)	(18,631)
Accounts payable	(94,392)	(66,991)
Accrued employee compensation	18,662	8,014
Deferred revenue and other accrued expenses	205,050	47,373
Net cash used in operating activities	(3,819,746)	(3,210,578)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property plant and equipment	(9,412)	(7,139)
Net cash used in investing activities	(9,412)	(7,139)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Net proceeds from related party debt	6,300	—
Payment of related party debt	(12,300)	(6,394)
Net proceeds from convertible debt	5,558,537	1,126,744
Payments on convertible debt	(2,653,990)	(303,100)
Net proceeds from non-convertible debt	1,257,418	302,252
Payments on non-convertible debt	(587,949)	(410,297)
Payment of accrued prepayment penalty	(96,023)	—
Net proceeds from the exercise of common stock warrants	—	149,165
Net proceeds from warrant reset transaction	—	862,518
Net proceeds from the issuance of convertible preferred stock	—	1,939,360
Net cash provided by financing activities	3,471,993	3,660,248

NET DECREASE IN CASH	(357,165)	442,531
CASH AT BEGINNING OF YEAR	473,948	31,417
CASH AT END OF PERIOD	$116,783	$473,948
SUPPLEMENTAL INFORMATION		
Interest paid in cash	$1,072,900	$14,832
Income taxes paid in cash	—	—
NON CASH TRANSACTIONS:		
Shares issued for conversion of debt and interest	396,919	136,500
Common stock issued for preferred dividends	—	82,916
Convertible debt exchanged for convertible preferred stock	—	300,000
Incremental value from warrant modifications	—	163,654
Fair value of common stock issued for services	—	214,192
Issuance of convertible preferred stock for board fees	—	84,750
Beneficial conversion feature on convertible preferred stock	—	1,495,415
Dividends earned on convertible preferred stock	—	143,771
Accrued dividends on preferred stock	23,194	—
Issuance of common stock for investment in available-for-sale equity securities	399,547	—
Unrealized loss from available-for-sale equity securities	105,025	—
Debt discount from derivative liability	6,819,730	—
Extension fees added to principal	84,000	—
Prepayment penalty and accrued interest enrolled into debt principal	48,950	—

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

PRESSURE BIOSCIENCES, INC. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(1) Business Overview

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 (35,000 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 but is expected to commence operations in 2016. Therefore, we don’t have control of the subsidiary and did not consolidate in our financial statements. PBI Europe did not have any operations in 2015.

(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 December 31, 2015, 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 Note 6, completed debt financing subsequent to December 31, 2015. We have financing efforts in place to continue to raise cash through debt and equity offerings.

Management has developed a plan to continue operations. This plan includes obtaining equity or debt financing. During the year ended December 31, 2015 we received 6,822,255 net proceeds, in additional convertible and non-convertible debt. 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.

We need substantial additional capital to fund normal operations in future periods. 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. These financial statements do not include any adjustments that might result from this uncertainty.

(3) Summary of Significant Accounting Policies

i. 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.

ii. 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 impairment of assets, deferred tax assets, the costs associated with fulfilling our warranty obligations for the instruments that we sell, and the estimates employed in our calculation of fair value of stock options awarded, beneficial conversion features and derivative liabilities. 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.

iii. Revenue Recognition

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

Our current instruments, the Barocycler NEP3229 and NEP2320, require a basic level of instrumentation expertise to set-up for initial operation. To support a favorable first experience for our customers, upon customer request and for an additional fee, we will send a highly trained technical representative to the customer site to install Barocyclers that we sell, lease, or rent through our domestic sales force. The installation process includes uncrating and setting up the instrument, followed by introductory user training. Product revenue related to current Barocycler instrumentation is recognized upon shipment of the unit, or in the case where the customer requests installation and training, the completion of the installation and introductory training process of the instrumentation at the customer location, for domestic installations. Product revenue related to sales of PCT instrumentation to our foreign distributors is recognized upon shipment through a common carrier. We provide for the expected costs of warranty upon the recognition of revenue for the sales of our instrumentation. Our sales arrangements do not provide our customers with a right of return. Product revenue related to the HUB440 and our consumable products such as PULSE Tubes, MicroTubes, and application specific kits is recorded upon shipment through a common carrier. Shipping costs are included in sales and marketing expense. Any shipping costs billed to customers are recognized as revenue.

The Company applies 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.

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

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

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

Deferred revenue represents amounts received from grants and the Company’s service contracts for which the related revenues have not been recognized because one or more of the revenue recognition criteria have not been met. The current portion of deferred revenue represents the amount to be recognized within one year from the balance sheet date based on the estimated performance period of the underlying deliverables. Revenue from service contracts is recorded ratably over the length of the contract.

Our transactions sometimes involve multiple elements (i.e., products and services). Revenue under multiple element arrangements is recognized in accordance with FASB ASC 605-25 *Multiple-Element Arrangements (“ASC 605”).* When vendor specific objective evidence or third party evidence of selling price for deliverables in an arrangement cannot be determined, the Company develops a best estimate of the selling price to separate deliverables and allocates arrangement consideration using the relative selling price method. If an arrangement includes undelivered elements that are not essential to the functionality of the delivered elements, we defer the fair value of the undelivered elements to such time as they are delivered. Fair value is determined based upon the price charged when the element is sold separately. If there is not sufficient evidence of the fair value of the undelivered elements the Company uses its best estimate of the value of those items and recognizes revenues based on the relative values of the delivered and undelivered items. We provide certain customers with extended service contracts with revenue recognized ratably

over the life of the contract.

iv. Cash and Cash Equivalents

Our policy is to invest available cash in short-term, investment grade interest-bearing obligations, including money market funds, and bank and corporate debt instruments. Securities purchased with initial maturities of three months or less are valued at cost plus accrued interest, which approximates fair value, and are classified as cash equivalents.

v. Research and Development

Research and development costs, which are comprised of costs incurred in performing research and development activities including wages and associated employee benefits, facilities, consumable products and overhead costs that are expensed as incurred. In support of our research and development activities we utilize our Barocycler instruments that are capitalized as fixed assets and depreciated over their expected useful life.

vi. Inventories

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

	2015	2014
Raw materials	$310,367	$304,928
Finished goods	778,004	595,624
Inventory reserve	(50,000)	(50,000)
Total	$1,038,371	$850,552

vii. Property and Equipment

Property and equipment are stated at cost, less accumulated depreciation. For financial reporting purposes, depreciation is recognized using the straight-line method, allocating the cost of the assets over their estimated useful lives of three years for certain laboratory equipment, from three to five years for management information systems and office equipment, and three years for all PCT finished units classified as fixed assets.

viii. Intangible Assets

We have classified as intangible assets, costs associated with the fair value of acquired intellectual property. Intangible assets, including patents, are being amortized on a straight-line basis over sixteen years. We perform an annual review of our intangible assets for impairment. When impairment is indicated, any excess of carrying value over fair value is recorded as a loss. As of December 31, 2015 and 2014, the outstanding balance for intangible assets is zero.

ix. Long-Lived Assets

The Company's long-lived assets are reviewed for impairment in accordance with the guidance of the FASB ASC 360-10-05, *Property, Plant, and Equipment*, whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. Recoverability of an asset to be held and used is measured by a comparison of the carrying amount of an asset to the future undiscounted cash flows expected to be generated by the asset. If such asset is considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the asset exceeds its fair value. Through December 31, 2015, the Company had not experienced impairment losses on its long-lived assets. While our current and historical operating losses and cash flow are indicators of impairment, we performed an impairment test at December 31, 2015 and determined that such long-lived assets were not impaired.

x. 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 and university labs. Allowances are provided for estimated amounts of accounts receivable which may not be collected. At December 31, 2015 and 2014, we determined that no allowance against accounts receivable was necessary.

The following table illustrates the level of concentration of the below two groups within revenue as a percentage of total revenues during the years ended December 31:

	2015		**2014**	
Top Five Customers	38	%	32	%
Federal Agencies	23	%	6	%

The following table illustrates the level of concentration of the below two groups within accounts receivable as a percentage of total accounts receivable balance as of December 31:

	2015		2014	
Top Five Customers	93	%	86	%
Federal Agencies	1	%	9	%

Product Supply

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

Investment in Available-For-Sale Equity Securities

As of December 31, 2015, we held 601,500 shares of common stock of Everest Investments Holdings S.A. (“Everest”), a Polish publicly traded company listed on the Warsaw Stock Exchange. We exchanged 1,000,000 shares of our common stock for the 601,500 shares from Everest. We account for this investment in accordance with ASC 320 *“Investments — Debt and Equity Securities”* as securities available for sale. On December 31, 2015, our balance sheet reflected the fair value of our investment in Everest to be $294,522, based on the closing price of Everest shares of $0.49 per share on that day. The carrying value of our investment in Everest common stock held will change from period to period based on the closing price of the common stock of Everest as of the balance sheet date. This change in market value will be recorded by us on a quarterly basis as an unrealized gain or loss in Comprehensive Income or Loss.

xi. Computation of Loss per Share

Basic loss per share is computed by dividing loss available to common shareholders by the weighted average number of common shares outstanding. Diluted loss per share is computed by dividing loss available to common shareholders by the weighted average number of common shares outstanding plus additional common shares that would have been outstanding if dilutive potential common shares had been issued. For purposes of this calculation, convertible preferred stock, common stock dividends, warrants to acquire preferred stock convertible into common stock, and warrants and options to acquire common stock, are all considered common stock equivalents in periods in which they have a dilutive effect and are excluded from this calculation in periods in which these are anti-dilutive. The following table illustrates our computation of loss per share for the years ended December 31:

	2015	2014
Numerator:		
Net loss	$(7,415,298)	$(4,612,540)
Beneficial conversion feature for preferred stock	-	(1,495,415)
Preferred dividends accrued	(23,194)	(143,771)
Net loss applicable to common shareholders	$(7,438,492)	$(6,251,726)
Denominator for basic and diluted loss per share:		
Weighted average common shares outstanding	20,726,205	14,264,753
Loss per common share - basic and diluted	$(0.36)	$(0.44)

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 for the years ended December 31:

	2015	2014
Stock options	5,571,250	3,406,250
Convertible debt	19,689,286	5,453,571
Common stock warrants	29,227,664	19,182,201
Convertible preferred stock:		
Series D Convertible Preferred	750,000	750,000
Series G Convertible Preferred	865,700	865,700
Series H Convertible Preferred	1,000,000	1,000,000
Series H2 Convertible Preferred	2,100,000	2,100,000
Series J Convertible Preferred	3,546,000	3,546,000
Series K Convertible Preferred	11,416,000	11,416,000
	74,165,900	47,719,722

xii. Accounting for Income Taxes

We account for income taxes under the asset and liability method, which requires recognition of deferred tax assets, subject to valuation allowances, and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting and income tax purposes. The Company considers many factors when assessing the likelihood of future realization of our deferred tax assets, including recent cumulative earnings experience by taxing jurisdiction, expectations of future taxable income or loss, the carry-forward periods available to us for tax reporting purposes, and other relevant factors. A valuation allowance is established if it is more likely than not that all or a portion of the net deferred tax assets will not be realized. If substantial changes in the Company’s ownership should occur, as defined in Section 382 of the Internal Revenue Code, there could be significant limitations on the amount of net loss carry forwards that could be used to offset future taxable income.

Tax positions must meet a “more likely than not” recognition threshold at the effective date to be recognized. At December 31, 2015 and 2014, the Company did not have any uncertain tax positions. No interest and penalties related to uncertain tax positions were accrued at December 31, 2015 and 2014.

xiii. Accounting for Stock-Based Compensation

We maintain equity compensation plans under which incentive stock options and non-qualified stock options are granted to employees, independent members of our Board of Directors and outside consultants. We recognize equity compensation expense over the requisite service period using the Black-Scholes formula to estimate the fair value of the stock options on the date of grant. Employee awards are accounted for under ASC 718 where the awards are valued at grant date. Awards given to nonemployees are accounted for under ASC 505 where the awards are valued at earlier of commitment date or completion of services.

Determining Fair Value of Stock Option Grants

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

Expected Term - The Company uses the simplified calculation of expected life, described in the FASB ASC 718, *Compensation-Stock Compensation*, 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 - As required by FASB ASC 718, *Compensation-Stock Compensation*, the Company records stock-based compensation expense only for those awards that are expected to vest. The Company estimated a forfeiture rate of 5% for awards granted based on historical experience and future expectations of options vesting. We used this historical rate as our assumption in calculating future stock-based compensation expense.

The following table summarizes the assumptions we utilized for grants of stock options to the three sub-groups of our stock option recipients during the years ended December 31, 2015 and 2014:

Assumptions	Non-Employee Board Members	CEO, other Officers and Employees
Expected life	6.0 (yrs)	6.0 (yrs)
Expected volatility	116.32%-141.15%	116.32%-141.15%
Risk-free interest rate	0.65%-2.54 %	0.65%-2.54 %
Forfeiture rate	5.00 %	5.00 %
Expected dividend yield	0.0 %	0.0 %

We recognized stock-based compensation expense of $208,989 and $101,125 for the years ended December 31, 2015 and 2014, respectively. The following table summarizes the effect of this stock-based compensation expense within each of the line items within our accompanying Consolidated Statements of Operations for the years ended December 31:

	2015	2014
Research and development	$50,617	$30,550
Selling and marketing	32,704	19,792
General and administrative	125,668	50,783
Total stock-based compensation expense	$208,989	$101,125

During the years ended December 31, 2015 and 2014, the total fair value of stock options awarded was $598,582 and $401,617, respectively.

As of December 31, 2015, the total estimated fair value of unvested stock options to be amortized over their remaining vesting period was $740,117. The non-cash, stock based compensation expense associated with the vesting of these options will be $342,000 in 2016, $198,680 in 2017, and $199,437 in 2018.

xiv. Advertising

Advertising costs are expensed as incurred. We incurred $12,291 in 2015 with none incurred in 2014 for advertising.

xv. 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. Short-term and long-term liabilities are primarily related to liabilities transferred under contractual arrangements with carrying values that approximate fair value.

xvi. Fair Value Measurements

The Company follows the guidance of FASB ASC Topic 820, "*Fair Value Measurements and Disclosures*" ("*ASC 820*") as it related to 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 an entity to develop its own assumptions.

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 currently classified within Level 1 and that its financial liabilities are currently all classified within Level 3 in the fair value hierarchy.

The following tables set forth the Company's financial assets and financial liabilities that were accounted for at fair value on a recurring basis as of December 31, 2015 and December 31, 2014. The development of the unobservable inputs for Level 3 fair value measurements and fair value calculations are the responsibility of the Company's management.

		Fair value measurements at December 31, 2015 using:		
	December 31, 2015	Quoted prices in active markets (Level 1)	**Significant other observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**
Available-For-Sale Equity Securities	294,522	294,522	-	-
Total Financial Assets	$294,522	$294,522	$ -	$ -

	December 31, 2015	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Series D Preferred Stock Purchase Warrants	$173,526	-	-	$ 173,526
Warrants Issued with Convertible Debt	3,122,450	-	-	3,122,450
Conversion Option Derivative Liabilities	3,940,791	-	-	3,940,791
Total Derivatives	$7,236,767	$-	$ -	$ 7,236,767

		Fair value measurements at December 31, 2014 using:		
	December 31, 2014	**Quoted prices in active markets (Level 1)**	**Significant other observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**
Series D Preferred Stock Purchase Warrants	$159,875	-	-	$159,875
Conversion Option Liabilities	590,341	-	-	590,341
Total Derivatives	$750,216	$ -	$ -	$750,216

The following table provides a summary of the changes in fair value, including net transfers in and/or out, of the derivative financial instruments, measured at fair value on a recurring basis using significant unobservable inputs:

	January 1, 2015	Issuance fair value	Change in fair value	Gain on extinguishment of derivative liabilities	December 31, 2015
Series D Preferred Stock Purchase Warrants	$159,875	$-	$13,651	$ -	$173,526
Warrants Issued with Convertible Debt	-	2,320,021	802,429	-	3,122,450
Conversion Option Derivative Liabilities	590,341	5,305,185	600,445	(2,555,180)	3,940,791
Total Derivatives	$750,216	$7,625,206	$1,416,525	$ (2,555,180)	$7,236,767

	January 1, 2014	Issuance fair value	Change in fair value	Gain on extinguishment of derivative liabilities	December 31, 2014
Series D Preferred Stock Purchase Warrants	$344,570	$-	$145,710	$ (330,405)	$159,875
Conversion Option Liabilities	356,197	898,684	(344,202)	(320,338)	590,341
Total Derivatives	$700,767	$898,684	$(198,492)	$ (650,743)	$750,216

The issuance fair value for 2015 includes the “day 1” derivative loss on the conversion option derivative liabilities of $805,476 which are included in “change in fair value of derivative liabilities” in the consolidated statement of operations.

The fair value of the derivative liabilities were determined using a binomial pricing model. The assumptions for the binomial pricing model are represented in the table below for the warrants issued in the Series D private placement reflected on a per share common stock equivalent basis.

Assumptions	**November 10, 2011**	**Warrants revalued at December 31, 2014**	**Warrants revalued at December 31, 2015**
Expected life (in months)	60.0	22.0	11.0
Expected volatility	104.5 %	116.0 %	104.9 %
Risk-free interest rate	0.875 %	0.58 %	0.65 %
Exercise price	$ 0.81	$ 0.25	$ 0.25
Fair value per warrant	$ 0.54	$ 0.15	$ 0.16

There were no warrants issued in 2014 with Convertible Debt. The assumptions for the binomial pricing model are represented in the table below for the warrants issued with the Convertible Debt in 2015 reflected on a per share common stock equivalent basis.

Assumptions	**At Issuance**	**Warrants revalued at**

	Fair value	December 31, 2015
Expected life (in months)	60.0	55.0-60.0
Expected volatility	118.3-120.1%	136.3-141.6%
Risk-free interest rate	1.48-1.69 %	1.29-1.76 %
Exercise price	$0.40	$0.40
Fair value per warrant	$0.19-$0.21	$0.30

The 2015 assumptions for the binomial pricing model are represented in the table below for the conversion options reflected on a per share common stock equivalent basis.

Assumptions	At Issuance fair value	At Settlement fair value	Conversion options revalued at December 31, 2015
Expected life (in months)	6-24	0-18	18-24
Expected volatility	104.2-153.8%	86.9%-142.2%	112.2-114.7%
Risk-free interest rate	0.05-0.99 %	0.01-0.72 %	1.06 %
Exercise price	$0.10-$0.35	$0.10-$0.25	$0.28
Fair value per conversion option	$0.09-$0.28	$0.07-$0.26	$0.14-$0.33

The 2014 assumptions for the binomial pricing model are represented in the table below for the conversion options reflected on a per share common stock equivalent basis.

Assumptions	**At Issuance fair value**	**Conversion options revalued at December 31, 2014**
Expected life (in months)	6-24	1-32
Expected volatility	104.4-206.2 %	77.4-154.1 %
Risk-free interest rate	0.05-0.99 %	0.03-.0.88 %
Exercise price	$0.13-$0.45	$0.14-0.35
Fair value per conversion option	$0.15-$0.29	$0.00-$0.19

xvii. Recently Issued Accounting Standards

In April 2015, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2015-03, “Simplifying the Presentation of Debt Issuance Costs” (“ASU 2015-03”). ASU 2015-03 requires that debt issuance costs be presented as a direct deduction from the carrying amount of the related debt liability, consistent with the presentation of debt discounts. Prior to the issuance of ASU 2015-03, debt issuance costs were required to be presented as deferred charge assets, separate from the related debt liability. ASU 2015-03 does not change the recognition and measurement requirements for debt issuance costs. The Company early-adopted ASU 2015-03 as of the end of its Fiscal 2015, and applied its provisions retrospectively. The adoption of ASU 2015-03 resulted in the reclassification of approximately $888,000 unamortized debt issuance costs related to the Company's Senior Notes (see Note 8) from other non-current assets to long-term debt within its consolidated balance sheets as of December 31, 2015. Other than this reclassification, the adoption of ASU 2015-03 and other new pronouncements that have been issued did not have an impact on the Company's consolidated financial statements.

(4) Property and Equipment, net

Property and equipment as of December 31, 2015 and 2014 consisted of the following components:

	December 31,	
	2015	2014
Laboratory and manufacturing equipment	$226,081	$226,081
Office equipment	158,872	149,459
Leasehold improvements	8,117	8,117
PCT collaboration, demonstration and leased systems	461,858	461,858
Total property and equipment	854,928	845,515
Less accumulated depreciation	(834,779)	(809,490)
Net book value	$20,149	$36,025

Depreciation expense for the years ended December 31, 2015 and 2014 was $25,288 and $29,213, respectively.

(5) Intangible Assets, net

Intangible assets as of December 31, 2015 reflect the purchase price attributable to patents in connection with the 1998 acquisition of BioSeq, Inc. and the PCT business. Acquired PCT patents were being amortized to expense on a straight-line basis at the rate of $48,632 per year over their estimated remaining useful lives of approximately 6 years. Intangible assets at December 31, 2015 and 2014 consisted of the following:

	2015	2014
PCT Patents	$778,156	$778,156
Less accumulated amortization	(778,156)	(778,156)
Net book value	$-	$-

Amortization expense for the year ended December 31, 2014 was $36,498, at which time the assets were fully amortized.

(6) Retirement Plan

We provide all of our employees with the opportunity to participate in our retirement savings plan. Our retirement savings plan has been qualified under Section 401(k) of the Internal Revenue Code. Eligible employees are permitted

to contribute to the plan through payroll deductions within statutory limitations and subject to any limitations included in the plan. During 2015 and 2014 we contributed $22,098 and $10,022, respectively, in the form of discretionary Company-matching contributions.

(7) Income Taxes

Tax positions must meet a “more likely than not” recognition threshold at the effective date to be recognized. At December 31, 2015 and 2014, the Company did not have any uncertain tax positions. No interest and penalties related to uncertain tax positions were accrued at December 31, 2015 and 2014.

We did not record an income tax benefit or provision for the years ended December 31, 2015 and 2014.

Significant items making up the deferred tax assets and deferred tax liabilities as of December 31, 2015 and December 31, 2014 are as follows:

	2015	2014
Current deferred taxes		
Inventories	$19,640	$19,640
Other accruals	23,714	21,818
Less: valuation allowance	(43,354)	(41,458)
Total current deferred tax assets	$-	$-
Long term deferred taxes:		
Accelerated tax depreciation	$14,134	$12,162
Non-cash, stock-based compensation, nonqualified	562,426	440,614
Goodwill and intangibles	-	-
Operating loss carry forwards and tax credits	12,028,900	9,720,260
Less: valuation allowance	(12,605,460)	(10,173,036)
Total long term deferred tax assets (liabilities), net	-	-
Total net deferred tax liabilities	$-	$-

A valuation allowance is established if it is more likely than not that all or a portion of the deferred tax asset will not be realized. Accordingly, a valuation allowance was established in 2015 and 2014 for the full amount of our deferred tax assets due to the uncertainty of realization. We believe based on our projection of future taxable operating income for the foreseeable future, it is more likely than not that we will not be able to realize the benefit of the deferred tax asset at December 31, 2015.

We have net operating loss carry-forwards for federal income tax purposes of $26,752,000 as of December 31, 2015. Included in these numbers are loss carry-forwards that were obtained through the acquisition of BioSeq, Inc. and are subject to Section 382 NOL limitations. These net operating loss carry-forwards expire at various dates from 2018 through 2036.

We had net operating loss carry-forwards for state income tax purposes of approximately $20,895,000 at December 31, 2015. These net operating loss carry-forwards expire at various dates from 2016 through 2036.

We have research and development tax credit carry-forwards for federal income tax purposes of approximately $1,019,000 as of December 31, 2015 and research and development tax credit carry-forwards for state income tax purposes of approximately $165,000 as of December 31, 2015. The federal credit carry-forwards expire at various dates from 2016 through 2036. The state credit carry-forwards expire at various dates from 2023 through 2031.

In addition, we have federal alternative minimum tax credit carry-forwards for federal income tax purposes of approximately $217,000 as of December 31, 2015. These credits do not expire.

Our effective income tax (benefit) provision rate was different than the statutory federal income tax (benefit) provision rate as follows for the years ended December 31:

	2015		2014	
Federal tax provision rate	34	%	34	%
Permanent differences	(12	)%	(2	)%
State tax expense	0	%	0	%
Refundable AMT and R&D tax credit	0	%	0	%
Net operating loss carry back	0	%	0	%
Valuation allowance	(23	)%	(32	)%
Effective income tax provision	0	%	0	%

(8) Commitments and Contingencies

Operating Leases

Our corporate office is currently located at 14 Norfolk Avenue, South Easton, Massachusetts 02375. We are currently paying $4,800 per month, on a lease extension, signed on December 29, 2015, that expires December 31, 2016, for our corporate office.

On November 1, 2014 we signed a lease for lab space in Medford, MA. We subsequently expanded our space in Medford. The lease expires December 30, 2017 and requires monthly payments of $5,385 subject to annual cost of living increases.

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 December 31, 2015:

2016	$122,220
Thereafter	64,620
Total minimum payments required	$186,840

Royalty Commitments

BioMolecular Assays, Inc.

In 1996, we acquired our initial equity interest in BioSeq, Inc., which at the time was developing our original pressure cycling technology. BioSeq, Inc. acquired its pressure cycling technology from BioMolecular Assays, Inc. under a technology transfer and patent assignment agreement. In 1998, we purchased all of the remaining outstanding capital stock of BioSeq, Inc., and at such time, the technology transfer and patent assignment agreement was amended to require us to pay BioMolecular Assays, Inc. a 5% royalty on our sales of products or services that incorporate or utilize the original pressure cycling technology that BioSeq, Inc. acquired from BioMolecular Assays, Inc. We are also required to pay BioMolecular Assays, Inc. 5% of the proceeds from any sale, transfer or license of all or any portion of the original pressure cycling technology. These payment obligations terminate in 2016. During the fiscal years ended December 31, 2015 and 2014, we incurred $31,301 and $31,835 in royalties, respectively.

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

Battelle Memorial Institute

In December 2008, we entered into an exclusive patent license agreement with the Battelle Memorial Institute ("*Battelle*"). The licensed technology is described in the patent application filed by Battelle on July 31, 2008 (US serial number 12/183,219). This application includes subject matter related to a method and a system for improving the analysis of protein samples, including through an automated system utilizing pressure and a pre-selected agent to obtain a digested sample in a significantly shorter period of time than current methods, while maintaining the integrity of the sample throughout the preparatory process. Pursuant to the terms of the agreement, we paid Battelle a non-refundable initial fee of $35,000. In addition to royalty payments on net sales on "licensed products", we are obligated to make minimum royalty payments for each year that we retain the rights outlined in the patent license agreement and we are required to have our first commercial sale of the licensed products within one year following the issuance of the patent covered by the licensed technology. After re-negotiating the terms of the contract in 2013 the minimum annual royalty was $1,200 and $2,900 for the years ended 2015 and 2014, respectively.

Target Discovery Inc.

In March 2010, we signed a strategic product licensing, manufacturing, co-marketing, and collaborative research and development agreement with Target Discovery Inc. ("*TDI*"). Under the terms of the agreement, we have been licensed by TDI to manufacture and sell a highly innovative line of chemicals used in the preparation of tissues for scientific analysis ("*TDI reagents*"). The TDI reagents were designed for use in combination with our pressure cycling technology. The companies believe that the combination of PCT and the TDI reagents can fill an existing need in life science research for an automated method for rapid extraction and recovery of intact, functional proteins associated with cell membranes in tissue samples. We did not incur any royalty obligation under this agreement in 2015 or 2014.

In April 2012, we signed a non-exclusive license agreement with TDI to grant the non-exclusive use of our pressure cycling technology. We recorded $22,000 of minimum royalty income in 2015 but none in 2014.

Severance and Change of Control Agreements

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

Each of these executive officers, other than Mr. Schumacher, is entitled to receive a change of control payment in an amount equal to one year of such executive officer's annualized base salary compensation, accrued paid time off, and medical and dental coverage, in the event of a change of control of the Company. In the case of Mr. Schumacher, this payment would be equal to two years of annualized base salary compensation, accrued paid time off, and two years of medical and dental coverage. The severance payment is meant to induce the aforementioned executives to remain in the employ of the Company, in general; and particularly in the occurrence of a change in control, as a disincentive to the control change.

(9) Convertible Debt and Other Debt

We have entered into various convertible debentures. The convertible debentures have terms ranging from 12 to 24 months and subject to annual interest rates ranging from 2% to 9%. The proceeds received are net of fees. The lenders charge interest per annum based on the principal balance. The lenders have the right, at any time after 180 days from the issue date to convert any or part of the outstanding and unpaid principal and interest into shares of the Company's common stock based on a volume weighted average price of the closing prices of the Company's shares during various periods prior to conversion subject to adjustments for stock splits, stock dividends or rights offerings. The Company shall have the right to prepay the debenture for a payment of the outstanding principal plus unpaid interest at any time on or before six months after the effective date. If the Company chooses to prepay it will incur pre-payment penalties ranging from 9.5% to 38% of the principal balance. The Company is required to reserve shares of common stock for full conversion of these debentures. The maturity dates range from six months to two years after the effective date of the payment. The convertible debt as of December 31, 2015 are secured by the assets of the Company. The Company determined that the conversion feature met the definition of a liability in accordance with ASC 815-40 and therefore bifurcated the conversion feature on each debt agreement and accounted for it as a derivative liability. The fair value of the conversion feature was accounted for as a note discount and will be amortized to interest expense over the life of the loan. The fair value of the conversion feature was reflected in the conversion option liability line in the consolidated balance sheets. We will continue to classify the fair value of the conversion options as a liability until the conversion options are exercised, expire or are amended in a way that would no longer require these conversion options to be classified as a liability, whichever comes first.

The proceeds from these convertible debts were allocated between the host debt instrument and the convertible option based on the residual method. The estimated fair value of the convertible option was determined using a binomial formula, resulting in allocations to the convertible option and accounted for as a liability in the Company's consolidated balance sheets. In accordance with the provisions of ASC 815-40, the gross proceeds are offset by debt discounts, which are amortized to interest expense over the expected life of the debt.

In connection with the senior secured convertible debentures issued in our still open $5 million private placement, we also issued warrants to the lenders to purchase an aggregate 8,767,857 shares of the Common Stock, at an exercise price of $0.40 per share, expiring five years after the issuance date.

ASC 470-20 states that the proceeds from the issuance of debt with detachable stock warrants should be allocated between the debt and warrants on the basis of their relative fair market values. The debt discount will be amortized to interest expense over the two-year term of these loans. The convertible debentures and warrants issued in connection with the convertible debentures are classified as derivative liabilities because the convertible debentures and warrants are entitled to certain rights in subsequent financings and these instruments contain “down-round protection” and therefore, do not meet the scope exception for treatment as a derivative under ASC 815, Derivatives and Hedging, (“ASC 815”). Since “down-round protection” is not an input into the calculation of the fair value of the convertible debentures and warrants, the instruments cannot be considered indexed to the Company’s own stock, which is a requirement for the scope exception as outlined under ASC 815. The estimated fair value of the warrants was determined using the binomial model, resulting in an allocation of $1,933,375 to the total warrants out of the gross proceeds of $4,910,000 at issuance date. The fair value will be affected by changes in inputs to that model including our stock price, expected stock price volatility, the contractual term, and the risk-free interest rate. We will continue to classify the fair value of the warrants as a liability until the warrants are exercised, expire or are amended in a way that would no longer require these warrants to be classified as a liability, whichever comes first.

The specific terms of the $5.4 million PIPE convertible debentures and outstanding balances as of December 31, 2015 are listed in the tables below.

Fixed Rate Convertible Notes

Inception Date	Term	Loan Amount	Outstanding Balance	Original Issue Discount	Interest Rate	Deferred Finance Fees	Discount related to Fair value of conversion feature and warrants	Prepayment Penalty
July 22, 2015	24 months	$2,180,000	$2,180,000	$218,000	10%	$388,532	$2,163,074	20%
September 25, 2015	24 months	1,100,000	1,100,000	110,000	10%	185,956	1,022,052	20%
October 2, 2015	24 months	150,000	150,000	15,000	10%	26,345	140,832	20%
October 6, 2015	24 months	30,000	30,000	3,000	10%	5,168	26,721	20%
October 14, 2015	24 months	50,000	50,000	5,000	10%	8,954	49,377	20%
		250,000	250,000	25,000	10%	43,079	222,723	20%

November 2, 2015	24 months											
November 10, 2015	24 months	50,000	50,000	5,000	1	10	%	2	8,790	46,984	20	%
November 12, 2015	24 months	215,000	215,000	21,500	1	10	%	2	38,518	212,399	20	%
November 20, 2015	24 months	200,000	200,000	20,000	1	10	%	2	37,185	200,000	20	%
December 4, 2015	24 months	170,000	170,000	17,000	1	10	%	2	37,352	170,000	20	%
December 11, 2015	24 months	360,000	360,000	36,000	1	10	%	2	75,449	360,000	20	%
December 18, 2015	24 months	55,000	55,000	5,500	1	10	%	2	11,714	55,000	20	%
December 31, 2015	24 months	100,000	100,000	10,000	1	10	%	2	20,634	100,000	20	%
		$4,910,000	$4,910,000	$491,000					$887,676	$4,769,162		

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

2 The annual interest starts accruing in the second year.

Deferred finance fees include cash commissions amounting to $501,000 and the fair value of the 1,689,286 warrants issued to the placement agent amounting to $386,676. For the year ended December 31, 2015, the Company recognized amortization expense related to the debt discounts indicated above of $924,180. The unamortized debt discounts as of December 31, 2015 related to the convertible debentures amounted to $5,223,658.

As of December 31, 2015, the Company also had an outstanding convertible note with a third party amounting to $100,000. The note is convertible at a fixed rate of $0.25 and matures in July 2016.

Variable Rate Convertible Notes

Inception Date	Term	Loan Amount		Interest Rate		Fees	Fair value of conversion feature	Prepayment Penalty		Discount to VWAP	Share reserve requirement
December 4, 2013	12 months	$223,000	*	4	%	$10,000	$59,903	20	%		-
February 2, 2015	12 months	100,000	*	4	%	5,000	62,219	19-33	%		-
February 2, 2015	12 months	120,000	*	4	%	5,000	74,663	19-33	%		-
February 22, 2015	six months	100,000	*	4	%	-	61,597	19-33	%		-
		112,500	*	8	%	4,000	312,847	19-33	%		-

February 25, 2015	12 months									
March 4, 2015	12 months	52,500	*	4	%	2,500	53,213	19-38	%	-
March 6, 2015	12 months	236,250	*	2	%	33,900	212,918	19-35	%	-
March 17, 2015	24 months	50,000	*	4	%	-	64,382	19-33	%	-
March 20, 2015	12 months	25,000	*	4	%	-	25,077	19-33	%	-
March 26, 2015	12 months	150,000	*	6	%	2,000	164,501	19-37.5	%	-
March 27, 2015	12 months	52,500	*	4	%	2,500	57,502	19-38	%	-
March 27, 2015	12 months	100,000	*	8	%	8,000	154,359	19-38	%	-
April 1, 2015	12 months	100,000	*	8	%	-	155,793	25-35	%	40% of 10 days	-
April 20, 2015	12 months	81,250	*	4	%	6,563	117,679	20	%	-
April 28, 2015	12 months	54,050	*	9	%	4,050	35,143	20	%	-
May 12, 2015	12 months	107,764	*	4	%	7,763	145,527	20	%	-
May 20, 2015	12 months	100,000	*	4	%	-	92,715	9.5-33	%	45% of 10 days	3,000,000
May 26, 2015	12 months	60,000	*	8	%	3,500	79,287	10-35	%	-
June 23, 2015	12 months	126,000	*	4	%	6,000	108,297	19-33	%	35% of 15 days	3,101,000
June 24, 2015	24 months	50,000	*	4	%	-	54,511	19-33	%	35% of 10 days	1,000,000
July 2, 2015	12 months	52,500	*	4	%	2,500	54,297	19-33	%	35% of 15 days	1,500,000
July 2, 2015	12 months	52,500	*	4	%	2,500	54,297	19-33	%	35% of 15 days	1,000,000
		$2,105,814				$105,776	$2,200,727				9,601,000

* The loans above either had outstanding balances as of December 31, 2014 or were issued in 2015 and subsequently paid off in 2015.

The following table provides a summary of the changes in convertible debt, net of unamortized discount, during 2015:

	2015
Balance at January 1,	$1,004,513
Issuance of convertible debt, face value	7,287,317

Original issue discount	(567,780)
Debt discount from derivative liabilities (embedded conversion option and warrants)	(6,433,054)
Deferred financing fees	(887,676)
Repayment of convertible debt	(2,653,990)
Conversion of convertible debt into common stock	(382,054)
Fees added to principal debt	84,000
Settlement of prepayment penalty	(96,023)
Amortization of debt discount to interest expense through December 31,	2,922,089
Balance at December 31,	277,342
Less: current portion	100,000
Convertible debt, long-term portion	$177,342

Other Notes

On June 6, 2014, we signed a Merchant Agreement with On Deck Capital. Under the agreement we received $150,000 in exchange for rights to all customer receipts until On Deck Capital is paid $190,499, to be collected at the rate of $756 per business day. The payments are secured by essentially all tangible assets of the Company. The Company paid On Deck Capital $3,750 in fees related to this transaction. The note was paid off in its entirety in 2015.

On January 15, 2015 we signed a Merchant Agreement with a lender. Under the agreement, we received $150,000 in exchange for rights to all customer receipts until the lender was paid $187,500, which was collected at the rate of $744 per business day. The payments were secured by essentially all tangible assets of the Company. $67,925 of the proceeds were used to pay off the outstanding balance of a previous loan from this lender. The Company paid $1,875 in fees in connection with this loan. The note was paid off in its entirety prior to December 31, 2015.

On January 29, 2015 we signed a Merchant Agreement with a lender. Under the agreement, we received $200,000 in exchange for rights to all customer receipts until the lender was paid $278,000, which was collected at the rate of $1,985 per business day. The payments were secured by essentially all tangible assets of the Company. The Company paid $999 in fees in connection with this loan. The note was paid off in its entirety prior to December 31, 2015.

On March 17, 2015 we signed a Merchant Agreement with a lender. Under the agreement, we received $50,000 in exchange for rights to all customer receipts until the lender was paid $67,450, which was collected at the rate of $559 per business day. The payments were secured by essentially all tangible assets of the Company. The Company paid $999 in fees in connection with this loan. The note was paid off in its entirety prior to December 31, 2015.

On May 29, 2015 we signed a Merchant Agreement with a lender. Under the agreement, we received $100,000 in exchange for rights to all customer receipts until the lender was paid $132,000, which was collected at the rate of $1,098 per business day. The Company paid $3,999 in fees in connection with this loan. The note was paid off in its entirety prior to December 31, 2015.

On August 28, 2015 we signed a Merchant Agreement with a lender. Under the agreement, we received $300,000 in exchange for rights to all customer receipts until the lender is paid $384,000, to be collected at the rate of $2,560 per business day. The payments are not secured. On the closing date, $131,710 of the proceeds were used to pay off the outstanding balances of two existing Notes. The Company paid $6,000 in fees in connection with this loan. The outstanding balance is recorded as other debt on the balance sheet.

During the year ended December 31, 2015, we signed three ninety-day notes with an investor. Under the terms of the notes, the Company received a total of $600,000. The investor converted these loans, plus $60,000 in accrued interest into the Company's $5 million PIPE offering on July 21, 2015. There was no gain or loss on the conversion.

During the year ended December 31, 2015, the Company made payments of $587,949 in total on the non-convertible debt from non-related parties.

Related Party Notes

During the year ended December 31, 2015, the Company received advances from certain officers of the Company amounting to $6,300 and made payments of $12,300. These advances are non-interest bearing and payable on demand. As of December 31, 2015 there are no outstanding notes to related parties.

(10) 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*")

As of December 31, 2015 and 2014, there were no shares of Junior A, and Series A, B, C, E, and H1 issued and outstanding.

Series D Convertible Preferred Stock

On November 11, 2011, we completed a registered direct offering, pursuant to which we sold an aggregate of 843 units for a purchase price of $1,000 per unit, resulting in gross proceeds to us of $843,000 (the "*Series D Placement*"). Each unit ("*Series D Unit*") consisted of (i) one share of Series D Convertible Preferred Stock, $0.01 par value per share

(the "*Series D Convertible Preferred Stock*") convertible into 1,538.46 shares of our common stock, (subject to adjustment for stock splits, stock dividends, recapitalization, etc.) and (ii) one five-year warrant to purchase approximately 614 shares of our common stock at a per share exercise price of $0.81, subject to adjustment as provided in the Warrants ("*Series D Warrant*"). The Series D Warrants will be exercisable beginning on May 11, 2012 and until the close of business on the fifth anniversary of the initial exercise date.

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

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

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

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

would exceed certain thresholds.

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

The holders of Series D Convertible Preferred Stock are not entitled to vote on any matters presented to the stockholders of the Company for their action or consideration at any meeting of stockholders of the Company (or by written consent of stockholders in lieu of meeting), except that the holders of Series D Convertible Preferred Stock may vote separately as a class on any matters that would (i) amend, our Restated Articles of Organization, as amended, in a manner that adversely affects the rights of the Series D Convertible Preferred Stock, (ii) alter or change adversely the powers, preferences or rights of the Series D Convertible Preferred Stock or alter or amend the certificate of designation, (iii) authorize or create any class of shares ranking as to dividends, redemption or distribution of assets upon liquidation senior to, or otherwise pari passu with, the Series D Convertible Preferred Stock, or (iv) increase the number of authorized shares of Series D Convertible Preferred Stock.

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

Series D Warrants

The Series D Warrants originally had an exercise price equal to $0.81 per share of common stock. In April 2012, the number of Series D Warrants increased by 530,406 to a total of 1,047,875 and each Series D Warrant had an exercise price reset to $0.40 per share of common stock. In December of 2013 the number of Series D Warrants increased by 628,733 to a total of 1,676,608 and each Series D Warrant had an exercise price reset to $0.25 per share of common stock. The Series D Warrants will be exercisable beginning on the six-month anniversary of the date of issuance and expire five years from the initial exercise date. The Series D Warrants permit the holder to conduct a "cashless exercise" at any time a registration statement registering, or the prospectus contained therein, is not available for the issuance of the shares of common stock issuable upon exercise of the Series D Warrant, and under certain circumstances at the expiration of the Series D Warrants. The exercise price and/or number of shares of common stock issuable upon exercise of the Series D Warrants are subject to adjustment for certain stock dividends, stock splits or similar capital reorganizations, as set forth in the Warrants. The exercise price 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 D Warrants then in effect. Upon any such issuance, subject to certain exceptions, the exercise price will be reduced to the per share price at which such shares of common stock or common stock equivalents are issued and

number of Series D Warrant shares issuable thereunder shall be increased such that the aggregate exercise price payable thereunder, after taking into account the decrease in the exercise price, shall be equal to the aggregate exercise price prior to such adjustment. Unless waived under certain circumstance by the holder of a Series D Warrant, such holder may not exercise the Series D Warrant if upon such exercise the holder's beneficial ownership of the Company's common stock would exceed certain thresholds.

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

Series G Convertible Preferred Stock

On July 6 and November 15, 2012, we completed a private placement, pursuant to which we sold an aggregate of 145,320 units for a purchase price of $5.00 per unit (the "Series G Purchase Price"), resulting in gross proceeds to us of $726,600 (the "*Series G Private Placement*"). Each unit ("*Series G Unit*") consists of (i) one share of Series G Convertible Preferred Stock, $0.01 par value per share (the "Series G Preferred Stock") convertible into 10 shares of our common stock, (subject to adjustment for stock splits, stock dividends, recapitalization, etc.) and (ii) a three-year warrant to purchase 5 shares of our common stock at a per share exercise price of $0.50 (the "*Series G Warrant*"). The Series G Warrants will be exercisable until the close of business on the third anniversary of the applicable closing date of the Series G Private Placement.

Each share of Series G Preferred Stock will receive a cumulative dividend at the annual rate of (i) four percent (4%) on those shares of Series G Preferred Stock purchased from the Company by an individual purchaser with an aggregate investment of less than $100,000, (ii) six percent (6%) on those shares of Series G Preferred Stock purchased from the Company by an individual purchaser with an aggregate investment of at least $100,000 but less than $250,000, and (iii) twelve percent (12%) on those shares of Series G Preferred Stock purchased from the Company by an individual purchaser with an aggregate investment of at least $250,000. Dividends accruing on the Series G Preferred Stock shall accrue from day to day until, and shall be paid within fifteen (15) days of, the first anniversary of, the original issue date of the Series G Preferred Stock; provided, however, if any shares of the Company's Series E Preferred Stock are outstanding at such time, payment of the accrued dividends on the Series G Preferred Stock shall be deferred until no such shares of Series E Convertible Preferred Stock remain outstanding. The Company may pay accrued dividends on the Series G Preferred Stock in cash or in shares of its common stock equal to the volume weighted average price of the common stock as reported by the OTC QB Market for the ten (10) trading days immediately preceding the Series G's first anniversary.

At the election of the Company and upon required advanced notice, each share of Series G Preferred Stock will automatically be converted into shares of common stock at the Conversion Ratio then in effect: (i) if, after 6 months from the original issuance date of the Series G Preferred Stock, the common stock trades on the OTC QB Market (or other primary trading market or exchange on which the common stock is then traded) at a price equal to at least $0.75, for 7 out of 10 consecutive trading days with average daily trading volume of at least 10,000 shares, (ii) on or after the first anniversary of the original issuance date of the Series G Preferred Stock or (iii) upon completion of a firm-commitment underwritten registered public offering by the Company at a per share price equal to at least $0.75, with aggregate gross proceeds to the Company of not less than $2.5 million. Unless waived under certain circumstances by the holder of the Series G Preferred Stock, such holder's Series G Preferred Stock may not be converted if upon such conversion the holder's beneficial ownership would exceed certain thresholds.

The holders of Series G Preferred Stock are not entitled to vote on any matters presented to the stockholders of the Company for their action or consideration at any meeting of stockholders of the Company (or by written consent of stockholders in lieu of meeting), except as required by law.

Series G Warrants

The Series G Warrants issued in the Series G Private Placement had an exercise price equal to $0.50 per share and expired on July 6, 2015.

Series H Convertible Preferred Stock

On December 28, 2012 the Company amended the Articles of Incorporation to authorize 10,000 shares of Series H Convertible Preferred Stock. On January 4, 2013, the Company reported that it had entered into a securities purchase and exchange agreement with an investor, pursuant to which the Company agreed to exchange 1,000,000 shares of the Company's common stock, par value $0.01 per share of common stock held by the investor for an aggregate of 10,000 shares of a newly created series of preferred stock, designated Series H Convertible Preferred Stock, par value $0.01 per share (the "*Series H Preferred Stock*") in a non-cash transaction. The investor originally purchased the common stock from the Company for $0.8025 per share. The exchange ratio was 100 shares of common stock per share of Series H Preferred Stock at a stated conversion price of $0.8025 per share.

Series H2 Convertible Preferred Stock

On December 23, 2014 the Company amended the Articles of Incorporation to authorize 21 shares of Series H2 Convertible Preferred Stock. On December 23, 2014, the Company reported that it had entered into a securities purchase and exchange agreement with an investor, pursuant to which the Company agreed to exchange 2,100,000 shares of the Company's common stock, par value $0.01 per share of common stock held by the investor for an aggregate of 21 shares of a newly created series of preferred stock, designated Series H2 Convertible Preferred Stock, par value $0.01 per share (the "*Series H2 Preferred Stock*") in a non-cash transaction. The investor originally acquired the common stock from the Company for $0.25 per share in the warrant reset transaction on December 23, 2014. The exchange ratio was 100,000 shares of common stock per share of Series H2 Preferred Stock at a stated conversion price of $0.25 per share.

Series J Convertible Preferred Stock

On February 6, March 28 and May 20, 2013, the Company entered into a Securities Purchase with various individuals pursuant to which the Company sold an aggregate of 5,087.5 units for a purchase price of $400.00 per unit (the "Purchase Price"), or an aggregate Purchase Price of $2,034,700. Each unit purchased in the initial tranche consists of (i) one share of a newly created series of preferred stock, designated Series J Convertible Preferred Stock, par value $0.01 per share (the "Series J Convertible Preferred Stock"), convertible into 1,000 shares of the Company's common stock, par value $0.01 per share and (ii) a warrant to purchase 1,000 shares of common stock at an exercise price equal to $0.40 per share. The warrants expire three years from the issuance date.

From the date of issuance of any shares of Series J Convertible Preferred Stock and until the earlier of the first anniversary of such date, the voluntary conversion of any shares of Series J Convertible Preferred Stock, or the date of any mandatory conversion (solely under the Company's control based upon certain triggering events) of the Series J

Convertible Preferred Stock, dividends will accrue on each share of Series J Convertible Preferred Stock at an annual rate of (i) four percent (4%) of the Purchase Price on those shares of Series J Convertible Preferred Stock purchased from the Company pursuant to the Securities Purchase Agreement by an individual purchaser who purchased from the Company shares of Series J Convertible Preferred Stock with an aggregate Purchase Price of less than $250,000, and (ii) six percent (6%) of the Purchase Price on those shares of Series J Convertible Preferred Stock purchased from the Company pursuant to the Securities Purchase Agreement by an individual purchaser who purchased shares of Series J Convertible Preferred Stock with an aggregate purchase price of at least $250,000. Dividends accruing on the Series J Convertible Preferred Stock shall accrue from day to day until the earlier of the first anniversary of the date of issuance of such shares of Series J Convertible Stock, the voluntary conversion of any shares of Series J Convertible Preferred Stock, or the date of any mandatory conversion of the Series J Convertible Preferred Stock, and shall be paid, as applicable, within fifteen (15) days of the first anniversary of the original issue date of the Series J Convertible Preferred Stock, within five (5) days of the voluntary conversion of shares of the Series J Convertible Preferred Stock, or within five (5) days of the mandatory conversion of shares of the Series J Convertible Preferred Stock. The Company may pay accrued dividends on the Series J Convertible Preferred Stock in cash or, in the sole discretion of the Board of Directors of the Company, in shares of its common stock in accordance with a specified formula.

Each share of Series J Convertible Preferred Stock is convertible into 1,000 shares of common stock at the option of the holder on or after the six-month anniversary of the issuance of such share, subject to adjustment for stock splits, stock dividends, recapitalizations and similar transactions (the "Conversion Ratio"). Unless waived under certain circumstances by the holder of Series J Convertible Preferred Stock, such holder's shares of Series J Convertible Preferred Stock may not be converted if upon such conversion the holder's beneficial ownership would exceed certain thresholds.

At the election of the Company and upon required advance notice, each share of Series J Convertible Preferred Stock will automatically be converted into shares of common stock at the Conversion Ratio then in effect: (i) on or after the six-month anniversary of the original issuance date of the Series J Convertible Preferred Stock, the common stock trades on the OTC QB Market (or other primary trading market or exchange on which the common stock is then traded) at a price per share equal to at least $0.80 for 7 out of 10 consecutive trading days with average daily trading volume of at least 50,000 shares, (ii) on the first anniversary of the original issuance date of the Series J Convertible Preferred Stock or (iii) within three days of the completion of a firm-commitment underwritten registered public offering by the Company at a per share price equal to at least $0.80, with aggregate gross proceeds to the Company of not less than $2.5 million. Unless waived under certain circumstances by the holder of the Series J Convertible Preferred Stock, such holder's Series J Convertible Preferred Stock may not be converted if upon such conversion the holder's beneficial ownership would exceed certain thresholds.

The holders of Series J Convertible Preferred Stock are not entitled to vote on any matters presented to the stockholders of the Company for their action or consideration at any meeting of stockholders of the Company (or by written consent of stockholders in lieu of meeting), except as required by law.

Series J Warrants

The Warrants issued in the Private Placement have an exercise price equal to $0.40 per share, with a term expiring three years from the issuance date. The Warrants also permit the holder to conduct a "cashless exercise" at any time the holder of the Warrant is an affiliate of the Company. The exercise price and/or number of shares issuable upon exercise of the Warrants will be subject to adjustment for stock dividends, stock splits or similar capital reorganizations, as set forth in the Warrant agreement.

Subject to the terms and conditions of the Warrants, at any time commencing six months from the closing date of the sale of Units under the Securities Purchase Agreement the Company has the right to call the Warrants for cancellation if the volume weighted average price of its common stock on the OTC QB Market (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 either (i) 10 consecutive trading days or (ii) 15 out of 25 consecutive trading days.

Registration Rights Agreement

In connection with the Private Placement, the Company has agreed that, if, at any time after February 1, 2014, the Company files a Registration Statement relating to an offering of equity securities of the Company (the "Registration Statement"), subject to certain exceptions, including a Registration Statement relating solely to an offering or sale of securities having an aggregate public offering price of less than $5,000,000, the Company shall include in the Registration Statement the resale of the shares of common stock underlying the Warrants. Shares of common stock issued upon conversion of Series J Convertible Preferred Stock or in payment of the dividend on the Series J Convertible Preferred Stock will not be registered and will not be subject to registration rights. This right is subject to customary conditions and procedures.

Series K Convertible Preferred Stock

On December 12, 2013, the Company entered into a Securities Purchase with various individuals pursuant to which the Company sold an aggregate of 4,000 units for a purchase price of $250.00 per unit (the "Purchase Price"), for an aggregate Purchase Price of $1,000,000. Each unit purchased in the initial tranche consists of (i) one share of a newly created series of preferred stock, designated Series K Convertible Preferred Stock, par value $0.01 per share (the "Series K Convertible Preferred Stock"), convertible into 1,000 shares of the Company's common stock, par value $0.01 per share and (ii) a warrant to purchase 500 shares of common stock at an exercise price equal to $0.3125 per share. The warrants expire three years from the issuance date. Of the $1,000,000 invested in the Private Placement, $572,044 was received in cash and $427,956 was from the conversion of outstanding indebtedness and interest. The Company incurred $43,334 of fees in conjunction with this private placement. The purchasers in the initial tranche of the private placement consisted of certain existing and new investors in the Company as well as all of the members of the Company's Board of Directors.

From the date of issuance of any shares of Series K Convertible Preferred Stock and until the earlier of the first anniversary of such date, the voluntary conversion of any shares of Series K Convertible Preferred Stock, or the date of any mandatory conversion (solely under the Company's control based upon certain triggering events) of the Series K Convertible Preferred Stock, dividends will accrue on each share of Series K Convertible Preferred Stock at an annual rate of (i) four percent (4%) of the Purchase Price on those shares of Series K Convertible Preferred Stock purchased from the Company pursuant to the Securities Purchase Agreement by an individual purchaser who purchased from the Company shares of Series K Convertible Preferred Stock with an aggregate Purchase Price of less

than $100,000, and (ii) six percent (6%) of the Purchase Price on those shares of Series K Convertible Preferred Stock purchased from the Company pursuant to the Securities Purchase Agreement by an individual purchaser who purchased shares of Series K Convertible Preferred Stock with an aggregate purchase price of at least $100,000. Dividends accruing on the Series K Convertible Preferred Stock shall accrue from day to day until the earlier of the first anniversary of the date of issuance of such shares of Series K Convertible Stock, the voluntary conversion of any shares of Series K Convertible Preferred Stock, or the date of any mandatory conversion of the Series K Convertible Preferred Stock, and shall be paid, as applicable, within fifteen (15) days of the first anniversary of the original issue date of the Series K Convertible Preferred Stock, within five (5) days of the voluntary conversion of shares of the Series K Convertible Preferred Stock, or within five (5) days of the mandatory conversion of shares of the Series K Convertible Preferred Stock. The Company may pay accrued dividends on the Series K Convertible Preferred Stock in cash or, in the sole discretion of the Board of Directors of the Company, in shares of its common stock in accordance with a specified formula.

Each share of Series K Convertible Preferred Stock is convertible into 1,000 shares of common stock at the option of the holder on or after the six-month anniversary of the issuance of such share, subject to adjustment for stock splits, stock dividends, recapitalizations and similar transactions (the “Conversion Ratio”). Unless waived under certain circumstances by the holder of Series K Convertible Preferred Stock, such holder’s shares of Series K Convertible Preferred Stock may not be converted if upon such conversion the holder’s beneficial ownership would exceed certain thresholds.

At the election of the Company and upon required advance notice, each share of Series K Convertible Preferred Stock will automatically be converted into shares of common stock at the Conversion Ratio then in effect: (i) on or after the six-month anniversary of the original issuance date of the Series K Convertible Preferred Stock, the common stock trades on the OTC QB Market (or other primary trading market or exchange on which the common stock is then traded) at a price per share equal to at least $0.80 for 7 out of 10 consecutive trading days with average daily trading volume of at least 50,000 shares, (ii) on the first anniversary of the original issuance date of the Series K Convertible Preferred Stock or (iii) within three days of the completion of a firm-commitment underwritten registered public offering by the Company at a per share price equal to at least $0.80, with aggregate gross proceeds to the Company of not less than $2.5 million. Unless waived under certain circumstances by the holder of the Series K Convertible Preferred Stock, such holder’s Series K Convertible Preferred Stock may not be converted if upon such conversion the holder’s beneficial ownership would exceed certain thresholds.

The proceeds from the sale of each Series K Unit were allocated between the Series K Convertible Preferred Stock and the Series K Warrants based on the relative fair value method. The estimated fair value of the Series K Warrants was determined using a Black-Scholes formula, resulting in an allocation of the gross proceeds of $271,422 to the total warrants issued. The allocation of the gross proceeds to the Series K Convertible Preferred Stock was $685,245, net of $43,334 in fees. In accordance with the provisions of ASC 470-20, an additional adjustment in the aggregate between Additional Paid in Capital and Accumulated Deficit of $1,495,415 was recorded for all tranches of Series K to reflect an implicit, deemed non-cash dividend related to the allocation of proceeds between the stock and warrants issued. The $1,495,415 represents the aggregate value of the adjustment to additional paid in capital related to the beneficial conversion feature of the Series K Convertible Preferred Stock. The value adjustment was calculated by subtracting the fair market value of the underlying common stock on the closing dates issuable upon conversion of the Series K Convertible Preferred Stock from the fair market value of the Series K Convertible Preferred Stock as determined when the Company performed a fair market value allocation of the proceeds to the Series K Convertible Preferred Stock and warrants.

On January 29, 2014, the Company entered into a Securities Purchase Agreement with various accredited investors, pursuant to which the Company sold an aggregate of 4,875 units for a purchase price of $250.00 per unit or an aggregate Purchase Price of $1,218,750. This was the second tranche of a $1.5 million private placement previously disclosed by the Company in its Current Report on Form 8-K filed with the Securities and Exchange Commission on December 12, 2013, which is incorporated by reference herein. The Purchasers in the second tranche of the Private Placement consisted of certain existing and new investors in the Company, as well as all of the members of the Company’s board of directors.

Each unit purchased in the second tranche consists of (i) one share of Series K Convertible Preferred Stock, par value $0.01 per share, convertible into 1,000 shares of the Company’s common stock, par value $0.01 per share and (ii) a warrant to purchase 500 shares of common stock at an exercise price equal to $0.3125 per share, with a term expiring on January 29, 2017.

On February 28, 2014, the Company entered into a Securities Purchase Agreement with various accredited investors, pursuant to which the Company sold an aggregate of 1,854 units for a purchase price of $340.00 per unit or an aggregate Purchase Price of $630,360. This was the third tranche of a $1.5 million private placement previously disclosed by the Company in its Current Report on Form 8-K filed with the Securities and Exchange Commission on December 12, 2013, which is incorporated by reference herein. The Purchasers in the third tranche of the Private Placement consisted of certain existing and new investors in the Company.

Each unit purchased in the third tranche consists of (i) one share of Series K Convertible Preferred Stock, par value $0.01 per share convertible into 1,000 shares of the Company’s common stock, par value $0.01 per share and (ii) a warrant to purchase 500 shares of common stock at an exercise price equal to $0.425 per share, with a term expiring on February 28, 2017.

On June 30, 2014, the Company entered into a Securities Purchase Agreement with various accredited investors, pursuant to which the Company sold an aggregate of 734 units for a purchase price of $300.00 per unit or an aggregate Purchase Price of $220,000. This was the fourth tranche of a $1.5 million private placement previously disclosed by the Company in its Current Report on Form 8-K filed with the Securities and Exchange Commission on December 12, 2013, which is incorporated by reference herein. The Purchasers in the fourth tranche of the Private Placement consisted of certain existing and new investors in the Company.

Each unit purchased in the fourth tranche consists of (i) one share of Series K Convertible Preferred Stock, par value $0.01 per share convertible into 1,000 shares of the Company's common stock, par value $0.01 per share and (ii) a warrant to purchase 500 shares of common stock at an exercise price equal to $0.375 per share, with a term expiring on June 30, 2017.

On November 12, 2014, the Company entered into a Securities Purchase Agreement with various accredited investors, pursuant to which the Company sold an aggregate of 1,052 units for a purchase price of $250.00 per unit or an aggregate Purchase Price of $263,000. This was the fifth tranche of a $1.5 million private placement previously disclosed by the Company in its Current Report on Form 8-K filed with the Securities and Exchange Commission on December 12, 2013, which is incorporated by reference herein. The Purchasers in the fourth tranche of the Private Placement consisted of certain existing and new investors in the Company.

Each unit purchased in the fifth tranche consists of (i) one share of Series K Convertible Preferred Stock, par value $0.01 per share convertible into 1,000 shares of the Company's common stock, par value $0.01 per share and (ii) a warrant to purchase 500 shares of common stock at an exercise price equal to $0.3125 per share, with a term expiring on November 12, 2017.

The Private Placement was originally expected to raise $1.5 million and close on or before January 31, 2014. On January 29, 2014, the Company's Board of Directors voted to increase the subscription amount of the Private Placement by $718,750. The Board of Directors also voted to extend the Private Placement until February 28, 2014. On February 28, 2014 the Company's Board of Directors voted to increase the subscription amount once again to a total of $3.5 million and extended the closing to April 4, 2014. On April 13, 2014 the Company's Board of Directors voted to increase the subscription amount by $1 million, to a total of $4.5 million, and extended the closing to May 31, 2014. On July 7, 2014 the Company's Board of Directors voted to extend the closing to August 15, 2014. Together with the initial tranche of $1,000,000 that closed on December 12, 2013, the second tranche of $1,218,750 that closed January 29, 2014, the third tranche of $630,360 that closed February 28, 2014, the fourth tranche of $220,000 that closed June 30, 2014, and the fifth tranche of $263,000 that closed November 12, 2014,the total consideration received by the Company in the Private Placement is $3,332,110, which is comprised of $2,511,404 in cash and $820,706 from the conversion of outstanding indebtedness and Board of Director fees. The placement was closed after the November 12, 2014 round.

On September 22, 2014 the Company issued 64,000 shares of common stock for the conversion of 64 shares of Series K Preferred Convertible Stock.

In connection with the Series K Warrants, we calculated the fair value of the warrants received as described above using the Black- Scholes formula with the below assumptions:

Assumptions	Series K Warrants December 12, 2013	Series K Warrants January 29, 2014	Series K Warrants February 28, 2014	Series K Warrants June 30, 2014	Series K Warrants November 12, 2014
Contractual life (in months)	36	36	36	36	36
Expected volatility	136.1	152.4	152.7	153.9	153.9
Risk-free interest rate	0.39 %	0.39 %	0.39 %	0.90 %	0.90 %
Exercise price	$ 0.3125	$ 0.3125	$ 0.425	$ 0.375	$ 0.3125
Fair value per warrant	$ 0.20	$ 0.30	$ 0.37	$ 0.29	$ 0.23

The holders of Series K Convertible Preferred Stock are not entitled to vote on any matters presented to the stockholders of the Company for their action or consideration at any meeting of stockholders of the Company (or by written consent of stockholders in lieu of meeting), except as required by law. The Company accrued dividends of $23,194 and $143,771 for 2015 and 2014, respectively.

Series K Warrants

The warrants issued in the Private Placement have an exercise price equal to $0.3125 per share, for the December 12, 2013 and January 29, 2014 warrants, $0.425 per share for the February 28, 2014 warrants, $0.375 per share for the June 30, 2014 warrants and $0.3125 per share for the November 12, 2014 warrants, with a term expiring three years from the issuance date. The warrants also permit the holder to conduct a “cashless exercise” at any time the holder of the warrant is an affiliate of the Company. The exercise price and/or number of shares issuable upon exercise of the warrants will be subject to adjustment for stock dividends, stock splits or similar capital reorganizations, as set forth in the warrant agreement.

Subject to the terms and conditions of the warrants, at any time commencing six months from the closing date of the sale of Units under the Securities Purchase Agreement the Company has the right to call the warrants for cancellation if the volume weighted average price of its common stock on the OTC QB Market (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 either (i) 10 consecutive trading days or (ii) 15 out of 25 consecutive trading days.

Registration Rights Agreement

In connection with the Private Placement, the Company has agreed that, if, at any time after February 1, 2014, the Company files a Registration Statement relating to an offering of equity securities of the Company (the "Registration Statement"), subject to certain exceptions, including a Registration Statement relating solely to an offering or sale of securities having an aggregate public offering price of less than $5,000,000, the Company shall include in the Registration Statement the resale of the shares of common stock underlying the warrants. Shares of common stock issued upon conversion of Series K Convertible Preferred Stock or in payment of the dividend on the Series K Convertible Preferred Stock will not be registered and will not be subject to registration rights. This right is subject to customary conditions and procedures.

Common Stock

Stock Options and Warrants

Our stockholders approved our amended 2005 Equity Incentive Plan (the "*2005 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 2005 Plan. Under the 2005 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 December 31, 2015, options to acquire 1,395,750 shares were outstanding under the 2005 Plan with 344,250 shares available for future grant under the Plan.

On December 12, 2013 at the Company's 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. Under the Plan, we may award stock options, shares of common stock, and other equity interests in the Company to employees, officers, directors, consultants, and advisors, and to any other persons the Board of Directors deems appropriate. As of December 31, 2015, options to acquire 2,107,500 shares were outstanding under the Plan with 892,500 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. Under the Plan, we may award non-qualified stock options in the Company to employees, officers, directors, consultants, and advisors, and to any other persons the Board of Directors deems appropriate. As of December 31, 2015, non-qualified options to acquire 2,068,000 shares were outstanding under the Plan with 2,932,000 shares available for future grants under the 2015 Plan.

All of the outstanding non-qualified options had an exercise price that was at or above the Company's common stock share price on December 31, 2015.

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

	Stock Options		Warrants		Total	
	Shares	Weighted Average price per share	Shares	Weighted Average price per share	Shares	Exercisable
Balance outstanding, January 1, 2014	1,771,708	$ 0.71	15,012,327	$ 0.57	16,784,035	16,611,528
Granted	1,675,500	0.30	8,903,000	0.38	10,578,500	
Exercised	-	-	(4,208,658)	0.25	(4,208,658)	
Expired	(10,000)	1.00	(524,468)	0.74	(534,468)	
Forfeited	(30,958)	0.71	-	-	(30,958)	
Balance outstanding, December 31, 2014	3,406,250	$ 0.51	19,182,201	$ 0.49	22,588,451	20,858,111
Granted	2,500,000	0.40	10,837,141	0.40	13,401,426	
Exercised	-	-	-	-	-	
Expired	(205,000)	1.00	(791,678)	0.31	(996,678)	
Forfeited	(130,000)	0.70	-	-	(130,000)	
Balance outstanding, December 31, 2015	5,571,250	$ 0.44	29,227,664	$ 0.44	34,863,199	31,664,469

The weighted average fair value of options issued on their grant dates was $0.27 for the year ended December 31, 2015.

	Options Outstanding			Options Exercisable		
Range of Exercise Prices	Number of Options	Weighted Average Remaining Contractual	Exercise Price	Number of Options	Weighted Average Remaining Contractual	Exercise Price

		Life (Years)			Life (Years)	
$0.30 - $0.39	1,675,500	8.7	$ 0.30	986,612	8.7	$ 0.30
0.40 - 0.49	2,811,000	9.7	0.40	311,000	7.4	0.40
0.50 - 0.59	226,250	6.6	0.50	226,250	6.6	0.50
0.60 - 0.69	402,500	4.1	0.60	392,658	4.1	0.60
0.70 - 1.25	456,000	2.1	1.00	456,000	2.1	1.00
$0.30 - $1.25	5,571,250	8.3	$ 0.44	2,372,520	6.3	$ 0.52

There was $740,117 of total unrecognized compensation cost, net of estimated forfeitures, related to non-vested stock options granted as of December 31, 2015. This cost is expected to be recognized over a period of 2.45 years, and will be adjusted for any future changes in estimated forfeitures.

The Series D Warrants issued in connection with the registered direct offering of Series D Convertible Preferred are measured at fair value and liability-classified because the Series D Warrants contain “down-round protection” and therefore, do not meet the scope exception for treatment as a derivative under ASC 815, *Derivatives and Hedging*, (“ASC 815”). Since “down-round protection” is not an input into the calculation of the fair value of the warrants, the warrants cannot be considered indexed to the Company’s own stock which is a requirement for the scope exception as outlined under ASC 815. The estimated fair value of the warrants was determined using the binomial model, resulting in an allocation of the gross proceeds $283,725 to the warrants issued in the Series D registered direct offering. The fair value will be affected by changes in inputs to that model including our stock price, expected stock price volatility, the contractual term, and the risk-free interest rate. We will continue to classify the fair value of the warrants as a liability until the warrants are exercised, expire or are amended in a way that would no longer require these warrants to be classified as a liability, whichever comes first. The down-round protection for the Series D Warrants survives for the life of the Series D Warrants, which ends in May 2017. During the year ended December 31, 2014 a total of 596,658 warrants were exercised at an exercise price of $0.25 resulting in net proceeds to the Company of $149,165.

In connection with the senior secured convertible debentures issued in our still open private placement with closings in 2015, we issued warrants to the lenders to purchase an aggregate 8,767,857 shares of the Common Stock, at an exercise price of $0.40 per share, expiring five years after the issuance date. We also issued warrants to the placement agent to purchase an aggregate 1,689,286 shares of the Common Stock, at an exercise price of $0.40 per share, expiring five years after the issuance date.

We extended the expiration dates to two more years on certain warrants related to bridge loans. These warrants were originally issued with a three year expiration. The incremental value for the warrant extension was $69,627 which was recognized as interest expense.

We recorded expense of $93,488 in 2015 relating to warrants issued in 2014 for services that were performed.

Common Stock Issuances

With respect to the convertible debenture for $223,000 signed by the Company on December 4, 2013, a lender, with the prior approval of the Company, chose to convert a portion of the outstanding note balance into shares of the Company's common stock, and to extend the note for approximately 45 days after each conversion, as follows:

On January 14, 2015 $25,000 was converted into 100,000 shares of the Company's common stock.

On February 25, 2015 $38,000 was converted into 140,741 shares of the Company's common stock.

On April 10, 2015 $35,000 was converted into 140,000 shares of the Company's common stock.

On May 29, 2015 $35,000 was converted into 140,000 shares of the Company's common stock.

On July 21, 2015 $20,000 was converted into 80,000 shares of the Company's common stock.

On August 13, 2015 $40,000 was converted into 160,000 shares of the Company's common stock.

On September 25, 2015 $30,000 was converted into 120,000 shares of the Company's common stock.

For each extension, the Company paid a fee of $13,000, $13,000, $10,000, and $8,000, respectively. This note was paid off in its entirety on November 5, 2015.

During the year ended December 31, 2015, the Company issued 1,755,091 shares with a fair value of $457,030 for consulting and investor relation services.

On August 14, 2015, the Company closed a Securities Exchange Agreement with Everest Investments Holdings of Warsaw, Poland under which Everest purchased 1,000,000 shares of the Company's restricted Common Stock at a purchase price of $0.50/share. In exchange, the Company received 601,500 shares of Everest Investments ("Everest"), a publicly-traded company on the Main Market of the Warsaw Stock Exchange. The shares of Everest were valued at approximately $400,000 as of the closing date.

With respect to the convertible debenture for $150,000 signed by the Company on June 4, 2014, a lender, with prior approval of the Company, chose to convert a portion of the outstanding note balance into shares of the Company's common stock, and to extend the note for approximately 30 days after each conversion, as follows:

On February 18, 2015 $25,000 was converted into 100,000 shares of the Company's common stock.

On March 18, 2015 $22,500 was converted into 90,000 shares of the Company's common stock.

On March 31, 2015 $27,500 was converted into 110,000 shares of the Company's common stock.

On April 17, 2015 $30,000 was converted into 120,000 shares of the Company's common stock.

With respect to the convertible debenture for $75,000 signed by the Company on November 10, 2014, a lender, upon the request of the Company, on June 8, 2015 agreed to extend the conversion date of the note until July 20, 2015. The lender received 40,000 shares of the Company's common stock in exchange for the extension. The Company recorded $10,000 to interest expense for this transaction. This note was paid off in its entirety on July 24, 2015.

On various dates in December 2015, $58,919 of existing convertible debt and interest was converted into 235,676 shares of the Company's common stock.

(11) Subsequent Events

Since January 1, 2016, the Company received $1,419,667 in net proceeds from the sale of convertible debentures and $256,660 in net proceeds from short- term promissory notes.

On various dates from January to March 2016 the Company issued 205,000 shares of restricted common stock to investor relations firms for services rendered.

On January 12, 2016 SCIEX, a global leader in life science analytical technologies (Framingham, MA) and a wholly-owned subsidiary of Danaher Corporation (NYSE: DHR), announced an exclusive co-marketing agreement with PBI to improve protein quantification in complex samples.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

None

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our Securities Exchange Act of 1934 filings are recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our President and Chief Executive Officer (Principal Executive Officer) and Chief Financial Officer (Principal Financial Officer), as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, as ours are designed to do, and management was necessarily required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As of December 31, 2015, 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 as of December 31, 2015 due to limited resources for adequate personnel to prepare and file reports under the Securities Exchange Act of 1934 within the required periods, and material weaknesses in our internal control over financial reporting relating to our accounting for complex equity transactions as described below under the heading "Report of Management on Internal Control over Financial Reporting". Management plans to remediate this weakness by taking the actions described below.

Report of Management on Internal Control over Financial Reporting

We are responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rule 13a-15(f) and 15d-15(f) under the Exchange Act, as a process designed by,

or under the supervision of our principal executive and principal financial officers and effected by our board of directors, management and other personnel 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 and includes those policies and procedures that:

pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and disposition of our assets;

provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorization of our management and directors; and

provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Our internal control system is designed to provide reasonable assurance to our management and board of directors regarding the preparation and fair presentation of financial statements. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risks that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

We have assessed the effectiveness of our internal control over financial reporting as of December 31, 2015. In making this assessment, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control-Integrated Framework (2013).

Based on this assessment, management believes that, as of December 31, 2015, the Company did not maintain effective internal control over financial reporting because of the effect of material weaknesses in our internal control over financial reporting discussed below.

Public Company Accounting Oversight Board Auditing Standard No. 2 defines a material weakness as a significant deficiency, or combination of significant deficiencies, that results in there being a more than remote likelihood that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. Based upon this definition, our management concluded that, as of December 31, 2015, a material weakness existed in our internal control over financial reporting related to accounting for complex equity transactions.

Specifically, we identified material weaknesses in our internal control over financial reporting related to the following matters:

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.

Our plan to remediate those material weaknesses is 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.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting that occurred during the fourth quarter of 2015 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION.

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Directors

The following table sets forth information about the individuals who serve as our directors as of December 31, 2015.

Name	Age	Position	Board Committees	Term of office
Richard T. Schumacher	65	President, Chief Executive Officer, Treasurer, Clerk and Director		2017
Jeffrey N. Peterson	60	Chairman of the Board	Audit, Compensation, Nominating	2018
Dr. Mickey Urdea	63	Director		2018
Vito J. Mangiardi	66	Director	Audit, Compensation, Nominating	2016
Kevin A. Pollack	45	Director	Audit, Compensation, Nominating	2016

The following noteworthy experience, qualifications, attributes and skills for each Board member, together with the biographical information for each nominee described below, led to our conclusion that the person should serve as a director of PBI in light of our business and structure:

Mr. Richard T. Schumacher, the founder of the Company, has served as a director of the Company since 1978. He has served as the Company's Chief Executive Officer since April 16, 2004 and President since September 14, 2004. He previously served as Chief Executive Officer and Chairman of the Board of the Company from 1992 to February 2003. From July 9, 2003 until April 14, 2004 he served as a consultant to the Company pursuant to a consulting agreement. He served as President of the Company from 1978 to August 1999. Mr. Schumacher served as the Director of Infectious Disease Services for Clinical Sciences Laboratory, a New England-based medical reference laboratory, from 1986 to 1988. From 1972 to 1985, Mr. Schumacher was employed by the Center for Blood Research, a nonprofit medical research institute associated with Harvard Medical School. Mr. Schumacher received a B.S. in Zoology from

the University of New Hampshire.

Mr. Jeffrey N. Peterson has served as a director of the Company since July 2011 and as Chairman of the Board starting in 2012. Since 1999, he has served as the chief executive officer of Target Discovery, Inc. ("TDI"), a personalized medicine diagnostics (PMDx) company. Mr. Peterson also serves as Chairman of TDI's majority-owned subsidiary, Veritomyx, Inc., which is completing development and commercialization of software tools for accurate peptide, protein and isoform identification and characterization. Prior to incorporating and joining TDI, Mr. Peterson served as CEO of Sharpe, Peterson, Ocheltree & Associates, an international business development consulting firm assisting Fortune 500 and many smaller firms in business expansion and strategy. Prior to that, he spent 9 years in key management roles in Abbott Laboratories' Diagnostics and International (Pharmaceuticals, Hospital Products, Nutritionals, and Consumer) businesses, last serving as CEO and General Manager of Abbott South Africa. Mr. Peterson's experience prior to Abbott Laboratories included 11 years with General Electric's Engineered Materials and Plastics businesses, spanning roles in strategic planning, business development, technology licensing, marketing and sales, operations, quality control and R&D. Mr. Peterson holds BSChE and MSChE (Chemical Engineering) degrees from MIT, as well as 6 issued US and many related international patents, and has authored articles in peer-reviewed scientific journals. Mr. Peterson is Chair Emeritus of the BayBio Institute, a non-profit organization serving the regional life science community. He served for 12 years on the Board of BayBio, the trade association for the life sciences industry in Northern California. He was a cofounder of the Coalition for 21st Century Medicine, and of BIO's Personalized Medicine & Diagnostics Working Group, and served on the board of Advisors for the Center for Professional Development and Entrepreneurship at the University of Texas MD Anderson Cancer Center. Mr. Peterson has lived and worked overseas for 18 years, in the Middle East, Europe and Africa, and is Chair Emeritus of the American International School of Johannesburg.

Mr. Vito J. Mangiardi has served as a director of the Company since July 2012. Mr. Mangiardi is an accomplished senior executive with proven experience as a President, CEO and COO in the Life Sciences and Bio Energy product and service sectors. He is a strong P&L performer and corporate strategist in General Management, Operations, Sales/Marketing, and Science. Mr. Mangiardi has held positions as a Research Chemist for Bio-Rad Laboratories, Inc.; Sales & Marketing Director for Baxter Travenol, Inc.; Executive VP and COO for Quintiles Transnational Corp.; President and CEO of Diagnostics Laboratories, Inc., Clingenix, Inc., and Bilcare, Inc.; and President of AAI Pharma, Inc. More recently he was the COO/Deputy Director of Operations and Production at the University of California Lawrence Berkeley National Laboratory Joint Genome Institute. Mr. Mangiardi has experience with three start-ups, two midsize, and several mature companies, and has international experience leading and managing organizations on four continents. He has vast experience in leading alliances, acquisitions, due diligence, and post-acquisition assimilation. Mr. Mangiardi has been on the Board of Directors of three companies and has proven success in working with both national and international investment groups to raise funds. Mr. Mangiardi earned a BS in Biology/Chemistry from Eastern Illinois University and two MBA degrees from Golden Gate University - in General Management and in Marketing. Mr. Mangiardi is listed as an inventor in four patents and various publications in protein separation techniques in the area of metabolism, thyroid, anemia/hematology and cancer, and is a member of numerous professional organizations. Mr. Mangiardi is the founding partner, President and CEO of Marin Bay Partners, LLC (MBP), a consulting firm focused on life sciences, pharmaceutical development and clinical diagnostics.

Mr. Kevin A. Pollack has served as a director of the Company since July 2012. Mr. Pollack is Chief Financial Officer of Opiant Pharmaceuticals, Inc. (OPNT-OTCQB), a speciality pharmaceutical company developing pharmacological treatments for substance use, addictive, and eating disorders. He has been an investment banker and securities attorney at Banc of America Securities LLC and Sidley Austin LLP (formerly Brown & Wood LLP), respectively, and has

previous asset management experience at Paragon Capital LP. Mr. Pollack is a magna cum laude graduate of the Wharton School of the University of Pennsylvania and holds J.D. and M.B.A. degrees from Vanderbilt University, where he graduated with Beta Gamma Sigma honors. Currently, he sits on the Boards of Directors of Opiant Pharmaceuticals, Inc. and MagneGas Corporation (MNGA-NASDAQ), an alternative energy company. Mr. Pollack also is President of Short Hills Capital LLC.

Dr. Michael S. "Mickey" Urdea has served as a director of the Company since February 8, 2013. Dr. Urdea is a Founder and Partner for Halteres Associates, a biotechnology consulting firm. He also founded and served as Chief Executive Officer of Tethys Bioscience, a proteomics-based diagnostics company involved in preventative personalized medicine. Additionally, Dr. Urdea is a founder and the Chairman of Catalysis Foundation for Health, an organization addressing gaps in global healthcare caused by inefficiencies in disease diagnosis and monitoring. He serves as an expert consultant to the life sciences industry and is on the scientific advisory boards and boards of directors of a number of biotechnology, diagnostics, venture capital and philanthropic organizations. Prior to his current business activities, Dr. Urdea founded the Nucleic Acid Diagnostics group at Chiron Corporation, and with colleagues, invented branched DNA molecules for amplification of signal in nucleic acid complexes. Application of this technology resulted in the first commercial products for quantification of human hepatitis B, hepatitis C, and human immunodeficiency viruses (HBV, HCV and HIV, respectively). He then became business head of the Molecular Diagnostics group and Chief Scientific Officer at Bayer Diagnostics. He continues to serve as a diagnostics industry, product development and scientific advisor to the Bill and Melinda Gates Foundation, acted as co-chair of two of the Grand Challenges grant review committees, and served as a member of its Diagnostic Forum. Dr. Urdea is an author on nearly 200 peer-reviewed scientific publications, nearly 300 abstracts and international scientific presentations, and more than 100 issued and pending patents. He received his BS in Biology and Chemistry from Northern Arizona University in Flagstaff and his Ph.D in Biochemistry from Washington State University.

Executive Officers

The information under the heading “Executive Officers of the Registrant” in Item 1 of Part I of this Annual Report on Form 10-K is incorporated herein by this reference.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires the Company’s executive officers and directors, and persons who own more than 10% of the Company’s common stock, to file reports of ownership and changes in ownership on Forms 3, 4 and 5 with the SEC.

Based solely on the Company’s review of the copies of such Forms and written representations from certain reporting persons, the Company believes that all filings required to be made by the Company’s Section 16(a) reporting persons during the Company’s fiscal year ended December 31, 2015 were made on a timely basis.

Code of Ethics

Pursuant to Section 406 of the Sarbanes-Oxley Act of 2002, we have adopted a Code of Ethics for senior financial officers that applies to our principal executive officer, principal financial officer, principal accounting officer, controller, and other persons performing similar functions. A copy of the code of ethics is posted on, and may be obtained free of charge from our Internet website at http://www.pressurebiosciences.com. If we make any amendments to this Code of Ethics or grant any waiver, including any implicit waiver, from a provision of this Code of Ethics to our principal executive officer, principal financial officer, principal accounting officer, controller, or other persons performing similar functions, we will disclose the nature of such amendment or waiver, the name of the person to whom the waiver was granted and the date of waiver in a Current Report on Form 8-K.

Corporate Governance

Term of Office

Our directors are appointed for a three-year term to hold office until the annual general meeting of our shareholders or until removed from office in accordance with our bylaws. Our officers are appointed by our board of directors and hold office until removed by the board.

Audit Committee

The Audit Committee was established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934. Messrs. Pollack (chairman), Mangiardi and Peterson are currently the members of the Audit Committee.

The Board of Directors has determined that Mr. Pollack qualifies as an "audit committee financial expert" as defined in Item 407(d)(5) of Regulation S-K and is "independent" as defined by SEC and OTC Market rules.

The Audit Committee operates pursuant to a written charter (the "*Audit Committee Charter*"), a current copy of which is publicly available on the investor relations portion of the Company's website at www.pressurebiosciences.com. Under the provisions of the Audit Committee Charter, the primary functions of the Audit Committee are to assist the Board of Directors with the oversight of (i) the Company's financial reporting process, accounting functions, and internal controls, and (ii) the qualifications, independence, appointment, retention, compensation, and performance of the Company's independent registered public accounting firm. The Audit Committee is also responsible for the establishment of "whistle-blowing" procedures, and the oversight of other compliance matters.

Compensation Committee

The Board of Directors has a Compensation Committee, consisting of Messrs. Peterson, Pollack and Mangiardi. The Compensation Committee's duties include (i) reviewing and approving our executive compensation, (ii) reviewing the recommendations of the president and chief executive officer regarding the compensation of our executive officers, (iii) evaluating the performance of the president and chief executive officer, (iv) overseeing the administration and approval of grants of stock options and other equity awards under our equity incentive plans, and (v) recommending compensation for our board of directors and each committee thereof for review and approval by the board of directors. The Compensation Committee operates pursuant to a written charter, a current copy of which is publicly available on the investor relations portion of our website at www.pressurebiosciences.com.

Involvement in Certain Legal Proceedings

To the best of our knowledge, none of our directors or executive officers has, during the past ten years:

- been convicted in a criminal proceeding or been subject to a pending criminal proceeding (excluding traffic violations and other minor offenses);
- had any bankruptcy petition filed by or against the business or property of the person, or of any partnership, corporation or business association of which he was a general partner or executive officer, either at the time of the bankruptcy filing or within two years prior to that time;
- been subject to any order, judgment, or decree, not subsequently reversed, suspended or vacated, of any court of competent jurisdiction or federal or state authority, permanently or temporarily enjoining, barring, suspending or otherwise limiting, his involvement in any type of business, securities, futures, commodities, investment, banking, savings and loan, or insurance activities, or to be associated with persons engaged in any such activity;
- been found by a court of competent jurisdiction in a civil action or by the Securities and Exchange Commission or the Commodity Futures Trading Commission to have violated a federal or state securities or commodities law, and the judgment has not been reversed, suspended, or vacated;
- been the subject of, or a party to, any federal or state judicial or administrative order, judgment, decree, or finding, not subsequently reversed, suspended or vacated (not including any settlement of a civil proceeding among private litigants), relating to an alleged violation of any federal or state securities or commodities law or regulation, any law or regulation respecting financial institutions or insurance companies including, but not limited to, a temporary or permanent injunction, order of disgorgement or restitution, civil money penalty or temporary or permanent cease-and-desist order, or removal or prohibition order, or any law or regulation prohibiting mail or wire fraud or fraud in connection with any business entity; or
- been the subject of, or a party to, any sanction or order, not subsequently reversed, suspended or vacated, of any self-regulatory organization (as defined in Section 3(a)(26) of the Exchange Act), any registered entity (as defined in Section 1(a)(29) of the Commodity Exchange Act), or any equivalent exchange, association, entity or organization that has disciplinary authority over its members or persons associated with a member.

Except as set forth in our discussion below in “Certain Relationships and Related Transactions,” none of our directors or executive officers has been involved in any transactions with us or any of our directors, executive officers, affiliates or associates which are required to be disclosed pursuant to the rules and regulations of the Commission.

ITEM 11. EXECUTIVE COMPENSATION

Executive Officer Compensation

Summary Compensation Table

The Summary Compensation Table below sets forth the total compensation paid or earned for the fiscal years ended December 31, 2015 and 2014 for: (i) each individual serving as our chief executive officer ("*CEO*") or acting in a similar capacity during any part of fiscal 2015; and (ii) the other two most highly paid executive officers (collectively, the "*Named Executive Officers*") who were serving as executive officers at the end of fiscal 2015.

Name and Principal Position	Fiscal Year	**Salary**[1]	Bonus	Stock Awards	**Option Awards**[2]	Non-Qualified Deferred Compensation Earning	**All other Compensation**[3]	Total
Richard T. Schumacher	2015	$294,250	$ -	$ -	$343,000	$ -	$ 16,098	$653,348
President, CEO	2014	294,250	-	-	71,910	-	70,880	437,040
Edmund Ting, Ph.D	2015	197,600	-	-	35,672	-	1,216	234,488
Senior Vice President of Engineering	2014	197,600	-	-	47,940	-	1,670	247,210
Alexander Lazarev, Ph.D	2015	165,600	-	-	31,556	-	7,656	204,812
Vice President of Research and Development	2014	165,600	-	-	35,955	-	7,910	209,465

(1) Salary refers to base salary compensation paid through our normal payroll process. No bonus was paid to any named executive officer for 2015 or 2014.

(2) Amounts shown do not reflect compensation received by the Named Executive Officers. Instead, the amounts shown are the aggregate grant date fair value as determined pursuant to FASB ASC 718, Compensation-Stock Compensation. Please refer to Note 2, xiii, "Accounting for Stock-Based Compensation" in the accompanying Notes to Consolidated Financial Statements for the fiscal year ended December 31, 2015, for the relevant assumptions used to

determine the valuation of stock option grants.

(3) “All Other Compensation” includes our Company match to the executives’ 401(k) contribution and premiums paid on life insurance for the executives. Both of these benefits are available to all of our employees. In the case of Mr. Schumacher, “All Other Compensation” also includes $13,448 in premiums we paid for a life insurance policy to which Mr. Schumacher’s wife is the beneficiary and $50,927 in payments for earned but unused paid time off. “All Other Compensation” for Dr. Lazarev includes $6,000 paid to Dr. Lazarev in lieu of his participation in the medical benefit plan offered by the Company.

Outstanding Equity Awards at Fiscal Year End

The following table sets forth certain information regarding outstanding stock options awards for each of the Named Executive Officers as of December 31, 2015.

Name	Option Awards				
	Number of Securities Underlying Unexercised Options **Exercisable**	Number of Securities Underlying Unexercised Options **Unexercisable** [1]		Option Exercise Price **($)**	Option Expiration Date
Richard T. Schumacher	30,000	-		$ 1.00	3/30/2016
President, CEO	70,000	-		$ 1.00	2/12/2017
	75,000	-		$ 0.60	3/12/2019
	15,000	-		$ 1.00	9/9/2021
	30,000	-		$ 0.60	3/13/2022
	75,000	-		$ 0.40	5/14/2023
	150,006	149,994	(2)	$ 0.30	9/24/2024
	104,167	1,145,833	(3)	$ 0.40	12/31/2025
Edmund Y. Ting, Ph.D	12,000	-		$ 1.00	3/30/2016
Senior Vice President of Engineering	60,000	-		$ 1.00	4/24/2016
	42,000	-		$ 0.60	2/12/2017
	15,000	-		$ 1.00	9/9/2021
	17,500	-		$ 0.60	3/13/2022
	54,000	-		$ 0.40	5/14/2023
	100,004	99,996	(2)	$ 0.30	9/24/2024
	10,833	119,167	(3)	$ 0.40	12/31/2025
Alexander V. Lazarev, Ph.D	50,000	-		$ 1.00	3/30/2016
Vice President of Research & Development	10,000	-		$ 1.00	2/12/2017
	35,000	-		$ 0.60	3/12/2019
	15,000	-		$ 1.00	9/9/2021
	15,000	-		$ 0.60	3/13/2022
	45,000	-		$ 0.40	5/14/2023
	75,003	74,997	(2)	$ 0.30	9/24/2024
	9,583	105,417	(3)	$ 0.40	12/31/2025

(1) All unvested stock options listed in this column were granted to the Named Executive Officer pursuant to our 2005 Equity Incentive Plan, 2013 Equity Incentive Plan and 2015 Nonqualified Incentive Plan. All options expire ten years after the date of grant. Unvested stock options become fully vested and exercisable upon a change of control of our Company.

(2) Options to purchase shares of common stock were granted on September 24, 2014 to each of the Named Executive Officers, of which 1/6th of the stock options will vest six

months from the date of grant while the remainder will vest monthly over the remaining three year vesting period.

(3) Options to purchase shares of common stock were granted on December 31, 2015 to each of the Named Executive Officers, of which the stock options will vest monthly from the date of grant over the three year vesting period.

Retirement Plan

All employees, including the named executive officers, may participate in our 401(k) Plan. Under the 401(k) Plan, employees may elect to make before tax contributions of up to 60% of their base salary, subject to current Internal Revenue Service limits. The 401(k) Plan does not permit an investment in our common stock. We match employee contributions up to 50% of the first 2% of the employee's earnings. Our contribution is 100% vested immediately.

Severance Arrangements

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

Change-in-Control Arrangements

Pursuant to severance agreements with each of Mr. Schumacher, Dr. Ting, Dr. Lazarev and Dr. Lawrence, each such executive officers, is entitled to receive a change of control payment in an amount equal to one year (other than Mr. Schumacher) of such executive officer's annualized base salary compensation, accrued paid time off, and medical and dental coverage, in the event of a change of control of our Company. In the case of Mr. Schumacher, his payment is equal to two years of annualized base salary compensation, accrued paid time off, and two years of medical and dental coverage.

Pursuant to our equity incentive plans, any unvested stock options held by a named executive officer will become fully vested upon a change in control (as defined in the 2005 Equity Incentive Plan) of our Company.

Director Compensation and Benefits

The following table sets forth certain information regarding compensation earned or paid to our directors during fiscal 2015.

Name	Fees Earned or Paid in Cash [1]	Stock Awards (1)	Option Awards [2][3]	Total
Vito J. Mangiardi	40,000	-	29,149	69,149
Jeffrey N. Peterson	60,000	-	52,361	112,361
Kevin A. Pollack	40,000	-	29,149	69,149
Michael S. Urdea, Ph. D.	55,000	-	22,402	77,402

Our non-employee directors receive the following compensation for service as a director:

(1) Each director currently earns a quarterly stipend of $10,000 for attending meetings of the full board of directors (whether telephonic or in-person) and attending committee meetings in 2015. Mr. Peterson currently earns $15,000 per quarter as chairman of the board of directors and Dr. Urdea receives $15,000 annually for serving on the scientific advisory committee. There is no limit to the number of board of directors or committee meetings that may be called.

(2) Amounts shown do not reflect compensation received by the directors. Instead, the amounts shown are the aggregate grant date fair value as determined pursuant to FASB ASC 718, Compensation-Stock Compensation. Please refer to Note 2, xiii, “Accounting for Stock-Based Compensation” in the accompanying Notes to the Consolidated Financial Statements for the fiscal year ended December 31, 2015, for the relevant assumptions used to determine the valuation of stock option grants.

(3) The following table shows the total number of outstanding stock options as of December 31, 2015 that have been issued as director compensation.

Name	Aggregate Number of Stock Options Outstanding
Vito J. Mangiardi	258,000
Jeffrey N. Peterson	452,250
Kevin A. Pollack	258,000
Michael S. Urdea, Ph. D.	220,500

Report from Compensation Committee

General

Messrs. Peterson, Pollack and Mangiardi are currently the members of the Compensation Committee. The Compensation Committee operates pursuant to a written charter, a current copy of which is publicly available on the investor relations portion of our website at www.pressurebiosciences.com. The primary functions of the Compensation Committee include (i) reviewing and approving our executive compensation, (ii) reviewing the recommendations of the president and chief executive officer regarding the compensation of our executive officers, (iii) evaluating the performance of the president and chief executive officer, (iv) overseeing the administration and approval of grants of stock options and other equity awards under our equity incentive plans, and (v) recommending compensation for our board of directors and each committee thereof for review and approval by the board of directors.

The Compensation Committee may form and delegate authority to one or more subcommittees as it deems appropriate from time to time under the circumstances (including (a) a subcommittee consisting of a single member and (b) a subcommittee consisting of at least two members, each of whom qualifies as a "non-employee director," as such term is defined from time to time in Rule 16b-3 promulgated under the Securities Exchange Act of 1934, and an "outside director," as such term is defined from time to time in Section 162(m) of the Internal Revenue Code of 1986, as amended, and the rules and regulations there under).

Compensation Objectives

In light of the relatively early stage of commercialization of our products, we recognize the importance of attracting and retaining key employees with sufficient experience, skills, and qualifications in areas vital to our success, such as operations, finance, sales and marketing, research and development, engineering, and individuals who are committed to our short- and long-term goals. The Compensation Committee has designed our executive compensation programs with the intent of attracting, motivating, and retaining experienced executives and, subject to our limited financial resources, rewarding them for their contributions by offering them a competitive base salary, potential for annual cash incentive bonuses, and long-term equity-based incentives, typically in the form of stock options. The Compensation Committee strives to balance the need to retain key employees with financial prudence given our history of operating losses, limited financial resources and the early stage of our commercialization.

Executive Officers and Director Compensation Process

The Compensation Committee considers and determines executive compensation according to an annual objective setting and measurement cycle. Specifically, corporate goals for the year are initially developed by our executive officers and are then presented to our board of directors and Compensation Committee for review and approval. Individual goals are intended to focus on contributions that facilitate the achievement of the corporate goals. Individual goals are first proposed by each executive officer, other than the president and CEO, then discussed by the entire senior executive management team and ultimately compiled and prepared for submission to our board of directors and the Compensation Committee, by the president and chief executive officer. The Compensation Committee sets and approves the goals for the president and chief executive officer. Generally, corporate and individual goals are set during the first quarter of each calendar year. The objective setting process is coordinated with our annual financial planning and budgeting process so our board of directors and Compensation Committee can consider overall corporate and individual objectives in the context of budget constraints and cost control considerations. Annual salary increases, bonuses, and equity awards, such as stock option grants, if any, are tied to the achievement of these corporate and individual performance goals as well as our financial position and prospects.

Under the annual performance review program, the Compensation Committee evaluates individual performance against the goals for the recently completed year. The Compensation Committee's evaluation generally occurs in the first quarter of the following year. The evaluation of each executive (other than the president and chief executive officer) begins with a written self-assessment submitted by the executive to the president and chief executive officer. The president and chief executive officer then prepares a written evaluation based on the executive's self-assessment, the president and chief executive officer's evaluation, and input from others within the Company. This process leads to a recommendation by the president and chief executive officer for a salary increase, bonus, and equity award, if any, which is then considered by the Compensation Committee. In the case of the president and chief executive officer, the Compensation Committee conducts his performance evaluation and determines his compensation, including salary increase, bonus, and equity awards, if any. We generally expect, but are not required, to implement salary increases, bonuses, and equity awards, for all executive officers, if and to the extent granted, by April 1 of each year.

Non-employee director compensation is set by our board of directors upon the recommendation of the Compensation Committee. In developing its recommendations, the Compensation Committee is guided by the following goals: compensation should be fair relative to the required services for directors of comparable companies in our industry and at our Company's stage of development; compensation should align directors' interests with the long-term interest of stockholders; the structure of the compensation should be simple, transparent, and easy for stockholders to understand; and compensation should be consistent with the financial resources, prospects, and competitive outlook for the Company.

In evaluating executive officer and director compensation, the Compensation Committee considers the practices of companies of similar size, geographic location, and market focus. In order to develop reasonable benchmark data the Compensation Committee has referred to publicly available sources such as www.salary.com and the BioWorld Survey. While the Compensation Committee does not believe benchmarking is appropriate as a stand-alone tool for setting compensation due to the unique aspects of our business objectives and current stage of development, the Compensation Committee generally believes that gathering this compensation information is an important part of its compensation-related decision making process.

The Compensation Committee has the authority to hire and fire advisors and compensation consultants as needed and approve their fees. No advisors or compensation consultants were hired or fired in fiscal 2015. The Compensation Committee is also authorized to delegate any of its responsibilities to sub committees or individuals as it deems appropriate. The Compensation Committee did not delegate any of its responsibilities in fiscal 2015.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

Beneficial Ownership Information

The following table sets forth certain information as of January 31, 2016 concerning the beneficial ownership of common stock for: (i) each director and director nominee, (ii) each Named Executive Officer in the Summary Compensation Table under “Executive Compensation” above, (iii) all executive officers and directors as a group, and (iv) each person (including any “group” as that term is used in Section 13(d)(3) of the Exchange Act) known by us to be the beneficial owner of 5% or more of our common stock. The address for each of the persons below who are beneficial owners of 5% or more of our common stock is our corporate address at 14 Norfolk Avenue, South Easton, MA 02375.

Beneficial ownership has been determined in accordance with the rules of the SEC and is calculated based on 21,996,330 shares of our common stock issued and outstanding as of January 31, 2016. Shares of common stock subject to options, warrants, preferred stock or other securities convertible into common stock that are currently exercisable or convertible, or exercisable or convertible within 60 days of January 31, 2016, are deemed outstanding for computing the percentage of the person holding the option, warrant, preferred stock, or convertible security but are not deemed outstanding for computing the percentage of any other person.

Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of common stock that they beneficially own.

Name of Beneficial Owner	Amount and Nature of Beneficially Ownership(1)	Percent of Class	
Richard T. Schumacher(2)	1,998,324	8.6	%
Jeffrey N. Peterson(3)	966,125	4.2	%
Kevin A. Pollack(4)	943,244	4.2	%
Vito J. Mangiardi(5)	715,310	3.2	%
Michael S. Urdea, Ph.D(6)	694,165	3.1	%
Edmund Y. Ting, Ph.D(7)	344,082	1.5	%
Alexander V. Lazarev, Ph.D(8)	223,598	1.0	%
All other officers(9)	232,691	1.0	%
All Executive Officers and Directors as a Group (eight persons)(8)	6,117,539	22.9	%

1) The terms of the Company's Series D Convertible Preferred Stock and Series D warrants, Series G Convertible Preferred Stock and Series G warrants, Series H Convertible Preferred Stock and Series H warrants, Series J Convertible Preferred Stock and Series J warrants, Series K Convertible Preferred Stock and Series K warrants and various Common Stock warrants issued in connection with the Company's fundraising efforts contain a limitation on conversion which prevents the holder from converting shares of Series D, Series G, Series H, Series J and Series K Convertible Preferred Stock into, or exercise of the warrants and various Common Stock warrants for, shares of Common Stock if, after giving effect to the conversion or exercise, as the case may be, the holder would beneficially own more than 4.99% of the outstanding shares of Common Stock. The holder may elect to increase this limitation to 9.99%, 14.99% or 19.99%, upon not less than 61 days prior written notice to the Company.

2) Includes (i) 519,173 shares of Common Stock issuable upon exercise of options; (ii) 63,000 shares of Common Stock issuable upon conversion of Series J Convertible Preferred Stock; (iii) 63,000 shares of Common Stock issuable upon conversion of Series J Convertible Preferred Stock; (iv) 122,000 shares of Common Stock issuable upon conversion of Series K Convertible Preferred Stock; and (v) 457,429 shares of Common Stock issuable upon the exercise of warrants. Does not include 20,162 shares of Common Stock held by Mr. Schumacher's minor son as his wife exercises all voting and investment control over such shares.

3) Includes (i) 306,750 shares of Common Stock issuable upon exercise of options; (ii) 103,000 shares of Common Stock issuable upon conversion of Series K Convertible Preferred Stock; and (iii) 267,000 shares of Common Stock issuable upon the exercise of warrants.

4) Includes (i) 177,000 shares of Common Stock issuable upon exercise of options; (ii) 200,000 shares of Common Stock issuable upon conversion of Series K Convertible Preferred Stock; and (iii) 301,000 shares of Common Stock issuable upon the exercise of warrants.

5) Includes (i) 177,000 shares of Common Stock issuable upon exercise of options; (ii) 120,000 shares of Common Stock issuable upon the exercise of warrants.

6) Includes (i) 158,250 shares of Common Stock issuable upon exercise of options; (ii) 177,000 shares of Common Stock issuable upon the exercise of warrants.

7) Includes (i) 311,337 shares of Common Stock issuable upon exercise of options; (ii) 200,000 shares of Common Stock issuable upon conversion of Series K Convertible Preferred Stock and (iii) 193,000 shares of Common Stock issuable upon the exercise of warrants.

8) Includes (i) 204,586 shares of Common Stock issuable upon exercise of options; (ii) 240,000 shares of Common Stock issuable upon conversion of Series K Convertible Preferred Stock; and (iii) 177,000 shares of Common Stock issuable upon the exercise of warrants.

9) Includes (i) 203,753 shares of Common Stock issuable upon exercise of options; (ii) 6,220 shares of Common Stock issuable upon the exercise of warrants.

Equity Compensation Plan Information

We maintain a number of equity compensation plans for employees, officers, directors and other entities and individuals whose efforts contribute to our success. The table below sets forth certain information as of our fiscal year ended December 31, 2015 regarding the shares of our common stock available for grant or granted under our equity compensation plans.

Plan Category	Number of securities to be issued upon exercise of outstanding options	Weighted-average exercise price of outstanding options	Number of securities remaining available for future issuance under equity compensation plans
Equity compensation plans approved by security holders(1)	3,503,250	$ 0.46	1,236,750
Equity compensation plans adopted by the Board of Directors(2)	2,068,000	0.40	2,932,000

(1) Includes the following plans: 2005 Equity Incentive Plan and 2013 Equity Incentive Plan.

(2) Includes the following plan: 2015 Nonqualified Stock Option Plan.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS; AND DIRECTOR INDEPENDENCE.

Board Independence

Our board of directors has reviewed the qualifications of each of Messrs. Peterson, Mangiardi, Pollack, and Dr. Urdea constituting more than a majority of our directors and has affirmatively determined that each individual is "independent" as such term is defined under the current listing standards of the OTC Markets. The board of directors has determined that none of these directors has a material relationship with us that would interfere with the exercise of independent judgment. In addition, each member of the Audit Committee is independent as required under Section 10A(m)(3) of the Securities Exchange Act of 1934, as amended (the "Exchange Act").

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The Audit Committee appointed MaloneBailey LLP, an independent registered public accounting firm, to audit the Company's consolidated financial statements for the fiscal year ended December 31, 2015. Marcum has served as the Company's independent registered public accounting firm in prior years since April 16, 2010.

Independent Registered Public Accounting Fees

The following is a summary of the fees billed to the Company by Marcum LLP and MaloneBailey LLP, the Company's previous and current independent registered public accounting firm, respectively for the fiscal year ended December 31, 2015 and 2014:

	Fiscal 2015 Fees	Fiscal 2014 Fees
Audit Fees	$115,615	$120,000
Audit-Related Fees	13,012	56,799
Tax and Other Fees	-	-
	$128,627	$176,799

Audit Fees. Consists of aggregate fees billed for professional services rendered for the audit of the Company's consolidated financial statements and review of the interim consolidated financial statements included in quarterly reports, as well as services that are normally provided by the independent registered public accounting firm in connection with statutory and regulatory filings or engagements.

Audit-Related Fees. Consists of aggregate fees billed for assurance and related services that are reasonably related to the performance of the audit or review of the Company's consolidated financial statements and are not reported under "Audit Fees."

Audit Committee Policy on Pre-Approval of Services

The Audit Committee's policy is to pre-approve all audit and permissible non-audit services provided by the independent registered public accounting firm. These services may include audit services, audit-related services, tax services, and other services. Pre-approval is generally provided for up to one year. The Audit Committee may also pre-approve particular services on a case-by-case basis.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

Exhibit No.		Reference
3.1	Restated Articles of Organization of the Company	A-3.1**
3.2	Articles of Amendment to Restated Articles of Organization of the Company	B-3.1**
3.3	Articles of Amendment to Restated Articles of Organization of the Company, as amended	O-3.1**
3.4	Articles of Amendment to Restated Articles of Organization of the Company, as amended	L-3.1**
3.5	Articles of Amendment to Restated Articles of Organization of the Company, as amended	P-3.1**
3.6	Articles of Amendment to Restated Articles of Organization of the Company, as amended	U-3.1**
3.7	Amended and Restated By-Laws of the Company	A-3.2**
3.8	Amendment to Amended and Restated By-Laws of the Company	C-3.3**
3.9	Articles of Amendment to Restated Articles of Organization of the Company, as amended	W-3.1
3.10	Articles of Amendment to Restated Articles of Organization of the Company, as amended	X-3.1
3.11	Articles of Amendment to Restated Articles of Organization of the Company, as amended	Z-3.1
4.1	Specimen Certificate for Shares of the Company’s common stock	D-4.1**
4.2	Description of Capital Stock (contained in the Amended and Restated Articles of Organization, as amended, of the Company filed as Exhibits 3.1, 3.2, 3.3, 3.4, 3.5, 3.6 and 3.7)	A-3.1 & 3.2, B-31, O-31, L-31, P-31 and U.31**
4.3		E-4**

	Rights Agreement dated as of February 27, 2003 between the Company and Computer share Trust Company, Inc.	
4.4	Amendment No. 1 to Rights Agreement dated April 16, 2004 between the Company and Computershare Trust Company, Inc.	F-4**
4.5	Amendment No. 2 to Rights Agreement dated November 8, 2011 between the Company and Computershare Trust N.A.	U-4.2**
4.6	Securities Purchase Agreement dated November 21, 2007 between the Company and the purchasers named therein	G-4.9**
4.7	Registration Rights Agreement dated November 21, 2007 between the Company and the purchasers named therein	G-4.10**
4.8	Securities Purchase Agreement dated February 12, 2009 between the Company and the purchasers named therein	L-4.1**
4.9	Form of 15-Month Preferred Stock Warrant	L-4.3**
4.10	Form of 30-Month common stock Purchase Warrant	L-4.4**
4.11	Amendment No. 1 to 30-Month common stock Purchase Warrant	Q-4.2**
4.12	Amendment No. 2 to 30-Month common stock Purchase Warrant	S-4.1**
4.13	Registration Rights Agreement dated February 12, 2009 between the Company and the purchasers named therein	L-4.5**
4.14	Securities Purchase Agreement dated November 18, 2009 between the Company and the purchasers named therein	O-4.1**
4.15	Registration Rights Agreement dated November 18, 2009 between the Company and the purchasers named therein	O-4.3**
4.16	Series B Preferred Stock Warrant	O-4.2**

Exhibit No.		Reference
4.17	Amendment No. 1 to Series B Convertible Preferred Stock Purchase Warrant	Q-4.1**
4.18	Amendment No. 2 to Series B Convertible Preferred Stock Purchase Warrant	S-4.2**
4.19	Securities Purchase Agreement dated April 8, 2011 between the Company and the Purchasers Named Therein	P-4.1**
4.20	Registration Rights Agreement dated April 8, 2011 between the Company and the Purchasers Named Therein	P-4.3**
4.21	Amendment No. 1 to Securities Purchase Agreement dated June 21, 2011, amending Securities Purchase Agreement dated April 8, 2011 between the Company and the Purchasers Named Therein	R-4.1**
4.22	Form of common stock Purchase Warrant	P-4.2**
4.23	Form of Warrant Issued to Lenders	T-4.1**
4.24	Form of Promissory Note Issued to Lenders	T-4.2**
4.25	Form of common stock Purchase Warrant	U-4.1**
4.26	Form of Warrant	V-4.1**
4.27	Securities Purchase and Exchange Agreement, dated December 28, 2012	W-4.2
4.28	Securities Purchase and Exchange Agreement, dated December 28, 2012	X-4.1
4.29	Form of Warrant	X-4.2
4.30	Registration Rights Agreement, dated February 6, 2013 between the Company and Purchasers named therein	X-4.3
4.31	10% Convertible Debenture, issued on June 7, 2013 for a Purchase price of $250.00	Y-4.1
4.32	Securities Purchase and Exchange Agreement, dated December 12, 2013	Z-4.1
4.33	Form of Warrant, initial exercise date December 12, 2013	Z-4.2
4.34	Registration Rights Agreement, dated December 12, 2013	Z-4.3
10.1	1999 Non-Qualified Stock Option Plan*	H**
10.2	1999 Employee Stock Purchase Plan*	H**

10.3	2005 Equity Incentive Plan.*	I-99.1**
10.4	Amendment No. 1 to 2005 Equity Incentive Plan*	M-10.1**
10.5	Description of Compensation for Certain Directors*	N-10.7**
10.6	Severance Agreement between the registrant and Richard T. Schumacher*	N-10.6**
10.7	Form of Severance Agreement including list of officers to whom provided*	N-10.7**
10.8	Consent Agreement, dated May 29, 2007, by and among the registrant, PBI Source Scientific, Inc., Source Scientific, LLC, BIT Analytical Instruments, Inc., Richard W. Henson and Bruce A. Sargeant.	J-10.1**
10.9	Asset Purchase Agreement dated April 16, 2004 between the Company, BBI Biotech Research Laboratories, Inc. and SeraCare Life Sciences, Inc.	F-1**
10.10	Technology Transfer and Patent Assignment Agreement dated October 7, 1996, between Bioseq, Inc. and BioMolecular Assays, Inc.	N-10.11**
10.11	Amendment to Technology Transfer and Patent Assignment Agreement dated October 8, 1998 between Bioseq, Inc. and BioMolecular Assays, Inc.	N-10.12**
10.12	Nonexclusive License Agreement dated September 30, 1998 between Bioseq, Inc. and BioMolecular Assays, Inc.	N-10.13**
10.13	Agreement for Research Services dated February 1, 2006 by and between the registrant and the University of New Hampshire	K-10.1**
10.14	Placement Agency Agreement between the Placement agent and the Company, dated November 8, 2011	U-10.1**
10.15	Form of Securities Purchase Agreement	U-10.2**
10.16	Form of Escrow Agreement, as amended	U-10.3**
10.17	Form of Securities Purchase Agreement	V-3.1**
10.18	Securities Purchase Agreement, dated June 7, 2013	Y-10.1
23.1	Consent of Independent Registered Public Accounting Firm (Malone Bailey LLP)	Filed herewith
23.2	Consent of Independent Registered Public Accounting Firm (Marcum LLP)	Filed herewith
31.1	Principal Executive Officer and Principal Financial Officer Certification Pursuant to Item 601(b)(31) of Regulation S-K, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith
32.1		

	Principal Executive Officer and Principal Financial Officer Certification Pursuant to Item 601(b)(32) of Regulation S-K, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed herewith
101	Interactive Data File	Filed herewith

*Management contract or compensatory plan or arrangement.

**Previously filed as follows.

A We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Registration Statement on Form S-1 (Registration No. 333-10759) filed with the Commission on August 23, 1996.

B We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2004.

C We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2002.

D We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Annual Report on Form 10-KSB for the fiscal year ended December 31, 2004.

E We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Current Report on Form 8-K filed with the Commission March 12, 2003.

F We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Current Report on Form 8-K filed with the Commission April 16, 2004.

G We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Registration Statement on Form S-3 (Registration No. 333-148227) filed with the Commission on December 20, 2007.

H We previously filed this exhibit as an appendix to the registrant's proxy statement filed June 14, 1999.

I We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Registration Statement on Form S-8 (Reg. No. 333-128594) filed with the Commission on September 26, 2005.

J We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Current Report on Form 8-K filed with the Commission on June 1, 2007.

K We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Current Report on Form 8-K filed with the Commission on February 7, 2006.

L We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Current Report on Form 8-K filed with the Commission on February 18, 2009.

M We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Current Report on Form 8-K filed with the Commission on September 29, 2008.

N We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Annual Report on Form 10-K filed with the Commission on March 27, 2008.

O We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Current Report on Form 8-K filed with the Commission on November 19, 2009.

P We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Current Report on Form 8-K filed with the Commission on April 12, 2011.

Q

We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Current Report on Form 8-K filed with the Commission on August 11, 2011.

R We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Current Report on Form 8-K filed with the Commission on June 21, 2011.

S We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Current Report on Form 8-K filed with the Commission on October 6, 2011.

T We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2011.

U We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Current Report on Form 8-K filed with the Commission on November 10, 2011.

V We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Current Report on Form 8-K filed with the Commission on February 9, 2012.

W We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Current Report on Form 8-K filed with the Commission on January 4, 2013.

X We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Current Report on Form 8-K filed with the Commission on February 13, 2013.

Y We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Current Report on Form 8-K filed with the Commission on June 13, 2013.

Z We previously filed this exhibit with the referenced exhibit number as an exhibit to the registrant's Current Report on Form 8-K filed with the Commission on December 12, 2013.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: April 5, 2016 Pressure BioSciences, Inc.

By: */s/ Richard T. Schumacher*
Richard T. Schumacher
President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacity and on the dates indicated.

Name	Capacity	Date
/s/ Richard T. Schumacher Richard T. Schumacher	President, Chief Executive Officer, Treasurer, Clerk and Director (Principal Executive Officer and Principal Financial Officer)	April 5, 2016
/s/ Jeffrey N. Peterson Jeffrey N. Peterson	Chairman of the Board of Directors	April 5, 2016
/s/ Mickey Urdea Michael S.Urdea, Ph.D.	Director	April 5, 2016
/s/ Vito Mangiardi Vito J. Mangiardi	Director	April 5, 2016
/s/ Kevin Pollack Kevin A. Pollack	Director	April 5, 2016