

POSITRON CORP  
Form 10-K  
April 15, 2013

**U.S. SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-K

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

**FOR THE YEAR ENDED DECEMBER 31, 2012**

Commissions file number: 000-24092

Positron Corporation

A Texas Corporation

530 Oakmont Lane, Westmont, IL 60559 (317) 576-0183

IRS Employer Identification Number: 76-0083622

Securities registered under Section 12(b) of the Exchange Act: None.

Securities registered under Section 12(g) of the Exchange Act: Common Stock, \$0.01 par value.

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Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.  
Yes  No

Indicate by a check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes   
No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark 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 definitions of "large accelerated filer", "accelerated filer", or "smaller reporting company" in Rule 12b-2 of the Exchange Act (check one):

Large accelerated filer  Accelerated filer

Non-accelerated filer  Smaller reporting Company

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

The aggregate market value of voting common stock held by non-affiliates of the registrant (assuming, for purposes of this calculation, without conceding, that all executive officers and directors are "affiliates") was \$12,739,773.72 as of

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June 30, 2012, based on the closing sale price of such common stock as reported on the OTC Bulletin Board.

There were 1,451,927,262 shares of the registrant's common stock, par value \$0.01 per share, outstanding as of April 15, 2013.

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## **PART I**

### **Forward-Looking Statements**

*This report contains various forward-looking statements regarding our business, financial condition, results of operations and future plans and projects. Forward-looking statements discuss matters that are not historical facts and can be identified by the use of words such as “believes,” “expects,” “anticipates,” “intends,” “estimates,” “projects,” “can,” “could,” “may,” “will,” “would” or similar expressions. In this report, for example, we make forward-looking statements regarding, among other things, our expectations about the rate of revenue growth in specific business segments and the reasons for that growth and our profitability, our expectations regarding an increase in sales, strategic traction and sales and marketing spending, uncertainties relating to our ability to compete, uncertainties relating to our ability to increase our market share, changes in coverage and reimbursement policies of third-party payers and the effect on our ability to sell our products and services, the existence and likelihood of strategic acquisitions and our ability to timely develop new products or services that will be accepted by the market.*

*Although these forward-looking statements reflect the good faith judgment of our management, such statements can only be based upon facts and factors currently known to us. Forward-looking statements are inherently subject to risks and uncertainties, many of which are beyond our control. As a result, our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth below under the caption “Risk Factors.” For these statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. You should not unduly rely on these forward-looking statements, which speak only as of the date on which they were made. They give our expectations regarding the future but are not guarantees. We undertake no obligation to update publicly or revise any forward-looking statements, whether as a result of new information, future events or otherwise, unless required by law.*

### **Item 1. Business**

#### **Organization**

Positron Corporation (the “Company” or “Positron”), unless the context requires otherwise, in this report the terms “we,” “us” and “our” refer to Positron Corporation.

#### **Nature of Business**

Positron Corporation is a nuclear medicine healthcare company specializing in the field of cardiac Positron Emission Tomography (PET) imaging - the gold standard diagnostic test in nuclear cardiology.

Positron's products and services enable healthcare providers to more accurately diagnose disease and improve patient outcomes, while practicing cost effective medicine. Positron is the only company that will provide an economical, end-to-end solution for PET myocardial perfusion imaging through complementary product integration of PET imaging systems, radiopharmaceuticals and radioisotopes.

The Company believes that our unique proprietary products, market position and vertically integrated strategy will lead to accelerated adoption and growth of the cardiac PET modality in the U.S. and emerging markets. Through leadership within our field, Positron intends to gain a dominant market position with strong earnings potential, ultimately becoming a sustained, long-term value creator for industry participants and our shareholders.

Our mission is to facilitate the stabilization, security and growth of the cardiac PET industry by providing cardiologists with: an economical, high-quality, PET imaging system; a reliable supply of radiopharmaceuticals for imaging procedures, and a comprehensive clinical, technical, support and service program.

## **Corporate History**

Positron Corporation was incorporated as a Texas corporation in 1983 with its corporate offices in Westmont, Illinois.

On June 30, 2005, the Company entered into a Joint Venture Contract with Neusoft Medical Systems Co., Inc. of Shenyang, in the People's Republic of China ("Neusoft"). Pursuant to the Joint Venture Contract, the parties formed a jointly-owned company, Neusoft Positron Medical Systems Co., Ltd. (the "JV Company"), to engage in the manufacturing of PET and PET/CT medical imaging equipment. The JV Company received its business license and was organized in September 2005.

On June 5, 2008, the Company acquired all of the issued and outstanding stock of Dose Shield Corporation, a radiopharmaceutical technology company based in Fishers, Indiana. Dose Shield was the originator of the Nuclear Pharm-Assist™ automated radiopharmaceutical system. In exchange Dose Shield received 80,000,000 shares of Common Stock and cash in the amount of \$600,000. In addition, the Company agreed to pay royalties equal to 1.5% of net revenues generated from all future sales of all Dose Shield equipment sold by Positron Pharmaceuticals.





On November 18, 2008, Solaris Opportunity Fund, L.P. (“Solaris”) became the Company’s controlling shareholder, having acquired approximately 60% of the Company’s voting capital stock at that time pursuant to a Securities Exchange Agreement among Solaris, the Company and Imagin Molecular Corporation, a publicly owned Delaware corporation (“Imagin”). Pursuant to the Exchange Agreement, Imagin transferred and assigned all of its rights title and interest in two notes receivable in the aggregate amount of \$2,181,000 due from the Company (the “Notes”) and 100,000,000 shares of the Company’s common stock, par value \$0.01 per share (the “Common Stock”) pledged to Solaris (the “Pledged Shares”) in exchange for the return of the 20,000,000 shares of Imagin’s common stock and 4,387,500 shares of Imagin’s Series A Preferred Stock, and the retirement and satisfaction of obligations to the advances made in the amount of \$200,000 to Imagin by Solaris. Simultaneously therewith, Solaris exchanged the Notes plus accrued interest, the Pledged Shares, and retired advances made to the Company in the aggregate amount of \$1,155,000, for the issuance of 100,000 shares of the Company’s Series S Preferred Stock.

In 2009, the Company moved its corporate administration from its Houston, Texas and Ottawa, Canada facilities to its Fishers, Indiana location, the Company continues to maintain its parts repair facility in the Houston area. Additionally, the Company also relocated Positron’s PET service & parts, purchasing and logistics/shipping functions to its Niagara Falls, New York location.

In 2010, the Company moved its accounting and corporate administration and sales and marketing to its Westmont, Illinois location.

On January 4, 2012, the Company increased the number of the Company’s authorized shares of capital stock from 810,000,000 shares to 3,020,000,000 of which 3,000,000,000 shares will be common stock par value \$0.01 per share (“Common Stock”) and 20,000,000 shares will be preferred stock par value \$1.00 per share (“Preferred Stock”).

On January 17, 2012, the Company acquired all of the membership interests and retained all employees of Manhattan Isotope Technology, LLC (“MIT”) based in Lubbock, Texas. In exchange, MIT’s previous owners shall receive cash advances, shares of Positron Common Stock, the assumption of certain indebtedness and earn-out consideration of up to \$3,500,000 based on 20 percent of the net income from sales relating to radioisotope and radiopharmaceutical operations of MIT through December 31, 2018. MIT is the only commercial resource in the United States with practical knowledge and experience in all stages of strontium-82 (Sr-82) production and spent generator lifecycle management. Positron will focus on increasing Sr-82 supply through the processing of proton irradiated target material from domestic and foreign suppliers and recycling Sr-82 from spent generators. MIT has become the first supplier to provide Active Pharmaceutical Ingredient (API) grade Sr-82 in the U.S. besides the United States Department of Energy. In an effort to expand Positron’s radioisotope product offerings, MIT possesses the unique and specialized expertise in the production of additional radioisotopes that are currently only supplied by the U.S. Government.

On July 9, 2012, the Company received approval of a Pledge Resolution for \$15 Million in Tax Increment Financing (TIF) Bonds, from the City of Gary Redevelopment Commission, of Indiana towards the development of Positron's 70 MeV cyclotron project. In addition to the TIF incentives, the City of Gary will assist in sourcing the appropriate allocation of New Market Tax Credits (NMTC) that could cover approximately \$15 Million, or 33%, of the estimated total development costs for the project. Positron seeks to raise approximately \$65 million, in total, for this project through a combination of debt, equity and incentives.

## **The Company**

Positron, a pioneer in cardiac PET, is well branded in the field of nuclear cardiology. Positron has gained significant traction in the industry based on its imaging technology and strong commitment towards advancing cardiac care. Originally a research & development company, Positron has expanded from a medical imaging device manufacturing to a company which is integrating the key components of the cardiac PET supply chain and will be able to offer an end-to-end solution for the nuclear cardiology market. Led by an experienced management team, Positron is moving towards becoming a true business enterprise with strong recurring revenue generating business model scalable to the global marketplace.

The Company believes that our unique products, market position and vertical integration strategy will stabilize and secure the supply chain, significantly reducing costs and industry uncertainties — a substantial advantage, leading to further adoption and growth of the cardiac PET modality.

Positron, through an acquisition of MIT in 2012, is the only commercial resource in the U.S. with practical knowledge and experience in all stages of Strontium-82 (Sr-82) production and spent generator lifecycle management. Positron seeks to secure both the short and long-term supply of radioisotopes used in cardiac PET imaging. Currently, the Company is producing Active Pharmaceutical Ingredient (API) grade Sr-82 at its Lubbock, Texas, facility from Sr-82 received from foreign irradiated source suppliers. The Company intends to further supplement strontium resources by pursuing additional supply agreements with all available domestic and foreign irradiated source suppliers and through recycling expired generators. Positron seeks to secure a long-term North America supply of medical radioisotopes for cardiac PET imaging by building and operating the world's largest commercial high energy/high current cyclotron (70MeV) within the U.S. This 70 MeV cyclotron will be at the heart of providing a reliable, dependable, and indigenous supply of radioisotopes, stabilizing and building confidence in the PET market and nuclear medicine community overall. Securing a reliable supply of radioisotopes should also increase the demand for Positron's complementary products: pharmaceuticals, imaging equipment and services.

Positron's business strategy is to gain a dominant market share through the vertical integration of such key components as: imaging technologies, clinical services, radiopharmaceutical and radioisotope processing, production, supply and distribution. Positron intends to maximize market share by offering cost-effective, value added solutions to end-users that meet the current and future market demands of nuclear cardiology.

## **Our Products and Key Components**

The Company offers a range of products and services for nuclear imaging community that are discussed below.

### **PET Imaging Systems: Support and Service**

Attrius® is the only FDA approved dedicated PET scanner optimized for cardiac imaging. Attrius® was named the "Most Innovative Device of 2010" by the renowned business research and consulting firm Frost & Sullivan. The Attrius® provides a robust, cardiac specific imaging software package designed to ensure effortless interpretation for today's most challenging clinical cases for nuclear cardiologists. Heart disease specific software includes the ability to monitor therapy, coronary artery overlay display, and open architecture for new protocol development and customization and motion correction software. The Attrius® is targeted for cardiac clinics and is designed to meet the performance, budget and space needs of the most demanding cardiologists.

Positron has further advanced its product portfolio with the addition of Coronary Flow Reserve (CFR) software. The University of Texas Health Science Center at Houston has received FDA approval for the CFR quantification software, to be used with Positron's Attrius PET scanner. Positron is licensed to distribute and support this software, a clear differentiator in patient diagnosis.

Positron offers a comprehensive world-class clinical, technical, and service customer care plan, through its PosiStar® customer care services. PosiStar® includes: 24/7 clinical and service support; uptime guarantees; remote access diagnostic/maintenance; physician interpretation training; billing training; nurse training; post-install physician over-reads; ICANL approval assistance; 6 months evaluation/assessment; industry luminary collaboration, etc. PosiStar® is a fee-based service, typically for three to five years.

### **Radiopharmaceuticals: Manufacturing, Processing & Distribution**

Positron has negotiated a strategic alliance with Jubilant DraxImage Inc. (JDI), an Sr-82/Rb-82 generator manufacturer, whose generator and related infusion cart are in the final stages of the FDA's approval process. Upon FDA approval, JDI and Positron will market and distribute the first and only alternative to Bracco's Cardiogen-82 generator, which had multiple recalls during the last two years. Positron will supply JDI with Sr-82 for the generator production. Positron intends to couple the generator with the Attrius sales and utilize Positron's current nuclear cardiology network. Initial efforts will be focused on North America. This product is a key element of Positron's strategy to vertically integrate the production and delivery of a complete cardiac imaging solution: isotope (Sr-82), generator (Rb-82), and imaging system (Attrius®).

PosiRx® is a radiopharmaceutical system that automates the elution, preparation and dispensing processes for radiopharmaceutical agents used in molecular imaging. It was created to simplify and control the procedures associated with compounding radiopharmaceuticals. PosiRx® integrates features that increase productivity while decreasing exposure and costs. Additionally, the PosiRx® assists in compliance with all current USP-797 and ALARA exposure control requirements for the production of unit dose radiopharmaceuticals.

PosiRx® is the first system of its kind to offer a complete and comprehensive automated solution, creating a more efficient and economical alternative to the current pharmacy per dose model. PosiRx® is targeted for clinics and hospitals with average to high SPECT imaging and pharmaceutical compounding volumes, in the U.S. and abroad. With PosiRx®, Positron intends to exploit possibilities existing in the SPECT imaging and pharmaceutical markets for both cardiology and oncology.

### **Radioisotopes: Production & Distribution**

Positron, through MIT, has registered its Drug Master File (DMF) for API grade Sr-82 with the FDA. This marks Positron's entrance into the radioisotope market with a high demand product as a precursor for PET radiopharmaceuticals. Positron is the only commercial resource in the U.S. that possesses the practical experience and knowledge in all stages of Sr-82 production and spent generator lifecycle management. Currently, Positron produces API grade strontium-82 from target material received from its foreign collaborators.

In our pursuit of securing isotopes for North American consumption and increasing the global radioisotope supply, Positron plans to build and operate the world's largest commercial high energy/high current cyclotron (70MeV) within the U.S. The proposed facility will be unique in that it will be capable of producing isotopes that are either not available or have very limited availability from other commercial sources in the United States and the world. Positron intends to couple the cyclotron with a material processing facility, isotope target manufacturing, drug manufacturing and Positron's expanding equipment manufacturing operations.

The primary isotope to be produced is Sr-82, that is currently in short supply in the world and is produced in the U.S. only by the Department of Energy ("DOE") National Laboratories. It is the policy of the DOE to not compete with private industry, and therefore the DOE may be compelled via petition to withdraw from the market when the materials are reasonably available commercially.

The cost of the project, including equipment, building, land, working capital and contingencies, is approximately \$60 million. Positron executed an agreement with IBA Molecular, of Belgium, to manufacture a 70 MeV cyclotron. The facility will be located in the city of Gary, Indiana. The facility will take approximately 3.5 years to build. The Company expects to begin operations in 2017. Positron has received an offer of \$30 Million in economic incentives from the City of Gary, Indiana towards the development of Positron's 70 MeV cyclotron project.

The Company plans to execute the project through its wholly owned subsidiary, Positron Isotopes Corporation, and will be funded with proceeds from debt and equity which the Company intends to raise. There can be no assurance that the Company will be able to raise the funds required to complete the cyclotron project or that if it does so, that such funds will be raised on terms that are favorable to the Company.

## **FINANCIAL SOLUTIONS**

Positron will provide customers with a variety of innovative risk mitigating financing programs, which are designed to minimize any barriers of entry, thus accelerating the expansion of cardiac PET and further securing Positron's position in the market.

### **Major developments and milestones achieved by Positron Corporation during 2012 include:**

Acquisition of Manhattan Isotope Technology (MIT), the only commercial resource in the U.S. with practical knowledge and experience in all stages of Strontium-82 (Sr-82) production and spent generator lifecycle management.

Jubilant DraxImage and Positron have negotiated a strategic collaboration on the sourcing and supply of strontium-82 and rubidium-82 generators, which will be the only alternative to Bracco Diagnostics' rubidium-82 generators in the U.S. after the FDA approval.

Positron registered a Drug Master File (DMF) for its strontium-82 Drug Substance with the United States Food & Drug Administration (FDA).

Positron began processing Sr-82 from third party irradiators and has been approved for supplying API grade Sr-82 for Jubilant DraxImage's rubidium-82 generators.

Positron is securing supply agreements with all available foreign and domestic strontium-82 suppliers.

Positron accepts offer of \$30 Million in economic incentives from the City of Gary, Indiana towards the development of Positron's 70 MeV cyclotron project.

The University of Texas Health Science Center at Houston has received FDA approval for their Coronary Flow Reserve (CFR) quantification software, to be used with Positron's Attriis PET scanner. Positron has been granted a license to distribute and support this software.

## **Market Opportunity**

### **Molecular Imaging Devices for Cardiology**

Cardiovascular disease (CVD) is the leading cause of death in the United States and constitutes 17% of overall national health expenditures (Forecasting the Future of Cardiovascular Disease in the United States, American Heart Association, 2011). Direct CVD costs are projected to increase from \$273 billion in 2010 to \$818 billion in 2030, indirect costs (due to lost productivity) – from \$172 billion in 2010 to \$276 billion in 2030.

Diagnostic imaging facilitates the early diagnosis of diseases and disorders, potentially minimizing the scope, cost and amount of care required, and potentially reducing the need for more invasive procedures. Nuclear imaging uses very low-level radioactive material, called radiopharmaceuticals, injected into a patient. The radiopharmaceuticals are specially formulated to concentrate temporarily in the specific part of the body to be studied. The radiation signals emitted by the materials are then converted into an image of the body part or organ. Nuclear imaging, in contrast to other diagnostic imaging modalities, shows not only the anatomy or structure of an organ or body part, but also its function—including blood flow, organ function, metabolic activity and biochemical activity. In cardiology, nuclear medicine provides the most accurate non-invasive tests for identifying narrowed coronary arteries, mild cholesterol build-up or diffuse coronary vascular disease that are responsible for most heart attacks. Management of coronary disease (CAD) currently utilizes noninvasive diagnostic testing as a “gatekeeper” and invasive coronary arteriography, when results are abnormal, to provide a definitive diagnosis of CAD. There are two major modalities in nuclear medicine imaging, gamma cameras and Positron Emission Tomography (PET), both of which are used for cardiovascular procedures. The most widely used imaging acquisition technology utilizing gamma cameras is single photon emission computed tomography, or SPECT.

Though PET tests are much more accurate and has been shown to reduce long-term costs, the nuclear cardiology imaging has been dominated by SPECT. This imbalance is a result of lower prices of SPECT cameras and decades long preferable reimbursement rates for cardiac SPECT procedures. The Company believes that recent dynamic market changes, including the dramatic increase of reimbursement rates for cardiac PET procedures, SPECT reimbursement cuts and the world shortage of the molybdenum-99 isotope used in cardiac SPECT, will significantly improve the economics of cardiac PET imaging and make PET technology much more competitive and appealing to cardiologists.

In myocardial perfusion imaging, PET has been proven to be superior in sensitivity and specificity when compared to SPECT, the more commonly utilized modality. Cardiac PET scans, with Rubidium-82 Chloride (Rb-82) or Nitrogen-13 Ammonia (N-13), result in a lower patient radiation exposure and is capable of performing superior quantitative measurements such as coronary flow reserve. Cardiac PET imaging has been shown to provide a 50% reduction in invasive coronary arteriography and coronary artery bypass grafting, leading to a 30% costs savings and improved clinical outcomes, when compared to SPECT (M.E. Merhige, M.D., et al. Journal Nuclear Medicine 2007; 48: 1069-1076).

## **SPECT IMAGING MODALITY**

SPECT is a comparatively old technology in a market that is mature if not oversaturated, with more than 85% of cameras purchased as replacements (Nuclear Medicine Market Outlook Report, IMV, 2011). 31% of all SPECT and SPECT/CT cameras in the U.S., or approximately 4,100, are dedicated cardiac cameras.

According to market research company BIO-TECH Systems, Inc. (*The U.S. Market for SPECT and PET Radiopharmaceuticals*, Report #330), in 2010, total sales of SPECT radiopharmaceuticals were \$758 million, among which, per our estimate, sales of major cardiac SPECT radiopharmaceuticals, Cardiolite, Myoview and sestamibi, were around \$575 million. We expect that this market will grow to \$610-620 million in 2011-2012 and be effectively flat thereafter.

Positron intends to enter this large SPECT radiopharmaceutical market with PosiRx® - a radiopharmaceutical system that automates the elution, preparation and dispensing processes for radiopharmaceutical agents used in molecular imaging. It was created to simplify and control the procedures associated with compounding radiopharmaceuticals. PosiRx® integrates features that increase productivity while decreasing exposure and costs. Additionally, the PosiRx® assists in compliance with all current USP-797 and ALARA exposure control requirements for the production of unit dose radiopharmaceuticals. Currently, the PosiRx® has been developed for use specific to SPECT agents.

## **PET IMAGING MODALITY**

PET is a younger and more advanced technology than SPECT. In cardiology perfusion imaging, PET scanners, in particular Positron's Atrius®, have superior sensitivity and specificity compared to SPECT cameras, provide less radiation exposure and are capable of performing quantitative measurements. Cardiac PET imaging has been shown to provide a 50% reduction in invasive coronary arteriography and coronary artery bypass grafting, a 30% costs savings, and excellent clinical outcomes compared with SPECT (M.E. Merhige, et al., *J Nucl Med* 2007; 48: 1069-1076).

The cardiac PET equipment market is much smaller than SPECT but has seen significant (25-30%) annual growth during the last decade and is expected to continue its expansion at 20% average annual growth during the next five years. According to Bracco Diagnostics, there were approximately 170 dedicated cardiac PET (PET/CT) scanners in the U.S. in 2012.



For many years, a major constraint for the PET market has been a high cost of PET and PET/CT scanners for cardiac studies. Positron Corporation has managed to reduce the buyers' barrier to entry by bringing to the market the Attrius® - the only cardiac dedicated PET system in the world. All other manufacturers (GE, Philips, Siemens) offer PET/CT systems at a 200% - 300% higher price but comparable performance of cardiac studies. In 2010 and 2011, Positron's share in sales of dedicated cardiac PET scanners was 14% and 17%, respectively. While we expect this share to grow significantly in the next several years, Positron's sales in 2011-2012 have been negatively impacted by the shortage of Rb-82. This impact was a result of an unscheduled maintenance of the United States Department of Energy (DOE) accelerator producing Sr-82, a pre-cursor to Rb-82, and by a voluntary recall of Sr-82/Rb-82 generators by Bracco Diagnostics for additional testing. The market is expected to rebound in Q2 2013.

Positron estimates service revenue in this segment was approximately \$16.0 million in 2012 and will increase to over \$30.0 million in 2017. Positron sells Attrius® scanners with 3-5 year service contracts and its current share in annual service revenue is estimated to be approximately 8% although is expected to grow up to 30% by the end of 2017.

The sales of the major cardiac PET radiopharmaceutical, Rb-82, were estimated at approximately \$70 million in 2010 and expected to increase to over \$170 million in 2017. However, the shortage of Sr-82, a precursor to Rb-82, can jeopardize the growth. Currently, the only supplier of Sr-82 in the United States is the US DOE and the only FDA approved Rb-82 supplier in the world is Bracco Diagnostics. This single supplier environment is where Positron sees great opportunity and has focused its resources and efforts on acquiring assets necessary for the vertical integration of the complete supply chain.

Positron has been working on several projects to secure the supply of Sr-82 and to enter the fast growing market of PET radiopharmaceuticals. The most significant project is a 70 MeV higher-energy cyclotron that can produce enough Sr-82 to supply Sr-82/Rb-82 generators to current and future Positron customers, optimally, customers with the Attrius® PET scanners. The cyclotron project is an expensive and lengthy project; however, if completed, it may eliminate a potential limiting factor in cardiac PET market growth. As an immediate-near term solution, Positron has acquired Manhattan Isotope Technologies, LLC (MIT), a company that has patented technology and know-how of recycling Sr-82 from spent generators and has agreements with the major foreign producers for supply of Sr-82. MIT can process and recycle Sr-82 at its facilities in Lubbock Texas.

We intend to address the issue of unavailability of Rb-82 generators by offering the market a new and more efficient generator from DraxImage, upon FDA approval. Jubilant DraxImage and Positron have negotiated a strategic collaboration on the sourcing and supply of strontium-82 and rubidium-82 generators.

Positron's acquisition of MIT has additional advantages that we believe will help to resolve a potentially significant problem of limited waste facilities for spent generators. Currently, waste management for spent generators is provided by DOE but capacity of its waste facilities will reach their limits in the very near future. MIT has technologies and facilities to replace DOE in this role and is currently pursuing this opportunity.

## Competitive Strengths

We believe that our Company has the following competitive strengths:

*Well Known Name Among Cardiologists.* The high count-rate capability and sensitivity of Positron's PET systems result in excellent diagnostic accuracy, faster imaging and ability to use short half-life radiopharmaceuticals, which made Positron's PET systems a system of choice for certain cardiac applications.

*The Only PET System on the Market.* All major PET manufacturers have discontinued manufacturing of stand-alone PET systems, offering very expensive PET combined with Computerized Tomography (PET/CT) instead. In cardiac applications, the Positron's Attrius® provides image quality comparable to PET/CT at significantly lower price. It also significantly reduces radiation exposure compared to PET/CT and even SPECT. A small footprint and affordable price makes it ideal for imaging clinics and hospitals.

*Cardiac Specific Software.* The Attrius® provides a robust, cardiac specific imaging software package designed to ensure effortless interpretation for today's most challenging clinical cases for nuclear cardiologists. Heart disease specific software includes the ability to monitor therapy, coronary artery overlay display, and open architecture for new protocol development and customization and motion correction software.

*Unique Automated Radiopharmaceutical System.* Positron's PosiRx® is a radiopharmaceutical system that automates the elution, preparation and dispensing processes for radiopharmaceutical agents used in molecular imaging. The PosiRx® system provides unprecedented "unit dose" flexibility to imaging providers at the touch of a button, 24/7. It was created to simplify and control the procedures associated with compounding radiopharmaceuticals. PosiRx® integrates features that increase productivity while decreasing exposure and costs.

*Unique Knowledge and Expertise in Sr-82 Production.* The Company through its wholly owned subsidiary MIT, is the only commercial resource in the United States with practical knowledge and experience in all stages of Sr-82 production.

*The Only Commercial Facility for refurbishment of Sr-82/Rb-82 generators in the U.S.* MIT's current facility in Lubbock, Texas, has the capacity to provide critical services necessary for the refurbishment of spent Sr-82/Rb-82 generators.

*Currently, the Only Commercial Source of Sr-82 in the U.S.* Using patented methods, MIT can recycle Sr-82 from spent Sr-82/Rb-82 generators at its facility in Lubbock, Texas, and process Sr-82 from foreign sources.

*Value-Added Offering of Complimentary Products to Customers.* The addition of complementary products, such as PET imaging systems, clinical and support services, radiopharmaceutical dispensing systems, radiopharmaceuticals and radioisotopes enhances the value of the offering to Positron's customers, providing them a total solution in nuclear cardiology.

## **Sales and Marketing**

To market its equipment and services, Positron employs an internal sales and marketing team dedicated to promote, educate and sell Positron products. Positron is also able to rely on referrals from users of its existing base of installed scanners and cameras, trade show exhibits, trade journal advertisements, clinical presentations at professional and industry conferences, and published articles in trade journals. The Company's sales personnel vary in geographic location and/or market expertise.

Positron sells and/or distributes its products and services directly to end-users.

## **Customer Care, Service and Warranty**

Positron has implemented PosiStar®, a complete customer care plan that offers full clinical support from Positron's experienced clinical and technical staff and industry luminaries that consult for the Company or are affiliated through Positron's customer network. PosiStar® Customer Care provides: physician interpretation training; nurse training; billing and prior-authorization training; physician over reads; post install, 24/7 clinical and service support; priority response with afterhours maintenance/service available; uptime guarantees and software upgrades; and remote access diagnostic/maintenance capabilities.

The Company has field service engineers who have primary responsibility for supporting and maintaining the Company's installed equipment base. In addition, the Company has field engineers involved in site planning, customer training, sales of hardware upgrades, sales and administration of service contracts, telephone technical support and customer service.

The Company services customers of our systems remotely through Internet access that facilitates real time system diagnosis without the need for a field service visit. When physical repair is required, our modular part replacement capability allows our field service engineers to perform field repairs that minimize customer downtime.

The Company typically provides a one-year parts and labor warranty to purchasers of our equipment. Following the warranty period, the Company offers purchasers a comprehensive service contract under which the Company provides all parts and labor, system software upgrades and unlimited service calls.

The Company's service goal is to maintain maximum system uptime. Success of a clinical site is largely dependent on patient volume during normal working hours and, therefore, equipment uptime and reliability are key factors in this success. Records compiled by the Company show an average uptime of more than 98% for all installed PET scanners.

Due to the Company's expertise and access to parts, we expect to service all the PET scanners we sell.

## **Competition**

The Company faces no direct competition from other manufacturers of PET scanners as it offers the only commercial standalone PET scanner, Attriis®. However, the Company has experienced competition from used PET/CT scanners although the remaining supply of used PET/CT systems is believed to be extremely low. The Company does not believe that MRI and CT scan imaging represent significant competing technologies, but potentially complementary technologies to PET, since PET, MRI and CT scans each provide information not available from the other modalities. Computed tomography angiography ("CTA") was once seen by some cardiologists to be competitive with PET myocardial perfusion imaging; however, there is an increasing public concern about a high radiation exposure of CT and, currently, there is no substantial movement into this modality.

In 2001-2002, GE, Siemens and Philips introduced PET/CT systems that combine CT scanning and PET in one unit. Since then production of standalone PET scanners have been discontinued and replaced by high priced PET/CT systems with costs much greater than Positron's Attrius® PET system. PET/CT integrates functional (PET) and structural (CT) information into a single scanning session, allowing fusion of the PET and CT images and thus improving lesion localization and interpretation accuracy. The CT scan is also used for attenuation correction, ultimately leading to high patient throughput. These combined advantages have rendered PET/CT a preferred imaging modality over standalone PET except in the imaging of cardiac studies. All major PET manufacturers, except Positron, pursue the similar strategies of developing more and more sophisticated and expensive whole-body PET/CT scanners. A hospital or medical imaging clinic with a whole-body PET/CT device has flexibility of using the scanner for oncology, cardiology or neurology purposes. However, the redundancy of functions, as well as the high price and large size, has negative impact on usage of PET scanners by specialty physicians (cardiologists, neurologists, urologists, etc.).

Though PET/CT has been commercially accepted, the clinical benefits and the need for this technology in cardiology imaging remain controversial and are debated. Leading cardiologists believe that combined PET/CT is not important in imaging myocardial perfusion. The heart does not require that fine level of resolution to diagnose coronary disease due to the thickness of the heart. Significant limitations of cardiac PET/CT are also respiratory motion and metallic artifacts, which can result in artifactual PET defects in up to 40% of patients, and these defects are moderate to severe in 23%. An interest in PET by cardiologists has increased significantly since 2009 boosted by preferable reimbursement rates and shortage of Tc-99m, a major cardiac SPECT radiopharmaceutical. Positron Corporation has been exploiting this rise of the demand by cardiologists and lack of the supply of affordable PET systems on the market by offering its cardiac specific, standalone Attrius® PET.

The Radiopharmaceutical Delivery is dominated today by Cardinal Health (160 nuclear pharmacies and 26 cyclotron-based PET radiopharmaceutical manufacturing facilities), PETnet Solutions, a fully owned subsidiary of Siemens Medical Solutions USA (52 radiopharmacies and distribution centers), Triad Isotopes (63 radiopharmacies after acquiring a Covidien's network and 6 cyclotrons), and GE healthcare (31 radiopharmacies). There are also approximately 73 independent radiopharmacies and 70 institutional radiopharmacies (affiliated with major medical schools).

Radiopharmaceuticals for cardiac applications are prepared in radiopharmaceutical generators, Tc-99m generators for SPECT (manufactured by Covidien and Lantheus) and Rb-82 generators for PET (Bracco Diagnostics). Rb-82 has a half-life of 75 seconds, and Rb-82 generators are delivered by Bracco directly to end users typically 13 times per year.

Tc-99m has a half-life of 6 hours, and centralized radiopharmacies use Tc-99m generators to deliver unit doses of Tc-99m based radiopharmaceuticals to customers. Centralized radiopharmacies incur very high fixed costs (approximately greater than \$1.0 million per year) and freight costs (two-three times-a-day deliveries to each client) and are affected by geographical factors: clients have to be in a 75 miles proximity to the pharmacy due to a short half-life of Tc-99m. Positron Corporation's PosiRx® does not have these limitations, as the radiopharmaceutical unit dose drawing devices can be placed directly into physicians' offices with once-a-week deliveries.

The Department of Energy is the only entity in the U.S. that produces Sr-82 and refurbishes spent Sr-82/Rb-82 generators; according to current policies, DOE should not compete with commercial companies.

Many of our competitors enjoy competitive advantages over us, including: greater name recognition; greater financial, technical and service resources; established relationships with healthcare professionals; established distribution networks; additional lines of products and the ability to offer rebates or bundle products to offer discounts or incentives; and greater resources for product development and sales and marketing. See “Item 1. Description of Business—Risk Associated with Business Activities—Substantial Competition and Effects of Technological Change”.

### **Third Party Reimbursement**

Our customers typically rely on the Medicare and Medicaid programs and private payers for reimbursement. As a result, demand for our products is dependent in part on the coverage and reimbursement policies of these payers. Third party coverage and reimbursement is subject to extensive federal, state, local, and foreign regulation, and private payer rules and policies. In many instances, the applicable regulations, policies and rules have not been definitively interpreted by the regulatory authorities or the courts, and are open to a variety of interpretations and are subject to change without notice.

The scopes of coverage and payment policies vary among third-party private payers. For example, some payers will not reimburse a provider unless the provider has a contract with the payer, and in many instances such payers will not enter into such contracts. Other payers prohibit reimbursement unless physicians own or lease our scanners and cameras on a full-time basis, or meet certain accreditation or privileging standards. Such requirements and limitations can significantly restrict the types of business models we can successfully utilize.

Medicare reimbursement rules impose many standards and policies on the payment of services that our customers provide. For instance, the Medicare prohibition on the “mark-up” of diagnostic tests can restrict what a physician may charge Medicare for diagnostic tests. Medicare also imposes medical necessity and other standards on physician and facilities that bill Medicare for services.

Any limitation of Medicare, Medicaid or private payer coverage for PET or SPECT procedures using will likely have a material adverse effect on the Company's business, financial condition, results of operations and cash flows.

Centers for Medicare & Medicaid Services (CMS) released their 2013 Medicare Physician Fee Schedule which outlines the payment rates for medical services paid to private physicians in the outpatient office setting. This fee schedule stated that Myocardial PET perfusion imaging was increased 1.8% to \$1,056.12 per study. The Medicare Physician Fee Schedule also states that Cardiovascular SPECT reimbursement for outpatient cardiology practices billing under CPT codes has been increased by 1%.

## **Manufacturing**

Our manufacturing strategy combines our internal design expertise and proprietary process technology with strategic outsourcing to achieve cost efficiencies. All of the Company's PET scanners are manufactured through our joint venture, Neusoft Positron Medical Systems, at its development and manufacturing facility in Shenyang, China. The manufacturing of the PosiRx® line takes place in Fishers, Indiana. The refurbishment of spent Sr-82/Rb-82 generators, production, recycling and processing of Sr-82 from foreign vendors are performed at MIT's facility in Lubbock, Texas.

The Company expects to continue outsourcing additional components and processes to gain efficiencies and cost savings. The Company expects to perform subassembly and final system performance tests, packaging and labeling at our facility. The Company provides connectivity solutions which include consulting and configured computers. The Company also sells accessories which are outsourced and include printers, equipment for handling and measuring radioactive materials, and software for the cameras and systems.

The Company and its third-party manufacturers are subject to the FDA's Quality System Regulation, state regulations, and regulations promulgated by the European Union.

### ***Joint Venture with Neusoft Medical Systems Co., Ltd.***

On June 30, 2005, the Company entered into a Joint Venture Contract with Neusoft Medical Systems Co., Inc. of Shenyang, in the People's Republic of China ("Neusoft"). Pursuant to the Joint Venture Contract the parties formed a jointly-owned company, Neusoft Positron Medical Systems Co., Ltd. (the "JV Company"), to engage in the manufacturing of PET and CT/PET medical imaging equipment. The JV Company received its business license and was organized in September 2005. The parties to the joint venture contributed an aggregate of US \$2,000,000 in

capital contributions. Neusoft's aggregate contribution to the capital of the JV Company was 67.5% of the total registered capital of the Company, or US\$ 1,350,000, and was made in cash. The Company's aggregate contribution to the capital of the JV Company was 32.5% of the total registered capital of the JV Company, or US\$ 650,000, of which US\$ 250,000 was made in cash, and US\$ 400,000 was made in the form of a technology license. Positron has transferred to the JV Company certain of its PET technology. During 2008-2009, as a result of additional capital contributions by Neusoft, the Company's share in JV Company decreased to 1%.

Under its Joint Venture Contract with Neusoft, the Company has the exclusive right to sell PET system products developed by the JV Company in the U.S, Canada, and Mexico under its registered trademarks. Neusoft has the exclusive right to sell products developed by the JV Company in China under its registered trademarks. Each of Neusoft and the Company has the right to sell products developed by the JV Company in the countries and regions worldwide with the exception of China, the U.S., Canada and Mexico, where select exclusive rights apply.

The joint venture obtained the FDA 510k regulatory approval of Attriis® Cardiac PET in April 2009.

## **Research and Development**

The Company's research and development expenses were approximately \$940,000 and \$1,315,000 for the years 2012 and 2011, respectively. The research and development activities have been focused on development of radiopharmaceutical delivery systems and regulatory and quality systems compliance required to offer radiopharmaceuticals, radiochemicals and radioisotopes into the marketplace. We continue to improve and/or customize our radiopharmaceutical equipment to fit it to new products and meet unique user requirements. There have been significant resources allocated in the initial start up, preparation, licensure and regulatory compliance of the Company's radiopharmaceutical manufacturing and radioisotope production facilities. We are also developing additional software and hardware for our PET and PET/CT scanner for additional functions that enhance performance and diagnostic efficacy and also in preparation for new cardiac radiopharmaceuticals that are in a pipeline of a major radiopharmaceutical manufacturer. These research and development activities are costly and critical to the Company's ability to maintain, develop and improve its "state of the art" products. The Company's inability to conduct such activities in the future may have a material adverse effect on the Company's business as a whole.



## **Patent, Trademarks and Royalty Arrangements**

The Company has three (3) patent covering the solid-state quantum photodetector technology and configuration of imaging apparatus and systems, one (1) U.S. patents pertaining to gamma cameras, and one (1) patent for PET radiopharmaceuticals infusion and shielding device. The Company has one (1) patent and one (1) patent pending pertaining to specific features of the Company's automated radiopharmaceutical system.

As of December 31, 2012, we hold trademark registrations in the United States for the following marks: Positron®, Attrius®, PosiRx®, PosiStar®, Tech-Assist® and Pulse CDC™."

The Company seeks to protect its trade secrets and proprietary know-how through confidentiality agreements with its employees and consultants. The Company requires our employees, consultants and advisors to enter into a confidentiality agreement containing provisions prohibiting the disclosure of confidential information to anyone outside the Company, and requiring disclosure to the Company of any ideas, developments, discoveries or investigations conceived during service and the assignment to the Company of patents and proprietary rights to such matters related to the business and technology of the Company. Despite any measures taken to protect our intellectual property, unauthorized parties may attempt to copy aspects of our products or to obtain and use information that we regard as proprietary.

## **Product Liability and Insurance**

Medical device companies are subject to a risk of product liability and other liability claims in the event that the use of their products results in personal injury claims. The Company carries the appropriate commercial and business insurances coverage to mitigate this risk. The Company has not experienced any product liability claims to date.

## **Employees**

As of December 31, 2012, the Company employed twenty-six (26) full-time employees. None of the Company's employees are represented by a union.

## **Available Information**

Positron Corporation is required to file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission ("SEC"). Investors may read and copy any document that Positron Corporation files, including this Annual Report on Form 10-K, at the SEC's Public Reference Room at 450 F Street, N.W., Washington, DC 20549. Investors may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an Internet site at <http://www.sec.gov> that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC, from which investors can electronically access Positron's SEC filings.

## **Item 1A. Risk Factors**

### **Risks Associated with Business Activities**

***History of Losses.*** To date, the Company has been unable to sell its products in quantities sufficient to be operationally profitable. Consequently, the Company has sustained substantial losses. During the year ended December 31, 2012, the Company had a net loss of approximately \$7,955,000 compared to a net loss of approximately \$6,121,000 during 2011. At December 31, 2012, the Company had an accumulated deficit of approximately \$116,328,000. There can be no assurances that the Company will ever achieve the level of revenues needed to be operationally profitable in the future and if profitability is achieved, that it will be sustained. Due to the limited number of products that have been sold in each fiscal period, the Company's revenues have fluctuated, and may likely continue to fluctuate significantly from quarter to quarter and from year to year. The opinion of the Company's independent auditors for the year ended December 31, 2012 expressed doubt as to the Company's ability to continue as a going concern. The Company will need to obtain additional capital and increase product sales to become profitable.

***Recruiting and Retention of Qualified Personnel.*** The Company's success is dependent to a significant degree upon the efforts of its executive officers and key employees. The loss or unavailability of the services of any of its key personnel could have a material adverse effect on the Company. The Company's success is also dependent upon its ability to attract and retain qualified personnel in all areas of its business, particularly management, research and development, sales and marketing and engineering. There can be no assurance that the Company will be able to continue to hire and retain a sufficient number of qualified personnel. If the Company is unable to retain and attract such qualified personnel, its business, operating results and cash flows could be adversely affected.

**Working Capital.** The Company had cash and cash equivalents of approximately \$243,000 at December 31, 2012. The Company utilized \$2,210,000 proceeds from issuance of convertible debt, \$305,000 borrowings on notes payable of \$65,000, proceeds from non-interest bearing advances, and \$383,000 proceeds from issuance of common stock for cash to fund operating activities during the year ended December 31, 2012. The Company had accounts payable and accrued liabilities of approx. \$1,634,000 and a negative working capital of approx. \$7,006,000. The Company believes that it may continue to experience operating losses and accumulate deficits in the foreseeable future. If we are unable to obtain financing to meet our cash needs we may have to severely limit or cease our business activities or may seek protection from our creditors under the bankruptcy laws.

**Penny Stock Rules.** If the shares of the Registrant's common stock are listed on The Nasdaq Stock Market or certain other national securities exchanges and the price thereof is below \$5.00, then subsequent purchases of such securities will be subject to the requirements of the penny stock rules absent the availability of another exemption. The SEC has adopted rules that regulate broker-dealer practices in connection with transactions in "penny stocks." Penny stocks generally are equity securities with a price of less than \$5.00 (other than securities registered on certain national securities exchanges or quoted on The Nasdaq Stock Market). The penny stock rules require a broker-dealer to deliver a standardized risk disclosure document required by the SEC, to provide the customer with current bid and offer quotations for the penny stock, the compensation of the broker-dealer and its salesperson in the transaction, monthly account statements showing the market value of each penny stock held in the customer's account, to make a special written determination that the penny stock is a suitable investment for the purchaser and receive the purchaser's written agreement to the transaction. These disclosure requirements may have the effect of reducing the level of trading activity in the secondary market for a stock that becomes subject to the penny stock rules.

**A Small Number of Large Stockholders and Thinly Traded Market.** A small number of our current stockholders hold a substantial number of shares of our common stock that they may sell in the public market. In addition, our common stock is thinly traded and any significant sales of our common stock may cause volatility in our common stock price. Sales by our current stockholders of a substantial number of shares, or the expectation that such sale may occur, could significantly reduce the market price of our common stock. We have also registered all shares of common stock that we may issue under our employee benefit plans. Accordingly, these shares can be freely sold in the public market upon issuance, subject to restrictions under the securities laws. If any of these stockholders cause a large number of securities to be sold in the public market, the sales could reduce the trading price of our common stock. These sales also could impede our ability to raise capital in the future.

In addition, these stockholders, acting together, will be able to significantly influence all matters requiring approval by our stockholders, including the election of directors and the approval of mergers or other business combination transactions. The interests of this group of stockholders may not always coincide with our interests or the interests of other stockholders, and they may act in a manner that advances their best interests and not necessarily those of other stockholders. As a result of their actions, or inaction our stock price may decline.

**Substantial Competition and Effects of Technological Change.** The industry in which the Company is engaged is subject to rapid and significant technological change. There can be no assurance that Company's systems can be

upgraded to meet future innovations in the industry or that new technologies will not emerge, or existing technologies will not be improved, which would render the Company's products obsolete or non-competitive. Many of our competitors enjoy significant competitive advantages over us, including: greater name recognition; greater financial, technical and service resources; established relationships with healthcare professionals; established distribution networks; additional lines of products and the ability to offer rebates or bundle products to offer discounts or incentives; and greater resources for product development and sales and marketing. In addition, there can be no assurance that other established medical imaging companies, any of which would likely have greater resources than the Company, will not enter the market. There can be no assurance that the Company will be able to compete successfully against any of its competitors.

***The downturn in the U.S. economy.*** Our revenues may be significantly impacted by the downturn in the U.S. economy. The slowing economy may also drive greater pricing pressures from our competition, increase the rate at which we lose business, or lead to disruptions in our supply chain, any of which would impede our ability to become profitable. Further, we cannot assure you that an improvement in economic conditions will result in an immediate, if at all positive, improvement in our operating results or cash flows.

***Dependence upon third-party suppliers and the availability of certain radiopharmaceuticals.*** We rely on a limited number of third parties to manufacture and supply certain key components of our products. Alternative sources of production and supply may not be readily available. We have also outsourced production of PET systems to a single contract manufacturer. If a disruption in the availability of parts, or in the operations of these suppliers were to occur, our business could be materially affected. For this reason, we have backup plans in place that are designed to prevent delays in production. If these plans are unsuccessful, delays in the production of systems for an extended period of time could cause the loss of revenue, which could significantly harm our business and results of operations. Our equipment leasing service will involve the use of certain radiopharmaceuticals. If we experience disruptions in the supply of these radiopharmaceuticals, that will cause us to cancel services that would otherwise be provided. If we are unable to obtain an adequate supply of the necessary radiopharmaceuticals, we may be unable to lease our equipment, and our business may be harmed.

***No Assurance of Market Acceptance.*** The Company's systems involve new technology that competes with more established technologies. The purchase and installation of our system involves a significant capital expenditure on the part of the purchaser. A potential purchaser of our system must have an available patient base that is large enough to provide the utilization rate needed to justify such capital expenditure. There can be no assurance that the Company's systems will be accepted by the target markets, or that the Company's sales of systems will increase or that the Company will be profitable.

***Patents and Proprietary Technology.*** The Company holds certain patent and trade secret rights relating to various aspects of its technologies, which are of material importance to the Company and its future prospects. Our pending U.S. and foreign patent applications, which include claims to material aspects of our products and procedures that are not currently protected by issued patents, may not issue as patents in a form that will be advantageous to us. Any patents we have obtained or do obtain may be challenged by re-examination or otherwise invalidated or eventually found unenforceable. Both the patent application process and the process of managing patent disputes can be time consuming and expensive. Competitors may attempt to challenge or invalidate our patents, or may be able to design alternative techniques or devices that avoid infringement of our patents, or develop products with functionalities that are comparable to ours. In the event a competitor infringes upon our patent or other intellectual property rights, litigation to enforce our intellectual property rights or to defend our patents against challenge, even if successful, could be expensive and time consuming and could require significant time and attention from our management. Furthermore, there can be no assurance that the Company's products will not infringe on any patents of others. We may not have sufficient resources to enforce our intellectual property rights or to defend our patents against challenges from others.

In addition, the Company requires each of its consultants to enter into a confidentiality agreement designed to assist in protecting the Company's proprietary rights. There can be no assurance that these agreements will provide meaningful protection or adequate remedies for the Company's trade secrets or proprietary know-how in the event of unauthorized use or disclosure of such information, or that others will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to the Company's trade secrets and proprietary know-how.

***We Use Products that are Highly Regulated.*** In July 2011, Bracco Diagnostics Inc. voluntarily recalled its CardioGen-82 generator after the U.S. Food and Drug Administration ("FDA") found that certain patients who had undergone PET imaging scans with rubidium chloride injected from CardioGen-82 generator, the radioactive drug injected into a patient to evaluate the functions of the heart, received excessive yet non-harmful amounts of the radiopharmaceutical. The recall was lifted in or about January 2012 and adversely affected the Company's operations. There can be no assurance that another, similar incident or a voluntary recall will not occur which would adversely affect the Company's business, financial conditions results of operations and cash flows.

***Government Regulation.*** We are directly, or indirectly through our clients, subject to extensive regulation by both the federal government and the states in which we conduct our business including: the federal Medicare and Medicaid anti-kickback laws, other Medicare laws, regulations, rules, manual provisions, and policies that prescribe the

requirements for coverage and payment for services performed by us and our DIS customers; the federal False Claims statutes; the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA; the Stark Law; the Federal Food, Drug and Cosmetic Act; federal and state radioactive materials laws; state food and drug and pharmacy laws and regulations; state laws that prohibit the practice of medicine by non-physicians and fee-splitting arrangements between physicians and non-physicians; state scope-of-practice laws; and federal rules prohibiting the mark-up of diagnostic tests to Medicare under certain circumstances. If our customers are unable or unwilling to comply with these statutes, regulations, rules and policies, utilization rates of our services and products will decline and our business will be harmed.

We maintain a compliance program to identify and correct any compliance issues and remain in compliance with all applicable laws, to train employees, to audit and monitor our operations, and to achieve other compliance goals. Like most companies with compliance programs, we occasionally discover compliance concerns. In such cases, we take responsive action including corrective measures when necessary. There can be no assurance that our responsive actions will insulate us from liability associated with any detected compliance concerns.

If our past or present operations are found to be in violation of any of the laws, regulations, rules or policies described above or the other laws or regulations to which we or our customers are subject, we may be subject to civil and criminal penalties, damages, fines, exclusion from federal or state health care programs, or the curtailment or restructuring of our operations. Similarly, if our customers are found to be non-compliant with applicable laws, they may be subject to sanctions, which could have a negative impact on us. If we are excluded from federal or state health care programs, our customers who participate in those programs could not do business with us. Any penalties, damages, fines, curtailment or restructuring of our operations would adversely affect our ability to operate our business and our financial results. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses, divert our management's attention from the operation of our business, and damage our reputation.

All laws and regulations, including those specifically applicable to the Company, are subject to change. The Company cannot predict what effect changes in laws and regulations might have on its business. Failure to comply with applicable laws and regulatory requirements could have material adverse effect on the Company's business, financial conditions, results of operations and cash flows.

Further, sales of medical devices outside the country may be subject to foreign regulatory requirements. These requirements vary widely from country to country. There is no assurance that the time and effort required to meet those varying requirements may not adversely affect Positron's ability to distribute its systems in some countries.

*No Dividends.* The Company has never paid cash dividends on its common stock and does not intend to pay cash dividends on its common stock in the foreseeable future.

### **Item 1B. Unresolved Staff Comments**

Not applicable.

### **Item 2. Properties**

In January 2012, the Company purchased approximately 2,000 square feet of office space in Westmont, Illinois from a related party in which it uses for corporate and administrative offices.

On April 19, 2010, the Company entered into a lease agreement (the "Lease") with GMA properties, LLC, a New York limited liability company (the "Lessor") for PET parts and service and Clinical and Technical Cardiovascular PET Training Institute. The amount of leased space at this location in Niagara, New York is approximately 3,125 square feet.

The Company has a month to month operating lease for its remaining Houston operations where the Company maintains inventory at times. Monthly rent for the facility is \$1,000.

On July 7, 2011, the Company entered into an operating lease with a third party for space for medical device assembly and warehousing at a building in Fishers, Indiana. The Company will be required to make payments of \$5,083 each month from December 1, 2011 through November 13, 2013, and \$5,287 from December 1, 2013 through November 30, 2016. The amount of leased space at this location is approximately 9,761 square feet.

On December 5, 2011, MIT entered into an operating lease with a third party for space for warehousing at a building in Lubbock, Texas. The Company will be required to make payments of \$1,475 each month from December 1, 2011 through December 1, 2012. According to the terms of the agreement, the lease continues on a month to month basis after December 31, 2012.

### **Item 3. Legal Proceedings**

On June 8, 2012, the owner of the radiopharmaceutical manufacturing facility the Company formerly leased in Crown Point, Indiana commenced an action to recover the use of the premises and the remaining rent due under the lease. On November 14, 2012, the owner was awarded a judgment against the Company in the amount of \$85,525.98 plus interest at the rate of 8%. The Company and the owner agreed to monthly payments in the minimum amount of \$5,000 until the judgment is paid in its entirety.

From time to time, we are a party to legal proceedings arising in the ordinary course of business. We are not currently a party to any other legal proceedings that we believe could have a material adverse effect on financial condition or results of operations.

### **Item 4. Mine Safety Disclosure**

Not applicable.



**PART II**

**Item 5. Market for Common Equity and Related Stockholder Matters**

*Market Information*

The Company’s common stock is currently traded and quoted on the NASDAQ OTC Bulletin Board under the symbol POSC. See “Item 1. Description of Business – Risks Associated with Business Activities.”

The following range of the high and low reported closing sales prices for the Company’s common stock for each quarter in 2012 and 2011, all as reported on the NASDAQ OTC Bulletin Board. These quotations reflect interdealer prices, without retail mark-up, mark-down or commission and may not represent actual transactions.

	2012		2011	
	High	Low	High	Low
First Quarter	\$0.02	\$0.01	\$0.05	\$0.03
Second Quarter	\$0.02	\$0.01	\$0.04	\$0.02
Third Quarter	\$0.01	\$0.01	\$0.03	\$0.02
Fourth Quarter	\$0.01	\$0.01	\$0.02	\$0.01

*Holder*s

There were approximately 4,059 shareholders of common stock as of April 15, 2013.

*Dividends*

Dividends payable to common shareholders, if any, will be contingent upon our revenues and earnings, capital requirements and financial conditions. The payment of dividends, if any, will be within the discretion of our Board of Directors. We presently intend to retain all earnings, if any, for use in our business operations.

Description of Securities

Number of Authorized and Outstanding Shares. The Company's Certificate of Formation, as amended, authorizes the issuance of 3,000,000,000 shares of common stock, \$0.01 par value per share (the "Common Stock"), of which 1,451,927,262 shares were outstanding on March 31, 2013. All of the outstanding shares of Common Stock are fully paid and non-assessable.

Voting Rights. Holders of shares of Common Stock are entitled to one vote for each share held of record on all matters to be voted on by the shareholders. Accordingly, the holders of in excess of 50% of the aggregate number of shares of Common Stock outstanding will be able to elect all of the directors of the Company and to approve or disapprove any other matter submitted to a vote of all shareholders. The holders of our Common Stock are entitled to receive ratably such dividends, if any, as may be declared by the Board of Directors out of funds legally available. We have not paid any dividends since our inception, and we presently anticipate that all earnings, if any, will be retained for development of our business. Any future disposition of dividends will be at the discretion of our Board of Directors and will depend upon, among other things, our future earnings, operating and financial condition, capital requirements, and other factors.

Other. Holders of Common Stock have no cumulative voting rights. Holders of Common Stock have no preemptive rights to purchase the Company's Common Stock. There are no conversion rights or redemption or sinking fund provisions with respect to the Common Stock.

Transfer Agent. Shares of Common Stock are registered at the transfer agent and are transferable at such office by the registered holder (or duly authorized attorney) upon surrender of the Common Stock certificate, properly endorsed. No transfer shall be registered unless the Company is satisfied that such transfer will not result in a violation of any applicable federal or state security laws. The Company's transfer agent for its Common Stock is Continental Stock Transfer & Trust Company, 17 Battery Place, 8th Floor, New York, NY 10004, (212) 509-4000.

### Description of Preferred Stock

The Company's Certificate of Formation, as amended, authorizes the issuance of 20,000,000 shares of preferred stock from time to time in one or more series. The Board of Directors is authorized to determine, prior to issuing any such series of preferred stock and without any vote or action by the shareholders, the rights, preferences, privileges and restrictions of the shares of such series, including dividend rights, voting rights, terms of redemption, the provisions of any purchase, retirement or sinking fund to be provided for the shares of any series, conversion and exchange rights, the preferences upon any distribution of the assets of the Company, including in the event of voluntary or involuntary liquidation, dissolution or winding up of the Company, and the preferences and relative rights among each series of preferred stock. The Board of Directors has designated the following series of preferred stock:

- (i) 7,900,000 shares of Series A 8% Convertible Redeemable Preferred Stock ("Series A"), of which 440,932 shares are outstanding. Holders of the Series A have no voting rights but may vote on a converted basis on any matter requiring shareholder vote. The Series A is senior to the Company's Common Stock in liquidation. While the Series A is outstanding or any dividends thereon remain unpaid, no Common Stock dividends may be paid or declared by the Company. The Series A may be redeemed in whole or in part, at the option of the Company, at any time subsequent to March 1998 at a price of \$1.46 per share plus any undeclared and/or unpaid dividends to the date of redemption. Redemption requires at least 30 days advanced notice and notice may only be given if the Company's Common Stock has closed above \$2.00 per share for the twenty consecutive trading days prior to the notice.
  
- (ii) 9,000,000 shares of Series B Preferred Stock ("Series B"), of which 3,056,487 shares are outstanding. Holders of the Series B are entitled to 100 votes per share on all matters requiring shareholder vote. Each share of Series B, \$1.00 par value, is convertible into 100 shares of the Company's Common Stock. The Series B is senior to the Company's Common Stock and junior in priority to the Company's Series A in liquidation. While the Series B is outstanding, no Common Stock dividends may be paid or declared by the Company. The Series B may be redeemed in whole or in part, at the option of the Company, at any time at a price of \$1.00 per share.
  
- (vii) 100,000 Series S Convertible Preferred Stock ("Series S"), of which 100,000 shares are outstanding. Holders of the Series S are entitled to 10,000 votes per share on all matters requiring shareholder vote. Each share of Series S, \$1.00 par value per share, is convertible into 10,000 shares of the Company's Common Stock, subject to adjustment. The Series S is senior to the Company's Common Stock and junior in priority to the Company's Series A and Series B in liquidation. While Series S is outstanding, no Common Stock dividends may be paid or declared by the Company.

### Penny Stock Rules

The Securities and Exchange Commission has also adopted rules that regulate broker-dealer practices in connection with transactions in penny stocks. Penny stocks are generally equity securities with a price of less than \$5.00 (other than securities registered on certain national securities exchanges or quoted on the NASDAQ system, provided that current price and volume information with respect to transactions in such securities is provided by the exchange or system).

Our shares are considered penny stock under the Securities and Exchange Act. The shares will remain penny stocks for the foreseeable future. The classification of penny stock makes it more difficult for a broker-dealer to sell the stock into a secondary market, which makes it more difficult for a purchaser to liquidate his/her investment. Any broker-dealer engaged by the purchaser for the purpose of selling his or her shares in us will be subject to Rules 15g-1 through 15g-10 of the Securities and Exchange Act. Rather than creating a need to comply with those rules, some broker-dealers will refuse to attempt to sell penny stock.

The penny stock rules require a broker-dealer, prior to a transaction in a penny stock not otherwise exempt from those rules, to deliver a standardized risk disclosure document, which:

- Contains a description of the nature and level of risk in the market for penny stock in both public offerings and secondary trading.

- Contains a description of the broker's or dealer's duties to the customer and of the rights and remedies available to the customer with respect to a violation of such duties or other requirements of the Securities Act of 1934, as amended.

- Contains a brief, clear, narrative description of a dealer market, including "bid" and "ask" price for the penny stock and the significance of the spread between the bid and ask price.

- Contains a toll-free telephone number for inquiries on disciplinary actions.

- Defines significant terms in the disclosure document or in the conduct of trading penny stocks.
- Contains such other information and is in such form (including language, type, size and format) as the Securities and Exchange Commission shall require by rule or regulation.

The broker-dealer also must provide, prior to effecting any transaction in a penny stock, to the customer:

- The bid and offer quotations for the penny stock.
- The compensation of the broker-dealer and its salesperson in the transaction.
- The number of shares to which such bid and ask prices apply, or other comparable information relating to the depth and liquidity of the market for such stock.
- Monthly account statements showing the market value of each penny stock held in the customer's account.

In addition, the penny stock rules require that prior to a transaction in a penny stock not otherwise exempt from those rules; the broker-dealer must make a special written determination that the penny stock is a suitable investment for the purchaser and receive the purchaser's written acknowledgment of the receipt of a risk disclosure statement, a written agreement to transactions involving penny stocks, and a signed and dated copy of a written suitability statement. These disclosure requirements will have the effect of reducing the trading activity in the secondary market for our stock because it will be subject to these penny stock rules. Therefore, stockholders may have difficulty selling their securities.

#### Recent Sales of Unregistered Securities

During the fiscal years ended December 31, 2012, 2011 and 2010, the Company issued the following securities exempt from the registration requirements of the Securities Act pursuant to Section 4(2) of the Securities Act. No underwriting or other compensation was paid in connection with these transactions:

On October 31, 2012, the Company issued two convertible debentures to Patrick G. Rooney, its Chairman and Chief Executive Officer and Corey Conn Chief Financial Officer, in the amount of \$1,600,000. In Connection with this subscription, on November 13, 2012, the Company issued Mr. Rooney warrants to purchase 37,500,000 shares of common stock and Mr. Conn warrants to purchase 10,500,000 shares of common stock all at the exercise price of \$0.01 per share.

On September 10, 2012, the Company converted obligations totaling \$35,605 into 10,000,000 shares of Common Stock. Of these shares, 6,666,667 shares were payable as of September 30, 2012 and were issued in October 2012.

On August 31, 2012, the Company converted 1,188,836 shares of Series B Convertible Preferred Stock into 118,883,629 shares of Common Stock. Also on August 31, the Company issued 2,000,000 shares to an investor who had purchased shares during the three months ended June 30, 2012 and which were included in stock payable as of June 30, 2012.

On August 21, 2012, the Company issued 1,000,000 shares of Common Stock to a vendor for services.

On July 17, 2012, the Company issued 1,000,000 shares of Common Stock to vendors for services rendered. The Company issued an additional 1,000,000 shares of Common Stock to a vendor for services rendered on July 18, 2012. Both issuances were valued at \$10,000.

On June 19, 2012, the Company converted 16,667 shares of Series A Convertible Preferred Stock into 16,667 shares of Common Stock, converted 118,149 shares of Series B Convertible Preferred Stock into 11,814,878 shares of Common Stock, and converted 18,200 shares of Series G Convertible Preferred Stock into 2,020,000 shares of Common Stock. In addition, the Company issued 3,970,786 shares of Common Stock to a vendor for settlement of accounts payable.

On June 7, 2012, the Company issued 4,000,000 warrants in connection with a Convertible Debt issuance to a lender to purchase Common Stock of the Company. The warrants expire on December 31, 2013.

On May 29, 2012, the Company converted 231,190 shares of Series B Convertible Preferred Stock into 23,119,000 shares of Common Stock. The Company issued 18,181,818 shares of Common Stock for repayment of related party convertible debt.

On May 21, 2012, the Company converted 73,226 shares of Series B Convertible Preferred Stock into 7,322,636 shares of Common Stock. The Company also accepted subscriptions in the amount of \$130,000 and issued 15,000,000 shares of Common Stock. In connection with these issuances, the Company issued 13,000,000 warrants to investors to purchase Common Stock of the Company, which will expire on December 31, 2013. In addition, the Company issued 175,000 shares of Common Stock to a vendor on May 21, 2012 for services rendered valued at \$2,000.

On May 20, 2012, the Company issued 2,000,000 warrants to an investor to purchase Common Stock of the Company. The warrants expire on December 31, 2013.

On May 7, 2012, the Company issued 4,000,000 warrants in connection with a Convertible Debt issuance to a Lender to purchase Common Stock of the Company. The warrants expire on December 31, 2013.

On April 5, 2012, the Company converted 634,000 shares of Series B Convertible Preferred Stock into 63,400,000 shares of Common Stock. The Company also accepted subscriptions in the amount of \$28,000 and issued 2,800,000 shares of Common Stock. In connection with these Common Stock issuances, the Company also issued 3,100,000 warrants to purchase Common Stock of the Company, which will expire on December 31, 2013. Also on April 5, 2012, the Company issued 39,682,539 shares of Common Stock for repayment of convertible debt, and issued 2,208,750 shares of Common Stock to a vendor for settlement of accounts payable. The Company recorded \$26,456 loss on the settlement.

On March 14, 2012, the Company accepted subscriptions in the amount of \$35,000 and issued 3,500,000 shares of Common Stock. In connection with these issuances, the Company also issued 3,500,000 warrants to investors to purchase Common Stock of the Company, which will expire on December 31, 2013, and extended the expiration date of 750,000 warrants which had expired to December 31, 2013. Also on March 14, 2012, the Company issued 1,200,000 shares of Common Stock to an employee for services valued at \$20,000, and 600,000 shares of Common Stock to a vendor for services rendered valued \$10,000.

On March 1, 2012, the Company converted 603,711 shares of Series B Convertible Preferred Stock into 60,371,100 shares of Common Stock. Also on March 1, 2012, the Company issued 3,000,000 shares of Common Stock to a vendor for services rendered valued at \$51,000.

On January 20, 2012, the Company accepted subscriptions in the amount of \$50,000 and issued 5,000,000 shares of Common Stock. In connection with these Common Stock issuances, the Company also issued 5,000,000 warrants to purchase Common Stock of the Company, which will expire on December 31, 2013, and extended the expiration date of 7,500,000 warrants which had expired to December 31, 2013.

On January 19, 2012, the Company converted 1,923,223 shares of Series B Convertible Preferred Stock into 192,322,258 shares of Common Stock. Also on January 19, 2012, the Company accepted subscriptions in the amount of \$100,000 and issued 27,000,000 shares of Common Stock. Additionally, the Company issued 10,000,000 warrants to investors to purchase Common Stock of the Company, which will expire on December 31, 2013, and extended the expiration dates of 30,000,000 warrants which had expired to December 31, 2013. Furthermore, on January 19, 2012, the Company issued 5,000,000 shares in connection with the acquisition of MIT and 76,261 shares of Common Stock

were issued for royalties. On January 19, 2012, the Company issued 25,000,000 shares of Common Stock and a convertible debenture due on December 31, 2013, with interest at the rate of 8%, to a related party as the purchase price for the office space previously leased by the Company. In addition, the Company issued 35,000,000 warrants, which entitle the related party to purchase shares of the Company's common stock of the Company, which will expire on December 31, 2013.

On January 9, 2012, the Company issued 1,400,000 shares to a vendor for services.

On September 10, 2012, the Company converted obligations totaling \$35,605 into 10,000,000 shares of Common Stock. Of these shares, 6,666,667 shares were payable as of September 30, 2012 and were issued in October 2012.

On August 21, 2012, the Company issued 1,000,000 shares of Common Stock to a vendor for services.

On July 17, 2012, the Company issued 1,000,000 shares of Common Stock to vendors for services rendered. The Company issued an additional 1,000,000 shares of Common Stock to a vendor for services rendered on July 18, 2012. Both issuances were valued at \$10,000.

On June 19, 2012, the Company converted 16,667 shares of Series A Convertible Preferred Stock into 16,667 shares of Common Stock, converted 118,149 shares of Series B Convertible Preferred Stock into 11,814,878 shares of Common Stock, and converted 18,200 shares of Series G Convertible Preferred Stock into 2,020,000 shares of Common Stock. In addition, the Company issued 3,970,786 shares of Common Stock to a vendor for settlement of accounts payable.

On May 29, 2012, the Company converted 231,190 shares of Series B Convertible Preferred Stock into 23,119,000 shares of Common Stock. The Company issued 18,181,818 shares of Common Stock for repayment of related party convertible debt.



On May 21, 2012, the Company converted 73,226 shares of Series B Convertible Preferred Stock into 7,322,636 shares of Common Stock. The Company also accepted subscriptions in the amount of \$130,000 and issued 15,000,000 shares of Common Stock. In connection with these issuances, the Company issued 13,000,000 warrants to investors to purchase Common Stock of the Company, which will expire on December 31, 2013. In addition, the Company issued 175,000 shares of Common Stock to a vendor on May 21, 2012 for services rendered valued at \$2,000.

On April 5, 2012, the Company converted 634,000 shares of Series B Convertible Preferred Stock into 63,400,000 shares of Common Stock. The Company also accepted subscriptions in the amount of \$28,000 and issued 2,800,000 shares of Common Stock. In connection with these Common Stock issuances, the Company also issued 3,100,000 warrants to purchase Common Stock of the Company, which will expire on December 31, 2013. Also on April 5, 2012, the Company issued 39,682,539 shares of Common Stock for repayment of convertible debt, and issued 2,208,750 shares of Common Stock to a vendor for settlement of accounts payable. The Company recorded \$26,456 loss on the settlement.

On March 14, 2012, the Company accepted subscriptions in the amount of \$35,000 and issued 3,500,000 shares of Common Stock. In connection with these issuances, the Company also issued 3,500,000 warrants to investors to purchase Common Stock of the Company, which will expire on December 31, 2013, and extended the expiration date of 750,000 warrants which had expired to December 31, 2013. Also on March 14, 2012, the Company issued 1,200,000 shares of Common Stock to an employee for services valued at \$20,000, and 600,000 shares of Common Stock to a vendor for services rendered valued \$10,000.

On March 1, 2012, the Company converted 603,711 shares of Series B Convertible Preferred Stock into 60,371,100 shares of Common Stock. Also on March 1, 2012, the Company issued 3,000,000 shares of Common Stock to a vendor for services rendered valued at \$51,000.

On January 20, 2012, the Company accepted subscriptions in the amount of \$50,000 and issued 5,000,000 shares of Common Stock. In connection with these Common Stock issuances, the Company also issued 5,000,000 warrants to purchase Common Stock of the Company, which will expire on December 31, 2013, and extended the expiration date of 7,500,000 warrants which had expired to December 31, 2013.

On January 19, 2012, the Company converted 1,923,223 shares of Series B Convertible Preferred Stock into 192,322,258 shares of Common Stock. Also on January 19, 2012, the Company accepted subscriptions in the amount of \$100,000 and issued 27,000,000 shares of Common Stock. Additionally, the Company issued 10,000,000 warrants to investors to purchase Common Stock of the Company, which will expire on December 31, 2013, and extended the expiration dates of 30,000,000 warrants which had expired to December 31, 2013. Furthermore, on January 19, 2012, the Company issued 5,000,000 shares in connection with the acquisition of MIT and 76,261 shares of Common Stock were issued for royalties. On January 19, 2012, the Company issued 25,000,000 shares of Common Stock and a convertible debenture due on December 31, 2013, with interest at the rate of 8%, to a related party as the purchase

price for the office space previously leased by the Company. In addition, the Company issued 35,000,000 warrants, which entitle the related party to purchase shares of the Company's common stock of the Company, which will expire on December 31, 2013.

On January 9, 2012, the Company issued 1,400,000 shares to a vendor for services.

On January 4, 2012, the Company accepted subscriptions in the amount of \$150,000 and issued 15,000,000 shares of Common Stock. In connection with these Common Stock issuances, the Company also issued 15,000,000 warrants to purchase Common Stock of the Company, which will expire on December 31, 2013, and extended the expiration date of 20,000,000 warrants which had expired to December 31, 2013.

Also on January 4, 2012, the Company issued 400,000 shares to a vendor for services.

In October 2011, the Company issued 500,000 shares of common stock for consulting services.

In October 2011, the Company issued 113,636 shares of its Series B Convertible Preferred Stock in exchange for the conversion of a promissory note in the aggregate principal amount of \$100,000.

In November 2011, the Company issued 100,000 shares of its Series B Convertible Preferred Stock for consulting services valued at \$130,000.

During the quarter ending September 30, 2011, investors exercised warrants on preferred stock for which the Company received \$270,000 in cash proceeds and issued 270,000 shares of Series B preferred stock. In addition, the Company received \$250,000 in cash proceeds for warrants and issued 125,000 shares of Series B preferred stock, which were exercised at December 31, 2010, and recorded as receivable from warrants exercise at December 31, 2010.

On August 2, 2011, the Company issued 3,000 shares of Series B stock to an unrelated party for consulting services valued at \$9,000.

On July 15, 2011, the Company issued 500,000 shares of common stock to an unrelated party for consulting services valued at \$17,000.

During the quarter ending June 30, 2011, the Company issued 10,000,000 shares of common stock to an unrelated third party for consulting services valued at \$290,000.

During the quarter ending June 30, 2011, warrant holders exercised warrants on preferred stock for which the Company received \$325,000 in cash proceeds and issued 130,000 shares of Series B preferred stock.

On June 21, 2011, the Company issued 11,500 shares of Series Preferred B stock to two unrelated parties for consulting services valued at \$33,000.

On April 6, 2011 and May 27, 2011, the Company issued 300,000 and 2,300,000 shares of common stock, respectively, to two, unrelated parties for consulting services valued at \$12,000 and \$67,000, respectively.

On May 26, 2011, the Company issued 424,242 Series B Convertible Preferred Stock upon the conversion of certain convertible debentures in the aggregate amount of \$700,000.

During the quarter ending March 31, 2011, investors converted 20,000 shares of Series B Preferred Stock into 2,000,000 shares of common stock.

During the quarter ending March 31, 2011, we received \$575,000 for the exercise of warrants and issued 255,000 shares of Series B Preferred Stock in connection with the exercise of these warrants.

On February 15, 2011, the Company issued 3,000 shares of Series B Preferred Stock to an unrelated party for consulting services. On the date of issuance, the common stock had a fair market value of \$0.04 per share. The Company recorded consulting fee expense of \$12,000 for the issuance of the shares.

During the quarter ending December 31, 2010, the Company issued 1,175,000 shares of common stock for consulting; 1,300,000 shares of common stock from a conversion of 13,000 shares of Series B Preferred Stock; 1,000,000 shares of common stock from a conversion of 10,000 shares of Series G Preferred Stock; 400,000 shares of common stock for a \$20,000 cash investment; 425,000 shares of Series B Preferred Stock for cash investment and 167,857 Series B Preferred Stock from conversions of warrants/options.

During the quarter ending September 30, 2010, the Company issued 63,391,669 shares of common stock to unrelated investors for cash in the amount of approximately \$2,186,204.

During the quarter ending September 30, 2010, investors converted 175,500 shares of Series B Preferred Stock into 17,500,000 shares of common stock.

During the nine months ended September 30, 2010, the Company issued 15,600,000 shares of common stock to unrelated parties for consulting services. On the dates of issuance the shares had an aggregate fair market value of \$1,526,200 for which the Company recorded consulting fee expense.

During the quarter ending September 30, 2010, the Company issued 291,777 shares of Series B Preferred Stock to unrelated parties for consulting services. Accordingly, the Company recorded consulting fee expense of \$441,000 related to the issuance of the shares.

On June 24, 2010, the Company issued 200,000 Series B Preferred shares to the former owners of Dose Shield pursuant to the terms of the purchase agreement (“Agreement”) between Dose Shield and the Company dated June 5, 2008. On August 12, 2010, the Company issued an additional 200,000 Series B Preferred shares to the former owners of Dose Shield pursuant to the terms of the Agreement.

During the quarter ending June 30, 2010, the Company issued 127,750,005 shares of common stock to unrelated investors for cash in the amount of \$2,943,475.

During the quarter ending June 30, 2010, investors converted 511,500 shares of Series B Preferred Stock into 51,150,000 shares of common stock. Investors also converted 29,091 shares of Series G Preferred stock into 2,909,000 shares of common stock.

During the quarter ending June 30, 2010, the Company issued 42,150,000 shares of common stock to unrelated parties for consulting services. On the dates of issuance the shares had an aggregate fair market value of \$5,438,500 for which the Company recorded consulting fee expense.

During the quarter ending June 30, 2010, the Company issued 37,100 shares of Series B Preferred Stock to unrelated parties for consulting services. Accordingly, the Company recorded consulting fee expense of \$178,400 related to the issuance of the shares.

During the quarter ending March 31, 2010, investors converted 636,860 shares of Series B Preferred Stock into 63,686,000 shares of common stock. Investors also converted 4,100 shares of Series G Preferred stock into 410,000 shares of common stock.

During the quarter ending March 31, 2010, the Company issued 253,427 shares of Series B Preferred Stock to an unrelated party for consulting services. Accordingly, the Company recorded consulting fee expense of \$253,427 related to the issuance of the shares.

On February 25, 2010, the Company issued 500,000 shares of common stock to an unrelated party for consulting services. On the date of issuance, the common stock had a fair market value of \$0.05 per share. The Company recorded consulting fee expense of \$25,000 for the issuance of the shares.

Unless noted above, the sales of the securities identified above were made pursuant to privately negotiated transactions that did not involve a public offering of securities and, accordingly, we believe that these transactions were exempt from the registration requirements of the Securities Act pursuant to Section 4(2) thereof and rules promulgated there under. Each of the above-referenced investors in our stock represented to us in connection with their investment that they were "accredited investors" (as defined by Rule 501 under the Securities Act) and were acquiring the shares for investment and not distribution, that they could bear the risks of the investment and could hold the securities for an indefinite period of time. The investors received written disclosures that the securities had not been registered under the Securities Act and that any resale must be made pursuant to a registration or an available exemption from such registration. All of the foregoing securities are deemed restricted securities for purposes of the Securities Act.

## **Item 6. Selected Financial Data**

Not applicable for smaller reporting companies.

## **Item 7. Management’s Discussion and Analysis or Plan of Operation**

*The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our selected financial data and our financial statements and the accompanying notes included in this annual report. The following discussion may contain forward-looking statements that reflect our plans, estimates and beliefs and involve risks, uncertainties and assumptions. Our actual results could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and under the headings “Risk Factors” and “Forward-Looking Statements.”*

### **Overview**

Positron Corporation is a nuclear medicine healthcare company specializing in the field of cardiac Positron Emission Tomography (PET) imaging - the gold standard diagnostic test in nuclear cardiology.

Positron’s products and services enable healthcare providers to more accurately diagnose disease and improve patient outcomes, while practicing cost effective medicine. Positron is the only company that will provide an economical, end-to-end solution for PET myocardial perfusion imaging through complementary product integration of PET imaging systems, radiopharmaceuticals, and radioisotopes.

The Company believes its unique proprietary products, market position and vertically integrated strategy will lead to accelerated adoption and growth of the cardiac PET modality in the U.S. and emerging markets. Through leadership within our field, Positron intends to gain a dominant market position with strong earnings potential, ultimately becoming a sustained, long-term value creator for industry participants and our shareholders.

## **The Company**

Positron, a pioneer in cardiac PET, is well branded in the field of nuclear cardiology. Founded in 1983, Positron has gained significant traction in the industry based on its imaging technology and strong commitment towards advancing cardiac care. Originally a research & development company, Positron's business strategy has evolved and grown over the past several years. Positron has expanded from a medical imaging device manufacturer to a nuclear healthcare company integrating the key components of the cardiac PET supply chain to provide an end-to-end solution for the market. Led by an experienced management team, Positron has become a true business enterprise with strong recurring revenue generating business model scalable to the global marketplace.

The Company believes that our unique products, market position and vertical integration strategy will stabilize and secure the supply chain, significantly reducing costs and industry uncertainties, a substantial advantage, leading to further adoption and growth of the cardiac PET modality.

Positron, through the acquisition of Manhattan Isotope Technology (MIT) in 2012, is the only commercial resource in the U.S. with practical knowledge and experience in all stages of Sr-82 production and generator lifecycle management. Positron seeks to secure both short and long-term supply of radioisotopes used in cardiac PET imaging. Currently, the Company is producing Active Pharmaceutical Ingredient (API) grade Sr-82 at its Lubbock, Texas, facility from strontium received from foreign irradiated source suppliers. The Company intends to further supplement strontium resources by pursuing additional supply agreements with all domestic and foreign irradiated source suppliers, requesting increases in production schedules from third party suppliers, and by recycling expired generators. Positron seeks to secure a long-term North America supply of medical radioisotopes for cardiac PET imaging by building and operating the world's largest commercial high-energy/high-current cyclotron (70MeV) within the U.S. This 70 MeV cyclotron will be at the heart of providing a reliable, dependable, and indigenous supply of radioisotopes, stabilizing and building confidence in the PET market and nuclear medicine community overall. Securing and delivering a reliable supply of radioisotopes should also increase the demand for Positron's complementary products.

Positron's business strategy is to gain a dominant market share through the vertical integration of such key components: imaging technologies, clinical services, radiopharmaceutical and radioisotope processing, production, and distribution. Positron creates market efficiencies by integrating these critical components. Positron intends to maximize market share by offering cost-effective, value added solutions to end-users that meet the current and future nuclear cardiology market demands.

## **PET vs. SPECT**

There are two main imaging modalities utilized in nuclear cardiology: Single Photon Emission Computed Tomography, or SPECT, and Positron Emission Tomography, or PET.

In myocardial perfusion imaging, PET has been proven to be superior in sensitivity and specificity when compared to SPECT, the more commonly utilized modality. Cardiac PET scans, with Rb-82 Chloride or Nitrogen-13 Ammonia (N-13), result in a lower patient radiation exposure and is capable of performing superior quantitative measurements such as coronary flow reserve. Cardiac PET imaging has been shown to provide a 50% reduction in invasive coronary arteriography and coronary artery bypass grafting, leading to a 30% costs savings and improved clinical outcomes, when compared to SPECT (M.E. Merhige, M.D., et al. Journal Nuclear Medicine 2007; 48: 1069-1076).

The cardiac PET equipment market is much smaller than SPECT, but has seen significant annual growth of 30% during the last decade. According to Bracco Diagnostics, there were approximately 160 dedicated cardiac PET & PET/CT scanners performing nuclear cardiology within the U.S. in 2010, a tenfold increase since 2006.

### **Barriers to entry**

For many years, one of the major constraints for adoption of this modality had been the high cost of PET and PET/CT scanners. Many practices and hospitals could not justify the cost of a new system for cardiac studies. In 2010, Positron received FDA clearance to market and distribute its dedicated PET system, which is optimized for nuclear cardiology. The Attrius is the only new, cost effective, dedicated PET system available on the market. Other system manufacturers (GE, Philips, Siemens) offer PET/CT cameras, which have a 200%-300% higher purchase price; PET/CT systems also possess attributes that may affect the accuracy of a perfusion study, leading to false positives.

Another more recent issue that has slowed the growth of nuclear cardiology is the shortage of the key drugs utilized in both SPECT (Mo-99/Tc-99m) and PET imaging (Sr-82/Rb-82).

The Sr-82 isotope decays to produce the Rb-82 tracer utilized in cardiac PET studies. Rb-82 is the most commonly used cardiac PET tracer in the United States. The FDA approved Rb-82 in 1989 for use in the detection of coronary artery disease and the Health Care Financing Administration approved reimbursement for Rb-82, PET MPI, in 1995 as a first line test in symptomatic patients. Rubidium is uniformly available through generator production in the U.S. and is used in conjunction with an automatic infusion system.



Over the past five years the explosive growth of cardiac PET imaging has driven a significant increase in the use of Sr-82/Rb-82 generators. The increasing demand for Sr-82 is beginning to outpace supply. Until recently, the U.S. Department of Energy had been the only entity in the United States capable of providing this material. In August of 2012, MIT submitted its DMF with the FDA and has begun production of API grade strontium-82.

Due to the growing demand and limited supply, the industry suffered a Sr-82 shortage in January 2011, effecting supply of Rb-82 generators. The same year Bracco Diagnostics Inc., the sole market supplier of the Rb-82 generator, underwent a voluntary recall of generators, further stunting industry sales and growth.

Positron is acutely focused on production of Sr-82. Positron possesses certain resources and technical advantages, unique to MIT, which will increase current and future strontium supply. Positron anticipates the cardiac PET market to rebound in Q2 2013, beginning with Bracco's ability to now accept new generator customers, and with accelerated expansion upon market entry of the DraxImage's generator, once FDA approved.

### **70 MeV Cyclotron Project**

Pursuing a strategy of complementary product integration, through its wholly owned subsidiary, Positron Isotopes Corporation, Positron seeks to build and operate a high-energy cyclotron facility used primarily for the production of medical diagnostic imaging and radiotherapy isotopes. The proposed 70MeV cyclotron is unique and capable of producing isotopes that are not available, or have very limited availability, from other commercial sources in the United States.

The major isotope to be produced is Sr-82, which is currently in short supply worldwide and is produced in the U.S. only by the U.S. Department of Energy (DOE) National Laboratories in Los Alamos, New Mexico and Brookhaven, New York. Sr-82 is the parent isotope used in the production of Rb-82 generators for PET myocardial perfusion imaging. Positron will have an access to a Rb-82 generator through a proprietary relationship with a major manufacturer or its own Rb-82 generator and intends to utilize all Sr-82 produced by the facility to supply its cardiac PET client base. This allows Positron to have a complete, integrated, supply chain. Positron's captive customer base of Attriis® owners and the existing robust PET users require a constant supply of radiopharmaceuticals manufactured from the Sr-82 radioisotope, giving us a significant advantage against any potential commercial competition.

A key point in determining the competitive landscape of U.S. Sr-82 production is the policy of the DOE to not compete with the private sector. While the DOE produces a majority of Sr-82 in the world, once Sr-82 is reasonably available commercially, the DOE can be compelled to withdraw from the market. Positron intends to couple the cyclotron with facilities for material processing, isotope target manufacturing, radiopharmaceutical manufacturing and equipment manufacturing operations; this facility, located in Gary, Indiana, will also host Positron's corporate

headquarters.

With the recent growth of cardiac PET imaging, the supply of isotopes is quickly moving towards capacity within the next one-three years. Annual demand for medical imaging products, produced by a high-energy cyclotron, are currently estimated at over \$20 million and is expected to reach \$30-35 million over the next few years, with continued growth estimated at 25-30% per year thereafter.

The DOE lists many isotopes for medical treatment or diagnostics that are in short supply, some of which can be produced in a high-energy commercial accelerator. Moving from R&D to clinical trials and then to commercial use, these isotopes will further expand the market. Additionally, using secondary targets, a high-energy cyclotron can also produce low-energy isotopes, in conjunction with, the production of high-energy isotopes, generating additional revenue. Positron Corporation can be a key market maker in all these segments and can enter the market, essentially, without competition. The revenue potential and diversity inherent in this project is considerable.

The cost of the project, including equipment, building, land, working capital and contingencies, is approximately \$65 million with itemized costs detailed in the business plan. The facility will be located in the city of Gary, Indiana, concurrent with the relocation of Positron's corporate headquarters and manufacturing facilities. Positron has accepted a proposal from Gary, Indiana for \$30 million in economic incentives through the issuance of long-term Economic Development Tax Increment Revenue Bonds ("TIF Bonds") and New Market Tax Credits ("NMTC").

Total amount of funding Positron seeks is \$65 million; \$30 million in corporate debt financing, \$15 million in TIF bonds financing, \$10 million in NMTC equity investment (approximate net proceeds) and \$10 million in equity financing. The availability of Industrial Revenue Bonds exists, if necessary.

## **Our Market**

According to the U.S. Department of Health and Human Services, there are more than 22,000 cardiovascular diseases specialists in the U.S., and their number will increase to 31,000 by 2020. This is the target market for our products and services, as well as hospitals in the United States that performs or could perform nuclear cardiac procedures and want to automate the delivery of radiopharmaceuticals. By adding complimentary products, we are able to offer customers value added solutions which include low cost molecular imaging devices, maintenance service, disease specific software, radiopharmaceutical unit doses drawing devices, and, potentially, radiopharmaceuticals agents for Cardiac Nuclear Medicine.

Cardiac Nuclear medicine helps in the diagnosis, management and prevention of cardiovascular disease (CVD) in patients. Radiopharmaceuticals are injected into a patient to provide the most accurate, non-invasive test for identifying narrowed coronary arteries, mild cholesterol build-up or diffuse coronary vascular disease, conditions that are responsible for almost all heart attacks.

Cardiovascular disease is the leading cause of death in the United States and constitutes 17% of overall national health expenditures (Forecasting the Future of Cardiovascular Disease in the United States, American Heart Association, 2011). Direct CVD costs are projected to increase from \$273 Billion, in 2010, to \$818 Billion, in 2030; with indirect costs, due to lost productivity, expected to rise from \$172 Billion to \$276 Billion by 2030.

## **Market Potential**

The cardiac PET industry has an indisputable need for a stable, efficient and economical environment. Through Positron's leadership and vision to integrate each key segment of the cardiac PET supply chain, the Company will stimulate growth and increase capacity to meet the needs of the global cardiac PET market. Positron intends to become the premier product, services, and solutions provider in the nuclear cardiology industry.

Although the cardiac PET industry experienced its most challenging year ever, it enabled the Company to aggressively pursue its strategy toward aggregating and integrating the key components critical in securing the cardiac value chain. Positron is dedicated to lowering the barriers that have been constricting, or could later constrict, the progress of medical advancements in cardiac PET. Through our efforts to supplement the supply of key radioisotopes and our ability to offer innovative products and services, management has methodically positioned Positron to become the industry's only end-to-end solutions provider. PET is the future of nuclear cardiology.

We believe that Positron is the only company with the critical components to vertically integrate the fragmented “single source supplier environment” that exists in the cardiac PET market today and that these initiatives are intended to drive the Company towards consistent profitability and cash flow.

## Results of Operations

Consolidated results of operations for the years ending December 31, 2012 and 2011 include Positron and its wholly-owned subsidiaries: Imaging PET Technologies (“IPT”) and Manhattan Isotope Technology LLC (“MIT”), since its acquisition on January 17, 2012.

**Revenues** - Revenues for the year ended December 31, 2012 were approximately \$2,801,000 as compared to \$6,663,000 for the year ended December 31, 2011. PET systems sold during the year ended December 31, 2012 were approximately \$1,142,000 as compared to \$5,490,000 in 2011, which accounted for the significant decrease in revenues. Sales of PET systems during 2012 have been negatively impacted by the shortage of Sr-82/Rb-82 generators supplied to cardiac imaging facilities by Bracco Diagnostics due to the voluntary recall of their Rb-82 generator and limited production capacity or supply of the parent isotope Sr-82.

**Costs of Sales** - Costs of sales for the year ended December 31, 2012 were approximately \$1,972,000 compared to \$6,386,000 for the year ended December 31, 2011. Costs were lower in 2012 principally due to the lower sales of the PET systems for which the Company is currently selling at a near break-even margin.

**Operating Expenses** - The Company’s operating expenses were approximately \$5,551,000 for the year ended December 31, 2012 compared to \$4,669,000 for the year ended December 31, 2011.

Research and development costs for the year ended December 31, 2012 were approximately \$940,000 compared to \$1,315,000 for the year ended December 31, 2011. Research and development costs included mostly payroll, contract labor and consulting fees for Attrius® software and the PosiRx® development. In addition, the Company has incurred research and development costs related to its planned radiopharmaceutical facility in preparation for regulatory approvals and production. The Company intends to continue to support research and development in software, radiopharmaceutical products and automated devices.

Sales and marketing expense for the years ended December 31, 2012 and 2011 were \$285,000 and \$1,038,000, respectively and were lower in 2012 due to the Company’s efforts to limit expenditures during the recall period of the Bracco Diagnostics rubidium generator.



General and administrative expenses during the year ended December 31, 2012 were \$4,326,000 as compared to \$2,316,000 for the year ended December 31, 2011. The increase is primarily attributable to the higher amount of stock based compensation of \$1,784,000 (*2012 Equity Incentive Plan*) and costs related to the acquisition of MIT, the Company's wholly-owned subsidiary, acquired in January 2012. The Company did not incur similar expenses during the year ended December 31, 2011.

**Other Expenses** – During the years ended December 31, 2012 and 2011, the Company recorded other expenses of approximately \$3,233,000 and \$1,729,000, respectively. Other expenses include interest expense, derivative expenses, debt modification expense and other gains and losses.

Interest expense was \$1,753,000 and \$1,185,000 for the years ended December 31, 2012 and 2011, respectively. \$1,380,000 and \$1,134,000 of the total interest expense for the years ended December 31, 2012 and 2011, respectively, was related to the accretion of debt discount associated with convertible debt.

The Company recorded loss on fair value adjustments to embedded conversion derivative liability associated with the convertible debt of approximately \$726,000 and \$544,000 for the years ended December 31, 2012 and 2011, respectively.

During the year ended December 31, 2012, the Company recognized \$432,000 expense on the modification of the terms of the convertible debentures and \$282,000 settlement loss on the settlement of certain liabilities. The Company did not record any of these expenses during the year ended December 31, 2011.

During the year ended December 31, 2012, the Company also recorded \$18,000 loss on the disposal of property and equipment, \$282,000 loss on settlement and other expenses of \$22,000.

**Net Loss** - For the year ended December 31, 2012, the Company had a net loss approximately of \$7,955,000, or \$0.01 per share, compared to a net loss of \$6,121,000, or \$0.01 per share, for the year ended December 31, 2011.

## **Liquidity and Capital Resources**

Since inception, the Company has expended substantial resources on research and development. The Company has sustained substantial losses due to the limited number of systems sold or placed into service each year. Revenues have

also fluctuated significantly from year to year. The Company had an accumulated deficit of approximately \$116,328,000 at December 31, 2012. The Company will need to increase sales of systems, services, radiopharmaceuticals and radioisotopes and apply the research and development advancements to achieve profitability in the future. Prior to the voluntary recall of Sr-82/Rb-82 generators by Bracco Diagnostics, the Company had experienced an increase in sales with the launch of Attrius® PET system and expected additional increase in revenue through sales of automated radiopharmaceutical systems and recurring revenue from the sale of radiopharmaceuticals and radioisotopes. With an increase in sales, all systems material cost of goods and labor costs will be significantly lower. The Company expects that these developments will have a positive impact on the sales & service volumes and increased net margins. However, there is no assurance that the Company will be successful in selling new systems.

The Company's ability to achieve its objectives is dependent on its ability to sustain and enhance its revenue stream and to continue to raise capital through loans, advances from related parties, credit and the private placement of restricted securities until such time as the Company achieves profitability. To date, management has been successful in raising capital as needed for the continued operations of the Company. There is no guarantee that management will be able to continue to raise needed capital in this fashion.

The Company's current financial condition raises doubt as to its ability to continue as a going concern. The report of the Company's independent registered public accountants, which accompanied the financial statements for the year ended December 31, 2012, is qualified with respect to that risk. If the Company is unable to obtain debt or equity financing to meet its cash needs, it may have to severely limit or cease business activities or may seek protection from creditors under the bankruptcy laws.

At December 31, 2012, the Company had current assets of \$1,104,000 and total assets of \$2,685,000 compared to December 31, 2011, when current assets were \$1,951,000 and total assets were \$2,308,000. The decrease in current assets is attributable primarily to the, approximately, \$560,000 decrease in deposits on Attrius systems, \$339,000 decrease in accounts receivable, and \$190,000 decrease in inventories, partially offset by \$242,000 increase in cash. During 2012, the non-current assets increased by approximately \$1,224,000, primarily due to the increase in property, plant and equipment of \$986,000 and intangible assets of \$358,000, partially offset by \$77,000 decrease in deferred rent and \$43,000 decrease in other assets.

Current liabilities at December 31, 2012 were \$8,110,000 compared to \$5,176,000 at December 31, 2011. At December 31, 2012, current liabilities was largely comprised of accounts payable and accrued liabilities, customer deposits, unearned revenue, current portion of notes payable, convertible debt and embedded conversion derivative liabilities. At December 31, 2011, the Company's current liabilities consisted of accounts payable and accrued liabilities, customer deposits, unearned revenue, common stock payable, convertible debt and embedded conversion derivative liabilities. The increase in current liabilities as of December 31, 2012 is largely due to the \$1,228,000 increase in convertible debentures, \$2,743,000 increase in the embedded derivative liability associated with the convertible debentures, and increase in the current portion of notes payable of \$129,000. This increase got partially offset by decrease in customer deposits of \$656,000, \$230,000 decrease in unearned revenue and \$269,000 decrease in common stock payable.

Net cash used in operating activities during the year ended December 31, 2012 was \$2,240,000 compared to \$4,075,000 used in operating activities during the year ended December 31, 2011. The decrease is primarily due to utilization of significant customer deposits in 2011 of \$2,801,000 versus \$656,000 in 2012, decrease of deposits to the manufacturer of the PET systems (\$560,000 in 2012 versus \$1,924,000 in 2011), as well as increased non-cash changes which increased net loss in 2012.

Net cash used in investing activities was \$72,000 for the year ended December 31, 2012 compared to \$10,000 for the year ended December 31, 2011, was related primarily to purchases of property and equipment.

Net cash provided by financing activities was \$2,554,000 and \$2,945,000 for the years ended December 31, 2012 and 2011, respectively. During the year ended December 31, 2012, cash from financing activities was comprised of \$2,210,000 proceeds from the issuance of convertible debt, \$305,000 proceeds from borrowing under notes payable, \$65,000 proceeds from non-interest bearing advances, \$383,000 proceeds from issuance of common stock, which got partially offset by repayments of notes payable of \$324,000 and repayments of non-interest bearing advances of \$85,000. During the year ended December 31, 2011, the Company received \$845,000 in connection with the exercise of warrants and \$2,100,000 in connection with the issuance of convertible debt.

#### **OFF-BALANCE SHEET ARRANGEMENTS**

We have not entered into any transactions with unconsolidated entities whereby we have financial guarantees, subordinated retained interests, derivative instruments or other contingent arrangements that expose us to material continuing risks, contingent liabilities, or any other obligations under a variable interest in an unconsolidated entity that provides us with financing, liquidity, market risk or credit risk support.

#### **Recently Issued Accounting Standards**



In February 2013, the FASB issued amendments to the accounting guidance for presentation of comprehensive income to improve the reporting of reclassifications out of accumulated other comprehensive income. The amendments do not change the current requirements for reporting net income or other comprehensive income, but do require an entity to provide information about the amounts reclassified out of accumulated other comprehensive income by component. In addition, an entity is required to present, either on the face of the statement where the net income is presented or in the notes, significant amounts reclassified out of accumulated other comprehensive income by the respective line items of net income but only if the amount reclassified is required under GAAP to be reclassified to net income in its entirety in the same reporting period. For other amounts that are not required under GAAP to be reclassified in their entirety to net income, an entity is required to cross-reference to other disclosures required under GAAP that provide additional detail about these amounts. These amendments are effective prospectively for reporting periods beginning after December 15, 2012. The Company does not believe the adoption of this guidance will have a material impact on the consolidated financial statements.

Other pronouncements issued by the FASB or other authoritative accounting standards group with future effective dates are either not applicable or not significant to the consolidated financial statements of the Company.

### **Critical Accounting Policies**

The discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amount of assets and liabilities and related disclosure of contingent assets and liabilities at the date of our financial statements and the reported amounts of revenues and expenses during the applicable period. Actual results may differ from these estimates under different assumptions or conditions.

We define critical accounting policies as those that are reflective of significant judgments and uncertainties and which may potentially result in materially different results under different assumptions and conditions. In applying these critical accounting policies, our management uses its judgment to determine the appropriate assumptions to be used in making certain estimates. These estimates are subject to an inherent degree of uncertainty. Our critical accounting policies include the following:

### ***Revenue Recognition***

The Company's revenues are currently derived from the sale of medical equipment products, maintenance contracts, service revenues and radioisotope sales. Revenues from maintenance contracts are recognized over the term of the contract. Service revenues are recognized upon performance of the services. The Company recognizes revenues from the sale of medical equipment and radioisotope products when earned. Specifically, revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred (or services have been rendered), the price is fixed or determinable, and collectability is reasonably assured. The Company obtains a signed customer acceptance after installation is complete for the sale of its Attrius® PET systems.

For multiple-element arrangements, revenue is allocated to each element based on their relative selling prices. Relative selling prices are based first on vendor specific objective evidence (VSOE), then on third-party evidence of selling price (TPE) when VSOE does not exist, and then on estimated selling price (ESP) when VSOE and TPE do not exist.

Because the Company has neither VSOE nor TPE for its products, the allocation of revenue has been based on the Company's ESPs. The objective of ESP is to determine the price at which the Company would transact a sale if the product was sold on a stand-alone basis. The Company determines ESP by considering the facts and circumstances of the product being sold.

### ***Stock Compensation***

We have granted stock options to employees, directors and consultants, as well as warrants to other third parties. For employee and director grants, the value of each option award is estimated on the date of grant using the Black-Scholes option-pricing model. The Black-Scholes model takes into account volatility in the price of our stock, the risk-free interest rate, the estimated life of the option, the closing market price of our stock and the exercise price. We base our estimates of our stock price volatility on the historical volatility of our common stock and our assessment of future volatility; however, these estimates are neither predictive nor indicative of the future performance of our stock. For purposes of the calculation, we assumed that no dividends would be paid during the life of the options and warrants. The estimates utilized in the Black-Scholes calculation involve inherent uncertainties and the application of management judgment. In addition, we are required to estimate the expected forfeiture rate and only recognize expense for those equity awards expected to vest. As a result, if other assumptions had been used, our recorded stock-based compensation expense could have been materially different from that reported. In addition, because some of the options and warrants issued to employees, consultants and other third-parties vest upon the achievement of certain milestones, the total expense is uncertain.

***Embedded conversion derivative liabilities***

Embedded conversion derivative liabilities are recorded as liabilities at their estimated fair value at the date of issuance, with subsequent changes in estimated fair value recorded in other income (expense) in the Company's statement of operations in each subsequent period. The embedded conversion derivative liabilities are measured at estimated fair value using the Black Scholes model. Inherent in this model are assumptions related to expected stock-price volatility, expected life, risk-free interest rate and dividend yield. We estimate volatility at the date of issuance, and at each subsequent reporting period, based on historical volatility that matches the expected remaining life of the embedded conversion derivative liabilities. The risk-free interest rate is based on the U.S. Treasury zero-coupon yield curve. The expected life of the embedded conversion derivative liabilities is assumed to be equivalent to their remaining contractual term. The dividend rate is based on our historical rate, which we anticipate to remain at zero. The assumptions used in calculating the estimated fair value of the embedded conversion derivative liabilities represent our best estimates, however these estimates involve inherent uncertainties and the application of management judgment. As a result, if factors change and different assumptions are used, the embedded conversion derivative liabilities and the change in estimated fair value could be materially different.

***Allowance for doubtful accounts***

Our allowance for doubtful accounts reflects reserves for customer and other receivables to reduce receivables to amounts expected to be collected. Management uses significant judgment in estimating uncollectible amounts. In estimating uncollectible accounts, management considers factors such as current overall economic conditions, industry-specific economic conditions, historical customer performance and anticipated customer performance. While we believe these processes effectively address our exposure for doubtful accounts and credit losses have historically been within expectations, changes in the economy, industry, or specific customer conditions may require adjustments to the allowance for doubtful accounts. As of December 31, 2012 and 2011, the allowance for doubtful accounts was \$50,000.

***Inventory***

Inventories are stated at the lower of cost or market. Cost is determined using the first-in, first-out (FIFO) method of inventory valuation.

Management assesses the recoverability of the various inventory components on a quarterly basis and is based on the estimated net realizable values of respective finished and in process inventories.

### **Information Regarding and Factors Affecting Forward Looking Statements**

The Company is including the following cautionary statement in this Annual Report on Form 10-K to make applicable and take advantage of the safe harbor provision of the Private Securities Litigation Reform Act of 1995 for any forward looking statements made by, or on behalf of the Company. Forward looking statements include statements concerning plans, objectives, goals, strategies, future events or performance and underlying assumptions and other statements which are other than statements of historical facts. Certain statements contained herein are forward looking statements and, accordingly, involve risks and uncertainties which could cause actual results or outcomes to differ materially from those expressed in the forward looking statements.

The Company's expectations, beliefs and projections are expressed in good faith and are believed by the Company to have a reasonable basis, including without limitations, management's examination of historical operating trends, data contained in the Company's records and other data available from third parties, but there can be no assurance that management's expectations, beliefs or projections will result or be achieved or accomplished. In addition to other factors and matters discussed elsewhere herein, the following are important factors that, in the view of the Company, could cause actual results to differ materially from those discussed in the forward looking statements: the ability of the Company to attain widespread market acceptance of its systems; the ability of the Company to obtain acceptable forms and amounts of financing to fund future operations; demand for the Company's services; and competitive factors. The Company disclaims any obligation to update any forward looking statements to reflect events or circumstances after the date hereof.

**Item 7A. Quantitative and Qualitative Disclosures About Market Risk**

Not required for smaller reporting companies.

**Item 8. Financial Statements**

The required Financial Statements and the notes thereto are contained in a separate section of this report beginning with the page following the signature page.

**Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure**

None.

**Item 9A. Controls and Procedures**

**(a) Evaluation of Disclosure Controls and Procedures**

Our principal executive officer and principal financial officer, after evaluating the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) as of December 31, 2012, have concluded that, based on such evaluation, our disclosure controls and procedures were effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms, and is accumulated and communicated to our management, including our principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Notwithstanding the foregoing, we have identified the following material weakness in our disclosure procedures:

***Audit Committee and Financial Expert*** - The Company does not have a formal audit committee with a financial expert, and thus the Company lacks the board oversight role within the financial reporting process.

There can be no assurance that the Company's disclosure controls and procedures will detect or uncover all failures of persons within the Company to disclose material information otherwise required to be set forth in the Company's periodic reports. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable, not absolute, assurance of achieving their control objectives.

**(b) Management's Report on Internal Control over Financial Reporting**

Our management is 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, 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 dispositions 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

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.

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 risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies and procedures may deteriorate.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2012. In making this assessment, management used the criteria set forth by the Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission, or the COSO criteria. Based on this assessment, management believes that, as of December 31, 2012, our internal control over financial reporting was effective at a reasonable assurance level based on these criteria.

This annual report does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's independent registered public accounting firm pursuant to rules of the Securities and Exchange Commission that permit the Company to provide only management's report in this annual report.

### **(c) Changes in Internal Control over Financial Reporting**

For the quarter ended December 31, 2012, the Company changed its internal control over financial reporting by devoting greater resources and including additional personnel to perform the Company's financial reporting functions including the retention of additional, external accountants to assist in recording, processing, summarizing and reporting the Company's financial information. Other than the control improvements discussed above, there have been no changes in the Company's internal control over financial reporting during the most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

### **Item 9B. Other Information**

On April 11, 2013, the Company accepted subscriptions from Patrick G. Rooney, its Chairman and Chief Executive Officer, and Corey N. Conn, its Chief Financial Officer in the amounts of \$500,000 and \$250,000 respectively for an aggregate investment of \$750,000. In consideration of these subscriptions, the Company issued 7,500,000 shares of its newly created Series H Junior Convertible Preferred Stock, par value \$0.01 per share (the "Series H Preferred Stock"). The Series H Preferred Stock ranks junior to dividends and distributions of the Company's assets upon liquidation to all previously-issued shares of the Company and is not entitled to receive interest or dividends. The Series H Preferred Stock is convertible into shares of the Company's Common Stock at a rate equal to the number of shares of Series H Preferred Stock being converted multiplied by the Original Issuance Price of \$0.10 and divided by seventy percent (70%) of the daily weighted volume average price for the three trading days prior to conversion. The Series H Preferred Stock shall be entitled to two hundred (200) votes per share of Series H Preferred Stock on all matters which holders of Common Stock are entitled to vote.

**PART III****Item 10. Directors, Executive Officers, and Corporate Governance**

The following table sets forth: (1) names and ages of all persons who presently are and who have been selected as directors and executive officers of the Registrant; (2) all positions and offices with the Registrant held by each such person; (3) any period during which he or she has served as such:

Name	Age	Position with the Company
Patrick G. Rooney	50	Chief Executive Officer and Chairman of the Board
Joseph G. Oliverio	43	Chief Technical Officer and Executive Director of PET and Director
Jason J. Kitten	40	Executive Director of Radioisotopes
Charles S. Conroy	43	Chief Operating Officer, Executive Director of Sale and Marketing
Corey N. Conn	50	Chief Financial Officer, Director
Timothy M. Gabel	43	Vice President of Engineering & Service
Scott Stiffler	43	General Manager of Pharmaceutical Automation and Product Development
Sachio Okamura	62	Director
Dr. Anthony C. Nicholls	65	Director

Directors are elected annually and serve until the next annual meeting and until his successor has been elected and qualified, or until his earlier death, resignation or removal.

**Patrick G. Rooney.** Mr. Rooney has served as Chairman of the Company since July 26, 2004 and has served as Chief Executive Officer since 2009. Mr. Rooney serves on the Board of Directors of Neusoft Positron Medical Systems Co., Ltd., a joint venture with Neusoft Medical Systems of China that manufactures the Company's PET products. Since March 2003, Mr. Rooney has been the Managing Director of Solaris Opportunity Fund L.P. ("Solaris"). On November 18, 2011, the U.S. Securities and Exchange Commission commenced a civil action against Mr. Rooney and Solaris Management, LLC, the General Partner of Solaris ("Solaris Management"). The action alleges, among other things, Solaris' investment concentration in Positron was a misuse of Solaris' funds and that Rooney failed to sufficiently disclose his role in Positron to Solaris' investors. Through 1985-2000, Patrick G. Rooney and/or Rooney Trading were members of The Chicago Board of Options Exchange, The Chicago Board of Trade and The Chicago Mercantile Exchange. In September 1998 through March 2003, Mr. Rooney was the Managing Director of Digital Age Ventures, Ltd., a venture capital investment company. From August 19, 2003 to December 31, 2005, Mr. Rooney served as Chief Executive Officer and Director of Imagin Molecular Corporation. The Company's Officers and Directors concluded Mr. Rooney's extensive experience in financing and background in early stage companies make him an ideal candidate to serve on the Board of Directors.



**Joseph G. Oliverio.** Mr. Oliverio was appointed by the Board of Directors to serve as the Company's Chief Technical Officer on May 14, 2009. From 2005 to 2009, Mr. Oliverio served as President of the Company. From August 18, 2006 to June 3, 2010, Mr. Oliverio served on the Board of Directors and Chief Executive Officer of Imagin Molecular Corporation, a publicly-owned Delaware corporation, and affiliate of the Registrant. Prior to April 15, 2009, Mr. Oliverio served on the Board of Directors of Neusoft Positron Medical Systems Co., Ltd., a joint venture with Neusoft Medical Systems of China that manufactures the Company's PET products. Prior to joining Positron, Mr. Oliverio was the Chief Operating Officer of Michael E. Merhige, M.D., LLC, a renowned coronary disease reversal and prevention center. Mr. Oliverio earned an MBA from the University of Phoenix and a BS in Nuclear Medicine Technology from State University of New York at Buffalo, and is a certified nuclear medicine technologist. Mr. Oliverio has performed more than 13,000 combined heart and cancer PET scans using Positron devices and brings to the Company a valuable combination of business, clinical and technical skill sets. The Company's Officers and Directors concluded Mr. Oliverio's extensive clinical and technical PET experience and industry background make him an ideal candidate to serve on the Board of Directors.

**Jason J. Kitten.** Jason Kitten is the founder and President of Manhattan Isotope Technology, LLC (MIT), which he founded in 2009 and was acquired by Positron in January of 2012. Mr. Kitten was appointed by the Board of Directors to serve as the Company's Executive Director of Radioisotopes. Prior thereto, Mr. Kitten worked at the Los Alamos National Laboratory from 1995 to 2010. Mr. Kitten holds a Master of Science degree in Radiopharmaceutical Science and has led projects in production of radioisotopes for medical, industrial, power, and military applications as well as Initiatives for Proliferation Prevention radioisotope projects abroad. The Company's Officers and Board of Directors concluded Mr. Kitten's experience and distinguished achievements in the radiopharmaceutical industry made him an ideal candidate to serve as Executive Director of Radioisotopes.

**Charles S. Conroy.** Charles Conroy joined Positron as Chief Operating Officer in November of 2012. Mr. Conroy has extensive industry experience in corporate and product strategy, partner and alliance management, licensing, acquisitions, divestitures and portfolio management. Mr. Conroy defines and implements strategies focused on accelerating growth across the company's product portfolio and leads the Company's sales and marketing initiatives, which are focused on revenue generation, enhancing Positron's industry position and brand recognition as a leader in nuclear medicine. Prior to joining the Company, Mr. Conroy served as the Vice President of Marketing of Amerinet since 2010. Prior thereto and from 2005, Mr. Conroy held a variety of leadership positions at Covidien including Director of Business Development and Licensing, Director of Global Marketing, and Regional Operations Manager. Additionally, from 2002 to 2004, Mr. Conroy worked for Eli Lilly in Business to Business Marketing and eBusiness Strategy and Alliance Management. Mr. Conroy earned a Bachelor of Science in Pharmacy from Purdue University and a Master of Business Administration from the University of Michigan. Mr. Conroy is a Board Certified Nuclear Pharmacist. The Company's Officers and Board of Directors concluded Mr. Conroy's experience and distinguished career made him an ideal candidate to serve as its Chief Operating Officer and Executive Director of Sales and Marketing.

**Corey N. Conn.** Mr. Conn was appointed by the Board of Directors to serve as Chief Financial Officer in 2005 and was elected as a Director on January 2, 2008. From August 19, 2003 until June 3, 2010, Mr. Conn has served on the Board of Directors and as Chief Financial Officer of Imagin Molecular Corporation, a publicly-owned Delaware corporation, and affiliate of the Registrant. Mr. Conn was a co-founder of Imagin Molecular's wholly-owned subsidiary Cipher Multimedia and served as its Chief Financial Officer and Director from August 2003 until his resignation in June 2010. Mr. Conn was Vice President of Business Development at iXL, an e-business and e-transformations services provider from June 1996 to September 1999 and also served as Managing Director of Virtual Partnerships, LLC, a business development and business strategy consulting firm from 1999 to 2004. Mr. Conn received a Bachelor's Degree in Business Administration from Bradley University. The Company's Officers and Directors concluded Mr. Conn's extensive experience in financial compliance and operations in early stage companies make him an ideal candidate to serve on the Board of Directors.

**Scott M. Stiffler.** Mr. Stiffler was appointed General Manager of Pharmaceuticals Automation and Product Development in 2012. From 2010 through 2012 Mr. Stiffler served as Vice President of Pharmaceuticals and has previously served as Director of Quality and Regulatory Affairs since September 2008. Mr. Stiffler served as a Certified Six Sigma Black Belt as well as a Program Manager for the development of delivery devices at Eli Lilly and Company from June 2001 to September 2008. While at Eli Lilly, Mr. Stiffler was responsible for the development of one of their highest volume insulin pens as well as several quality and cost improvement projects. Prior to Eli Lilly Mr. Stiffler worked for 10 years in the automotive industry as an engineer and project manager. He has a degree in Mechanical Engineering from Purdue University and an MBA from Indiana University's Kelley School of Business. The Company's Officers and Directors concluded Mr. Stiffler's extensive engineering, product generation and pharmaceutical background from a large corporation make him an ideal candidate to serve as a General Manager of Pharmaceuticals Automation and Product Development.

**Timothy M. Gabel** has served as Vice President of Operations of Positron Corporation from March of 2006 and was appointed by the Board of Directors to serve as Director of Service on May 15, 2009. Prior thereto and from 1996, Mr. Gabel specialized in international business, international technical project management, product research and

development, lean manufacturing implementation, and product design with the automotive components supplier, Delphi Corporation. His experience includes technology transfer, and joint venture partnership development with companies in China, Japan, Mexico and Europe. Mr. Gabel holds four U.S. patents, and earned his Bachelor's of Science in Mechanical Engineering from the State University of New York at Buffalo. The Company's Officers and Directors concluded Mr. Gabel's extensive engineering and management experience in large corporations make him an ideal candidate to serve as a Vice President. Mr. Gabel resigned in December 2012.

**Sachio Okamura.** Mr. Okamura has served as a director since his appointment to the Board of the Company on April 1, 2001. Mr. Okamura has performed bio-medical consulting services for Okamura Associates, Inc. from 1993 through the present date. These consulting services have included regulatory, distribution, licensing, joint venture, investment, merger and acquisition activities involving businesses in the United States and Japan. Mr. Okamura was in charge of bio-medical business development for various offices of Mitsubishi Corporation from 1978 through 1993. Mr. Okamura received a BS in Biochemistry in 1975 from the University of California, Davis and a Master of International Business from the American Graduate School of International Management in 1978. The Company's Officers and Directors concluded Mr. Okamura's extensive experience within the medical industry makes him an ideal candidate to serve on the Board of Directors.

**Dr. Anthony C. Nicholls.** Dr. Nicholls has served as a director since 2005. Dr. Nicholls is an independent consultant with over 30 years' experience in medical devices and diagnostics research. He has lectured in 45 countries of the world on subjects varying from the rapid diagnosis of Sepsis, Tuberculosis and Aids to vaccine production, environmental responsibility and entrepreneurship. He co-founded FAS Medical Ltd. in 1992, and as CEO, raised (CDN) \$6 million, achieved a listing on CDNX and established sales of the company's products in 21 countries. He was employed as CEO of FAS Medical Ltd. from 1992 to 2003. Previously he was CEO of Trinity Biotech PLC and oversaw a successful IPO on NASDAQ. Earlier, Dr. Nicholls held senior management posts with Cambridge Biotech Corp. (Exec. VP), Biotech Research Labs Inc. (Pres. & COO), Fisher Scientific (Senior VP. & Gen. Manager), Ciba Corning Medical (Director, New Technology Development) and Flow General (International Scientific Director). Dr. Nicholls' academic career included seven years as Head of Microbiology and Immunology at the Midhurst Medical Research Institute in Sussex, England, where he published numerous papers on tuberculosis, pneumonia and sepsis. Dr. Nicholls is a graduate of the University of Birmingham School of Medical Sciences and has a Ph.D. in Immunology. The Company's Officers and Directors concluded Mr. Nicholls extensive experience within the medical industry as a businessman and physician make him an ideal candidate to serve on the Board of Directors.

#### AUDIT COMMITTEE.

Our Board of Directors has not established a separate audit committee within the meaning of Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Instead the board of directors acts as the audit committee within the meaning of Section 3(a)(58)(B) of the Exchange Act. The Company intends on establishing an Audit Committee composed of independent directors of the Company. The audit committee's duties would be to recommend to the Company's board of directors the engagement of independent auditors to audit the Company's financial statements and to review its accounting and auditing principles. The audit committee would review the scope, timing and fees for the annual audit and the results of audit examinations performed by the internal auditors and independent public accountants, including their recommendations to improve the system of accounting and internal controls. The audit committee would at all times be composed exclusively of directors who are, in the opinion of the Company's board of directors, free from any relationship which would interfere with the exercise of independent judgment as a committee member and who possess an understanding of financial statements and generally accepted accounting principles.

#### COMPENSATION COMMITTEE.

Our board of directors does not have a separate compensation committee responsible for determining executive and director compensation. Instead, the board of directors fulfills this function, and each member of the Board participates in the determination. Given the small size of the Company and its Board, plus the Company's limited resources, locating, obtaining and retaining additional independent directors is extremely difficult. In the absence of independent directors, the Board does not believe that creating a separate compensation committee would result in any improvement in the compensation determination process. Accordingly, the board of directors has concluded that the Company and its stockholders would be best served by having the entire board of director's act in place of a compensation committee. When acting in this capacity, the Board does not have a charter.

#### CODE OF ETHICS

We have adopted a code of ethics meeting the requirements of Section 406 of the Sarbanes-Oxley Act of 2002. We believe our code of ethics is reasonably designed to deter wrongdoing and promote honest and ethical conduct; provide full, fair, accurate, timely and understandable disclosure in public reports; comply with applicable laws; ensure prompt internal reporting of violations; and provide accountability for adherence to the provisions of the code of ethic. Our code of ethics is filed as an exhibit to this Form 10-K.

#### **Item 11. Executive Compensation**

**Summary Compensation Table**

The following Summary Compensation Table shows certain compensation information for each of the Named Executive Officers. Compensation data is shown for the years ended December 31, 2012 and 2011. This information includes the dollar value of base salaries, bonus awards, the number of stock options granted, and certain other compensation, if any, whether paid or deferred.

Name and Principal Position	Year	Salary (a)	Bonus	Restricted Stock Awards	Option Awards (b)	Nonequity incentive plan	All other compensation	Total
Patrick G. Rooney, Chief Executive Officer	2012	\$138,640	\$-	-	\$161,084	-	-	\$299,724
	2011	\$122,225	\$85,500	-	-	-	-	\$207,725
Joseph G. Oliverio, Chief Technical Officer	2012	\$147,200	-	-	\$161,084	-	-	\$308,284
	2011	\$146,231	\$10,000	-	-	-	-	\$156,231
Corey N. Conn, Chief Financial Officer	2012	\$141,295	\$-	-	\$161,084	-	-	\$302,379
	2011	\$122,192	\$35,000	-	-	-	-	\$157,192
Timothy M. Gabel, Vice President Engineering and Service	2012	\$36,801	\$-	-	-	-	-	\$36,801
	2011	\$125,000	\$10,000	-	-	-	-	\$135,000
Scott Stiffler, General Manager of Pharmaceutical Automation	2012	\$117,031	\$-	-	\$201,355	-	-	\$318,386
	2011	\$125,000	\$10,000	-	-	-	-	\$135,000
Charles Conroy Chief Operating Officer, Executive Director of Sales and Marketing	2012	\$20,192	\$-	-	\$98,057	-	-	\$118,249
	2011	\$-	\$-	-	-	-	-	\$-
Jason Kitten Executive Director of Radioisotopes	2012	\$117,788	\$-	\$50,000	\$20,136	-	\$27,500	\$190,424
	2011	-	\$-	-	-	-	-	\$-
Sachio Okamura, Director	2012	\$-	\$-	-	-	-	-	\$-
	2011	\$-	\$-	-	-	-	-	\$-
Dr. Anthony C. Nicholls, Director	2012	\$-	\$-	-	-	-	-	\$-
	2011	\$-	\$-	-	-	-	-	\$-

(a) Mr. Gabel resigned in December 2012;

(b) On January 17, 2012, the Company granted employees options to purchase 177,600,000 shares of common stock at an exercise price of \$0.01 per share. Fifty percent of the options vested immediately and the remaining fifty percent vested on January 17, 2013. The options expire on January 17, 2015. The Company granted 20,000,000 stock options to Joseph G. Oliverio, 20,000,000 stock options to Patrick G. Rooney, 20,000,000 stock options to Corey N. Conn, and 25,000,000 stock options to Scott Stiffler,

The following table sets forth for each named executive officer certain information concerning the outstanding equity awards as of December 31, 2012.

Name and Principal Position	Option awards		Stock awards				Equity		
	Number of Securities Underlying Unexercised Options Exercisable	Number of Securities Underlying Unexercised Options Unexercisable	Option Exercise Price (\$)	Option Expiration Date	Market Number Value of of Shares Shares or Units of Stock that Have Not Vested	Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights that Have Not Vested	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights that Have Not Vested		
Joseph Oliverio	225,000	(1) 225,000	\$ 1.00	12/31/13	-	-	-	-	-
Joseph Oliverio	5,000,000	5,000,000	\$ 0.01	01/17/15	-	-	-	-	-
Patrick Rooney	350,000	(1) 350,000	\$ 1.00	12/31/13	-	-	-	-	-
Patrick Rooney	5,000,000	5,000,000	\$ 0.01	01/17/15	—	-	-	-	-
Corey Conn	225,000	(1) 225,000	\$ 1.00	12/31/13	-	-	-	-	-
Corey Conn	5,000,000	5,000,000	\$ 0.01	01/17/15	-	-	-	-	-
Timothy Gabel	182,500	(1) 182,500	\$ 1.00	12/31/13	-	-	-	-	-
Scott Stiffler	6,250,000	6,250,000	\$ 0.01	01/17/15	-	-	-	-	-
Charles Conroy	5,000,000	5,000,000	\$ 0.01	01/17/15	-	-	-	-	-
Jason Kitten	1,250,000	1,250,000	\$ 0.01	01/17/15	-	-	-	-	-

(1) - Options were granted for Series B preferred shares.

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**Equity Compensation Plan Information**

The following table summarizes share and exercise information about the Company's equity compensation plans as of December 31, 2012.

<b>Plan Category</b>	<b>Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights</b>	<b>Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights</b>	<b>Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (excluding securities included in column 1)</b>
Series B Preferred Stock Options	2,500,000	\$ 1.00	-
Common Stock	190,600,000	\$ 0.01	9,400,000

**SUMMARY OF EQUITY COMPENSATION PLANS****Equity-Based Compensation***Key Employee Incentive Compensation.*

The Company has an incentive compensation plan for certain key employees. The incentive compensation plan provides for annual bonus payments based upon achievement of certain corporate objectives as determined by the Company's Board of Directors. During 2012, the Company did not pay any bonus pursuant to the incentive compensation plan.

*2009 Stock Incentive Plan*



Positron's Board of Directors (the "Board") administers the 2009 Stock Incentive Plan ("2009 Plan"), which was adopted by the Board effective September 22, 2009. The purpose of the 2009 Plan is to advance the interests of the Company's stockholders by enhancing the Company's ability to attract, retain and motivate persons who are expected to make important contributions to the Company and by providing such persons with equity ownership opportunities and performance-based incentives that are intended to better align their interests with those of the Company's stockholders. The 2009 Plan provides for the direct issuance of Awards including stock options, restricted stock awards and unrestricted stock awards. All of the Company's employees, officers and directors (including persons who have entered into an agreement with the Company under which they will be employed by the Company in the future), as well as all of the Company's consultants and advisors that are natural persons, are eligible to the awards under the 2009 Plan. The administrator is authorized to determine the terms of each award granted under the plan, including the number of shares, exercise price, term and exercisability. Stock and options may be granted for services rendered or to be rendered. A total of 10,000,000 shares of Common Stock have been authorized for issuance under the 2009 Plan. During 2011, 3,600,000 shares of common stock were issued under the 2009 Plan to consultants for services. As of December 31, 2012, 8,600,000 shares total had been issued under the 2009 Plan.

#### *2010 Equity Incentive Plan*

Positron's Board of Directors (the "Board") administers the 2010 Equity Incentive Plan ("2010 Plan"), which was adopted by the Board effective March 25, 2010. The purpose of the 2010 Plan is to advance the interests of the Company's stockholders by enhancing the Company's ability to attract, retain and motivate persons who are expected to make important contributions to the Company and by providing such persons with equity ownership opportunities and performance-based incentives that are intended to better align their interests with those of the Company's stockholders. The 2010 Plan provides for the direct issuance of Awards including stock options, restricted stock awards and unrestricted stock awards. All of the Company's employees, officers and directors (including persons who have entered into an agreement with the Company under which they will be employed by the Company in the future), as well as all of the Company's consultants and advisors that are natural persons, are eligible to the awards under the 2010 Plan. The administrator is authorized to determine the terms of each award granted under the plan, including the number of shares, exercise price, term and exercisability. Stock and options may be granted for services rendered or to be rendered. A total of 50,000,000 shares of Common Stock have been authorized for issuance under the 2010 Plan. As of December 31, 2012, 40,000,000 shares in total had been issued under the 2010 Plan.

### *2012 Equity Incentive Plan*

On January 17, 2012, Positron's Board of Directors (the "Board") adopted the 2012 Equity Incentive Plan ("2012 Plan"). The plan authorizes issuance a total of 200,000,000 options to purchase common stock shares. The purpose of the 2012 Plan is to advance the interests of the Company's stockholders by enhancing the Company's ability to attract, retain and motivate persons who are expected to make important contributions to the Company and by providing such persons with equity ownership opportunities and performance-based incentives that are intended to better align their interests with those of the Company's stockholders. The 2012 Plan provides for the direct issuance of Awards including stock options, restricted stock awards and unrestricted stock awards. All of the Company's employees, officers and directors (including persons who have entered into an agreement with the Company under which they will be employed by the Company in the future), as well as all of the Company's consultants and advisors that are natural persons, are eligible to the awards under the 2012 Plan. The administrator is authorized to determine the terms of each award granted under the plan, including the number of shares, exercise price, term and exercisability. Stock and options may be granted for services rendered or to be rendered. A total of 200,000,000 shares of Common Stock have been authorized for issuance under the 2012 Plan. On January 17, 2012, the Company granted certain employees options to purchase 177,600,000 shares of common stock under the 2012 Plan at an exercise price of \$0.01 per share. During 2012, 7,000,000 of these options were forfeited. On November 5, 2012, the Company granted additional options to purchase 20,000,000 shares of common stock to a new employee at an exercise price of \$0.01 per share. Fifty percent of the January and November option grants vested immediately on the grant date and the remaining fifty percent vested on January 17, 2013. All the options issued under the plan expire on January 17, 2015. As of December 31, 2012, the Company had a total of 190,600,000 options outstanding, 50% of which were fully vested. The remaining 50% of options vested on January 17, 2013.

### *401(k) Savings Plan*

The Company has a 401(k) Retirement Plan and Trust (the "401(k) Plan") which became effective as of January 1, 1989. Employees of the Company who have completed one-quarter year of service and have attained age 21 are eligible to participate in the 401(k) Plan. Subject to certain statutory limitations, a participant may elect to have his or her compensation reduced by up to 20% and have the Company contribute such amounts to the 401(k) Plan on his or her behalf ("Deferral Contributions"). The Company may make discretionary contributions in an amount up to 25% of the participant's Deferral Contributions up to 6% of his/her compensation ("Employer Contributions"). Additionally, the Company may make such additional contributions, as it shall determine each year in its discretion. All Deferral and Employer Contributions made on behalf of a participant are allocated to his/her individual accounts and such participant is permitted to direct the investment of such accounts.

A participant is fully vested in the current value of that portion of his/her accounts attributable to Deferral Contributions. A participant's interest in that portion of his/her accounts attributable to Employer Contributions is generally fully vested after five years of employment. Distributions under the 401(k) Plan are made upon termination of employment, retirement, disability and death. In addition, participants may make withdrawals in the event of severe hardship or after the participant attains age fifty-nine and one-half. The 401(k) Plan is intended to qualify under

Section 401 of the Internal Revenue Code of 1986, so that contributions made under the 401(k) Plan, and income earned on contributions, are not taxable to participants until withdrawal from the 401(k) Plan.

### **Policy with Respect to \$1 Million Deduction Limit**

It is the Company's policy, where practical, to avail itself of all proper deductions under the Internal Revenue Code. Amendments to the Internal Revenue in 1993, limit, in certain circumstances, the deductibility of compensation in excess of \$1 million paid to each of the five highest paid executives in one year. The total compensation of the executive officers did not exceed this deduction limitation in 2012 or 2011.

### **Compensation of Directors**

Directors who are also employees of the Company receive no fees for services provided in that capacity, but are reimbursed for out-of-pocket expenses incurred in connection with attendance at meetings of the Board of Directors and its committees.

#### *Non-Employee Director Compensation*

During the year ended December 31, 2012 and 2011, our Non-Employee Directors received no compensation from the Company. Non-Employee Directors continue to be reimbursed for their reasonable expenses associated with attending board and committee meetings.

### **Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters**

The following tables, based in part upon information supplied by officers, directors and principal shareholders, set forth certain information regarding the beneficial ownership of the Company's voting securities by (i) all those known by the Company to be beneficial owners of more than 5% of the Company's voting securities; (ii) each director (iii) the Company's Chief Executive Officer and the four other highest paid executive officers (the "Named Executive Officers"); and (iv) the directors and executive officers as a group.

Name of Beneficial Owner	Title of Class	Beneficial Ownership (a)	Number of Shares Subject to Options, Warrants and Convertible Preferred Stock Exercisable	Percent of Class	
Solaris Opportunity Fund, L.P.	(c) Common	3,300,000	0	40.9	%
	Series S Preferred	100,000	1,000,000,000		
Imagin Diagnostic Centres, Inc.	(d) Common	750,000	0	15.3	%
	Series B Preferred	2,622,502	262,250,200		
Joseph G. Oliverio	(e) Common	0	75,000,000	4.9	%
Patrick G. Rooney	(f) Common	48,181,818	1,213,981,818	47.9	%
	Series H Preferred	5,000,000	71,428,571		
Corey N. Conn	(g) Common	0	85,500,000	7.7	%
	Series H Preferred	2,500,000	35,714,285		
Timothy M. Gabel	(h) Common	0	36,500,000	2.4	%
Sachio Okamura	(i) Common	0	2,500,000	*	
Dr. Anthony C. Nicholls	(j) Common	0	1,500,000	*	
Jason M. Kitten	(k) Common	5,000,000	7,500,000	*	
Charles C. Conroy	(l) Common	0	20,000,000	1.3	%
All Directors and Executive Officers as a Group	Common	60,681,818	1,542,981,818	53.3	%

\* Does not exceed 1% of the referenced class of securities.

(a) Security ownership is direct unless indicated otherwise. Security ownership information for beneficial owners is taken from statements filed with the Securities and Exchange Commission pursuant to Sections 13(d), 13(g) and 16(a) and/or information made known to the Company.

(b) For each shareholder, the calculation of beneficial ownership is based upon 1,451,927,262 shares of Common Stock outstanding as of April 15, 2013 and shares of Common Stock subject to options, warrants and/or conversion rights held by the shareholder that are currently exercisable or exercisable within 60 days, which are deemed to be outstanding and to be beneficially owned by the shareholder holding such options, warrants, or conversion rights. Each share of Series A Preferred Stock converts into one fully paid and non-assessable shares of Common Stock. Each share of Series B Convertible Preferred Stock converts into one hundred (100) shares of Common Stock. Each share of Series H Junior Convertible Preferred Stock Converts into a number of shares of Common Stock equal to the number of shares of Series H Preferred Stock being converted multiplied by \$0.10 and divided by the volume weighted average price for the three trading days prior to conversion multiplied by .70. Each share of the Series S Convertible Preferred Stock converts into the number of Series S Preferred shares converted

multiplied by Ten Thousand (10,000).

(c) Includes 3,300,000 Common shares owned directly and 1,000,000,000 shares issuable upon full conversion of 100,000 shares of Series S Preferred Stock. The address for Solaris Opportunity Fund, L.P. is 3801 N. Washington St. Oak Brook, Illinois 60523. Patrick G. Rooney holds voting and dispositive power for Solaris Opportunity Fund, L.P.

(d) Includes 750,000 shares owned directly, and 262,250,200 shares issuable upon full conversion of 2,622,502 shares of Series B Preferred Stock. The address for Imagin Diagnostic Centres, Inc. ("IDC") is 3014 - 610 Granville St., Vancouver, British Columbia, V6C 3T3, Canada. Gregory Pappas, Chief Executive Officer, holds voting and dispositive power for IDC.

(e) Includes 55,000,000 shares of Common Stock issuable upon full conversion of 550,000 Series B shares that may be acquired by Mr. Oliverio pursuant to stock options that are exercisable until December 31, 2013 and 20,000,000 shares of Common Stock options pursuant to 2012 Equity Incentive Plan that are exercisable until January 17, 2015.

(f) Includes 70,000,000 shares of Common Stock issuable upon full conversion of 700,000 Series B shares that may be acquired by Mr. Rooney pursuant to options that are exercisable until December 31, 2013, warrants to purchase 72,500,000 shares of Common Stock at the exercise price of \$.01 which expire on December 31, 2013, and 20,000,000 shares of Common Stock options pursuant to 2012 Equity Incentive Plan that are exercisable until January 17, 2015. Also assumes conversion of 5,000,000 shares of Series H Preferred Stock held by Mr. Rooney at the conversion price of \$.007 per share. Also includes 1,003,300,000 shares of common stock held by or convertible to by Solaris Opportunity fund, L.P. (“Solaris”), over which Mr. Rooney holds voting and dispositive power. Mr. Rooney disavows beneficial ownership over any securities held by Solaris.

(g) Includes 55,000,000 shares of Common Stock issuable upon full conversion of 550,000 Series B shares that may be acquired by Mr. Conn pursuant to stock options that are exercisable until December 31, 2013, warrants to purchase 10,500,000 shares of Common Stock at the exercise price of \$.01 which expire on December 31, 2013, and 20,000,000 shares of Common Stock options pursuant to 2012 Equity Incentive Plan that are exercisable until January 17, 2015. Also assumes the conversion of 2,500,000 shares of Series H Preferred Stock held by Mr. Conn at the conversion price of \$.007 per share.

(h) Includes 36,500,000 shares of Common Stock issuable upon full conversion of 365,000 Series B shares that may be acquired by Mr. Gabel pursuant to stock options that are exercisable until December 31, 2013.

(i) Includes 2,500,000 shares of Common Stock issuable upon full conversion of 25,000 Series B shares that may be acquired by Mr. Okamura pursuant to stock options that are exercisable until December 31, 2013.

(j) Includes 1,500,000 shares of Common Stock issuable upon full conversion of 15,000 Series B shares that may be acquired by Dr. Nicholls pursuant to stock options that are exercisable until December 31, 2013.

(k) Includes 2,500,000 shares of Common Stock that may be acquired by Mr. Kitten pursuant to stock options that are exercisable until January 17, 2015.

(l) Includes 10,000,000 shares of Common Stock that may be acquired by Mr. Conroy pursuant to stock options that are exercisable until January 17, 2015.

The address for all officers and directors of the Company is 530 Oakmont Lane, Westmont, IL. 60559.

## **SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE**

Section 16(a) of the Exchange Act requires the Company's officers and directors, and persons who own more than ten percent of a registered class of the Company's equity securities, to file reports of securities ownership and changes in such ownership with the SEC. Officers, directors and greater than ten percent shareholders also are required by rules promulgated by the SEC to furnish the Company with copies of all Section 16(a) forms they file.

Imagin Diagnostic Centres, Inc., a ten percent shareholder of the Company, has failed to file reports on Form 3 and Form 4 covering the acquisition and status to it for the periods of January 1, 2004 through the filing of this report.

The address for all officers and directors of the Company is 530 Oakmont Lane, Westmont, IL 60559.

### **Item 13. Certain Relationships and Related Transactions and Director Independence**

During the years ended December 31, 2012 and 2011, the Company recognized cost of revenues of approximately \$623,000 and \$4,563,000, respectively, related to the purchase of Attrius® PET systems from Neusoft Positron Medical Systems ("Neusoft") – the Company's joint venture partner located in Shenyang, China. At December 31, 2011, the Company had \$560,000 (three Attrius® systems) in deposits paid to ("Neusoft") for Attrius® systems for which the Company had sales contracts. These deposits were utilized during the year ended December 31, 2012. At December 31, 2011, the Company also had a \$250,000 receivable from Neusoft for certain excess freight charges owed, and had \$218,000 payable to Neusoft for the purchase of an Attrius® PET system. Due to the continued supply delays in the rubidium market, the Company has experienced a significant drop in demand and has been unable to sell new machines. Due to these conditions the NPMS's production schedules have also been affected and, therefore, the Company has been unable to pursue the \$250,000 receivable from NPMS and has charged off this balance.

During 2011, the Company borrowed \$20,000 from, its Chief Executive Officer (CEO). This loan remained unpaid as of December 31, 2011. During the twelve month ended December 31, 2012, the Company borrowed from the CEO additional \$40,000. All the advances, totaling \$60,000, were repaid during 2012 and as of December 31, 2012, the Company did not have an amount due to the Chief Executive Officer.

On January 12, 2012, the Company acquired a building in Westmont, Illinois, which the Company previously leased from its Chief Executive Officer, Patrick G. Rooney (CEO or Lender) for corporate and administrative offices since 2010. The Company issued the Chief Executive Officer 25,000,000 shares of common stock, which were valued at approximately \$250,000 and a convertible debenture of \$250,000, which shall be due on December 31, 2013 and bear interest at 8% per year payable quarterly in cash. In addition, the Company issued 35,000,000 warrants, which entitle the Lender to purchase shares of the Company's common stock, par value \$0.01 per share, at an exercise price of \$0.01 per share and expiring on December 31, 2013. The Lender is entitled to convert the accrued interest and principal of the convertible debentures into common stock of the Company at a conversion price equal to 55% of the lowest daily volume weighted average price for the three trading days preceding conversion. During the twelve months ended December 31, 2012, the Company converted \$100,000 of the principal amount of these Convertible Debentures into 18,181,818 shares of Common Stock.

During the year ended December 31, 2012, the Company issued additional convertible debt to its Chief Executive Officer in the amount of \$1,320,000. The debt is non-interest bearing and matures on December 31, 2013. In connection with the this debt, the Company issued warrants to purchase 37,500,000 shares of the Company's Common Stock, at an exercise price of \$0.01 per share expiring on December 31, 2013. The lender is entitled to convert the accrued interest and principal of the convertible debentures into common stock of the Company at a conversion price equal to 55% of the lowest daily volume weighted average price for the three trading days preceding conversion.

In September and December 2012, the Company issued two non-interest bearing convertible debentures totaling \$380,000 to Corey Conn, the Company's Chief Financial Officer (CFO or Lender). In connection with the this debt, the Company issued warrants ("Warrants") to purchase 10,500,000 shares of the Company's Common Stock, at an exercise price of \$0.01 per share expiring on December 31, 2013. The Lender is entitled to convert the accrued interest and principal of the Convertible Debentures into common stock of the Company at a conversion price equal to 55% of the lowest daily volume weighted average price for the three trading days preceding conversion. These debentures are noninterest bearing.

As of December 31, 2011, \$27,498 had been advanced to Manhattan Isotope Technology LLC in contemplation of acquiring the company which occurred in January 2012.

#### *Director Independence*

We currently use NASDAQ's general definition for determining director independence, which states that "independent director" means a person other than an officer or employee of the company or its subsidiaries or any other individual having a relationship, that, in the opinion of the company's Board of Directors, would interfere with the exercise of independent judgment in carrying out the responsibilities of the director.



The Board has determined that two of our five current directors, Sachio Okamura and Dr. Anthony C. Nicholls meet this definition of independence.

**Item 14. Principal Accountant Fees and Services**

The following table shows the fees billed to the Company for the audits and other services provided by Sassetti LLC, its independent registered public accounting firm for the year ended December 31:

	2012	2011
Audit fees (1)	\$78,945	\$72,440
Audit-related fees (2)	5,200	-
Tax fees (3)	10,940	12,300
All other fees (4)	-	4,360
	\$95,085	89,100

(1) Audit fees consist of fees billed for professional services rendered for the audit of the Registrant's annual financial statements and review of the interim consolidated financial statements included in quarterly reports and services that are normally provided in connection with statutory and regulatory filings or engagements.

(2) Audit-Related fees consist of fees billed for due diligence and audit procedures related to the acquisition of MIT, including testing of beginning balances.

(3) Tax fees consist of fees billed for professional services rendered for tax compliance, tax advice and tax planning (domestic and international). These services include assistance regarding federal, state and international tax compliance, acquisitions and international tax planning.

(4) Other fees consist of review of regulatory compliance.

The Board of Directors has considered the role of Sasseti LLC in providing certain tax services to Positron and has concluded that such services are compatible with Sasseti LLC's independence as our auditors. In addition, the Board of Directors has approved providing certain tax services since the effective date of the SEC rules. The rule states that an auditor is not independent of an audit client if the services it provides to the client are not appropriately approved. The Board of Directors will continue to pre-approve all audit and permissible non-audit services provided by the independent auditors until an audit committee is formed which will then be responsible for approving audit fees. We are looking for new board members that would be qualified to serve on an audit committee.

The Board of Directors has adopted a policy for the pre-approval of services provided by the independent auditors, pursuant to which it may pre-approve any service consistent with applicable law, rules and regulations. Under the policy, the Board of Directors may also delegate authority to pre-approve certain specified audit or permissible non-audit services to one or more of its members, including the Chairman. A member to whom pre-approval authority has been delegated must report its pre-approval decisions, if any, to the Board of Directors at its next meeting, and any such pre-approvals must specify clearly in writing the services and fees approved. Unless the Board of Directors determines otherwise, the term for any service pre-approved by a member to whom pre-approval authority has been delegated is twelve months.

## Item 15. Exhibits

- |     |  |
|-----|--|
| 2.1 | Securities Exchange Agreement with Solaris Opportunity Fund, L.P. and Imagin Molecular Corporation, dated November 17, 2008 (incorporated herein by reference to Exhibit 2.1 of the Company's Quarterly Report on Form 10-Q for the quarter ending September 30, 2008 filed on November 19, 2008 (File No. 000-24092)) |
| 3.1 | Articles of Incorporation of the Registrant (incorporated herein by reference to Exhibit 3.1 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).  |

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- 3.2 By-laws of the Registrant, as amended (incorporated herein by reference to Exhibit 3.2 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).
- 4.1 Specimen Stock Certificate (incorporated herein by reference to Exhibit 4.1 of the Company's Annual Report on Form 10-KSB for the year ended December 31, 1994).
- 4.2 Statement of Designation Establishing Series A 8% Cumulative Convertible Redeemable Preferred Stock of Positron Corporation, dated February 28, 1996 (incorporated herein by reference to Exhibit 4.3 of the Company's Annual Report on Form 10-KSB for the year ended December 31, 1995).
- 4.3 Warrant Agreement dated as of June 15, 1999 between Positron Corporation and Gary Brooks (incorporated herein by reference to Exhibit 4.9 to the Company's Registration Statement on Form SB-2 (File No. 333-30316)).
- 4.4 Stock Purchase Warrant dated as of June 15, 1999 issued by Positron Corporation to Gary H. Brooks (incorporated herein by reference to Exhibit 4.10 to the Company's Registration Statement on Form SB-2 (File No. 333-30316)).
- 4.5 Warrant Agreement dated as of June 15, 1999 between Positron Corporation and S. Lewis Meyer (incorporated herein by reference to Exhibit 4.11 to the Company's Registration Statement on Form SB-2 (File No. 333-30316)).
- 4.6 Stock Purchase Warrant dated as of June 15, 1999 issued by Positron Corporation to S. Lewis Meyer (incorporated herein by reference to Exhibit 4.12 to the Company's Registration Statement on Form SB-2 (File No. 333-30316)).

- 4.7 Statement of Designation Establishing Series B Preferred Stock of Positron Corporation dated September 30, 2006 (incorporated by reference to Exhibit 4.7 to the Company's Annual Report on Form 10-K/A filed on March 4, 2012.)
- 4.8 Statement of Designation Establishing Series C Preferred Stock of Positron Corporation dated May 21, 2004 (incorporated by reference to Exhibit 4.1 to the Company's Report on Form 8-K dated May 21, 2004)
- 4.9 Statement of Designation Establishing Series D Preferred Stock of Positron Corporation dated May 21, 2004 (incorporated by reference to Exhibit 4.2 to the Company's Report on Form 8-K dated May 21, 2004)
- 4.10 Statement of Designation Establishing Series E Preferred Stock of Positron Corporation dated February 28, 2005 (incorporated by reference to Exhibit 4.18 to the Company's Annual Report on Form 10-KSB dated April 19, 2005)
- 4.11 Statement of Designation Establishing Series F Preferred Stock of Positron Corporation (incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K dated June 27, 2005).
- 4.12 Statement of Designation Establishing Series S Convertible Redeemable Preferred Stock of Positron Corporation, dated November 7, 2008 (incorporated herein by reference to Exhibit 2.1 of the Company's Quarterly Report on Form 10-Q for the quarter ending September 30, 2008 filed on November 19, 2008 (File No. 000-24092))
- 4.13 2007 Omnibus Securities and Incentive Plan (incorporated by reference to Exhibit 4.13 to the Company's Annual Report on Form 10-K/A filed on March 4, 2012)
- 4.14\* Statement of Designation Establishing Series H Junior Convertible Preferred Stock.
- 10.1 Lease Agreement dated as of July 1, 1991, by and between Lincoln National Pension Insurance Company and Positron Corporation (incorporated herein by reference to Exhibit 10.1 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).
- 10.2 Agreement dated as of March 1, 1993, by and between Positron Corporation and Oxford Instruments (UK) Limited (incorporated herein by reference to Exhibit 10.2 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).
- 10.3 International Distribution Agreement dated as of November 1, 1992, by and between Positron Corporation and Batec International, Inc. (incorporated herein by reference to Exhibit 10.3 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).
- 10.4 1994 Incentive and Nonstatutory Option Plan (incorporated herein by reference to Exhibit A to Company's Proxy Statement dated May 2, 1994).†
- 10.5 Amended and Restated 1987 Stock Option Plan (incorporated herein by reference to Exhibit 10.5 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).†
- 10.6

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Retirement Plan and Trust (incorporated herein by reference to Exhibit 10.6 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).†

10.7 Amended and Restated License Agreement dated as of June 30, 1987, by and among The Clayton Foundation for Research, Positron Corporation, K. Lance Gould, M.D., and Nizar A. Mullani (incorporated herein by reference to Exhibit 10.7 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).

10.8 Clarification Agreement to Exhibit 10.7 (incorporated herein by reference to Exhibit 10.8 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).

10.9 Royalty Assignment dated as of December 22, 1988, by and between K. Lance Gould and Positron Corporation (incorporated herein by reference to Exhibit 10.10 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).

- Royalty Assignment dated as of December 22, 1988, by and between Nizar A. Mullani and Positron Corporation (incorporated herein by reference to Exhibit 10.11 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).
- Royalty Assignment dated as of December 22, 1988, by and between The Clayton Foundation and Positron Corporation (incorporated herein by reference to Exhibit 10.12 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).
- Consulting Agreement dated as of January 15, 1993, by and between Positron Corporation and K. Lance Gould, M.D. (incorporated herein by reference to Exhibit 10.24 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).
- Consulting Agreement dated February 23, 1995, effective December 15, 1994, by and between Positron Corporation and F. David Rollo, M.D. Ph.D., FACNP.
- Consulting Agreement dated as of January 15, 1993, by and between Positron Corporation and Nizar A. Mullani (incorporated herein by reference to Exhibit 10.31 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).
- Consulting Agreement dated as of November 12, 1993, by and between Positron Corporation and OmniMed Corporation (incorporated herein by reference to Exhibit 10.35 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).
- Contract No. 1318 dated as of December 30, 1991, by and between Positron Corporation and The University of Texas Health Science Center at Houston (incorporated herein by reference to Exhibit 10.39 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).
- Letter Agreement dated July 30, 1993 between Positron Corporation and Howard Baker (incorporated herein by reference to Exhibit 10.52 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).
- Technology Transfer Agreement dated as of September 17, 1990, by and between Positron Corporation and Clayton Foundation for Research (incorporated herein by reference to Exhibit 10.54 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).
- Form of Amended and Restated Registration Rights Agreement dated as of November 3, 1993, by and among Positron and the other signatories thereto (1993 Private Placement) (incorporated herein by reference to Exhibit 10.73 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).
- Registration Rights Agreement dated as of July 31, 1993, by and among Positron and the other signatories thereto (other than the 1993 Private Placement) (incorporated herein by reference to Exhibit 10.74 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).
- Software Licenses dated as of March 1, 1993, by and between Positron Corporation and Oxford Instruments (UK) Limited (incorporated herein by reference to Exhibit 10.81 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).
- Distribution Agreement dated as of June 1, 1993, by and between Positron Corporation and Elscint, Ltd. (incorporated herein by reference to Exhibit 10.82 to the Company's Registration Statement on Form SB-2 (File

No. 33-68722)).

10.23 First Amendment to Amended and Restated Registration Rights Agreement, dated as of November 19, 1993, by and among Positron Corporation and the other signatories thereto (incorporated herein by reference to Exhibit 10.91 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).

- 10.24 Agreement made and entered into as of October 31, 1993, by and between Positron Corporation and Nizar A. Mullani (incorporated herein by reference to Exhibit 10.97 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).
- 10.25 Agreement made and entered into as of October 31, 1993, by and between Positron Corporation and K. Lance Gould (incorporated herein by reference to Exhibit 10.98 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).
- 10.26 Agreement made and entered into as of November 15, 1993, by and between Positron Corporation and Nizar A. Mullani (incorporated herein by reference to Exhibit 10.100 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).
- 10.27 Agreement made and entered into as of November 15, 1993, by and between Positron Corporation and K. Lance Gould (incorporated herein by reference to Exhibit 10.101 to the Company's Registration Statement on Form SB-2 (File No. 33-68722)).
- 10.28 First Amendment made and entered as of January 25, 1994, by and between Emory University d/b/a Crawford Long Hospital and Positron Corporation (incorporated herein by reference to Exhibit 10.102 of the Company's Annual Report on Form 10-KSB for the year ended December 31, 1993).
- 10.29 Acquisition Agreement between General Electric Company and Positron Corporation dated July 15, 1996 (incorporated by reference to Exhibit 10.56 to the Company's Report on Form 10-KSB for the year ended December 31, 1996).
- 10.30 Sales and Marketing Agreement With Beijing Chang Feng Medical (incorporated by reference to Exhibit 10.58 to the Company's Report on Form 10-KSB/A for the year ended December 31, 1996).
- 10.31 Stock Purchase Agreement between Positron Corporation and Imatron, Inc. (incorporated hereby by reference to Annex A to the Company's Proxy Statement dated December 18, 1998).
- 10.32 Agreement and Release dated as of November 30, 1999 by and among Positron Corporation, K. Lance Gould and University of Texas Medical Center (incorporated herein by reference to Exhibit 10.62 to the Company's Registration Statement on Form SB-2 (File No. 333-30316)).
- 10.33 1999 Stock Option Plan (incorporated herein by reference to Exhibit 10.63 to the Company's Registration Statement on Form SB-2 (File No. 333-30316)).†
- 10.34 1999 Non-Employee Directors' Stock Option Plan (incorporated herein by reference to Exhibit 10.64 to the Company's Registration Statement on Form SB-2 (File No. 333-30316)).†
- 10.35 1999 Stock Bonus Incentive Plan (incorporated herein by reference to Exhibit 10.65 to the Company's Registration Statement on Form SB-2 (File No. 333-30316)).†
- 10.36 1999 Employee Stock Purchase Plan (incorporated herein by reference to Exhibit 10.66 to the Company's Registration Statement on Form SB-2 (File No. 333-30316)).†
- 10.37 Stock Purchase Warrant dated September 1, 1999 issued by Positron to S. Okamura and Associates, Inc. (incorporated herein by reference to Exhibit 10.67 to the Company's Registration Statement on Form SB-2 (File



No. 333-30316)).

10.38 Stock Purchase Warrant dated August 18, 1999 issued by Positron to Morris Holdings Ltd. (incorporated herein by reference to Exhibit 10.68 to the Company's Registration Statement on Form SB-2 (File No. 333-30316)).

10.39 Stock Purchase Warrant dated January 20, 2000 issued by Positron to Vistula Finance Limited (incorporated herein by reference to Exhibit 10.69 to the Company's Registration Statement on Form SB-2 (File No. 333-30316)).

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- 10.40 Loan Agreement with Imatron Inc dated June 29, 2001 (incorporation herein by reference to the Company's Report on Form 8-K dated July 12, 2001)
- 10.41 Technology Purchase Agreement, dated as of June 29, 2003, by and between General Electric Company and Positron Corporation (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on July 14, 2003)
- 10.42 Software License Agreement, dated as of June 29, 2003, by and between General Electric Company and Positron Corporation (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on July 14, 2003)
- 10.43 Agreement for Services, dated as of June 29, 2003, by and between General Electric Company and Positron Corporation (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on July 14, 2003)
- 10.44 Note Purchase Agreement dated May 21, 2004 between Positron and IMAGIN Diagnostic Centres, Inc. (incorporated by reference to Exhibit 10.1 to the Company's Report on Form 8-K dated May 21, 2004)
- 10.45 Secured Convertible Promissory Note dated May 21, 2004 in the principal amount of \$400,000 (incorporated by reference to Exhibit 10.2 to the Company's Report on Form 8-K dated May 21, 2004)
- 10.46 Form Secured Convertible Promissory Note in the principal amount of \$300,000 (incorporated by reference to Exhibit 10.3 to the Company's Report on Form 8-K dated May 21, 2004)
- 10.47 Security Agreement dated May 21, 2004 between Positron and IMAGIN Diagnostic Centres, Inc. (entered into in connection with Note Purchase Agreement) (incorporated by reference to Exhibit 10.4 to the Company's Report on Form 8-K dated May 21, 2004)
- 10.48 Loan Agreement dated May 21, 2004 between Positron and IMAGIN Diagnostic Centres, Inc. (incorporated by reference to Exhibit 10.5 to the Company's Report on Form 8-K dated May 21, 2004)
- 10.49 Security Agreement dated May 21, 2004 between Positron and IMAGIN Diagnostic Centres, Inc. (entered into in connection with Loan Agreement) (incorporated by reference to Exhibit 10.7 to the Company's Report on Form 8-K dated May 21, 2004)
- 10.50 Voting Agreement dated May 21, 2004 between Positron and IMAGIN Diagnostic Centres, Inc. (incorporated by reference to Exhibit 10.8 to the Company's Report on Form 8-K dated May 21, 2004)
- 10.51 Registration Rights Agreement dated May 21, 2004 between Positron and IMAGIN Diagnostic Centres, Inc. (incorporated by reference to Exhibit 10.9 to the Company's Report on Form 8-K dated May 21, 2004)
- 10.52 Note Purchase Agreement dated February 28, 2005 between Positron and Solaris Opportunity Fund, L.P. (incorporated by reference to Exhibit 10.83 to the Company's Annual Report on Form 10-KSB/A for the fiscal year ended December 31, 2005)
- 10.53 Secured Convertible Promissory Note dated March 7, 2005 in the principal amount of \$200,000 in favor of Solaris Opportunity Fund, L.P. (incorporated by reference to Exhibit 10.84 to the Company's Annual Report on Form 10-KSB/A for the fiscal year ended December 31, 2005)

Security Agreement dated February 28, 2005 between Positron and Solaris Opportunity Fund, L.P.  
10.54 (incorporated by reference to Exhibit 10.85 to the Company's Annual Report on Form 10-KSB/A for the fiscal year ended December 31, 2005)

Registration Rights Agreement dated February 28, 2005 between Positron and Solaris Opportunity Fund, L.P.  
10.55 (incorporated by reference to Exhibit 10.86 to the Company's Annual Report on Form 10-KSB/A for the fiscal year ended December 31, 2005)

- 10.56 Warrant Purchase Agreement by and among Positron Corporation, Carlos Sao Paulo, Sofia Salema Garcao, Maria Madalena Pimental and José Maria Salema Garção dated May 12, 2005 (incorporated by reference to Exhibit 10.1 to the Company's Report on Form 8-K dated May 12, 2005)
- 10.57 Note Purchase Agreement dated June 27, 2005 between Positron and Solaris Opportunity Fund, L.P. (incorporated by reference to Exhibit 10.1 to the Company's Report on Form 8-K dated June 27, 2005)
- 10.58 Form Secured Convertible Promissory Note (incorporated by reference to Exhibit 10.2 to the Company's Report on Form 8-K dated June 27, 2005)
- 10.59 Security Agreement dated June 27, 2005 between Positron and Solaris Opportunity Fund, L.P. (incorporated by reference to Exhibit 10.3 to the Company's Report on Form 8-K dated June 27, 2005)
- 10.60 Registration Rights Agreement dated June 27, 2005 between Positron and Solaris Opportunity Fund, L.P. (incorporated by reference to Exhibit 10.4 to the Company's Report on Form 8-K dated June 27, 2005)
- 10.61 Note Purchase Agreement dated August 8, 2005 between Positron and IMAGIN Diagnostic Centres, Inc. (incorporated by reference to Exhibit 10.1 to the Company's Report on Form 8-K dated August 8, 2005)
- 10.62 Form Secured Convertible Promissory Note (incorporated by reference to Exhibit 10.2 to the Company's Report on Form 8-K dated August 8, 2005)
- 10.63 Registration Rights Agreement dated August 8, 2005 between Positron and IMAGIN Diagnostic Centres, Inc. (incorporated by reference to Exhibit 10.3 to the Company's Report on Form 8-K dated August 8, 2005)
- 10.64 Agreement between Gary H. Brooks and Positron Corporation dated September 29, 2005 (incorporated by reference to Exhibit 10.1 of the Company's Report on Form 8-K dated September 29, 2005)
- 10.65 Note Purchase Agreement dated October 31, 2005 between Positron and IMAGIN Diagnostic Centres, Inc. (incorporated by reference to Exhibit 10.1 of the Company's Report on Form 8-K dated October 31, 2005)
- 10.66 Form Secured Convertible Promissory Note (incorporated by reference to Exhibit 10.2 of the Company's Report on Form 8-K dated October 31, 2005)
- 10.67 Registration Rights Agreement dated October 31, 2005 between Positron and IMAGIN Diagnostic Centres, Inc. (incorporated by reference to Exhibit 10.3 of the Company's Report on Form 8-K dated October 31, 2005)
- 10.68 Joint Venture Contract dated July 30, 2005 between Positron Corporation and Neusoft Medical Systems Co., Ltd. (incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-QSB for the quarter ended September 30, 2005)
- 10.69 Technologies Contribution Agreement dated July 30, 2005 between Positron Corporation and Neusoft Positron Medical Systems Co., Ltd. (incorporated by reference to Exhibit 10.2 of the Company's Quarterly Report on Form 10-QSB for the quarter ended September 30, 2005)
- 10.70 Software Sub-License Agreement dated September 6, 2005 between Positron Corporation and Neusoft Positron Medical Systems Co., Ltd. (incorporated by reference to Exhibit 10.3 of the Company's Quarterly Report on Form 10-QSB for the quarter ended September 30, 2005)

Trademark License Agreement dated July 30, 2005 between Positron Corporation and Neusoft Positron  
10.71 Medical Systems Co., Ltd. (incorporated by reference to Exhibit 10.4 of the Company's Quarterly Report on  
Form 10-QSB for the quarter ended September 30, 2005)

Corporate Name License Agreement dated July 30, 2005 between Positron Corporation and Neusoft Positron  
10.72 Medical Systems Co., Ltd. (incorporated by reference to Exhibit 10.5 of the Company's Quarterly Report on  
Form 10-QSB for the quarter ended September 30, 2005)

- 10.73 Employment Agreement dated December 27, 2005 between Positron Corporation and Joseph G. Oliverio (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on March 9, 2006)†
- 10.74 Joseph G. Oliverio Stock Option Agreement (incorporated by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K filed on March 9, 2006)†
- 10.75 Joseph G. Oliverio Notice of Grant of Stock Option (incorporated by reference to Exhibit 10.3 of the Company's Current Report on Form 8-K filed on March 9, 2006)†
- 10.76 Amended and Restated 2005 Stock Incentive Plan (incorporated by reference to Exhibit 10.4 of the Company's Current Report on Form 8-K filed on March 9, 2006)†
- 10.77 2005 Stock Incentive Plan - Form Notice of Grant of Stock Option (incorporated by reference to Exhibit 10.5 of the Company's Current Report on Form 8-K filed on March 9, 2006)†
- 10.78 2005 Stock Incentive Plan - Form Stock Option Agreement (incorporated by reference to Exhibit 10.6 of the Company's Current Report on Form 8-K filed on March 9, 2006)†
- 10.79 Memorandum of Understanding between Quantum Molecular Pharmaceutical, Inc., Imagin Diagnostic Centres, Inc. and Positron Corporation dated December 28, 2005. (incorporated by reference to Exhibit 10.79 of the Company's Annual Report on Form 10-K filed April 5, 2006)
- 10.80 2006 Stock Incentive Plan (incorporated by reference to the Company's Current Report on Form 8-K filed on , 2006)
- 10.81 Statement of Designation Establishing Series G Preferred Stock of Positron Corporation (incorporated by reference to the Company's Current Report on Form 8-K filed on March 9, 2006.)
- 10.82 Form of Series G Unit Subscription Agreement (incorporated by reference to the Company's Current Report on Form 8-K filed on March 9, 2006).
- 10.83 Form of Common Stock Purchase Warrant (incorporated by reference to the Company's Current Report on Form 8-K filed on March 9, 2006).
- 10.84 Securities Purchase Agreement dated May 23, 2006 (incorporated by reference to Exhibit 10.6 of the Company's Current Report on Form 8-K filed on June 1, 2006).
- 10.85 Callable Secured Convertible Note in favor of AJW Offshore, Ltd dated May 23, 2006 (incorporated by reference to the Company's Current Report on Form 8-K filed on June 1, 2006).
- 10.86 Callable Secured Convertible Note in favor of AJW Partners, LLC dated May 23, 2006 (incorporated by reference to the Company's Current Report on Form 8-K filed on June 1, 2006).
- 10.87 Stock Purchase Warrant in favor of AJW Qualified Partners, LLC (incorporated by reference to the Company's Current Report on Form 8-K filed on June 1, 2006).
- 10.88

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Stock Purchase Warrant in favor of AJW Offshore, Ltd. (incorporated by reference to the Company's Current Report on Form 8-K filed on June 1, 2006).

10.89 Stock Purchase Warrant in favor of New Millennium Capital Partners, II (incorporated by reference to the Company's Current Report on Form 8-K filed on June 1, 2006).

10.90 Registration Rights Agreement dated May 23, 2006 (incorporated by reference to the Company's Current Report on Form 8-K filed on June 1, 2006).

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- 10.91 Security Agreement dated May 23, 2006 (incorporated by reference to the Company's Current Report on Form 8-K filed on June 1, 2006).
- 10.92 Intellectual property Security Agreement.( incorporated by reference to the Company's Current Report on Form 8-K filed on June 1, 2006)
- 10.93 Securities Purchase Agreement dated January 26, 2007 (incorporated by reference to the Company's Current Report on Form 8-K filed on January 31, 2006).
- 10.94 Purchase Agreement dated January 26, 2007 (incorporated by reference to the Company's Current Report on Form 8-K filed on January 31, 2006).
- 10.95 Non-Negotiable Promissory Note dated January 26, 2007 (incorporated by reference to the Company's Current Report on Form 8-K filed on January 31, 2006).
- 10.96 Collateral Pledge Agreement dated January 26, 2007 (incorporated by reference to the Company's Current Report on Form 8-K filed on January 31, 2006).
- 10.97 Promissory Note in favor of Imagin Molecular Corporation, dated April 10, 2008 (incorporated by reference to the Company's Annual Report on Form 10-K filed on April 14, 2008).
- 10.98 Stock Pledge Agreement with Imagin Molecular Corporation dated April 10, 2008. (incorporated by reference to the Company's Annual Report on Form 10-K filed on April 14, 2008).
- 10.99 Stock Purchase Agreement with Positron Pharmaceutical Company, Dos Shield Corporation, Nukemed, Inc., Michael Thomas, and John Zehner, dated June 11, 2008 incorporated by reference to the Company's Current Report on Form 8-K filed on June 11, 2008).
- 10.100 Employment Agreement with John Zehner, dated June 6, 2008 (incorporated by reference to the Company's Current Report on Form 8-K filed on June 11, 2008).
- 10.101 2008 Stock Incentive Plan (incorporated herein by reference to Exhibit 10.1 to the Company's Registration Statement on Form S-8(File No. 333-152616)).†
- 10.102 Promissory Note in favor of Imagin Molecular Corporation, dated August 18, 2008 (incorporated by reference to the Company's Quarterly Report on Form 10-Q filed on August 19, 2008).
- 10.103 Addendum to the Stock Pledge Agreement with Imagin Molecular Corporation, dated August 18, 2008 (incorporated by reference to the Company's Quarterly Report on Form 10-Q filed on August 19, 2008).
- 10.104 2009 Stock Incentive Plan (incorporated herein by reference to Exhibit 10.1 to the Company's Registration Statement on Form S-8(File No. 333-162204)).†
- 2009 Equity Incentive Plan (incorporated herein by reference to Exhibit 99.1 to the Company's Registration Statement on Form S-8(File No. 333-165724)).†



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10.105 Settlement Agreement and Mutual Release with New Millennium Capital Partners II, LLC, AJW Offshore, Ltd., AJW Qualified Partners, LLC and AJW Partners, LLC, dated July 28, 2011 (incorporated herein by reference to Exhibit 10.1 to the Company's Current Form 8-K (File No. 000-24092))

14.1 Code of Conduct and Ethics.

21 \* List of Subsidiaries

31.1\* Chairman of the Board Certification of Periodic Financial Report Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

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- 31.2\* Chief Financial Officer Certification of Periodic Financial Report Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- 32.1# Chairman of the Board Certification Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002
- 32.2# Chief Financial Officer Certification Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002
- † Management contract or compensatory plan or arrangement identified pursuant to Item 13(a).
- \* Filed herewith
- # Furnished herewith
- † Management contract or compensatory plan or arrangement identified pursuant to Item 13(a).
- \* Filed herewith
- # Furnished herewith

**(b) Reports on Form 8-K**

For the quarter ending December 31, 2012, the Company filed a Current Report on Form 8-K disclosing the receipt of subscriptions in the aggregate amount of \$1,600,000 by Patrick G. Rooney, the Registrant's Chairman and Chief Executive Officer and Corey Conn, the Registrant's Chief Financial Officer.

**SIGNATURES**

In accordance with Section 13 or 15(d) of the Exchange Act, the Registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

**POSITRON CORPORATION**

Date: April 15, 2013 By: */s/ Patrick G. Rooney*  
 Patrick G. Rooney  
 Chief Executive Officer and Chairman of the Board  
 (principal executive officer)

By: */s/ Corey N. Conn*  
 Corey N. Conn  
 Chief Financial Officer  
 (principal financial officer)

By: */s/ Joseph G. Oliverio*  
 Joseph G. Oliverio  
 Chief Technology Officer and Director

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 capacities and on the dates indicated.

<b>Signature</b>	<b>Title</b>	<b>Date</b>
<i>/s/ PATRICK G. ROONEY</i> Patrick G. Rooney	Chairman and Chief Executive Officer (Principal Executive Officer)	April 15, 2013
<i>/s/COREY N. CONN</i> Corey N. Conn	Chief Financial Officer and Director (Principal Financial Officer)	April 15, 2013
<i>/s/JOSEPH G. OLIVERIO</i> Joseph G. Oliverio	Chief Technical Officer and Director	April 15, 2013
<i>/s/JASON KITTEN</i> Jason Kitten	Executive Director of Radioisotopes	April 15, 2013
<i>/s/CHARLES CONROY</i> Charles Conroy	Chief Operating Officer and Executive Director of Sales and Marketing	April 15, 2013

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/s/SCOTT STIFFLER  
Scott Stiffler

General Manager of Pharmaceutical Automation April 15, 2013

/s/SACHIO OKAMURA  
Sachio Okamura

Director

April 15, 2013

/s/ANTHONY C. NICHOLLS  
Dr. Anthony Nicholls

Director

April 15, 2013

**POSITRON CORPORATION AND SUBSIDIARIES**

**FINANCIAL STATEMENTS**

**WITH REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

**for the years ended December 31, 2012 and 2011**

**FINANCIAL STATEMENTS**

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Sassetti LLC

Certified Public Accountants

The Board of Directors

Positron Corporation

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have audited the accompanying consolidated balance sheets of Positron Corporation and Subsidiaries as of December 31, 2012 and 2011 and the related consolidated statements of operations and comprehensive loss, stockholders' equity, and cash flows for the years 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 audits.

We conducted our audits 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 financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the 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 audits provide 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 Positron Corporation and Subsidiaries as of December 31, 2012 and 2011, and the results of their operations and cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

The accompanying consolidated 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 a significant accumulated deficit which raises substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ Sassetti LLC

Oak Park, Illinois

April 15, 2013

6611 W. North Avenue \* Oak Park, Illinois 60302 \* Phone (708) 386-1433 \* Fax (708) 386-0139

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**POSITRON CORPORATION AND SUBSIDIARIES****CONSOLIDATED BALANCE SHEETS****(In thousands, except share data)**

	December 31,	
	2012	2011
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$243	\$1
Accounts receivable, less allowance for doubtful accounts of \$50	273	612
Inventories, less reserve of \$457 and \$490	551	741
Prepaid expenses	37	37
Deposits – Attrius® systems	-	560
Total current assets	1,104	1,951
Property and equipment, less accumulated depreciation of \$346 and \$135	1,170	184
Deferred rent	-	77
Intangible assets	358	-
Other assets	53	96
Total assets	\$2,685	\$2,308
<b>LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)</b>		
Current liabilities:		
Accounts payable, trade and accrued liabilities	\$1,634	\$1,645
Customer deposits	746	1,402
Unearned revenue	58	288
Common stock payable	-	269
Notes payable – current portion	129	-
Convertible debenture, less debt discount of \$1,798 and \$966	1,562	334
Embedded conversion derivative liabilities	3,981	1,238
Total current liabilities	8,110	5,176
Notes payable –noncurrent portion	560	-
Contingent earnout payable	205	-
Total liabilities	8,875	5,176
Stockholders' equity (deficit):		
Series A preferred stock: \$1.00 par value; 8% cumulative, convertible, redeemable; 7,900,000 shares authorized; 440,932 and 457,599 shares issued and outstanding.	441	457
Series B preferred stock: \$1.00 par value; convertible, redeemable; 9,000,000 shares authorized; 3,056,487 and 7,828,822 shares issued and outstanding	2,750	7,521
Series G preferred stock: \$1.00 par value; convertible, redeemable; 3,000,000 shares authorized; 0 and 19,200 shares issued and outstanding	-	19



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Series S preferred stock: \$1.00 par value; convertible, redeemable; 100,000 shares authorized; 100,000 shares issued and outstanding	100	100
Common stock: \$0.01 par value; 3,000,000,000 shares authorized; 1,451,927,262 and 788,327,497 shares issued and outstanding	14,203	7,567
Additional paid-in capital	92,802	89,999
Other comprehensive loss	(143 )	(143 )
Accumulated deficit	(116,328)	(108,373)
Treasury stock: 60,156 shares at cost	(15 )	(15 )
Total stockholders' deficit	(6,190 )	(2,868 )
Total liabilities and stockholders' equity	\$2,685	\$2,308

See accompanying notes to consolidated financial statements

**POSITRON CORPORATION AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS****(In thousands, except per share data)**

	Year Ended December 31,	
	2012	2011
Revenues:	\$2,801	\$6,663
Costs of revenues:	1,972	6,386
Gross profit	829	277
Operating expenses:		
General and administrative	4,326	2,316
Research and development	940	1,315
Selling and marketing	285	1,038
Total operating expenses	5,551	4,669
Loss from operations	(4,722 )	(4,392 )
Other expense		
Interest expense	(1,753 )	(1,185 )
Derivative losses	(726 )	(544 )
Debt modification expense	(432 )	-
Loss on settlement	(282 )	-
Other expense	(22 )	-
Loss on disposal of property and equipment	(18 )	-
Total other expense	(3,233 )	(1,729 )
Loss before income taxes	(7,955 )	(6,121 )
Income taxes	-	-
Net loss and comprehensive loss	\$(7,955 )	\$(6,121 )
Basic and diluted loss per common share	\$(0.01 )	\$(0.01 )
Basic and diluted weighted average shares outstanding	1,265,270	786,579

See accompanying notes to consolidated financial statements

**POSITRON CORPORATION AND SUBSIDIARIES****CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY (DEFICIT)****(In thousands, except share data)**

	Series A Preferred Stock		Series B Preferred Stock		Series S Preferred Stock		Series G Preferred Stock		Common Stock	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount
Balance December 31, 2010	457,599	\$457	6,668,444	\$6,361	100,000	\$100	19,200	\$19	782,727,497	\$7,511
Net loss	-	-	-	-	-	-	-	-	-	-
Conversion of Series B to common stock	-	-	(20,000)	(20)	-	-	-	-	2,000,000	20
Issuance of common stock for services	-	-	-	-	-	-	-	-	3,600,000	36
Exercise of warrants	-	-	400,000	400	-	-	-	-	-	-
Issuance of Series B for services	-	-	117,500	117	-	-	-	-	-	-
Allocation of convertible debenture to fair value of warrants	-	-	-	-	-	-	-	-	-	-
Conversion of convertible debenture to Series B	-	-	537,878	538	-	-	-	-	-	-
Reclassification of embedded conversion derivative liability to APIC upon conversion	-	-	-	-	-	-	-	-	-	-

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of convertible  
debenture

Receivable from warrants exercise	-	-	125,000	125	-	-	-	-	-	-
			-						-	
Balance December 31, 2011	457,599	\$457	7,828,822	\$7,521	100,000	\$100	19,200	\$19	788,327,497	\$7,567
Conversion of Series A to common stock	(16,667)	(16)	-	-	-	-	-	-	16,667	-
Conversion of Series B to common stock	-	-	(4,772,335)	(4,771)	-	-	-	-	477,233,501	4,772
Conversion of Series G to common stock	-	-	-	-	-	-	(19,200)	(19)	2,020,000	20
Issuance of common stock for cash	-	-	-	-	-	-	-	-	38,300,000	383
Issuance of common stock for services	-	-	-	-	-	-	-	-	41,165,240	412
Issuance of common stock for investment	-	-	-	-	-	-	-	-	30,000,000	300
Allocation of convertible debenture to fair value of warrants	-	-	-	-	-	-	-	-	-	-
Reclassification of warrant derivative liability to APIC upon conversion of convertible debenture	-	-	-	-	-	-	-	-	-	-
Issuance of stock payable	-	-	-	-	-	-	-	-	17,000,000	170
	-	-	-	-	-	-	-	-	57,864,357	579

Shares issued for  
note payable

Stock based  
compensation -  
stock options

Net Loss

Balance

December 31, 2012	440,932	\$441	3,056,487	\$2,750	100,000	\$100	-	\$-	1,451,927,262,	\$14,203
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See accompanying notes to consolidated financial statements

## POSITRON CORPORATION AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF STOCKHOLDERS' DEFICIT

(In thousands, except share data)

(Continued)

	Additional Paid-In Capital	Receivable from exercise of warrants	Other Comprehensive Income	Accumulated Deficit	Treasury Shares	Stock Amount	Total
Balance December 31, 2010	\$ 88,126	\$ (250 )	\$ (143 )	\$ (102,252 )	60,156	\$ (15 )	\$ (86 )
Net loss	-	-	-	(6,121 )	-	-	(6,121)
Conversion of Series B to common stock	-	-	-	-	-	-	-
Issuance of common stock for services	68	-	-	-	-	-	104
Exercise of warrants	195	-	-	-	-	-	595
Issuance of Series B for services	67	-	-	-	-	-	184
Allocation of convertible debenture to fair value of warrants	369	-	-	-	-	-	369
Conversion of convertible debenture to Series B	262	-	-	-	-	-	800
Reclassification of embedded conversion derivative liability to APIC upon conversion of convertible debenture	1,037	-	-	-	-	-	1,037
Receivable from warrants exercise	(125 )	250	-	-	-	-	250
Balance December 31, 2011	\$ 89,999	\$ -	\$ (143 )	\$ (108,373 )	60,156	\$ (15 )	\$ (2,868)
Conversion of Series A to common stock	16	-	-	-	-	-	-
	(1 )	-	-	-	-	-	-

Conversion of Series B to common stock							
Conversion of Series G to common stock	(1	)	-	-	-	-	-
Issuance of common stock for cash	-		-	-	-	-	383
Issuance of common stock for services	30		-	-	-	-	442
Issuance of common stock for investment	-		-	-	-	-	300
Allocation of convertible debenture to fair value of warrants	331		-	-	-	-	331
Reclassification of warrant derivative liability to APIC upon conversion of convertible debenture	545		-	-	-	-	545
Issuance of stock payable	99		-	-	-	-	269
Shares issued for note payable	-		-	-	-	-	579
Stock based compensation - stock options	1,784		-	-	-	-	1,784
Net Loss					(7,955	)	(7,955)
Balance December 31, 2012	\$ 92,802	\$ -	\$ (143	)	\$ (116,328	)	60,156 (15 ) (6,190)

See accompanying notes to consolidated financial statements



**POSITRON CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**

(In thousands)

	Year Ended December 31,	
	2012	2011
Cash flows from operating activities:		
Net loss	\$(7,955)	\$(6,121)
Adjustment to reconcile net loss to net cash used in operating activities		
Depreciation and amortization	226	77
Bad debt expense	-	50
Loss on disposal of property and equipment	18	-
Loss on settlement	282	-
Stock based compensation	1,784	-
Derivative losses	726	544
Debt modification expense	432	-
Common stock issued for services	442	104
Preferred stock issued for services	-	184
Amortization of deferred rent	77	34
Accretion of debt discount	1,628	1,134
Inventory reserve	-	123
Changes in operating assets and liabilities:		
Accounts receivable	339	(148 )
Inventories	190	(242 )
Prepaid expenses	-	(9 )
Deposits	560	1,924
Other assets	43	(74 )
Accounts payable, trade and accrued liabilities	(146 )	842
Customer deposits	(656 )	(2,801)
Common stock payable	-	269
Unearned revenue	(230 )	35
Net cash used in operating activities	(2,240)	(4,075)
Cash flows from investing activities:		
Purchase of property and equipment	(73 )	(10 )
Purchase of MIT, net of cash acquired	1	-
Net cash used in investing activities	(72 )	(10 )
Cash flows from financing activities:		
Borrowings under note payable	305	-

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Payments on note payable	(324 )	-
Noninterest bearing advances	65	-
Noninterest bearing repayments	(85 )	-
Common stock issued for cash	383	-
Proceeds from convertible debt	2,210	2,100
Proceeds from exercise of warrants	-	845
Net cash provided by financing activities	2,554	2,945
Net increase (decrease) in cash and cash equivalents	242	(1,140)
Cash and cash equivalents, beginning of period	1	1,141

See accompanying notes to consolidated financial statements

**POSITRON CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**

(Continued)

(In thousands)

<b>Cash and cash equivalents, end of period</b>	\$243	\$1
<b>Supplemental cash flow information:</b>		
Interest paid	\$32	\$-
Income taxes paid	\$-	\$-
<b>Non-cash disclosures</b>		
Conversion of Series A preferred stock to common stock	\$16	\$-
Conversion of Series B preferred stock to common stock	\$4,771	\$20
Conversion of Series G preferred stock to common stock	\$19	\$-
Issuance of 17,000,000 common stock owed	\$269	\$-
Allocation of Convertible Debentures to warrants and embedded conversion derivative liability	\$2,460	\$2,100
Issuance of common stock, warrants, and convertible debentures for purchase of building from related party	\$500	\$-
Conversion of Convertible Debenture and accrued interest into common stock	\$578	\$
Conversion of Convertible Debentures to Series B Preferred Stock	\$-	\$800
Conversion of embedded derivative liability to paid - in capital	\$545	\$1,037
Property and equipment additions financed	\$50	\$-
Noncash consideration for MIT acquisition (see Note 4)	\$255	\$-

See accompanying notes to consolidated financial statements

## **POSITRON CORPORATION AND SUBSIDIARIES**

### **NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

#### **1. DESCRIPTION OF BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

##### **Description of Business**

Positron Corporation (the “Company”) was incorporated on December 20, 1983 in the state of Texas and commenced commercial operations in 1986. Positron Corporation is a nuclear medicine healthcare company. The Company offers positron emission tomography molecular imaging systems, clinical and support services, automated radiopharmaceutical systems, radiopharmaceuticals and radioisotope processing and production.

The molecular imaging systems portion of the business provides Positron Emission Tomography (PET) scanners. The automated radiopharmaceutical system portion of the business offers the world’s first robotic system for the preparation and dispensing of radiopharmaceuticals that provides unit dose radiopharmaceutical agents used in molecular imaging. The radioisotope manufacturing portion of the business enables the Company to process and produce radioisotope(s) that are critical components required in nuclear imaging.

The Company’s objective is to generate revenue by offering inexpensive molecular imaging systems and support services, disease specific software, automated radiopharmaceutical dose preparation and dispensing system, radiopharmaceutical(s) and radioisotope(s) for nuclear medicine primarily in the field of cardiac nuclear medicine.

On January 17, 2012, the Company acquired all of the issued and outstanding membership interest of Manhattan Isotope Technology LLC (“MIT”). See Note 3.

MIT possesses the unique and specialized expertise in all stages of strontium-82 (Sr-82) production and spent generator lifecycle management. Currently, MIT produces API grade strontium-82 from target material received from its foreign collaborators.

##### **Principles of Consolidation**

For the years ended December 31, 2012 and 2011, the financial statements include the transactions of Positron Corporation and its wholly-owned subsidiaries, IPT and MIT, Positron Pharmaceuticals Company and Positron Isotope Corporation. All intercompany transactions have been eliminated.

### **Basis of Presentation and Use of Estimates**

These financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (GAAP). Such principles require management to make 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. Actual results could differ from those estimates.

### **Affiliated Entities**

Affiliated entities and their affiliation, as defined by FASB Codification Topic 850 are as follows:

Solaris Opportunity Fund owns or controls common and preferred shares of the Company and its managing member is the CEO of the Company.

The Company has a 1% ownership interest in the joint venture Neusoft Positron Medical Systems ("Neusoft"). Both the Company and the joint venture's other partner, Neusoft Medical Systems purchase PET systems at a wholesale transfer price from Neusoft. The Company maintains one of five board seats on Neusoft's board. The Company currently accounts for its investment in Neusoft on the cost method and has no recorded value as of December 31, 2012 or 2011 based on prior losses of Neusoft.

### **Concentrations of Credit Risk**

The Company maintains its cash in institutions insured by the Federal Deposit Insurance Corporation (FDIC) and at times, balances may exceed government insured limits. The Company has never experienced any losses related to these balances. All of the Company's non-interest bearing cash balances were fully insured at December 31, 2012 and 2011 due to a temporary federal program in effect from December 31, 2010 through December 31, 2012. Under the program, there is no limit to the amount of insurance for eligible accounts. Beginning in 2013, insurance coverage will revert to \$250,000 per depositor at each financial institution, and non-interest bearing cash balances may again exceed federally insured limits.



During the twelve months ended December 31, 2012, one customer accounted for 26% of sales and a separate customer accounted for 70% of accounts receivable. During the twelve months ended December 31, 2011, seven customers accounted for greater than 10% of sales with 11%, 12%, 11%, 13%, 10%, 10% and 11% , respectively. Two of those customers accounted for 40% and 46% of accounts receivable.

### **Cash Equivalents and Short-term Investments**

For the purposes of reporting cash flows, the Company considers highly liquid, temporary cash investments with an original maturity period of three months or less to be cash equivalents.

### **Accounts Receivable**

Accounts receivable consist of amounts due from customers. The Company records a provision for doubtful accounts to allow for any amounts which may be unrecoverable, which is based upon an analysis of the Company's prior collection experience, customer creditworthiness and current economic trends.

### **Goodwill and Other Intangible Assets**

Accounting Standard Codification ("ASC") 350 "Goodwill and Other Intangible Assets" requires that assets with indefinite lives no longer be amortized, but instead be subject to annual impairment tests. The Company follows this guidance.

The Company tests goodwill that is not subject to amortization for impairment annually or more frequently if events or circumstances indicate that impairment is possible. Goodwill was tested at the end of the fourth quarter, December 31, 2012 and it was found that the carrying value of goodwill was not impaired.

The impairment test performed December 31, 2012 was based on a discounted cash flow model using management's business plan projected for expected cash flows. Based on the computation it was determined that no impairment existed. Goodwill as of December 31, 2012 was \$346,000. There was no goodwill as of December 31, 2011.

Definite lived intangible assets are being amortized over their useful lives.

## **Inventory**

Inventories are stated at the lower of cost or market. Cost is determined using the first-in, first-out (FIFO) method of inventory valuation. Management assesses the recoverability and establishes reserves of the various inventory components on a quarterly basis and is based on the estimated net realizable values of respective finished, in process and raw material inventories.

## **Property and Equipment**

Property and equipment are recorded at cost and depreciated for financial statement purposes using the straight-line over estimated useful lives below:

	<b>Estimated life, years</b>
Building	39
Furniture and fixtures	5-7
Leasehold Improvements	1-3
Computer equipment	3-5
Research equipment	7
Machinery and equipment	3-5

Gains or losses on dispositions are included in the statement of operations in the period incurred. Maintenance and repairs are charged to expense as incurred.

## **Impairment of Long-Lived Assets**

Periodically, the Company evaluates the carrying value of its long-lived assets, by comparing the anticipated future net cash flows associated with those assets to the related net book value. If impairment is indicated as a result of such reviews, the Company would record the impairment based on the fair market value of the assets, using techniques such as projected future discounted cash flows or third party valuations.



## Fair Value of Financial Instruments

The carrying value of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities and unearned revenue, approximate their fair values because of the short-term nature of these instruments. Management believes the Company is not exposed to significant interest or credit risks arising from these financial instruments.

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date.

Valuation techniques used to measure fair value maximize the use of observable inputs and minimize the use of unobservable inputs. The Company utilizes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable.

Level 1 — Quoted prices in active markets for identical assets or liabilities. These are typically obtained from real-time quotes for transactions in active exchange markets involving identical assets.

Level 2 — Quoted prices for similar assets and liabilities in active markets; quoted prices included for identical or similar assets and liabilities that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets. These are typically obtained from readily-available pricing sources for comparable instruments.

Level 3 — Unobservable inputs, where there is little or no market activity for the asset or liability. These inputs reflect the reporting entity's own beliefs about the assumptions that market participants would use in pricing the asset or liability, based on the best information available in the circumstances.

The following table presents the embedded conversion derivative liabilities, the Company's only financial liabilities measured and recorded at fair value on the Company's consolidated balance sheets on a recurring basis and their level within the fair value hierarchy as of December 31, 2012 (in thousands):

	December 31, 2012	Level 1	Level 2	Level 3
Embedded conversion derivative liability	\$3,981	\$ -	\$ -	\$3,981

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	December 31, 2011			
Embedded conversion liability	\$1,238	\$ -	\$ -	\$1,238

The following table reconciles, for the year ended December 31, 2012 and 2011, the beginning and ending balances for financial instruments that are recognized at fair value in the consolidated financial statements (in thousands):

Balance of embedded conversion derivative liability as of December 31, 2010	\$-
Fair value of embedded conversion derivative liabilities at issuance	1,731
Reductions in fair value due to conversion of Convertible Debentures into common stock	(1,037)
Loss on fair value adjustments to embedded conversion derivative liabilities	544
Balance of embedded conversion derivative liability as of December 31, 2011	\$1,238
Fair value of embedded conversion derivative liabilities at issuance	2,129
Reductions in fair value due to conversion of Convertible Debentures into common stock	(544 )
Debt modification expense	432
Loss on fair value adjustments to embedded conversion derivative liabilities	726
Balance of embedded conversion derivative liabilities at December 31, 2012	\$3,981

The fair value of the conversion features are calculated at the time of issuance and the Company records a derivative liability for the calculated value using a Black-Scholes option-pricing model. Changes in the fair value of the derivative liability are recorded in other income (expense) in the consolidated statement of operations. Upon conversion of the convertible debt to stock, the Company reclassifies the related embedded conversion derivative liability to paid-in capital. Since the fair value of the embedded conversion derivative liability exceeded the carrying value of the convertible debentures on the issuance date, the convertible debentures were recorded at a full discount. The Company recognizes expense for accretion of the convertible debentures discount over the term of the notes. The Company has considered the provisions of ASC 480, *Distinguishing Liabilities from Equity*, as the conversion feature embedded in each debenture could result in the note principal being converted to a variable number of the Company's common shares.

The derivatives were valued using the Black-Scholes option pricing model with the following assumptions:

	December 31, 2012		December 31, 2011	
Market value of stock on measurement date	\$ 0.0085		\$ 0.0089	
Risk-free interest rate	0.15	%	0.12	%
Dividend yield	0	%	0	%
Volatility factor	141	%	192	%
Term	1 year		1 year	

### Debt discount

Costs incurred with parties who are providing long-term financing, which generally include the value of warrants or the fair value of an embedded derivative conversion feature, are reflected as a debt discount and are amortized over the life of the related debt. When the debt is repaid, the related debt discount is recorded as additional interest expenses and the related derivative liability is relieved into additional paid in capital.

The Company valued the embedded derivative conversion using Black-Scholes method. The debt discount attributable to the warrants issued with convertible debentures during the years December 31, 2012 and 2011 was \$331,000 and \$369,000, respectively. The debt discount attributable to the embedded conversion derivative liability during the years ended December 31, 2012 and 2011 was \$2,129,000 and \$1,731,000, respectively.

### Income Taxes

Income taxes are accounted for under the liability method. Deferred income taxes are provided for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and amounts used for income tax purposes. Deferred taxes are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or the entire deferred tax asset will not be realized. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of the enactment. We recognize tax benefits when we believe the benefit is more likely than not to be sustained upon review from the relevant authorities. We recognize penalties and interest expense related to unrecognized tax benefits in income tax expense.

## **Revenue Recognition**

The Company's revenues are currently derived from the sale of medical equipment products, maintenance contracts, service revenues and radioisotope sales. Revenues from maintenance contracts are recognized over the term of the contract. Service revenues are recognized upon performance of the services. The Company recognizes revenues from the sale of medical equipment and radioisotope products when earned. Specifically, revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred (or services have been rendered), the price is fixed or determinable, and collectability is reasonably assured. The Company obtains a signed customer acceptance after installation is complete for the sale of its Attrius® PET systems.

For multiple-element arrangements, revenue is allocated to each element based on their relative selling prices. Relative selling prices are based first on vendor specific objective evidence (VSOE), then on third-party evidence of selling price (TPE) when VSOE does not exist, and then on estimated selling price (ESP) when VSOE and TPE do not exist.

Because the Company has neither VSOE nor TPE for its products, the allocation of revenue has been based on the Company's ESPs. The objective of ESP is to determine the price at which the Company would transact a sale if the product was sold on a stand-alone basis. The Company determines ESP by considering the facts and circumstances of the product being sold.

### **Research and Development Expenses**

All costs related to research and development costs are charged to expense as incurred and include salaries and benefits, supplies and consulting expenses.

### **Stock Based Compensation**

We recognize compensation expense for share-based awards using the fair value of the option at the time of the grant and amortizing the fair value over the estimated service period on the straight-line attribute method.

### **Loss Per Common Share**

Basic loss per common share is calculated by dividing net income by the weighted average common shares outstanding during the period. Stock options and warrants are not included in the computation of the weighted average number of shares outstanding for dilutive net loss per common share during each of the periods presented in the Statement of Operations and Comprehensive Income, as the effect would be antidilutive.

### **Recent Accounting Pronouncements**

The Company has implemented all new accounting pronouncements that are in effect and that may impact its financial statements and does not believe that there are any other new accounting pronouncements that have been issued that might have a material impact on its financial position or results of operations.

In June of 2011, Accounting Standards Codification Topic 220, Comprehensive Income was amended to increase the prominence of items reported in other comprehensive income. Accordingly, a company can present all non-owner changes in stockholders' equity either in a single continuous statement of comprehensive income or in two separate but consecutive statements. The Company adopted this guidance as of January 1, 2012 on a retrospective basis and this adoption did not have a material effect on the Company's financial statements.

In May of 2011, Accounting Standards Codification Topic 820, Fair Value Measurement was amended to develop common requirements for measuring fair value and for disclosing information about fair value measurements in accordance with U.S. generally accepted accounting principles and International Financial Reporting Standards. The Company adopted this guidance as of January 1, 2012 on a retrospective basis and this adoption did not have a material effect on the Company's financial statements.

## **2. GOING CONCERN**

Since inception, the Company has expended substantial resources on research and development. Consequently, we have sustained substantial losses. Due to the limited number of products sold each year, revenues have fluctuated significantly from year to year and has not sold quantities that are sufficient to be operationally profitable. The Company had an accumulated deficit of \$116,328,000 and a stockholders' deficit of \$6,190,000 at December 31, 2012. The Company will need to resume and increase sales of PET and radiopharmaceutical systems, services, radiopharmaceuticals and radioisotope sales and apply the research and development advancements to achieve profitability in the future. There can be no assurance that the Company will continue to be successful in selling products.

The Company utilized \$2,210,000 proceeds from issuance of convertible debt, \$305,000 borrowings on notes payable, \$65,000 proceeds from non-interest bearing advances, and \$383,000 proceeds from issuance of common stock for cash to fund operating activities during the year ended December 31, 2012. The Company had cash and cash equivalents of approx. \$243,000 at December 31, 2012, accounts payable and accrued liabilities of approx. \$1,634,000 and a negative working capital of \$7,006,000. Working capital requirements for the upcoming year will reach beyond our current cash balances. The Company plans to continue to raise funds as required through equity and debt financing to sustain business operations. These factors raise substantial doubt about the Company's ability to continue as a going concern.

There can be no assurance that the Company will be successful in implementing its business plan and ultimately achieving operational profitability. The Company's long-term viability as a going concern is dependent on its ability to 1) achieve adequate profitability and cash flows from operations to sustain its operations, 2) control costs and expand revenues from existing or new business 3) meet current commitments and fund the continuation of its business operation in the near future and 4) raise additional funds through debt and/or equity financings.

### 3. ACQUISITION OF MIT

On January 17, 2012, the Company acquired Manhattan Isotope Technology LLC (“MIT”) upon consummation of a Membership Interest Purchase Agreement (the “Agreement”) with MIT and the interest-holders of MIT, whereby the Company acquired all of the issued and outstanding membership interests from the holders in exchange for: (i) the assumption of the liabilities of MIT; (ii) cash advances; (iii) earn-out payments equal to twenty percent (20%) of “Net Income” as defined in the Agreement; (iv) 5,000,000 common shares of Positron stock; and (v) entry into employment agreements with MIT’s employees.

In accordance with the transaction, the Company acquired the assets related to MIT’s business of refurbishing spent strontium-82/rubidium-82 and other radioisotope generators, recycling strontium-82 and other radioisotopes from generators, processing of strontium-82 and other radioisotopes, providing expertise in production of radioisotopes and radioisotopes services, including cash, equipment, leasehold improvements, patent, certain supply and distribution and other vendor contracts, goodwill and assumed liabilities including trade payables, accruals and a note payable with a commercial bank. The parties made customary representations, warranties and indemnities in the Agreement that are typical and consistent for a transaction of this size and scope.

The Company has included the financial results of MIT in the consolidated financial statements from the date of acquisition. MIT is included in the Radiopharmaceuticals operating segment. The Company incurred acquisition costs of approximately \$13,000 in 2011 and \$12,000 in 2012. The following table summarizes the consideration transferred to acquire MIT at the acquisition date:

#### Fair Value of Consideration Transferred:

Common stock of Company	\$50,000
Contingent consideration	205,297
Total	\$255,297

The total purchase price for the MIT acquisition was allocated to the net tangible and intangible assets based upon their fair values as of January 17, 2012 as set forth below. The excess of the purchase price over the net assets was recorded as goodwill. The following table summarizes the fair values of the assets and liabilities assumed at the acquisition date.

Cash	\$829
Equipment and leasehold improvements	653,567
Patent	14,000
Trade and other payables	(59,282 )

Note payable	(700,000)
Net liabilities assumed	\$(90,886 )
Goodwill	346,183
Total	\$255,297

The Company identified intangible assets associated with a patent and assigned the fair value of \$14,000. The useful life associated with these patents was 6 years.

The acquisition of MIT includes a contingent consideration arrangement that requires cash payments to the previous members equal to 20% of “Net Income” as defined in the Agreement through December 31, 2018. The range of the undiscounted amounts the Company could owe under this arrangement is between \$0 and \$3,000,000. The fair value of the contingent consideration on the acquisition date of approximately \$205,000 was estimated based on the present value of projected payments which were based on projected net income through 2018. These calculations and projections are based on significant inputs not observable in the market, which ASC 820 refers to as Level 3 inputs. Key assumptions include a discount rate of 25 percent as well as an increasing level of revenues and expenses based on probability factors at the acquisition date.

At December 31, 2012, the Company evaluated the contingent consideration and determined that there is no change to the fair value.

The following unaudited pro forma summary presents consolidated financial information of the Company as if the business combination had occurred on January 1, 2011:

Sales \$6,790,685

Net Loss \$ (6,496,313)

#### **4. DEPOSITS - ATTRIUS® SYSTEMS**

At December 31, 2011, the Company had \$560,000 (three Attrius® systems) in deposits paid to our joint venture partner, Neusoft Positron Medical Systems Co., Ltd., (“Neusoft”) for Attrius® systems for which the Company has sales contracts. These deposits were utilized during the year ended December 31, 2012.



**5. INVENTORIES**

Inventories at December 31, 2012 and 2011 consisted of the following (in thousands):

	December 31,	
	2012	2011
Finished systems	\$310	\$385
Raw materials and service parts	698	756
Work in progress	-	90
	1,008	1,231
Less: Reserve for obsolete inventory	(457 )	(490 )
Inventory, net	\$551	\$741

**6. PROPERTY AND EQUIPMENT**

Property and equipment at December 31, 2012 and 2011 consisted of the following (in thousands):

	December 31,	
	2012	2011
Building	\$500	\$-
Furniture and fixtures	75	27
Leasehold improvements	72	19
Computer equipment	60	59
Research equipment	667	-
Machinery and equipment	142	214
	1,516	319
Less: Accumulated depreciation	(346 )	(135 )
Property And Equipment, net	\$1,170	\$184

**7. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES**

Accounts payable and accrued liabilities at December 31, 2012 and 2011 consisted of the following (in thousands):

	December 31,	
	2012	2011
Trade accounts payable	\$1,127	\$1,307
Accrued royalties	87	87

Accrued interest	154	51
Sales taxes payable	78	66
Accrued compensation	80	13
Accrued professional fees	-	15
Other accrued expenses	108	106
Total	\$1,634	\$1,645

## 8. CUSTOMER DEPOSITS

Customer deposits represent amounts paid to the Company by customers for devices in advance of manufacturing completion and/or shipment of the device to the customer. Deposit amounts may vary depending on the contract. Customer deposits as of December 31, 2012 and 2011 were \$746,000 and \$1,402,000, respectively. Included in customer deposits at December 31, 2012 and 2011 were deposits of approximately \$669,000 from a customer that had placed an order in 2007 for five Nuclear Pharm-Assist™ systems. As of the date of this report, there can be no assurance that this customer will fulfill its order for these devices.

Also, included in customer deposits at December 31, 2012 are \$77,000 deposits on two Attriis® systems. At December 31, 2011, customer deposits included \$733,000 of deposits on two Attriis® systems sale orders and two used machines.

Our customer sales contracts require our customers to pay the Company 30% upon signing the contract, 60% upon notification to ship, and the remaining 10% after customer acceptance.

## 9. CONVERTIBLE DEBENTURES

### *Convertible Debentures 2011*

As of December 31, 2011 the Company issued a Convertible debt to unrelated parties in the amount of \$1,300,000 which was maturing on December 31, 2012. During the twelve months period ended December 31, 2012, the Company converted \$300,000 of the debt into 39,682,539 shares of the Company's common stock and recorded loss on debt settlement of \$133,982. The maturity date of the remaining \$1,000,000 convertible debentures was extended through December 31, 2013 and the company recorded modification expense of \$432,124 under Black Scholes method.

On April 26, 2011, the Company issued \$1,300,000 of convertible debentures "(Convertible Debentures)" to certain investors ("Investors"). Interest accrues at the rate of eight percent per annum and is payable quarterly in cash. The debentures mature on December 31, 2012. In addition, the Company issued 6,500,000 warrants ("Warrants"), which entitle the Investors to purchase shares of the Company's common stock, par value \$0.01 per share, at an exercise price of \$0.03 per share and expiring on December 31, 2013. The Investors are entitled to convert the accrued interest and principal of the Convertible Debentures into common stock of the Company at a conversion price equal to 55% of the lowest daily volume weighted average price for the three trading days preceding conversion.

### *Initial Accounting*

Under the initial accounting, the Company separated the Convertible Debentures instrument into component parts of the Convertible Debentures, the Warrants and the embedded conversion derivative liability. The Company estimated the fair value of each component as of the date of issuance and allocated net proceeds initially to the Warrants based on a relative fair value fair value of the Convertible Debentures and the Warrants and then allocated the remaining proceeds to the embedded conversion derivative liability. The fair value of the embedded conversion derivative liability exceeded the proceeds from the Convertible Debentures less the allocation of the proceeds to the Warrants, which resulted in a debt discount of \$1,300,000. The debt is accreted to interest expense over the life of the Convertible Debentures.

The following is a summary of the proceeds from the issuance of the Convertible Debentures and the initial accounting of the issuance (in thousands):

Proceeds from convertible debt issuance	\$1,300
Allocation of proceeds to warrants	(168 )

Allocation of proceeds to embedded conversion derivative liability	(1,132)
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Total	\$-
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On August 17, 2011 and September 28, 2011, the Company issued \$200,000 and \$200,000, respectively of convertible debentures (“Convertible Debt”) to certain investors (“Debt Investors”). Interest accrues at the rate of eight percent per annum and is payable quarterly in cash. The debentures mature on December 31, 2012. In addition, the Company issued 8,500,000 warrants (“\$0.01 Warrants”), which entitle the Debt Investors to purchase shares of the Company’s common stock, par value \$0.01 per share, at an exercise price of \$0.01 per share and expiring on December 31, 2013. The Debt Investors are entitled to convert the accrued interest and principal of the Convertible Debentures into common stock of the Company at a conversion price equal to 55% of the lowest daily volume weighted average price for the three trading days preceding conversion.

#### *Initial Accounting*

Under the initial accounting, the Company separated the Convertible Debentures instrument into component parts of the Convertible Debt, the \$0.01 Warrants and the embedded conversion derivative liability. The Company estimated the fair value of each component as of the date of issuance and allocated net proceeds initially to the \$0.01 Warrants based on a relative fair value fair value of the Convertible Debt and the \$0.01 Warrants and then allocated the remaining proceeds to the embedded conversion derivative liability. The fair value of the embedded conversion derivative liability exceeded the proceeds from the Convertible Debt less the allocation of the proceeds to the \$0.01 Warrants, which resulted in a debt discount of \$400,000. The debt is accreted to interest expense over the life of the Convertible Debt.

The following is a summary of the proceeds from the issuance of the Convertible Debt and the initial accounting of the issuance (in thousands):

Proceeds from convertible debt issuance	\$400
Allocation of proceeds to \$0.01 warrants	(105)
Allocation of proceeds to embedded conversion derivative liability	(295)
Total	\$-

On November 15, 2011 and December 5, 2011, the Company issued \$200,000 and \$200,000, respectively of convertible debentures “(Convertible Debt)” to certain investors (“Debt Investors”). Interest accrues at the rate of eight percent per annum and is payable quarterly in cash. The debentures mature on December 31, 2012. In addition, the Company issued 14,000,000 warrants (“\$0.01 Warrants”), which entitle the Debt Investors to purchase shares of the Company’s common stock, par value \$0.01 per share, at an exercise price of \$0.01 per share and expiring on December 31, 2013. The Debt Investors are entitled to convert the accrued interest and principal of the Convertible Debentures into common stock of the Company at a conversion price equal to 55% of the lowest daily volume weighted average price for the three trading days preceding conversion.

*Initial Accounting*

Under the initial accounting, the Company separated the Convertible Debentures instrument into component parts of the Convertible Debt, the \$0.01 Warrants and the embedded conversion derivative liability. The Company estimated the fair value of each component as of the date of issuance and allocated net proceeds initially to the \$0.01 Warrants based on a relative fair value fair value of the Convertible Debt and the \$0.01 Warrants and then allocated the remaining proceeds to the embedded conversion derivative liability. The fair value of the embedded conversion derivative liability exceeded the proceeds from the Convertible Debt less the allocation of the proceeds to the \$0.01 Warrants, which resulted in a debt discount of \$400,000. The debt is accreted to interest expense over the life of the Convertible Debt.

The following is a summary of the proceeds from the issuance of the Convertible Debt and the initial accounting of the issuance (in thousands):

Proceeds from convertible debt issuance	\$400
Allocation of proceeds to \$0.01 warrants	(96 )
Allocation of proceeds to embedded conversion derivative liability	(304)

Total \$-

### *Conversion of Convertible Debentures to Series B Shares*

On May 26, 2011, the Investors converted \$700,000 of the Convertible Debentures to 424,242 Series B preferred shares. On October 17, 2011, the Investors converted an additional \$100,000 of the Convertible Debentures to 113,636 Series B preferred shares. The Company recorded interest accretion expense of \$800,000 for these Convertible Debentures during the year ended December 31, 2011. In connection with the conversion of the \$800,000 of convertible debentures, the Company also reduced the embedded conversion derivative liability by \$1,037,000 based on the fair value of the related embedded conversion derivative liability on the date of exercise and increased additional paid-in capital by the same amount.

### *Convertible Debentures 2012*

On January 12, 2012, the Company acquired a building in Westmont, Illinois, which the Company previously leased from a related party for corporate and administrative offices (see Note 15). As a part of the price consideration, the Company issued the related party a convertible debenture in the principal amount of \$250,000, which shall be due on December 31, 2013 and bears interest at 8% per year payable quarterly in cash. In addition, the Company issued warrants ("Warrants") to the related party to purchase 25,000,000 shares of the Company's common stock, par value \$0.01 per share (the "Common Stock"), at an exercise price of \$0.01 per share and expiring on December 31, 2013. The related party is entitled to convert the accrued interest and principal of the convertible debentures into common stock of the Company at a conversion price equal to 55% of the lowest daily volume weighted average price for the three trading days preceding conversion. During the period ended December 31, 2012, the Company has converted \$100,000 of the principal amount of the debt into 18,181,818 shares of common stock and recorded loss on debt settlement of \$44,661

During the twelve months ended December 31, 2012, the Company issued additional of \$2,210,000 of convertible debt with maturity date December 31, 2013, of which \$460,000 bears 8% interest and \$1,750,000 is non-interest bearing. \$510,000 of the convertible debt was issued to unrelated parties, and \$ 1,700,000 to related parties. In connection with the issuances the Company issued warrants ("Warrants") to purchase 68,500,000 shares of the Company's Common Stock, at an exercise price of \$0.01 per share and expiring on December 31, 2013. The lender is entitled to convert the accrued interest and principal of the Convertible Debentures into common stock of the Company at a conversion price equal to 55% of the lowest daily volume weighted average price for the three trading days preceding conversion.

*Initial Accounting*

Under the initial accounting, the Company separated the Convertible Debentures instrument into component parts of the Convertible Debt, the \$0.01 Warrants and the embedded conversion derivative liability. The Company estimated the fair value of each component as of the date of the issuance. The fair value of the embedded conversion derivative liability exceeded the value of the Convertible Debt less the allocation of the liability to the \$0.01 Warrants, which resulted in a debt discount of \$2,460,000. The discount is accreted to interest expense over the life of the Convertible Debt.

The following is a summary of Convertible Debt and the initial accounting of the issuances (in thousands):

Convertible debt issuance	\$2,460
Allocation of debt to warrants	(331 )
Allocation of debt to embedded conversion derivative liability	(2,129)
Total discount	\$-

*Convertible debentures as of December 31, 2012*

As of December 31, 2012, the Company had an outstanding convertible debt in the amount of \$3,360,000. Of this amount, \$1,610,000 accrues interest at a rate of 8% per annum, and \$1,750,000 is non-interest bearing. All convertible debt matures on December 31, 2013.

During the years ended December 31, 2012 and 2011, the Company recognized interest expense related to Convertible Debentures of \$1,733,000 and \$1,185,000, respectively. As of December 31, 2012 and December 31, 2011, accrued interest on Convertible Debentures was \$148,741 and \$43,923 respectively. Convertible Debentures outstanding as of December 31, 2012 and 2011 were as follows (in thousands):

December 31, 2012	Unrelated parties	Related parties	Total December 31, 2012
Convertible debentures- face value	\$ 1,510	\$ 1,850	\$ 3,360
Debt discount	(350 )	(1,448 )	(1,798 )
Total convertible debentures	1,160	402	\$ 1,562
Less current portion	(1,160 )	(402 )	(1,562 )

Long term portion	\$ -	\$ -	\$ -
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December 31, 2011	Unrelated parties	Related parties	Total December 31, 2011
Convertible debentures- face value	\$ 1,300	\$ -	\$ 1,300
Debt discount	(966	) -	(966 )
Total current convertible debentures	\$ 334	\$ -	\$ 334

## 10. NOTES PAYABLE

On January 17, 2012, the Company assumed from MIT a note payable with Los Alamos National Bank (“LANB”) in the amount of \$700,000. On February 10, 2012, MIT refinanced with LANSB the principal and accrued interest of this note payable with a promissory note of \$708,000, maturing on April 1, 2019. The monthly payment to LANSB on the promissory note is \$10,000, with the interest rate of 5.5% at December 31, 2012. The promissory note is guaranteed by the Company and secured by all assets of the Company. Total interest expense 2012 related to the promissory note recorded during the year ended December 31, was \$35,000 during. The note outstanding principal amount and accrued interest as of December 31, 2012, were approx. \$649,000 and \$3,000, respectively.



From time to time, the company receives advances from unrelated parties. These advances are unsecured, bear interest at 8% and there are no specific repayment terms. During the twelve months ended December 31, 2012, the Company received advances and made repayments of these advances in the amounts of \$305,000 and \$265,000, respectively. During the year ended December 31, 2012, the Company recorded interest expense related to the advances of \$1,600, which remained unpaid as of December 31, 2012. As of December 31, 2012, and 2011 the amounts due to the unrelated parties were \$40,000 and \$0, respectively.

Future maturities of notes payable are as follows:

Debt maturities as of	December 31,
2013	\$ 129,000
2014	94,000
2015	98,000
2016	105,000
2017	110,000
2018 and thereafter	153,000
Total	689,000
Less: current portion	(129,000)
Notes payable – noncurrent portion	\$560,000

## 11. STOCKHOLDERS' EQUITY

### 2012

On January 4, 2012, the Company increased the number of the Company's authorized shares of capital stock from 810,000,000 shares to 3,020,000,000 of which 3,000,000,000 shares will be common stock par value \$0.01 per share ("Common Stock") and 20,000,000 shares will be preferred stock par value \$1.00 per share ("Preferred Stock"). Additionally on January 4, 2012, the Company accepted subscriptions in the amount of \$150,000 and issued 15,000,000 shares of Common Stock. In connection with these Common Stock issuances, the Company also issued 15,000,000 warrants to purchase Common Stock of the Company, which will expire on December 31, 2013 and extended the expiration date of 20,000,000 warrants which had expired to December 31, 2013.

On January 4, 2012, the Company issued 400,000 shares to a vendor for services rendered valued at \$4,000.

On January 9, 2012, the Company issued 1,400,000 shares to a vendor for services rendered valued at \$14,000.

On January 19, 2012, the Company converted 1,923,223 shares of Series B Convertible Preferred Stock into 192,322,258 shares of common stock and accepted subscriptions in the amount of \$100,000 and issued 27,000,000 shares of Common Stock. Additionally, the Company issued 10,000,000 warrants to investors to purchase Common Stock of the Company, which will expire on December 31, 2013 and extended the expiration dates of 30,000,000 warrants which had expired to December 31, 2013.

On January 19, 2012, the Company issued 5,000,000 shares in connection with the acquisition of MIT and 76,261 shares of Common Stock were issued for royalties.

On January 19, 2012, the Company issued 25,000,000 shares of Common Stock and a convertible debenture due on December 31, 2013, with interest at the rate of 8%, to a related party as the purchase price for the office space previously leased by the Company. In addition, the Company issued 35,000,000 warrants, which entitle the related party to purchase shares of the Company's common stock of the Company, which will expire on December 31, 2013.

On January 20, 2012, the Company accepted subscriptions in the amount of \$50,000 and issued 5,000,000 shares of Common Stock. In connection with these Common Stock issuances, the Company also issued 5,000,000 warrants to purchase Common Stock of the Company, which will expire on December 31, 2013, and extended the expiration date of 7,500,000 warrants which had expired to December 31, 2013.

On March 1, 2012, the Company converted 603,711 shares of Series B Convertible Preferred Stock into 60,371,100 shares of Common Stock and issued 3,000,000 shares of Common Stock to a vendor for services rendered valued at \$51,000.

On March 14, 2012, the Company accepted subscriptions in the amount of \$35,000 and issued 3,500,000 shares of Common Stock. In connection with these issuances, the Company also issued 3,500,000 warrants to investors to purchase Common Stock of the Company, which will expire on December 31, 2013, and extended the expiration date of 750,000 warrants which had expired to December 31, 2013. Also on March 14, 2012, the Company issued 1,200,000 shares of Common Stock to an employee for services valued at \$20,000, and 600,000 shares of Common Stock to a vendor for services rendered valued at \$10,000.

On April 5, 2012, the Company converted 634,000 shares of Series B Convertible Preferred Stock into 63,400,000 shares of Common Stock. The Company also accepted subscriptions in the amount of \$28,000 and issued 2,800,000 shares of Common Stock. In connection with these Common Stock issuances, the Company also issued 3,100,000 warrants to purchase Common Stock of the Company, which will expire on December 31, 2013. Also on April 5, 2012, the Company issued 39,682,539 shares of Common Stock for repayment of convertible debt, and issued 2,208,750 shares of Common Stock to a vendor for settlement of accounts payable. The Company recorded \$26,456 loss on the settlement.

On May 7, 2012, the Company issued 4,000,000 warrants in connection with a Convertible Debt issuance to a Lender to purchase Common Stock of the Company, which will expire on December 31, 2013.

On May 20, 2012, the Company issued 2,000,000 warrants to an investor to purchase Common Stock of the Company, which will expire on December 31, 2013.

On May 21, 2012, the Company converted 73,226 shares of Series B Convertible Preferred Stock into 7,322,636 shares of Common Stock. The Company also accepted subscriptions in the amount of \$130,000 and issued 15,000,000 shares of Common Stock. In connection with these issuances, the Company issued 13,000,000 warrants to investors to purchase Common Stock of the Company, which will expire on December 31, 2013. In addition, the Company issued 175,000 shares of Common Stock to a vendor on May 21, 2012 for services rendered valued at \$2,000.

On May 29, 2012, the Company converted 231,190 shares of Series B Convertible Preferred Stock into 23,119,000 shares of Common Stock. The Company issued 18,181,818 shares of Common Stock for repayment of related party convertible debt.

On June 7, 2012, the Company issued 4,000,000 warrants in connection with a Convertible Debt issuance to a lender to purchase Common Stock of the Company, which will expire on December 31, 2013.

On June 19, 2012, the Company converted 16,667 shares of Series A Convertible Preferred Stock into 16,667 shares of Common Stock, converted 118,149 shares of Series B Convertible Preferred Stock into 11,814,878 shares of Common Stock, and converted 18,200 shares of Series G Convertible Preferred Stock into 2,020,000 shares of Common Stock. In addition, the Company issued 3,970,786 shares of Common Stock to a vendor for settlement of accounts payable.

On July 17, 2012, the Company issued 1,000,000 shares of Common Stock to vendors for services rendered. The Company issued an additional 1,000,000 shares of Common Stock to a vendor for services rendered on July 18, 2012. Both were valued at \$10,000.

On August 21, 2012 the Company issued 1,000,000 shares of Common Stock to a vendor for services rendered valued at \$10,000.

On August 31, 2012, the Company converted 1,188,836 shares of Series B Convertible Preferred Stock into 118,883,629 shares of Common Stock. Also on August 31, the Company issued 2,000,000 shares to an investor who had purchased shares during the three months ended June 30, 2012 and which were included in stock payable as of June 30, 2012.

On September 10, 2012, the Company converted obligations totaling \$35,605 into 10,000,000 shares of Common Stock. Of these shares, 6,666,667 shares were payable as of September 30, 2012 and were issued in October 2012. In connection with this issuance the Company recorded a loss on settlement of \$54,395.

In November 2012, the Company issued warrants to purchase a total of 10,500,000 shares of the Company's Common Stock, at an exercise price of \$0.01 per share expiring on December 31, 2013, to its Chief Financial Officer. The warrants were issued in connection with the issuance of two non-interest bearing convertible debentures totaling \$380,000 to the CFO.

In November 2012, the Company issued warrants to purchase a total of 37,500,000 shares of the Company's Common Stock, at an exercise price of \$0.01 per share to its Chief Executive Officer. The warrants expire on December 31, 2013. The warrants were issued in connection with the issuance of two non-interest bearing convertible debentures totaling \$1,320,000 to the CEO.

In December 2012, the Company issued a convertible debenture in the amount of \$50,000 to a third party. In connection with the debt, the Company also issued to the third party warrants to purchase 1,500,000 shares of the Company's Common Stock, at an exercise price of \$0.01 per share expiring on December 31, 2013.

## Options

For all of the Company's stock-based compensation plans, the fair value of each grant was estimated at the date of grant using the Black-Scholes option-pricing model. Black-Scholes utilizes assumptions related to volatility, the risk-free interest rate, the dividend yield (which is assumed to be zero, as the Company has not paid cash dividends to date and does not currently expect to pay cash dividends) and the expected term of the option. Expected volatilities utilized in the model are based mainly on the historical volatility of the Company's stock price over a period commensurate with the expected life of the share option as well as other factors. The risk-free interest rate is derived from the zero-coupon U.S. government issues with a remaining term equal to the expected life at the time of grant.

In January 2010 the Company granted certain employees options to purchase 2,500,000 shares of Series B Preferred stock at an exercise price of \$1.00 per share (the "Preferred Options".) The options vest immediately and have a term of four years. Accordingly, in January 2010 the Company recorded compensation expense of \$2,500,000 for the Preferred Option grants. All of these options are outstanding as of December 31, 2012. Fair market value using the Black-Scholes option-pricing model was determined using the following assumptions:

Expected life (years)	4
Risk free rate of return	2.5 %
Dividend yield	0
Expected volatility	378%

On January 17, 2012, Positron's Board of Directors (the "Board") adopted the 2012 Equity Incentive Plan ("2012 Plan"), authorizing issuance of 200,000,000 stock options to purchase shares of the Company's common stock.

On January 17, 2012, the Company granted certain employees options to purchase 177,600,000 shares of common stock under the plan at an exercise price of \$0.01 per share ("January Issuance"). Fifty (50) percent of the options vested immediately on the grant date with the remaining fifty (50) percent vesting on January 17, 2013. The Company recorded a total expense of approximately \$1,735,000 related to these options during the year ended December 31, 2012 and will record additional \$39,000 for these stock options in the first quarter of 2013. During the year ended December 31, 2012, options to purchase 7,000,000 shares of stock were forfeited and a total of 170,600,000 options from the January Issuance were outstanding as of December 31, 2012. At December 31, 2012, the remaining weighted average contractual term of these options was 2.05 years. The intrinsic value of these options on the grant date was \$187,600 as the closing stock price on the grant date was \$0.011. Fair market value using the Black-Scholes option-pricing model was determined using the following assumptions:

Expected life (years)	1.75
Risk free rate of return	0.75 %

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Dividend yield	0
Expected volatility	218 %

In November 2012, the Company granted additional options to purchase 20,000,000 shares of common stock under the 2012 Plan to a new employee at an exercise price of \$0.01 per share. Fifty (50) percent of the options vested immediately on the grant date with the remaining fifty (50) percent vesting on January 17, 2013. The Company recognized an expense of approximately \$49,000 related to these options during the year ended December 31, 2012 and will recognize an additional expense of \$49,000 during the first quarter of 2013. At December 31, 2012, the remaining weighted average contractual term of these options was 2.05 years. The intrinsic value of the options on the grant date was \$0, as the closing stock price on the grant date was \$0.008. Fair market value using the Black-Scholes option-pricing model was determined using the following assumptions:

Expected life (years)	2.25
Risk free rate of return	0.27 %
Dividend yield	0
Expected volatility	125 %

As of December 31, 2012, the Company had a total of 190,600,000 options outstanding with 9,400,000 options available for issuance under the 2012 Plan. Fifty (50) percent of the outstanding options were fully and the remaining fifty (50) percent vest on January 17, 2013. All the options issued under the 2012 Plan expire on January 17, 2015.

A summary of common stock option activity is as follows:

	Shares Issuable Under Outstanding Options	Weighted Average Exercise Price
Balance at December 31, 2011	-	\$ -
Issued	197,600,000	\$ 0.01
Expired/forfeited	(7,000,000 )	0.01
Exercised	-	-
Balance at December 31, 2012	190,600,000	\$ 0.01
Exercisable, December 31, 2012	95,300,000	\$ 0.01

## Warrants

A summary of warrant activity based on common stock equivalents is as follows:

	Number of Shares	Exercise Price	Weighted Average Exercise Price
Balance at December 31, 2010	195,833,338	\$0.02-0.15	\$ 0.06
Warrants exercised	(40,000,000 )	\$0.01-0.025	\$ 0.01
Warrants expired	(1,250,000 )	\$0.02	\$ 0.02
Warrants issued with common and Series B Preferred stock in private placement	29,000,000	\$0.01	\$ 0.01
Balance at December 31, 2011	183,583,338	\$0.01-0.15	0.05
Warrants exercised	-	-	-
Warrants expired	(134,583,338 )	\$0.01-0.03	\$ 0.03
Warrants issued with common and Series B Preferred stock in private placement	114,850,000	\$0.01	\$ 0.01
Warrants issued with convertible debentures and notes payable	103,500,000	\$0.01	\$ 0.01
Balance at December 31, 2012	267,350,000	\$0.01-0.15	\$ 0.03

All outstanding warrants are currently exercisable. A summary of outstanding common stock warrants at December 31, 2012 follows:

Number of Common Stock Equivalents	Expiration Date	Remaining Contractual Life (Years)	Exercise Price
4,000,000	(a)	-	\$0.02
30,000,000	May 2013	0.39	\$0.15
233,350,000	December 2013	1.00	\$0.01-0.03

(a) Warrants expire six months after the date on which a registration statement is filed and accepted by the Securities Exchange Commission permitting a sale of the shares issuable upon exercise of the warrant.

## 12. PREFERRED STOCK

The Company's Certificate of Formation, as amended, authorizes the issuance of 20,000,000 shares of preferred stock from time to time in one or more series. The Board of Directors is authorized to determine, prior to issuing any such series of preferred stock and without any vote or action by the shareholders, the rights, preferences, privileges and restrictions of the shares of such series, including dividend rights, voting rights, terms of redemption, the provisions of any purchase, retirement or sinking fund to be provided for the shares of any series, conversion and exchange rights, the preferences upon any distribution of the assets of the Company, including in the event of voluntary or involuntary liquidation, dissolution or winding up of the Company, and the preferences and relative rights among each series of preferred stock. The Board of Directors has designated the following series of preferred stock:



### **Series A Preferred Stock**

The Company had 7,900,000 shares of Series A Preferred Stock authorized for issuance. Subject to adjustment based on issuance of shares at less than fair market value, each share of the Series A Preferred Stock was initially convertible into one share of common stock. Each Redeemable common stock Purchase Warrant is exercisable at a price of \$2.00 per share of common stock. Eight percent (8%) dividends on the Series A Preferred Stock may be paid in cash or in Series A Preferred Stock at the discretion of the Company. The Series A Preferred Stock is senior to the Company's common stock in liquidation. Holders of the Series A Preferred stock may vote on an as if converted basis on any matter requiring shareholder vote. While the Series A Preferred Stock is outstanding or any dividends thereon remain unpaid, no common stock dividends may be paid or declared by the Company. The Series A Preferred Stock may be redeemed in whole or in part, at the option of the Company, at any time subsequent to March 1998 at a price of \$1.46 per share plus any undeclared and/or unpaid dividends to the date of redemption. Redemption requires at least 30 days advanced notice and notice may only be given if the Company's common stock has closed above \$2.00 per share for the twenty consecutive trading days prior to the notice.

As of December 31, 2012 and 2011, there were 440,932 and 457,599 shares of Series A Preferred Stock outstanding, respectively.

### **Series B Preferred Stock**

As of December 31, 2012, the Company has 9,000,000 shares of Series B Preferred Stock authorized for issuance. Each share of Series B Preferred Stock \$1.00 par value is convertible into 100 shares of the Company's Common Stock. The Series B Preferred Stock is senior to the Company's Common Stock and junior in priority to the Company's A and G Preferred Stock in liquidation. Holders of the Series B Preferred Stock are entitled to 100 votes per share on all matters requiring shareholder vote. While Series B Preferred Stock is outstanding no Common Stock dividends may be paid or declared by the Company. The Series B Preferred Stock may be redeemed in whole or in part, at the option of the Company, at any time at a price of \$1.00 per share.

As of December 31, 2012 and 2011, 3,056,487 and 7,828,822 shares of Series B Preferred Stock were outstanding.

### **Series G Preferred Stock**

The Company has designated 3,000,000 shares of preferred stock as Series G Preferred Stock \$1.00 par value. Each share of Series G Preferred Stock is convertible into 100 shares of common stock. The Series G Preferred Stock is

senior to the Company's common stock and junior in priority to the Registrant's Series A, C, D, E and F Preferred Stock in liquidation. Except as required by law and in the case of various actions affecting the rights of the Series G Preferred Stock, holders of the Series G Preferred Stock are not entitled to vote on matters requiring shareholder vote. While the Series G Preferred Stock is outstanding or any dividends thereon remain unpaid, no common stock dividends may be paid or declared by the Company. The Series G Preferred Stock may be redeemed in whole or in part, at the option of the Company, at any time at a price of \$5.00 per share plus any undeclared and/or unpaid dividends to the date of redemption.

As of December 31, 2012 and 2011, there were 0 and 19,200 shares of Series G Preferred Stock outstanding, respectively.

### **Series S Preferred Stock**

As of December 31, 2012, the Company has 10,000 shares of Series S Preferred Stock authorized for issuance. Each share of Series S Convertible Preferred Stock, \$1.00 par value per share, is convertible into 10,000 shares of the Company's Common Stock, subject to adjustment. The Series S Preferred Stock is senior to the Company's Common Stock and junior in priority to the Company's A, B and G Preferred Stock in liquidation. Holders of the Series S Preferred Stock are entitled to 10,000 votes per share on all matters requiring shareholder vote. While Series S Preferred Stock is outstanding no Common Stock dividends may be paid or declared by the Company.

As of December 31, 2012 and 2011, 100,000 shares of Series S Convertible Preferred Stock were outstanding.

### **13. OTHER EXPENSES**

During the years ended December 31, 2012 and 2011, the Company recorded other expenses of approximately \$3,233,000 and \$1,729,000, respectively. Other expenses include interest expense, derivative expenses and other gains and losses.

Interest expense was \$1,753,000 and \$1,185,000 for the years ended December 31, 2012 and 2011, respectively. \$1,628,000 and \$1,134,000 of the total interest expense for the years ended December 31, 2012 and 2011, respectively, was related to the accretion of debt discount associated with convertible debt.

The Company recorded loss on fair value adjustments to embedded conversion derivative liability associated with the convertible debt of approximately \$726,000 and \$544,000 for the years ended December 31, 2012 and 2011, respectively.

During the year ended December 31, 2012, the Company also recorded \$18,000 loss on the disposal of property and equipment, \$282,000 loss on settlement, debt modification expense of \$432,000 and other expenses of \$22,000.

#### 14. LOSS PER SHARE

Basic loss per common share is based on the weighted average number of common shares outstanding in each period and earnings adjusted for preferred stock dividend requirements. Diluted earnings per common share assumes that any dilutive convertible preferred shares outstanding at the beginning of each period were converted at those dates, with related interest, preferred stock dividend requirements and outstanding common shares adjusted accordingly. It also assumes that outstanding common shares were increased by shares issuable upon exercise of those stock options and warrants for which market price exceeds exercise price, less shares which could have been purchased by the Company with related proceeds. The convertible preferred stock and outstanding stock options and warrants were not included in the computation of diluted earnings per common share for the twelve months ended December 31, 2012 and 2011, respectively since it would have resulted in an antidilutive effect.

The following table sets forth the computation of basic and diluted loss per share (in thousands, except per share data):

	<b>Year Ended December 31,</b> (In thousands, except for per share data)	
	2012	2011
Numerator		
Basic and diluted loss	\$ (7,955 )	\$ (6,121 )
Denominator		
Basic and diluted earnings per share - weighted average shares outstanding	1,265,270	786,579
Basic and diluted loss per common share	\$ (0.01 )	\$ (0.01 )

All common stock equivalents in the years ended December 31, 2012 and 2011 were excluded from the above calculation as their effect was anti-dilutive.

Anti-dilutive securities (based on conversions to common shares) not included in net loss per share calculation (in thousands):

	Year Ended December 31	
	December 31, 2012	December 31, 2011
Convertible Series A preferred stock	441	457
Convertible Series B preferred stock	305,648	782,882
Convertible Series G preferred stock	100	1,920
Convertible Series S preferred stock	1,000,000	1,000,000
Stock warrants	267,350	183,583
Convertible debt	722,910	262,626
Common stock options	190,600	-
Series B preferred stock options	250,000	-

## 15. INCOME TAXES

The Company has incurred losses since its inception and, therefore, has not been subject to federal income taxes. As of December 31, 2012, the Company had domestic net operating loss (“NOL”) carryforwards for income tax purposes of approximately \$57,438,377 which expire in 2013 through 2033. Under the provisions of Section 382 of the Internal Revenue Code greater than 50% ownership changes that occurred in the Company may significantly limit the Company’s ability to utilize its NOL carry forwards to reduce future taxable income and related tax liabilities.

Section 382 allows an owner shift any time there is a transfer of stock by a person who directly, or indirectly, owns more than 5% of the corporation and the percentage of stock of the corporation owned by one or more five percent shareholders has increased, in the aggregate, by more than 50 percentage points over the lowest percentage of stock owned by such shareholders at any time during the "testing period." The "testing period" is generally a three-year period ending on the date of any owner or equity structure shift.

The amount of post-change income that may be offset by pre-change losses is limited each year by the "Section 382 Limitation." Generally, the Section 382 Limitation is an amount equal to the value of the old loss corporation multiplied by a long-term interest rate established monthly by the Internal Revenue Service. The Company has not yet determined the qualifying events and resulting limitation that may impact utilization of net operating losses against future periods.

The composition of deferred tax assets and the related tax effects at December 31, 2012 and 2011 are as follows (in thousands):

	2012	2011
Deferred tax assets:		
Domestic net operating losses	\$19,529	\$18,592
Stock option compensation	606	-
Book/tax difference in fixed assets	32	
Accrued liabilities and reserves	272	283
	20,439	18,875
Valuation allowance	(20,439)	(18,875)
Total deferred tax assets	\$—	\$-

The difference between the income tax benefit in the accompanying statement of operations and the amount that would result if the U.S. Federal statutory rate of 34% were applied to pre-tax loss is as follows (amounts in thousands):

	2012		2011	
	Amount	%	Amount	%
Benefit for income taxes at federal statutory rate	\$2,704	34 %	\$2,081	34 %
Derivative losses	(596 )	(7 )	(185 )	(3 )
Discount amortization and other	(565 )	(7 )	(334 )	(5 )
Change in rates and other	21	-	1,777	28
Change in valuation allowance	(1,564)	(20)	(3,339)	(54)
	\$-	- %	\$-	- %

## **16.401(K) PLAN**

The Positron Corporation 401(k) Plan and Trust (the "Plan") covers all of the Company's employees who are United States citizens, at least 21 years of age and have completed at least one quarter of service with the Company. Pursuant to the Plan, employees may elect to reduce their current compensation by up to the statutorily prescribed annual limit and have the amount of such reduction contributed to the Plan. The Plan allows for the Company to make discretionary contributions in an amount equal to 25 percent of the participant's deferral contributions, up to 6 percent of the employee's compensation, as defined in the Plan agreement. The Company made no contributions in 2012 and 2011. The Board of Directors of the Company may authorize additional discretionary contributions; however, no such contributions were made by the Company in 2012 or 2011.

## **17.RELATED PARTY TRANSACTIONS**

At December 31, 2011, the Company had a \$250,000 receivable from Neusoft Positron Medical Systems (NPMS), the Company's joint venture, for excess freight charges owed and had a \$218,000 payable to NPMS for the purchase of an Attrius PET system. Due to the continued supply delays in the rubidium market, the Company has experienced a significant drop in demand and has been unable to sell new machines. Due to these conditions the NPMS's production schedules have also been affected and therefore the Company has been unable to pursue the \$250,000 receivable from NPMS and has charged off this balance. During the year ended December 31, 2012, the Company recognized cost of revenues of approximately \$623,000 related to the purchase of Attrius® PET systems from NPMS.

During 2011, the Company borrowed \$20,000 from, its Chief Executive Officer (CEO). This loan remained unpaid as of December 31, 2011. During the twelve month ended December 31, 2012, the Company borrowed from the CEO an additional \$40,000. All the advances, totaling \$60,000, were repaid during 2012 and as of December 31, 2012, the Company did not have an amount due to the Chief Executive Officer.

On January 12, 2012, the Company acquired a building in Westmont, Illinois, which the Company previously leased from its Chief Executive Officer (Lender or Related Party) for corporate and administrative offices since 2010. The Company issued the Chief Executive Officer 25,000,000 shares of common stock, which were valued at approximately \$250,000 and a convertible debenture of \$250,000, which shall be due on December 31, 2013 and bear interest at 8% per year payable quarterly in cash. In addition, the Company issued 35,000,000 warrants ("Warrants"), which entitle the Related Party to purchase shares of the Company's common stock, par value \$0.01 per share, at an exercise price of \$0.01 per share and expiring on December 31, 2013. The Lender is entitled to convert the accrued interest and principal of the Convertible Debentures into common stock of the Company at a conversion price equal to 55% of the lowest daily volume weighted average price for the three trading days preceding conversion. During the twelve months ended December 31, 2012, the Company issued 18,181,818 shares of Common Stock for repayment of \$100,000 of these Convertible Debentures. At December 31, 2011, the Company had \$77,000 of deferred rent related to this building recorded as an asset in the financial statements, which was expensed during the year ended December 31, 2012, and as of December 31, 2012, the Company did not have deferred rent on its balance sheet.

During the year ended December 31, 2012 the Company issued additional convertible debt to its Chief Executive Officer ("Lender") in the amount of \$1,320,000. The debt is non-interest bearing and matures on December 31, 2013. In connection with the this debt, the Company issued warrants ("Warrants") to purchase 37,500,000 shares of the Company's Common Stock, at an exercise price of \$0.01 per share expiring on December 31, 2013. The lender is entitled to convert the accrued interest and principal of the Convertible Debentures into common stock of the Company at a conversion price equal to 55% of the lowest daily volume weighted average price for the three trading days preceding conversion.

During September and December 2012, the Company issued two non-interest bearing convertible debentures totaling \$380,000 to its Chief Financial Officer ("Lender" or "CFO"). In connection with this debt, the Company issued to the CFO warrants to purchase 10,500,000 shares of the Company's Common Stock, at an exercise price of \$0.01 per share expiring on December 31, 2013. The Lender is entitled to convert the accrued interest and principal of the Convertible Debentures into common stock of the Company at a conversion price equal to 55% of the lowest daily volume weighted average price for the three trading days preceding conversion. These debentures are noninterest bearing. As of December 31, 2012, the Company all of the \$380,000 debt was outstanding.

In September of 2012, the Company received an unsecured advance of \$25,000 from a related party, which accrues interest at 8% per annum. This note was fully repaid as of December 31, 2012.

## **Key Employee Incentive Compensation**

The Company has an incentive compensation plan for certain key employees and its Board of Directors. The incentive compensation plan provides for annual bonus payments based upon achievement of certain corporate objectives as determined by the Company's Board of Directors.

## **18. COMMITMENTS AND CONTINGENCIES**

### *Lease Agreements*

We have operating leases for various offices and operating facilities in the United States. Rent expense was \$153,000 and \$190,000 for the years ended December 31, 2012 and 2011, respectively.

On April 19, 2010, the Company entered into an operating lease agreement with a third party for warehousing and office space in Niagara, New York. The lease expires in May 2013, with an option to renew for an additional three years. Monthly rent is \$1,800.

On July 7, 2011, the Company entered into an operating lease with a third party for space for medical device assembly and warehousing at a building in Fishers, Indiana. The Company is required to make payments of \$5,083 each month from December 1, 2011 through November 13, 2013, and \$5,287 from December 1, 2013 through November 30, 2016. The amount of leased space at this location is approximately 9,761 square feet.



On December 5, 2011, MIT entered into an operating lease with a third party for space for warehousing at a building in Lubbock, Texas. The Company is required to make payments of \$1,475 each month from December 1, 2011 through December 1, 2012. According to the terms of the agreement, the lease continues on month to month basis after December 31, 2012.

On February 9, 2012, MIT entered into a financing agreement with a third party for certain lab research equipment, which was delivered on March 15, 2012. The Company was required to make the first payment of \$22,862 upon signing the agreement and a monthly payment of \$12,856 thereafter for the next five months.

Future minimum rental commitments under non-cancellable facilities operating leases in place are as follows as of December 31, 2012:

Year Ending December 31,	
2013	\$70,210
2014	63,447
2015	63,447
2016	58,159
2017 and Thereafter	-
Total	\$255,262

### *Litigation*

On June 8, 2012, the owner of the radiopharmaceutical manufacturing facility the Company formerly leased in Crown Point, Indiana commenced an action to recover the use of the premises and the remaining rent due under the lease. On November 14, 2012, the owner was awarded a judgment against the Company in the amount of \$85,525.98 plus interest at the rate of 8%. The Company and the owner agreed to monthly payments in the minimum amount of \$5,000 until the judgment is paid in its entirety.

### **19. SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED) (in thousands)**

	Quarter ended			
	March 31, 2012	June 30, 2012	September 30, 2012	December 31, 2012
Net sales	\$829	\$1,224	\$370	\$378

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Gross profit (loss)	359	331	106	33
Net loss	(2,962 )	(1,235 )	(1,568 )	(2,190 )
Net earnings (loss) per share – basic and diluted	\$(0.00 )	\$(0.00 )	\$(0.00 )	\$(0.00 )
Weighted average basic and diluted shares	970,887	1,256,915	1,360,107	1,451,140

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	Quarter ended			
	March 31, 2011	June 30, 2011	September 30, 2011	December 31, 2011
Net sales	\$2,871	\$3,021	\$482	\$289
Gross profit (loss)	428	(68 )	(19 )	(64 )
Net loss	(735 )	(2,835 )	(1,453 )	(1,098 )
Net earnings (loss) per share – basic and diluted	\$(0.00 )	\$(0.00 )	\$(0.00 )	\$(0.00 )
Weighted average basic and diluted shares	784,327	789,738	797,751	786,579

## 20.SEGMENTS

We have aggregated our operations into two reportable segments based upon product lines, manufacturing processes, marketing and management of our businesses: medical equipment and radiopharmaceuticals. Our business segments operate in the nuclear medicine industry. The Company's medical equipment segment is currently generating all revenues and the majority of all expenses as the radiopharmaceuticals segment is still in the development phase.

We evaluate a segment's performance based primarily upon operating income before corporate expenses.

Corporate assets consist primarily of cash but also include plant and equipment associated with our headquarters. These items (and income and expenses related to these items) are not allocated to the segments. Unallocated income/expenses include interest income, interest expense, debt extinguishment and refinancing costs and other (expense) income and certain expenses which are not considered related to either segment, but are instead considered general corporate expenses.

The following table represents sales, operating loss and total assets attributable to these business segments for the periods indicated (in thousands):

	Year Ended	
	December 31, 2012	2011
Total Sales:		
Medical equipment	\$2,789	\$6,663

Radiopharmaceuticals	12	-
Total sales	\$2,801	\$6,663

Operating loss:

Medical equipment	\$3,690	\$3,775
Radiopharmaceuticals	1,026	396
Unallocated	6	221
Total operating loss	\$4,722	\$4,392

	December 31, 2012	December 31, 2011
Total assets:		
Medical equipment	\$ 1,739	2,283
Radiopharmaceuticals	945	24
Unallocated	1	1
Total assets	\$ 2,685	\$ 2,308

## 21. SUBSEQUENT EVENTS

Management has evaluated all events that occurred after the balance sheet date through the date when these financial statements were issued to determine if they must be reported. The Management of the Company has determined that there was a reportable subsequent event to be disclosed as follows:

On January 31, 2013 the Company accepted a \$250,000 advance from its CEO. At the time, the Company issued no shares or warrants in connection with this transaction.

On February 27, 2013 the Company accepted a \$250,000 advance from its CFO. At the time, the Company issued no shares or warrants in connection with this transaction.

On March 25, 2013 the Company accepted a \$100,000 advance from its CEO. At the time, the Company issued no shares or warrants in connection with this transaction.

On April 11, 2013 the Company accepted a \$150,000 advance from its CEO. At the time, the Company issued no shares or warrants in connection with this transaction.

On April 11, 2013, the Company accepted subscriptions from Patrick G. Rooney, its Chairman and Chief Executive Officer, and Corey N. Conn, its Chief Financial Officer and converted the advances noted above in the amounts of \$500,000 and \$250,000 respectively for an aggregate investment of \$750,000. In consideration of these subscriptions, the Company issued 7,500,000 shares of its newly created Series H Junior Convertible Preferred Stock, par value \$0.01 per share (the "Series H Preferred Stock"). The Series H Preferred Stock ranks junior to dividends and distributions of the Company's assets upon liquidation to all previously-issued shares of the Company and is not entitled to receive interest or dividends. The Series H Preferred Stock is convertible into shares of the Company's Common Stock at a rate equal to the number of shares of Series H Preferred Stock being converted multiplied by the Original Issuance Price of \$0.10 and divided by seventy percent (70%) of the daily weighted volume average price for the three trading days prior to conversion. The Series H Preferred Stock shall be entitled to two hundred (200) votes per share of Series H Preferred Stock on all matters which holders of Common Stock are entitled to vote.