

POSITRON CORP
Form 10-K
April 15, 2010

U.S. SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

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

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2009

Commissions file number: 0-24092

Positron Corporation

A Texas Corporation

7715 Loma Ct. Suite A, Fishers, IN. 46038 (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, \$.01 PAR VALUE

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.

Yes No

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

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incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. T

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

Non-accelerated filer

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

Issuer's revenues for fiscal year ended December 31, 2009: \$1,446,000.

Aggregate market value of common stock held by non-affiliates of the Registrant as of June 30, 2009: \$7,673,231.

As of April 15, 2010 there were 397,933,773 shares of the Registrant's common stock, \$.01 par value outstanding.

PART I

Item 1.	<u>Business</u>	3
Item 1A	<u>Risk Factors</u>	11
Item 1B	<u>Unresolved Staff Comments</u>	14
Item 2.	<u>Properties</u>	14
Item 3.	<u>Legal Proceedings</u>	14
Item 4.	Reserved	14

PART II

Item 5.	<u>Market for the Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	14
Item 6.	<u>Selected Financial Data</u>	16
Item 7.	<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	16
Item 7A	<u>Quantitative and Qualitative Disclosures About Market Risk</u>	21
Item 8.	<u>Financial Statements and Supplementary Data</u>	21
Item 9.	<u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	21
Item 9A(T)	<u>Controls and Procedures</u>	21
Item 9B.	<u>Other Information</u>	22

PART III

Item 10.	<u>Directors, Executive Officers, and Corporate Governance</u>	23
Item 11.	<u>Executive Compensation</u>	24
Item 12.	<u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	29
Item 13.	<u>Certain Relationships and Related Transactions and Director Independence</u>	30
Item 14.	<u>Principal Accountant Fees and Services</u>	31
Item 15.	<u>Exhibits and Financial Statement Schedules</u>	31
	<u>SIGNATURES</u>	32

Table of Contents

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,” “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 payors 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.

Corporate Information

Positron Corporation (the “Company” or “Positron”) was incorporated in 1983 and is currently headquartered in Fishers, Indiana. Unless the context requires otherwise, in this report the terms “we,” “us” and “our” refer to Positron Corporation.

Item 1. Business

General

Overview

Positron Corporation (the “Company”) is a molecular imaging company focused on Nuclear Cardiology. Positron utilizes its proprietary product line to provide unique solutions to the Nuclear Medicine community ranging from imaging to radiopharmaceutical distribution. Positron products include: the Attrius™, a Positron Emission Tomography (PET) imaging device; the Pulse®, a Single Photon Emission Computerized Tomography (SPECT) imaging device; the Nuclear Pharm-Assist®, an automated radiopharmaceutical distribution device; and the Tech-Assist™, a radiopharmaceutical injection shield. Posi-tron’s SPECT and PET cardiac molecular imaging de-vices are installed in more than 175 hospitals and physician offices around the world; two dozen of them are serviced by the Company.

Market Opportunity

Molecular Imaging Devices for Cardiology

Cardiovascular diseases (CVD) are the cause of death of approximately 17 million people worldwide, almost one-third of all deaths. By 2030, almost 23.6 million people will die from CVD (WHO, September 2009). CVD accounted for 38% of all deaths, or 1 of every 2.6 deaths in the United States (American Heart and Stroke Association, 2005). Heart disease is the leading cause of death for both men and women in the USA – 34.2% of all deaths. Estimated 80 million adults within the United States, or approximately 1 in 3 of the total population, were affected with CVD (Heart Disease and Stroke Statistics – 2009 Update, www.americanheart.org). In 2010, heart disease will cost the United States \$316.4 billion, including the cost of health care services, medications, and lost productivity (Centers for Disease Control and Prevention).

Table of Contents

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 to 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 non-invasive 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 market dynamic 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.

Our Products

Since 1983, the Company has been designing, manufacturing, marketing and servicing advanced molecular imaging devices / software for Cardiology utilizing PET technology products such as Auricle™, HZ™, HZL™, mPOWER™ and the new Attrius™ and since 2006, SPECT technology under the trade name Pulse CDC™. Posi-tron’s SPECT and PET cardiac molecular imaging de-vices are installed in more than 175 hospitals and physician offices around the world.

Positron Corporation is the only company in North America that offers a standalone, dedicated cardiac reasonably priced PET system. Positron, through its China based joint venture, Neusoft Positron Medical Systems, has upgraded its PET imaging system to accommodate the growing need for less expensive, high quality molecular imaging devices in today’s challenging economy. Positron’s technology for PET imaging provides image quality comparable to other PET manufactures with a fraction of their price. In addition, Positron offers a software patient management solution to improve patient care. The Attrius™ Cardiac PET system has received regulatory approval in 2009; the first system was delivered into the USA in November 2009 and was successfully clinically tested by a prominent cardiologist, Dr. Merhige. The Attrius™ has attracted significant interest from cardiologists, and Positron already has a backlog of orders for delivery in 2010.

For the Attrius™ PET, Positron was recognized with the 2010 Frost & Sullivan Award for New Product Innovation in the cardiac molecular imaging devices market. Each year, Frost & Sullivan presents this award to the company that has demonstrated superior performance against key competitors based on the following benchmarking criteria: innovative element of the product; leverage of leading edge technologies; value added features/benefits; increased customer value; and customer acquisition/penetration potential. Frost & Sullivan acknowledge that Attrius™ is the ideal solution for cardiologists and hospitals looking to add high accuracy, cost effective imaging technology.

Radiopharmaceutical Delivery Devices

According to Bio-Tech Systems (www.biotechsystems.com), a research firm that covers the diagnostic imaging market, nuclear cardiology radiopharmaceutical sales of \$1.29 billion in 2007 will increase to \$2.1 billion by 2014. In a study conducted by Frost & Sullivan (www.frost.com), the medical imaging consumables market is expected to grow at a compound annual rate of 14 percent, driven by an aging baby boomer population and persons 65 and over, and increasing more than twice as fast as the total population.

Tc-99m accounts for 82 percent of all diagnostic radiopharmaceutical injections each year (Arlington Medical Resources, Inc., *The Imaging Market Guides – United States Edition*, 2008). A current distribution model of Tc-99m is based on centralized radio pharmacies which provides scheduled deliveries of unit doses of radiopharmaceuticals to their clients located in a 70-75 miles range.

Table of Contents

Positron's radiopharmaceutical delivery system, the Nuclear Pharm-Assist®, reduces client overhead and the overall radiation exposure of employees, improves efficiency and meets or exceeds relevant compliance rules and regulations. The Nuclear Pharm-Assist® provides "Unit Dose" flexibility, for both PET and SPECT products, that is unprecedented in the industry.

Positron Corporation believes immediate market opportunities for the Nuclear Pharm-Assist® may exist with Centralized Nuclear Pharmacies and large hospitals due to USP-797. USP-797 is a United States Pharmacopeia Chapter for the compounding of sterile products, including nuclear medicine pharmaceuticals, that is enforceable by the FDA. Nuclear medicine facilities and nuclear pharmacies continue to address specific USP-797 concerns—from training, operating procedures, construction and financial constraints—to maintain compliance with these regulations. The Nuclear Pharm-Assist® is a platform that allows providers to meet or exceed the requirements of USP-797. As a compounding aseptic containment isolator, the Nuclear Pharm-Assist® will provide an ISO Class 5 (class 100) environment necessary for USP-797 compliance, while at the same time automating the radiopharmaceutical compounding procedure. The Nuclear Pharm-Assist® is a unique solution for Nuclear Medicine facilities to assist in achieving rapid, cost effective compliance.

Positron Corporation offers several variations of the Nuclear Pharm-Assist® to address the needs of each customer, specifically within Nuclear Cardiology. This version, marketed as the Nuclear Cardio-Assist™, can act as a "virtual" nuclear pharmacy with "Unit Dose" availability, at the touch of a button, 24/7. The Nuclear Cardio-Assist™ is a self-contained device that provides a platform for compliance with all regulations that involve compounding and dispensing sterile products. Single patient doses can be compounded from "Cold" kits, as needed, to meet customer specifications for each patient. The Nuclear Cardio-Assist™ is also a valuable asset for use in general Nuclear Medicine departments, as well as, Nuclear Pharmacies.

The Nuclear Pharm-Assist® can be combined with the patented Tech-Assist™ for dispensing of F-18 products from a vial in a clinic or hospital. This system reduces exposure by over 50% to the worker and allows for patient specific dosing to meet each individual patient requirement based on the patient's physical make up at the time of injection. This patient dispensing system will become even more relevant as new F-18 products cause increased worker exposure in nuclear cardiology settings.

Table of Contents

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 the Positron's PET systems result in good 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 Cardiac PET System in the Market.** All major PET manufacturers have discontinued manufacturing of stand-alone PET systems, offering PET combined with Computerized Tomography (PET/CT) instead. A very expensive CT component provides certain advantages in oncology applications but is redundant for cardiac imaging procedures. Positron intends to fill this market niche with its Attrius™ Cardiac PET system from Positron Chinese joint venture, Neusoft Positron Medical Systems.
- **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 Radiopharmaceutical Delivery Systems.** Positron's revolutionary "virtual pharmacy" solutions, Nuclear Pharm-Assist® and Nuclear Cardio-Assist™, allows placing pharmaceutical dose delivery systems into the physician's offices and provides unprecedented "Unit Dose" flexibility to imaging providers at the touch of a button, 24/7. The systems meets the requirements of the United States Pharmacopeia Chapter 797 compounding regulations as a compounding aseptic containment isolator (CACI) and provides the ISO Class 5 environment necessary for USP-797 compliance as well as automating the basic radiopharmaceutical compounding procedures.
- **Complete Turnkey Offering of Radiopharmaceuticals, Camera Service and Imaging as a Total Solution to Customers.** Positron offers financing and partnership flexibility to imaging providers with the choice of radiopharmaceuticals, radiopharmaceutical dispensing systems, molecular imaging devices, and equipment service directly from Positron. Customers can choose all services as a complete package or individual parts that suit their needs.

Business Strategy

We intend to increase our revenues by:

- **Focus on the cardiac diagnostic market,** which though highly competitive, has not being properly addressed to accommodate the trends from government pressures to reduce the healthcare burden while improving outcomes.
- **Effective Cost leadership –** Positron offers customers efficient, effective and economical complete cardiac solutions. Offering a total cardiac solution that includes imaging devices and radiopharmaceutical distribution.
- **Product differentiation by not only uniqueness of our PET systems, cardiac specific software and pharmaceutical delivery systems,** but offering to customers a total imaging solution.
- **Providing Turnkey Services.** - Positron intends to generate recurring monthly revenue from the service of our imaging systems and radiopharmaceutical delivery devices in addition to revenue from the sale of radiopharmaceuticals.

Table of Contents

Sales and Marketing

To market its equipment and services, Positron relies 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 uses both sales personnel and key distributors who have geographic or market expertise.

The Company has signed on as a Corporate Partner with MedAxiom, a comprehensive subscription-based service provider and information resource exclusively for cardiology practices. MedAxiom's network is compiled of over 300 practices representing 5,400 physicians covering 45 states across the U.S. Aligning with MedAxiom provides Positron direct access to most all cardiology practices in the country, many of them are in the immediate market for Positron's products.

Positron has executed an Agent Agreement with TIS – Technology Imaging Services. TIS offer a wide range of solutions for Nuclear Cardiology, Oncology, and Cardiac PET, including hot lab set up and products, which gives Positron and its products exposure throughout the PET Industry, an opportunity to introduce and offer Tech-Assist™ exposure control dose administration device and Attrius™ Cardiac optimized PET scanner.

Positron sells and/or distributes its products and services directly to end-users. We have certain experience with one-level distribution channels, when our SPECT cameras were sold not to end-users only but also to dealers. Though it helped to increase the number of cameras sold, it had an impact on the profit margin and left Positron with less recurring revenue from the service contracts.

There is no assurance that the Company's marketing and distribution strategy is sufficiently aggressive to compete against larger, better funded competitors.

Table of Contents

Customer Service and Warranty

The Company has field service engineers in the United States 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 domestic customers of our systems remotely through Internet access that facilitates system diagnosis without the need for field service or repair. 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 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. At year end 2009, the company had twelve (12) full service contracts and three (3) parts and labor contracts.

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 95% for all installed PET systems during 2007 and 2006; a study of 50 SPECT cameras yielded an average uptime of all units of 99.94 % and less than one service related incoming call per month.

As we have changed our business model from manufacturing and selling equipment to "servisation" of our products, when a major share of revenue is expected from services to the clients, customer service will play more and more important role in the Company. Our goal is to service all new PET systems sold.

Competition

The Company faces no direct competition as they are the only commercial manufacturer of a standalone PET system. The Company's SPECT camera has competition from other SPECT imaging companies. The Company does not believe that MRI and CT scan imaging represent significant competing technologies, but rather complementary technologies to PET, since PET, MRI and CT scans each provide information not available from the others. Computed tomography angiography ("CTA") is 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.

The Company is in a competitive imaging marketplace. Competition may come from other commercial manufacturers of PET/CT systems and SPECT/CT cameras such as General Electric Medical Systems ("GE"), Siemens Medical Systems, Inc. ("Siemens) and Philips Medical ("Philips"), all of which offer a full line of imaging cameras for each diagnostic imaging technology, including x-ray, MRI, CT, ultrasound and nuclear medicine, or SPECT/CT and PET/CT imaging. The molecular imaging systems sold by these competitors have been in use for a longer period of time than our products and are more widely recognized and used by physicians and hospitals.

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 price PET/CT systems with an average price tag of \$2 million dollars. PET/CT integrates functional (PET) and structural (CT) information into a single scanning session, allowing excellent fusion of the PET and CT images and thus improving lesion localization and interpretation accuracy. The CT data 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. As a result, all major PET manufacturers 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 accepted commercially, 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 artefacts, which can result in art factual 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 raise of the demand by cardiologists and lack of the supply of affordable PET systems on the market by offering its cardiac specific, standalone Attriustm 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' network and 6 cyclotrons), and GE healthcare (31 radiopharmacies). There are also about 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 only 75 seconds, and Rb-82 generators are delivered by Bracco directly to end users 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 (around \$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 70-75 miles proximity to the pharmacy due to a short half-life of Tc-99m. The Positron Corporation's Nuclear-Assist line of equipment does not have these limitations, as the radiopharmaceutical delivery devices can be placed directly into physicians' offices with once-a-week deliveries.

Until lately, both cardiac radiopharmaceuticals have been protected by patents combined with exclusive distribution relationships. Since the end of 2008, Rb-82 (Cardiogen®) and Tc-99m Sestamibi (Cardiolite®) are available generically. This is a landmark event that opened the billion dollar nuclear cardiology radiopharmaceutical market.

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. 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 payors for reimbursement. As a result, demand for our products is dependent in part on the coverage and reimbursement policies of these payors. Third party coverage and reimbursement is subject to extensive federal, state, local, and foreign regulation, and private payor 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 payors. For example, some payors will not reimburse a provider unless the provider has a contract with the payor, and in many instances such payors will not enter into such contracts. Other payors prohibit reimbursement unless physicians own or lease our systems 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.

Table of Contents

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.

On October 30, 2009, Centers for Medicare & Medicaid Services (CMS) released their 2010 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 20% to \$1,432.87 per study. The Schedule also states that Cardiovascular SPECT reimbursement for outpatient cardiology practices billing under CPT codes has been reduced by 36%. Ejection fraction and wall motion codes will now be bundled into a new global code.

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 systems will be manufactured through its joint venture, Neusoft Positron Medical Systems, at its developmental and manufacturing facility in Shenyang, China. The manufacturing of the Nuclear Pharm-Assist® line takes place in Indianapolis, Indiana metro-politan area.

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 labelling 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., 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.

Table of Contents

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 is 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 is 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%. The parties share the profits, losses and risks of the JV Company in proportion to and, in the event of losses, to the extent of their respective contributions to the registered capital of the JV Company.

Under its Joint Venture Contract with Neusoft, the Company has the exclusive right to sell PET system products developed by the JV Company in Canada, the U.S. 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, Canada, the U.S. and Mexico where select exclusive rights apply.

The joint venture has obtained the FDA 510k regulatory approval of Attrius™ Cardiac PET in April 2009.

While the parties believe that the joint venture will meet their objectives, there can be no assurance that the joint venture will meet such objectives, including production and timely delivery of PET systems.

Research and Development

The Company's research and development expenses were approximately \$178,000 and \$1,027,000 for the years 2009 and 2008, respectively. The research and development activities have been focused on development of radiopharmaceutical delivery systems and improvements to PulseCDC camera. We continue working on improvements to our radiopharmaceutical equipment to fit it to new products and meet sometimes unique user requirements. We are planning also development of additional software for our PET scanner to prepare it 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 develop and maintain improved "state of the art" products. The Company's inability to conduct such activities in the future may have a material adverse affect on the Company's business as a whole.

Table of Contents

Patent, Trademarks and Royalty Arrangements

The Company acquired the know-how and patent rights for positron imaging from three entities: the Clayton Foundation, K. Lance Gould (formerly a director) and Nizar A. Mullani (also formerly a director.) The obligations to pay royalties for these know-how and patent rights have expired on July 14, 2008.

The Company has several historic domestic and international patents pertaining to positron emission tomography technology and currently maintains one active U.S. patent relating to the unique construction and arrangement of the photo detector module array used in its devices. This was issued in May 1993 and expires in December of 2011.

The Company has several current, and historic domestic and international patents pertaining to its technologies in positron emission tomography (PET) imaging, single photon emission computed tomography (SPECT) imaging, and radiopharmaceutical dispensing and shielding technologies. The Company currently maintains 7 active U.S. patents relating to these technologies. The most recent issued in 2010.

As of December 31, 2009, we hold trademark registrations in the United States for the following marks: Attrius™, POSICAM™, Pulse CDC™ and Nuclear Pharm-Assist®.

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 has not experienced any product liability claims to date.

Employees

As of December 31, 2009, the Company employed twenty-one (21) 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 systems in quantities sufficient to be operationally profitable. Consequently, the Company has sustained substantial losses. During the year ended December 31, 2009, the Company had a net loss of approximately \$5,749,000, compared to a net loss of \$8,975,000 during 2008. At December 31, 2009, the Company had an accumulated deficit of approximately \$91,329,000. 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 sizable sales price of each system and the limited number of systems that have been sold or placed in service 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, 2009 expressed substantial doubt as to the Company's ability to continue as a going concern. The Company will need to obtain additional capital and increase system sales to become profitable.

- 11 -

Table of Contents

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 \$165,000 at December 31, 2009. The Company received \$3,633,000 in proceeds from private placements of securities and financings in 2009. In spite of the proceeds, the Company believes that it is possible 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.

Table of Contents

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.

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.

Table of Contents

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

None.

Item 2. Properties

The Company is headquartered in Fishers, Indiana, where it currently leases an office and warehouse from a related party. This facility lease is a one year lease expiring in September 2010. Rentals payments for the facility are \$4,671 monthly. The Company renewed a one year operating lease for its remaining Houston operations. The lease term is from February 1, 2010 to January 31, 2011. Monthly rent for the facility is \$1,000.

Item 3. Legal Proceedings

On or about August 11, 2009, the Company accepted service of a Summons and Complaint in the Supreme Court of the State of New York alleging that the Company breached its obligations to the Investors by failing to pay to the Investors principal and interest on the maturity date, together with all accrued interest on the Debentures and the Company has breached its obligations to convert the principal and accrued interest underlying the Debentures into shares of the Company's common stock. The Investors are seeking an amount to be proven at trial, to foreclose on their security interest covering the Company's assets, plus attorney's fees. On September 21, 2009, the Company served its answer to the action, asserting general and affirmative defenses to the Investors' claims. The action is currently in the discovery stage.

In July 2009, Mark Brett Scarbinsky commenced an action against the Company in the Court of Common Pleas of Berks County to recover alleged unpaid salaries, vacation time, bonuses, expenses and incentive shares as a result of the plaintiff's employment agreement from the Company in the aggregate approximate amount of \$43,000 plus 250,000 shares of the Company's common stock. The plaintiff and the Company settled the action for the payment of \$15,000 (\$10,000 which was paid on execution and the balance to be paid within 30 days) and the issuance of 250,000 shares of common stock.

In August 2009, Controlled Automation, Inc. commenced an action for breach of contract against the Company in the Superior Court of Hamilton County, Indiana alleging the Company is indebted to the Plaintiff for goods and services allegedly rendered to the Company. The plaintiff and the Company settled the action for the payment of \$23,885.09 and the return by the plaintiff of certain of the Company's property.

In September 2009, Sam Faivre, a former consultant of the Company, commenced an action for breach of contract against the Company for services rendered to the Company. Although the Company believed a settlement had been accepted by the Plaintiff, default judgment was entered against the Company in the amount of \$22,927.58 and the amount was subsequently paid.

PART II

Item 5. Market for Common Equity and Related Stockholder Matters

The Company's common stock is currently traded and quoted on the NASDAQ OTC Bulletin Board under the symbol POSC. The Company's common stock was previously traded on the NASDAQ Small Cap Market but was delisted in 1997 because the Company was unable to comply with various financial and compliance requirements for continued inclusion on the NASDAQ Small Cap Market. 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 2009 and 2008, 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.

	2009		2008	
	High	Low	High	Low
First Quarter	\$ 0.04	\$ 0.01	\$ 0.07	\$ 0.04
Second Quarter	\$ 0.05	\$ 0.02	\$ 0.10	\$ 0.04
Third Quarter	\$ 0.09	\$ 0.04	\$ 0.09	\$ 0.05
Fourth Quarter	\$ 0.09	\$ 0.06	\$ 0.07	\$ 0.01

Table of Contents

There were approximately 345 shareholders of record of common stock as of March 31, 2010, including broker-dealers holding shares beneficially owned by their customers.

- 15 -

Table of Contents

Item 6. Selected Financial Data

Not applicable

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 molecular imaging company focused on Nuclear Cardiology. Positron utilizes its proprietary product line to provide unique solutions to the Nuclear Medicine community ranging from imaging to radiopharmaceutical distribution. Positron products include: the Attrius™, a Positron Emission Tomography (PET) imaging device; the Pulse™, a Single Photon Emission Computerized Tomography (SPECT) imaging device; the Nuclear Pharm-Assist®, an automated radiopharmaceutical distribution device; and the Tech-Assist™, a radiopharmaceutical injection shield. Posi-tron's SPECT and PET cardiac molecular imaging de-vices are installed in more than 175 hospitals and physician offices around the world; two dozens of them are serviced by the Company. The Company has sold our imaging systems to physician offices, hospitals, and imaging centers primarily in the United States, although we have sold a small number of imaging systems internationally. The Company intends to install our radiopharmaceutical delivery systems to physician offices, hospitals, and nuclear pharmacies.

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 radiopharmacies that need to comply with the requirements of USP-797 or want to automate the delivery of radiopharmaceuticals. We are able to offer a total customer solution which includes low cost molecular imaging devices, disease specific software, radiopharmaceutical distribution and delivery systems, and radiopharma-ceuticals agents for Cardiac Nuclear Medicine. We believe our market has been negatively affected by declining reimbursements from Medicare and Medicaid programs, pricing pressures, and continuing efforts by some third party payors to reduce health care expenditures by requiring physicians to obtain specific accreditations or certifications, or disallowing reimbursement if imaging is performed with leased cameras. We see, however, the reversal of the reimbursement trend in the last two years.

General

The Company believes it will experience an increase in sales with the launch of sales of new PET systems from our China based joint venture, Neusoft Positron Medical Systems. Our PET imaging system has been developed to accommodate the growing need by cardiologists for less expensive, high quality molecular imaging devices in today's challenging economy. The Attrius™ Cardiac PET system has received the Food and Drug Administration approval in April 2009. The Company believes that the cardiac market for PET is quickly emerging and provides an immediate opportunity to capture significant market share with a low-cost, stand-alone dedicated Cardiac PET device. Positron's technology for PET imaging provides superior image quality with significantly less cost than other PET/CT

manufacturers. In addition, Positron offers a software patient management solution to improve patient care, including software by K. Lance Gould, M.D., a world renowned expert of cardiac PET technology.

Our Radiopharmaceutical Products segment expects revenue growth from sales and installations of radiopharmaceutical delivery systems and recurring revenue from delivery of radiopharmaceuticals. We believe that there is an immediate market opportunity for our radiopharmaceutical delivery system with centralized nuclear pharmacies, large hospitals and cardiology practices, many of which are not compliant with the United States Pharmacopeia Chapter 797 compounding regulations. Our Nuclear Pharm-Assist® systems reduce clients' overheads and the overall radiation exposure of workers, improves the efficiency of the pharmacy & delivery of radiopharmaceuticals and complies with newly enacted sterility requirements.

The Company intends to enter the market as the first medical device manufacturer to sell the pharmaceutical directly to the end customer. Currently the cardiac drugs for SPECT imaging are prepared at centralized Radio-pharmacies where they are substantially marked up. Our "virtual pharmacy" solution allows placing dose delivery systems into the physician's offices. Our Nuclear Cardio-Assist™ provides nuclear cardiology departments the ease of "Unit Dose" with the reliability of an "In-House" supply. The Nuclear Cardio-Assist™ automatically elutes a generator, compounds kits, performs quality control, fills a syringe, assays the dose in the syringe and dispenses the dose in the syringe ready for patient injection. The Nuclear Cardio-Assist™ replaces typical "Hot" lab equipment and acts as a "virtual" nuclear pharmacy with "Unit Dose" availability, at the touch of a button, 24/7.

We believe that these initiatives are intended to drive the Company towards consistent profitability and cash flow.

We expect increased sales and marketing spending to build on our 2010 sales.

Table of Contents

Results of Operations

Consolidated results of operations for the year ending December 31, 2009 and 2008 include Positron and its wholly-owned subsidiary Imaging Pet Technologies (“IPT”).

Revenues - The Company generated revenues of \$1,446,000 and \$2,126,000 for the years ended December 31, 2009 and 2008, respectively. Revenue from service contracts totalled \$827,000 and \$1,150,000 for the years ended December 31, 2009 and 2008, respectively. The decrease in service is due to in large part to the continuous decline of sales of both PET systems and PulseCDC gamma cameras. Additionally, some existing service contracts were either terminated or moved to time and materials billing, which resulted in lower revenue.

Costs of Sales - Costs of sales and gross profit (loss) % for the year ended December 31, 2009 were \$1,319,000 and 8.8%, respectively compared to \$2,939,000 and (38.3%) for the year ended December 31, 2008. The negative gross profit during the year ended December 31, 2008 was due primarily to activities in the Company’s subsidiary Positron Pharmaceuticals whose gross loss was approximately \$554,000. Subsequent to the Company’s acquisition of Dose Shield, Pharma spent significant amounts on the re-design of its Nuclear Pharm-Assist® systems that were already in process and for which we had established contract sales prices that were not adjusted. All additional costs were charged to the cost of the machines. In 2008, cost of sales also includes a write down of \$412,000 taken upon the disposal of obsolete parts during the move from Ottawa to Indianapolis, and a charge for an additional reserve of \$39,000 for slow moving parts.

For the year ended December 31, 2009, the Company recorded a gross loss on the sale of finished systems of \$(167,000). The gross loss resulted mainly from production costs incurred for the manufacturing of the Nuclear Pharm-Assist® systems. The Company executed a fixed price contract with a customer and therefore has been unable to pass production cost overages along to the customer. Cost of goods sold related to service contracts was approximately \$527,500. Revenues from service yielded a 36.25% gross profit for the year ended December 31, 2009. Also in 2009, the Company recorded a \$58,000 charge for slow moving and obsolete inventory.

Operating Expenses - The Company’s operating expenses were \$4,956,000 for the year ended December 31, 2009 compared to \$7,514,000 for the year ended December 31, 2008.

Selling, general and administrative expenses increased from \$3,222,000 for the year ended December 31, 2008 as compared to \$6,777,000 for the current year. The Company acquired Dose Shield in June 2008 and closed the Canadian facility of IPT and moved the operations to Indianapolis. Although salaries decreased from approximately \$1.9 million in 2008 to \$1.2 million in 2009, consulting fees increased from \$842,000 in 2008 to \$2.5 million for the year ended December 31, 2009. A significant amount of the consulting expense is fees paid pursuant to contracts with consultants hired to assist the Company with capital raising. For the year ended December 31, 2009, general and administrative expenses include stock based compensation expense of \$2,258,000 related to stock option grants to employees.

Research and development costs for the year ended December 31, 2009 were \$178,000 compared to \$1,027,000 for the year ended December 31, 2008. Research and development costs for the year ended December 31, 2008 included costs which related to further development of the IS2 gamma cameras and other related technologies. For the year ended December 31, 2008 the Company also incurred research costs related to the NPMS joint venture and upgrade and modernization of the PET imaging system. The modernization development program was substantially completed in 2008 and the new system was submitted to the FDA in January 2009 and approved for marketing in April 2009.

Table of Contents

Operating expenses in 2008 include a charge for impairment of the intangible asset recorded in conjunction with the acquisition of Dose Shield. At the date of acquisition in June 2008, the Company recorded the excess of purchase price over the fair value of the net assets of \$3,265,000 as an intangible asset. The entire amount was deemed impaired at December 31, 2008.

Other Income (Expenses) - Interest expense was \$1,416,000 and \$687,000 for the years ended December 31, 2009 and 2008, respectively. The significant increase in interest is due mainly to interest and related charges pursuant to default provisions contained in the NIR debentures agreements. In May 2009, the Company defaulted on the entire outstanding amount of the NIR debenture principal and accrued interest. Default related charges totalled \$472,000 (recorded as interest expense) and other interest on the NIR notes amounted to \$70,000 for the year ended December 31, 2009. Additionally, in 2009 interest expense included \$700,000 of discount amortization related to convertible debentures. Interest expense in 2008 included \$526,000 of discount amortization related to convertible debentures and \$68,000 of interest on two notes payable to Imagin Molecular.

The Company recorded derivative gains of \$499,000 for the year ended December 31, 2009 and \$63,000 for the year ended December 31, 2008. Derivative gains resulted from changes in variables used to calculate fair market value using the Black Sholes Model. Specifically, decreases of the Company's stock price and less price volatility yielded a lower fair market value of the conversion features resulting in a decrease to the derivative liability during the year.

Income Taxes – There is no provision for income taxes due to ongoing operating losses. As of December 31, 2009, we had net operating loss carryforwards of approximately \$29,000,000 for Federal reporting purposes. These amounts expire at various times through 2029. The Company has provided a full valuation allowance against the net deferred tax assets at December 31, 2009 and 2008.

Under the provisions of Section 382 of the Internal Revenue Code a greater than 50% ownership change that occurs in the Company limits the Company's ability to utilize certain pre-existing NOL's 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 events and resulting limitation that may impact utilization of net operating losses against future periods.

Table of Contents

Net Loss - For the year ended December 31, 2009, the Company had a net loss of \$5,749,000, or \$0.02 per share, compared to a net loss of \$8,975,000, or \$0.07 per share, for the year ended December 31, 2008.

Liquidity and Capital Resources

At December 31, 2009, the Company had current assets of \$923,000 and total assets of \$988,000 compared to December 31, 2008 when current assets were \$1,033,000 and total assets were \$1,104,000. The decrease in current assets is attributable primarily to decreases in inventory and accounts receivable both attributable to a decrease in overall sales and service revenue.

Current liabilities at December 31, 2009 were \$7,947,000 compared to \$7,254,000 at December 31, 2008. Accounts payable and accrued liabilities were \$3,200,000 and \$2,687,000 at December 31, 2009 and 2008, respectively. This increase is due in large part to a significant increase in accrued interest related to the NIR debentures (see "Other Income"). At December 31, 2009, current liabilities also included \$1,358,000 of convertible debentures which were due in May and June 2009 and are currently in default, related derivative liabilities of \$2,104,000, and \$540,000 of notes payable related to the acquisition of Dose Shield.

Net cash used in operating activities during the year ended December 31, 2009 was \$3,345,000 compared to \$3,407,000 used in operating activities during the year ended December 31, 2008.

Net cash used in investing activities was \$21,000 for the year ended December 31, 2009 and was all related to purchases of property and equipment including \$16,000 in building and leasehold improvements. Net cash provided by investing activities of \$762,000 during the year ended December 31, 2008 included \$835,000 of advances from Imagin Molecular Corporation that were converted to notes and subsequently exchanged for shares of the Company's Series S Preferred Stock.

Net cash provided by financing activities was \$3,519,000 and \$2,415,000 for the years ended December 31, 2009 and 2008, respectively. During the year ended December 31, 2009, the Company issued preferred stock for cash totalling \$1,699,000 and common stock for cash totalling \$1,933,000, compared to the prior year when the Company issued preferred and common stock for cash totalling \$1,115,000 and \$50,000, respectively. During the year ended December 31, 2008, the Company also received proceeds from related parties of \$1,288,000, the vast majority of which was received from the Solaris Opportunity Fund.

Since inception, the Company has expended substantial resources on research and development. Consequently, we have sustained substantial losses. Due to the limited number of systems sold or placed into service each year, revenues have fluctuated significantly from year to year. The Company had an accumulated deficit of \$91,329,000 at December 31, 2009. The Company will need to increase system sales and apply the research and development advancements to achieve profitability in the future. We expect to experience an increase in sales with the launch of Attrius™ Cardiac PET system and through sales of radiopharmaceutical delivery systems and recurring revenue from delivery of radiopharmaceuticals with Nuclear Pharm-Assist® systems. Through the Company's joint venture with Neusoft Medical Systems, PET system 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 funds through loans, credit and the private placement of restricted securities until such time as the Company achieves profitability. To date, management has been successful in raising cash on an as-needed basis for the continued operations of the Company. There is no guarantee that management will be able to continue to raise needed cash 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 public accountants, which accompanied the financial statements for the year ended December 31, 2009, was 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.

The Company has no material commitments for capital expenditures at this time. The Company has no "off balance sheet" source of liquidity arrangements.

- 19 -

Table of Contents

New Accounting Pronouncements

Critical Accounting Policies

In response to the Securities and Exchange Commission's Release No. 33-8040, "Cautionary Advice Regarding Disclosure About Critical Accounting Policies," we have identified critical accounting policies based upon the significance of the accounting policy to our overall financial statement presentation, as well as the complexity of the accounting policy and our use of estimates and subjective assessments. We have concluded our critical accounting policies are as follows:

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.

- 20 -

Table of Contents

Revenue Recognition

Revenues from system contracts and other nuclear imaging devices are recognized when all significant costs have been incurred and the system has been shipped to the customer. Revenues from maintenance contracts are recognized over the term of the contract. Service revenues are recognized upon performance of the services.

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 POSICAM™ 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

The Company is not exposed to any significant market risk related to interest rates and foreign currencies.

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(T). Controls and Procedures

Evaluation of Disclosure Controls and Procedures.

In accordance with Rule 13a-15(b) of the Securities Exchange Act of 1934 as amended (the "Exchange Act"), as of the end of the period covered by this Annual Report on Form 10-K, the Company's management evaluated, with the participation of the Company's principal executive and financial officer, the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Rule 13a-15(e) or Rule 15d-15(e) under the Exchange Act). Disclosure controls and procedures are defined as those controls and other procedures of an issuer that

are designed to ensure that the information required to be disclosed by the issuer in the reports it files or submits under the Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms. Based on their evaluation of these disclosure controls and procedures, the Company's chairman of the board and chief executive and financial officer has concluded that that there are material weaknesses in our disclosure controls and procedures.

- 21 -

Table of Contents

The material weaknesses in our disclosure control procedures are as follows:

1. Lack of formal policies and procedures necessary to adequately review significant accounting transactions. The Company utilizes a third party independent contractor for the preparation of its financial statements. Although the financial statements and footnotes are reviewed by our management, we do not have a formal policy to review significant accounting transactions and the accounting treatment of such transactions. The third party independent contractor is not involved in the day to day operations of the Company and may not be provided information from management on a timely basis to allow for adequate reporting/consideration of certain transactions.
2. 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.

We intend to initiate measures to remediate the identified material weaknesses including, but not necessarily limited to, the following:

- Establishing a formal review process of significant accounting transactions that includes participation of the Chief Executive Officer, the Chief Financial Officer and the Company's corporate legal counsel.
- Form an Audit Committee that will establish policies and procedures that will provide the Board of Directors a formal review process that will among other things, assure that management controls and procedures are in place and being maintained consistently.

Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act). Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2009. In making this assessment, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in Internal Control-Integrated Framework. Based on its evaluation, our management concluded that there is a significant deficiency and a material weakness in our internal control over financial reporting.

The significant deficiency relates to a lack of segregation of duties due to the small number of employees involvement with general administrative and financial matters. However, management believes that compensating controls are in place to mitigate the risks associated with the lack of segregation of duties. Compensating controls include outsourcing certain financial functions to an independent contractor.

The material weakness relates to a lack of formal policies and procedures necessary to adequately review significant accounting transactions. The Company utilizes a third party independent contractor for the preparation of its financial statements. Although the financial statements and footnotes are reviewed by our management, we do not have a formal policy to review significant accounting transactions and the accounting treatment of such transactions. The third party independent contractor is not involved in the day to day operations of the Company and may not be provided information from management on a timely basis to allow for adequate reporting/consideration of certain transactions. We intend to initiate measures to remediate the identified material weaknesses including establishing a formal review process for significant accounting transactions that includes the participation of the Company's management and corporate legal counsel, and establishing a formal audit committee.

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

registered public accounting firm pursuant to temporary rules of the Securities and Exchange Commission that permit the Company to provide only management's report in this annual report.

Item 9B. Other Information

None.

- 22 -

Table of Contents

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 a such:

Name	Age	Position with the Company
Patrick G. Rooney	47	Chairman of the Board – Elected 2004
Joseph G. Oliverio	40	Chief Technical Officer and Director – Elected 2006
John Zehner	42	Chief Operating Officer
Corey N. Conn	48	Chief Financial Officer and Director – Elected 2008
Timothy M. Gabel	40	Director of Service
Scott Stiffler	41	Director of Quality & Regulatory Affairs
Sachio Okamura	59	Director – Elected 2001
Dr. Anthony (Tony) C. Nicholls	62	Director – Elected 2005
Joseph C. Sardano	60	Director – Elected 2008

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. . 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 will manufacture the Company's PET products. Since March 2003, Mr. Rooney has been the Managing Director of Solaris Opportunity Fund L.P., an investing/trading hedge fund. Through years 1985-2000, Patrick G. Rooney and/or Rooney Trading were a member 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.

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. Mr. Oliverio also serves as the Chief Executive Officer of Imagin Molecular Corporation, a publicly-owned Delaware corporation, and affiliate of the Registrant. Mr. Oliverio serves on the Board of Directors of Neusoft-Positron Medical Systems Co., Ltd., a joint venture with Neusoft Medical Systems of China that will manufacture 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.

John Zehner. Mr. Zehner was appointed by the Board of Directors to serve as the Company's Chief Operation Officer on May 15, 2009. Mr. Zehner was Executive Vice-President of Positron since July 2008, when his company, Dose Shield, Inc., was acquired by Positron Corporation. Mr. Zehner has over 18 years of experience in the Nuclear Medicine field. Zehner has been part of several start-ups, mergers and acquisitions. In 1993, he assisted in the start-up of North-ern Virginia Isotopes, Inc., a nuclear pharmacy focused on distributing radioactive pharma-ceuticals for

diagnostics and therapy to the Washington, D.C. market. In 1994, he established Valley Isotopes, Inc., a nuclear pharmacy in Winchester, Virginia. In 1995, Zehner led the formation of Eastern Isotopes, Inc. through the merger of three nuclear pharmacies and later established its pharmaceutical manufacturing division for FDG in 1998. In 1999, he became President and COO of Eastern Isotopes, Inc. and under his leadership grew sales from approximately \$4 million to over \$34 million by 2003. In 2007, Zehner formed NukeMed, Inc. and Dose Shield after leading the extremely lucrative sale of Eastern Isotopes, Inc. to IBA, SA, a Belgium life science company.

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. Mr. Conn also serves as President of Imagin Molecular Corporation, a publicly-owned Delaware corporation, and affiliate of the Registrant. Mr. Conn was Vice President of Business Development at iXL, an e-business and e-transformations services provider from 1995 to 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 served as a member of the Board of Directors of Uniloc, Inc., from April 2000 to July 2002. Mr. Conn received a Bachelor's Degree in Business Administration from Bradley University.

Table of Contents

Timothy M. Gabel was appointed by the Board of Directors to serve as Director of Service on May 15, 2009. Mr. Gabel was Vice President of Operations of Positron Corporation since March of 2006. Prior hereto 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.

Scott Stiffler. Mr. Stiffler has served as Director of Quality and Regulatory Affairs since September 2008. Mr. Stiffler is responsible for maintaining ISO and FDA regulatory compliance at Positron. Prior thereto 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. 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.

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.

Dr. Anthony (Tony) 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., and as CEO, raised (CDN) \$6 million, achieved a listing on CDNX and established sales of the company's products in 21 countries. 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.

Joseph C. Sardano. Mr. Sardano has been elected as a director in 2008. Mr. Sardano served as a Senior Vice President of Sales and Marketing at Siemens Medical Solutions and CTI Molecular Imaging before becoming a strategic industry consultant and serving on the board of directors of various medical imaging companies. Mr. Sardano has served as CTI's Senior Vice President of Sales and Marketing since September 2004. In this capacity, he led the sales and marketing activities for all business units of CTI, including the sales of scanners under the sales agency agreement with Siemens Medical Solutions USA, Inc. Previously, Mr. Sardano served as Vice President of Sales for CTI Solutions from September 2002 to September 2004. Prior to joining CTI, Mr. Sardano held several key positions in the medical industry. He was with GE Medical Systems where he served as Region Sales Manager from 1999 to 2000 and as P.E.T. Americas Sales Manager from 2001 to 2002. Prior to that, Mr. Sardano served as Vice President Sales for Elscint Inc., and Vice President and General Sales Manager for Fisher Scientific. He has also served in various management capacities with Toshiba America Medical Systems, Medstone International and Xerox Corporation. Mr. Sardano holds a Bachelor of Arts degree from Concordia University in Montreal, Canada and an Executive Business

Development Diploma from McGill University.

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, 2009 and 2008. 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.

- 24 -

Table of Contents

Name and Principal Position	Year	Salary (a)	Bonus	Restricted Stock Awards	Option Awards(b)	Nonequity incentive plan compensation	All Other compensation	Total
Patrick G. Rooney Chairman of the Board	2009	\$ 100,000	--	--	--	--	--	\$ 100,000
	2008	\$ 100,000	--	--	--	--	--	\$ 100,000
Joseph G. Oliverio President	2009	\$ 150,000	--	--	--	--	--	\$ 150,000
	2008	\$ 150,000	--	--	--	--	--	\$ 150,000
Corey N. Conn Chief Financial Officer	2009	\$ 100,000	--	--	--	--	--	\$ 100,000
	2008	\$ 100,000	--	--	--	--	--	\$ 100,000
Timothy M. Gabel Vice President of Operations	2009	\$ 100,000	--	--	--	--	--	\$ 100,000
	2008	\$ 100,000	--	--	--	--	--	\$ 100,000
John Zehner Executive Vice President	2009	\$ 100,000	--	--	--	--	--	\$ 100,000
	2008	\$ 58,333	--	--	--	--	--	\$ 58,333
Scott Stiffler Director of Quality and Regulatory Affairs	2009	\$ 100,000	--	--	\$ 11,998	--	--	\$ 111,998
	2008	\$ 16,667	--	--	--	--	--	\$ 16,667

(a) Mr. Zehner's 2008 salary is for the partial year beginning on June 6, 2008, the date of acquisition of Dose Shield. Mr. Stiffler began employment with the Company in October 2008.

(b) On September 12, 2009, Mr. Stiffler was granted an option to purchase 150,000 shares of the Company's common stock. The fair market value of the shares on the date of grant were \$11,988.

Employment Agreements

Positron has an employment agreement with John Zehner, Chief Operating Officer. The term of the employment agreement is for a period of three years commencing on June 1, 2008; and is subject to automatic renewals for two (2) successive one year periods. Mr. Zehner has a base salary of \$100,000. The base compensation may be increased (but not decreased) from time to time upon review by and within the sole and absolute discretion of the Board of Directors of Positron. The employment agreement cannot be terminated without cause.

Table of Contents

Equity Compensation Plan Information

The following table summarizes share and exercise information about the Company's equity compensation plans as of December 31, 2009.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (excluding securities included in 1 column)
All Equity Compensation Plans Approved by Security Holders	26,645,000	\$ 0.06	16,900,000 (1)

(1) Includes 15,550,000 shares available under the 2005 Amended and Restated Stock Incentive Plan and 1,350,000 shares available for issuance under the 2008 Stock Incentive Plan. Effective January 2010 the 2005 Stock Incentive Plan has been terminated; no additional shares will be issued.

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 Compensation Committee, subject to the approval of the Board of Directors. During 2008, the Company did not pay any bonus pursuant to the incentive compensation plan.

Table of Contents

Amended and Restated 2005 Stock Incentive Plan

Positron's Board administers the Amended and Restated 2005 Stock Incentive Plan ("2005 Plan"), which was adopted by the Board effective November 18, 2005. The 2005 Plan provides for the grant of options and stock to directors, officers, employees and consultants. 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. Options granted under the plan may be incentive stock options or nonqualified stock options. The exercise price of incentive stock options may not be less than 100% of the fair market value of the Common Stock as of the date of grant (110% of the fair market value in the case of an optionee who owns more than 10% of the total combined voting power of all classes of the Company's capital stock). Options may not be exercised more than ten years after the date of grant (five years in the case of 10% shareholders). Upon termination of employment for any reason other than death or disability, each option may be exercised for a period of 90 days; to the extent it is exercisable on the date of termination. In the case of a termination due to death or disability, an option will remain exercisable for a period of one year; to the extent it is exercisable on the date of termination. A total of 40,000,000 shares of Common Stock have been authorized for issuance under the 2005 Plan. As of December 31, 2009, a total of 24,450,000 options have been granted under the 2005 Plan, none of which have been exercised, and of which 24,450,000 are fully vested. Effective January 2010, the 2005 Plan has been terminated, no further options will be granted.

2006 Stock Incentive Plan

Positron's Board administers the 2006 Stock Incentive Plan ("2006 Plan"), which was adopted by the Board effective April 10, 2006. The 2006 Plan provides for the direct issuance of stock and grants of nonqualified stock options to directors, officers, employees and consultants. 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. Options may not be exercised more than ten years after the date of grant. Upon termination of employment for any reason other than death or disability, each option may be exercised for a period of 90 days; to the extent it is exercisable on the date of termination. In the case of a termination due to death or disability, an option will remain exercisable for a period of one year; to the extent it is exercisable on the date of termination. A total of 5,000,000 shares of Common Stock have been authorized for issuance under the 2006 Plan. As of December 31, 2009, all shares available under the 2006 Plan had been issued.

Table of Contents

2007 Omnibus Securities and Incentive Plan

Positron's Board of Directors (the "Board") administers the 2007 Omnibus Securities and Incentive Plan ("2007 Plan"), which was adopted by the Board effective July 1, 2007. The 2007 Plan provides for the direct issuance of Awards including any Distribution Equivalent Right, Option, Performance Share Award, Performance Unit Award, Restricted Stock Award, Stock Appreciation Right or Unrestricted Stock Award to key management employees, non-employee directors and non-employee consultants. 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 5,000,000 shares of Common Stock have been authorized for issuance under the 2007 Plan. As of December 31, 2009, all shares under the 2007 Plan had been issued to consultants.

2008 Stock Incentive Plan

Positron's Board of Directors (the "Board") administers the 2008 Stock Incentive Plan ("2008 Plan"), which was adopted by the Board effective July 28, 2008. The purpose of the 2008 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 2008 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 2008 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 6,000,000 shares of Common Stock have been authorized for issuance under the 2008 Plan. As of December 31, 2009, 4,650,000 shares had been issued under the 2008 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 2008 Plan. As of December 31, 2009, no shares 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 20,000,000 shares of Common Stock have been authorized for issuance under the 2010 Plan. As of December 31, 2010, no shares had been issued under the 2010 Plan.

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 makes contributions in an amount equal 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.

The Company did not make any contributions to the 401(k) Plan on behalf of employees during the years ended December 31, 2009 and 2008.

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 fiscal year 2009 or 2008.

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.

Table of Contents

Non-Employee Director Compensation

Beginning January 22, 1999 through current date, non-employee directors were not separately compensated for their services on the Board although they continued to be reimbursed for their reasonable expenses associated with attending board and committee meetings.

Historically, each non-employee director was eligible to receive an initial option to purchase 25,000 shares of Common Stock under the Company's 1999 Non-Employee Directors' Stock Option Plan upon their election or appointment to the Board. The Company anticipates that future grants to non-employee directors may be made with exercise prices for such grants equal to 100% of the fair market value of the Common Stock on the date of grant.

Item 12. Security Ownership of Directors, Officers and Certain Beneficial Owners

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.

Security Ownership of Certain Beneficial Owners (a)

Name and Address of Beneficial Owner	Number of Shares of Common Stock	% of Outstanding Common Stock (b)
Solaris Opportunity Fund, L.P.	1,119,574,140 (c)	54.0 %
IMAGIN Diagnostic Centres, Inc.	389,900,200 (d)	18.0 %

(a) 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) The percentage of outstanding Common Stock assumes full conversion of Convertible Series A, B, and S Preferred Stock into Common Stock and is based on 397,933,773 shares of Common Stock outstanding on April 15, 2010.

(c) Includes 12,274,140 shares owned directly, shares issuable upon full conversion of 1,073,000 shares of Series B Preferred Stock into Common Stock, and shares issuable upon full conversion of 100,000 shares of Series S Preferred Stock into Common Stock.

(d) Includes 23,000,000 shares owned directly, shares issuable upon full conversion of 3,623,252 shares of Series B Preferred Stock into Common Stock, and 4,575,000 shares that may be acquired pursuant to warrants to purchase common shares that are or will become exercisable within 60 days of April 15, 2010. The address for IMAGIN is 3014 - 610 Granville St., Vancouver, British Columbia, V6C 3T3, Canada. .

Table of Contents

Security Ownership of Directors, Director Nominees and Executive Officers

TiTitle of Class	Name of Beneficial Owner	Beneficial Ownership (aa) (cc)	Percent of Class (bb)
Common	Joseph G. Oliverio	7,500,000 (cc)	1.8%
Common	Sachio Okamura	575,000 (dd)	*
Common	Patrick G. Rooney	5,075,000 (ee)	1.2%
Common	Dr. Anthony C. Nicholls	550,000 (ff)	*
Common	Corey N. Conn	4,000,000 (gg)	1.0%
Common	Timothy M. Gabel	1,500,000 (hh)	*
Common	Scott Stiffler	150,000 (ii)	*
Common	John Zehner	26,666,667(jj)	6.8%
Common	All Directors and Executive Officers as a Group	46,016,667	11.8%
*	Does not exceed 1% of the referenced class of securities.		

(aa) Ownership is direct unless indicated otherwise.

(bb) Calculation based on 391,023,773 shares of Common Stock outstanding as of March 31, 2010 plus stock options that are or will become exercisable within 60 days of March 31, 2010.

(cc) Includes 7,500,000 shares that may be acquired by Mr. Oliverio pursuant to stock options that are or will become exercisable within 60 days of March 31, 2010.

(dd) Includes 575,000 shares that may be acquired by Mr. Okamura pursuant to stock options that are or will become exercisable within 60 days of March 31, 2010.

(ee) Includes 5,075,000 shares that may be acquired by Mr. Rooney pursuant to stock options that are or will become exercisable within 60 days of March 31, 2010.

(ff) Includes 550,000 shares that may be acquired by Mr. Nicholls pursuant to options that are or will be exercisable within 60 days of March 31, 2010.

(gg) Includes 4,000,000 shares that may be acquired by Mr. Conn pursuant to stock options that are or will become exercisable within 60 days of March 31, 2010.

(hh) Includes 1,500,000 shares that may be acquired by Mr. Gabel pursuant to stock options that are or will become exercisable within 60 days of March 31, 2010.

(ii) Includes 150,000 shares that may be acquired by Mr. Stiffler pursuant to stock options that are or will become exercisable within 60 days of March 31, 2010.

(jj) Includes all shares held of record by NukeMed Corporation. John Zehner controls all voting power of the stock held by NukeMed Corporation.

The address for all officers and directors of the Company is 7715 Loma Ct. Suite A, Fishers, IN. 46038.

Item 13. Certain Relationships and Related Transactions and Director Independence

2009

During the year ended December 31, 2009, the Company, pursuant to the terms of the Stock Purchase Agreement dated June 5, 2008 for the acquisition of Dose Shield Corporation (“Dose Shield”); the Company recorded \$69,000 of accrued commissions which represents 50% of net revenue generated from sales of all Pharm-Assist equipment. Additionally, the Company is obligated to pay a 1.5% royalty on sales of equipment from Dose Shield's portfolio. Total royalties related to the Dose Shield equipment were \$2,100 in 2009. John Zehner, the Company's Chief Operating Officer is a former owner of Dose Shield. Interest expense on the loan due to the former owners of Dose Shield was \$43,200 during the year ended December 31, 2009. As of December 31, 2009, the principal balance of the note payable related to the acquisition is \$540,000.

The Company leases its facility in Fishers, Indiana from a Company owned by John Zehner, the Company's Chief Operating Officer. During the year ended December 31, 2009, the Company paid approximately \$56,000 to lease the facility. The current operating lease expires in September 2010.

In December 2009, the Company issued 53,000 and 40,000 shares of Series B Preferred shares to Solaris Opportunity Fund and Solaris Management Fund, respectively, as settlement of notes payable.

2008

During the year ended December 31, 2007, the Company received non-interest bearing advances from its affiliate, Imagin Molecular Corporation, (“IMGM”) totalling \$1,346,000. During the nine months ended September 30, 2008, IMG M advanced an additional \$835,000 to the Company. Positron's President and Director, Joseph Oliverio and its Chief Financial Officer and Director, Corey Conn are both officers and directors of IMG M. On April 10, 2008, the Company and its affiliate, IMG M, formalized the advances of \$1,346,000 from IMG M in the form of a promissory note bearing interest at 8% per annum, due on December 31, 2008 (“Note 1”). Note 1 was secured by a pledge of 100,000,000 shares of Positron's common stock, par value \$0.001, (the “Pledged Shares”) in accordance with a Stock Pledge Agreement (the “Pledge”). On August 18, 2008, the advances totalling \$835,000 were also formalized into a promissory note, with interest at 8%, due on December 31, 2008 (“Note 2”). Note 2 was also secured by the Pledged Shares. Upon a default of either promissory note or the Pledge, IMG M may sell the Pledged Shares to repay any and all amounts due under the Note and/or the August 18, 2008 Note. Accrued interest on the Notes at September 30, 2008 is \$68,000.

On November 18, 2008, the Company, Solaris Opportunity Fund, L.P., Solaris Management, LLC, and Imagin Molecular Corporation executed and consummated a Securities Exchange Agreement whereby Imagin transferred and assigned all of its rights title and interest to Note 1, Note 2 and the Pledged Shares to Solaris 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, to be retired and cancelled on Imagin's books and records and the retirement and satisfaction of any obligations to the advances made in the amount of \$200,000 to Imagin by Solaris. Simultaneously therewith, Solaris exchanged Note 1, Note 2 and the Pledged Shares and the retirement and satisfaction of any obligations to the advances made to the Company in the aggregate amount of \$1,195,000 for the issuance of 100,000 shares of the Company's Series S Preferred Stock (the “Exchange”). As a result of the Exchange, Solaris Opportunity Fund, L.P. became the Company's controlling shareholder, holding approximately 60% of the Company's voting capital stock. Patrick G. Rooney, the Chairman of Positron, is Managing Member of the Solaris Opportunity Fund.

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.

Three of our six current directors, Sachio Okamura, Dr. Anthony C. Nicholls and Joseph C. Sardano, meet this definition of independence.

- 30 -

Table of Contents

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 Frank L. Sassetti & Co., its independent registered public accounting firm for fiscal 2009 and 2008.

	Fiscal 2009	Fiscal 2008
Audit fees (1)	\$ 55,550	\$ 57,942
Audit-related fees	--	20,386
Tax fees	4,000	4,150
All other fees	--	--
	\$ 59,550	\$ 82,478

(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 an acquisition.

(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.

The Board of Directors has considered the role of Frank L. Sassetti & Co. in providing certain tax services to Imagin and has concluded that such services are compatible with Frank L. Sassetti Co.'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. When the audit committee is formed one of their first assignments will be to propose to the board a code of ethics.

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

(a)

Exhibits

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

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

(b) Reports on Form 8-K

There were no current reports on Form 8-K for the quarter ending December 31, 2008.

Table of Contents

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, 2010

By: /s/ Patrick G. Rooney
Patrick G. Rooney
Chairman of the Board

- 32 -

Table of Contents

POSITRON CORPORATION AND SUBSIDIARIES
FINANCIAL STATEMENTS
WITH REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM
for the years ended December 31, 2009 and 2008

- 33 -

Table of Contents

FINANCIAL STATEMENTS
TABLE OF CONTENTS

	Page
Report of Independent Registered Public Accounting Firm	36
Consolidated Balance Sheet as of December 31, 2009 and 2008	37
Consolidated Statements of Operations and Comprehensive Income for the years ended December 31, 2009 and 2008	38
Consolidated Statement of Stockholders' Deficit for the two years ended December 31, 2009	39
Consolidated Statements of Cash Flows for the years ended December 31, 2009 and 2008	41
Notes to Consolidated Financial Statements	42

Table of Contents

Frank L. Sasseti & Co.
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 as of December 31, 2009 and 2008 and the related consolidated statements of operations and comprehensive income, 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 as of December 31, 2009 and 2008, and the results of its operations and its 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/ Frank L. Sasseti & Co.

April 15, 2010
Oak Park, Illinois

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

Table of Contents

POSITRON CORPORATION AND SUBSIDIARY
CONSOLIDATED BALANCE SHEETS
December 31, 2009 and 2008
(In thousands, except share data)

ASSETS	2009	2008
Current assets:		
Cash and cash equivalents	\$ 165	\$ 7
Accounts receivable, net of allowance for doubtful accounts of \$16 and \$40	74	230
Inventories	615	755
Due from affiliates	69	40
Prepaid expenses	--	1
Total current assets	923	1,033
Property and equipment, net	56	28
Other assets	9	43
Total assets	\$ 988	\$ 1,104
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable, trade and accrued liabilities	\$ 3,200	\$ 2,687
Customer deposits	669	253
Notes payable	575	540
Convertible notes payable, less discount of \$0 and \$608	1,323	599
Unearned revenue	51	728
Due to affiliates	25	133
Derivative liabilities for convertible debentures	2,104	2,314
Total current liabilities	7,947	7,254
Convertible notes payable, less discount of \$105 in 2008	--	11
Deposits for unissued preferred stock	--	100
Derivative liabilities for convertible debentures, net of current portion	--	289
Total liabilities	7,947	7,654
Stockholders' deficit:		
Series A Preferred Stock: \$1.00 par value; 8% cumulative, convertible, redeemable; 5,450,000 shares authorized; 457,599 and 464,319 shares issued and outstanding.	457	457
Series B Preferred Stock: \$1.00 par value; convertible, redeemable; 9,000,000 shares authorized; 6,729,421 and 5,926,111 shares outstanding	6,413	6,215
Series G Preferred Stock: \$1.00 par value; convertible, redeemable; 3,000,000 shares authorized; 62,391 and 111,391 shares outstanding	62	29
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; 800,000,000 shares authorized; 391,023,773 and 160,240,384 shares outstanding.	3,910	1,602
Additional paid-in capital	73,568	70,686
Other comprehensive income	(125)	(44)
Accumulated deficit	(91,329)	(85,580)

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Treasury Stock: 60,156 shares at cost	(15)	(15)
Total stockholders' deficit	(6,959)	(6,550)
Total liabilities and stockholders' deficit	\$ 988	\$ 1,104

See notes to financial statements.

- 36 -

Table of Contents

POSITRON CORPORATION AND SUBSIDIARY
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME
For the years ended December 31, 2009 and 2008
(In thousands, except per share data)

	2009	2008
Sales	\$ 1,446	\$ 2,126
Costs of sales	1,319	2,939
Gross profit (loss)	127	(813)
Selling, general and administrative	4,778	3,222
Research and development	178	1,027
Impairment of intangible asset	--	3,265
Total operating expenses	4,956	7,514
Loss from operations	(4,829)	(8,327)
Other income (expenses):		
Interest expense	(1,416)	(687)
Equity in losses of unconsolidated subsidiaries	--	--
Derivative gains	499	63
Other	(3)	(24)
	(920)	(648)
Loss before income taxes	(5,749)	(8,975)
Income taxes	--	--
Net loss	\$ (5,749)	\$ (8,975)
Other comprehensive income (loss)		
Foreign currency translation gain (loss)	(81)	(38)
Comprehensive loss	\$ (5,830)	\$ (8,937)
Basic and diluted loss per common share	\$ (0.02)	\$ (0.07)
Basic and diluted weighted average shares outstanding	239,033	134,556

See notes to financial statements.

Table of Contents

POSITRON CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF STOCKHOLDERS' DEFICIT
For the years ended December 31, 2009 and 2008
(In thousands, except share data)

	Series A		Series B		Series S		Series G Preferred		Common Stock	
	Preferred Stock Shares	Preferred Stock Amount	Preferred Stock Shares	Preferred Stock Amount	Preferred Stock Shares	Preferred Stock Amount	Stock Shares	Stock Amount	Shares	Amount
December 31, 2007	464,319	\$464	5,926,111	\$5,926	--	--	111,391	\$29	102,555,302	\$1,026
Net loss	--	--	--	--	--	--	--	--	--	--
Stock based compensation	--	--	--	--	--	--	--	--	--	--
Conversion of debentures to common stock	--	--	--	--	--	--	--	--	1,372,052	13
Issuance of common stock for cash	--	--	--	--	--	--	--	--	1,000,000	10
Issuance of common stock for services	--	--	--	--	--	--	--	--	14,000,000	140
Issuance of common stock for debt settlement	--	--	--	--	--	--	--	--	1,296,108	13
Issuance of common stock for partial purchase price for acquisition	--	--	--	--	--	--	--	--	40,000,000	400
Conversion of Series A into common stock	(6,720)	(7)	--	--	--	--	--	--	16,922	--
Issuance of Series B preferred in private	--	--	288,750	289	--	--	--	--	--	--

placement											
Issuance of Series S for settlement of note payable	--	--	--	--	100,000	100	--	--	--	--	--
Foreign currency translation gain	--	--	--	--	--	--	--	--	--	--	--
December 31, 2008	457,599	\$457	6,214,861	\$6,215	100,000	\$100	111,391	\$29	160,240,384	\$1,602	
Net loss	--	--	--	--	--	--	--	--	--	--	--
Stock based compensation	--	--	--	--	--	--	--	--	--	--	--
Conversion of Series B to common stock	--	--	(1,294,582)	(1,295)	--	--	--	--	129,458,200	1,295	
Issuance of common stock for cash	--	--	--	--	--	--	--	--	70,521,049	705	
Issuance of common stock for services	--	--	--	--	--	--	--	--	25,474,140	255	
Issuance of common stock for debt settlement	--	--	--	--	--	--	--	--	400,000	4	
Stock options exercised									30,000	--	
Issuance of Series B and warrants for cash	--	--	1,626,282	1,310	--	--	--	--	--	--	--
Issuance of Series B for services	--	--	89,860	90	--	--	--	--	--	--	--

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Issuance of Series B for settlement of notes payable	--	--	93,000	93	--	--	--	--	--	--
Conversion of Series G to common stock and paid in capital reclassification	--	--	--	--	--	--	(49,000)	33	4,900,000	49
Change in foreign currency translation gain	--	--	--	--	--	--	--	--	--	--
Balance December 31, 2009	457,599	\$457	6,729,421	\$6,413	100,000	\$100	62,391	\$62	391,023,773	\$3,910

See notes to financial statements.

Table of Contents

POSITRON CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF STOCKHOLDERS' DEFICIT

For the years ended December 31, 2009 and 2008

(In thousands, except share data)

(Continued)

	Additional Paid-in Capital	Other Comprehensive Income	Accumulated Deficit	Treasury Stock		Total
				Shares	Amount	
Balance December 31, 2007	\$64,314	\$ (82)	\$ (76,605)	60,156	\$(15)	\$(4,943)
Net loss	--	--	(8,975)	--	--	(8,975)
Stock based compensation	3	--	--	--	--	3
Conversion of debentures to common stock	(3)	--	--	--	--	10
Issuance of common stock for cash	40	--	--	--	--	50
Issuance of common stock for services	520	--	--	--	--	660
Issuance of common stock for debt settlement	75	--	--	--	--	88
Issuance of common stock for partial purchase price of acquisition	1,600	--	--	--	--	2,000
Conversion of Series A preferred into common stock	7	--	--	--	--	--
Issuance of Series B preferred in private placement	826	--	--	--	--	1,115
Issuance of Series S preferred for settlement of notes payable	3,304	--	--	--	--	3,404
Change in foreign currency Translation gain	--	38	--	--	--	38
Balance December 31, 2008	\$70,686	\$ (44)	\$ (85,580)	60,156	\$(15)	\$(6,550)
Net loss	--	--	(5,749)	--	--	(7,748)

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Stock based compensation	258	--	--	--	--	258
Conversion of Series B to common stock	--	--	--	--	--	--
Issuance of common stock for cash	1,228	--	--	--	--	1,933
Issuance of common stock for services	1,093	--	--	--	--	1,348
Issuance of common stock for debt settlement	4	--	--	--	--	8
Stock options exercised	1					1
Issuance of Series B and warrants for cash	389	--	--	--	--	1,699
Issuance of Series B for services	--	--	--	--	--	90
Issuance of Series B for settlement of notes payable	(9)	--	--	--	--	84
Conversion of Series G to common stock and paid in capital reclassification	(82)	--	--	--	--	--
Change in foreign currency Translation gain	--	(81)	--	--	--	(81)
Balance December 31, 2009	\$73,568	\$ (125)	\$ (91,329)	60,156	\$(15)	\$(6,959)

See notes to financial statements.

Table of Contents

POSITRON CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
For the years ended December 31, 2009 and 2008
(In thousands)

	2009	2008
Cash flows from operating activities:		
Net loss	\$(5,749)	\$(8,975)
Adjustments to reconcile net loss to net cash used in operating activities		
Derivative (gains) losses	(499)	(63)
Compensation related to issuance of options	258	3
Depreciation and amortization	14	52
Loss on disposal of assets	--	24
Issuance of common stock for services	1,347	660
Preferred stock issued for services	90	--
Amortization of loan costs, debt discount and beneficial conversion feature	751	600
Impairment of intangible asset	--	3,265
Preferred stock issued for interest	--	68
Changes in operating assets and liabilities:		
Accounts receivable	175	(20)
Inventories	172	588
Prepaid expenses	--	93
Other current assets	(1)	29
Accounts payable and accrued liabilities	372	516
Customer deposits	401	(99)
Unearned revenue	(676)	(148)
Net cash used in operating activities	(3,345)	(3,407)
Cash flows from investing activities:		
Proceeds from notes payable to affiliated entities	--	835
Partial payment of purchase price of acquisition, net of cash received	--	(60)
Purchase of property and equipment	(21)	(13)
Net cash (used in) provided by investing activities	(21)	762
Cash flows from financing activities:		
Payment of notes payable	--	(41)
Proceeds from related party advances	--	1,288
Proceeds from notes payable	35	--
Payment of notes payable to related party	(48)	--
Repayment of advances made to affiliated entities	--	296
Capital lease obligation	--	(18)
Common stock issued	1,933	50
Preferred stock issued	1,699	1,115
Deposit for unissued securities	(100)	(275)
Net cash provided by financing activities	3,519	2,415

Effect of exchange rate changes on cash and cash equivalents	5	45
Net (decrease) increase in cash and cash equivalents	158	(185)
Cash and cash equivalents, beginning of year	7	192
Cash and cash equivalents, end of year	\$165	\$7
Supplemental cash flow information:		
Interest paid	\$--	\$--
Income taxes paid	\$--	\$--
Non-cash disclosures		
Issuance of common stock to satisfy debt obligation	\$9	\$88
Fair market value of warrants issued with Series B Preferred shares recorded as an increase to paid in capital for value of warrants	\$412	\$493
Convertible debenture discount with corresponding increase to derivative liabilities for beneficial conversion feature	\$--	\$285
Series S Preferred Stock exchanged for retirement of notes payable and accrued interest due to related parties	\$--	\$3,404
Conversion of Series A Preferred Stock to common stock	\$--	\$7
Conversion of Series B Preferred Stock to common stock	\$1,295	\$--
Conversion of debentures to common stock	\$--	\$51
Conversion of accrued interest to convertible notes payable	\$--	\$116
Common stock issued for acquisition of Dose Shield	\$--	\$2,000
Debt recorded for acquisition of Dose Shield	\$--	\$540
Conversion of Series G Preferred to Common Stock	\$49	\$--

See notes to financial statements

Table of Contents

POSITRON CORPORATION AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
DECEMBER 31, 2008 AND 2007

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 during 1986. Positron Corporation operations include Molecular Imaging Devices and Radiopharmaceutical Distribution Products. The Molecular Imaging Devices portion of the business provides Positron Emission Tomography (PET) scanners and Single Photon Emission Computed Tomography (SPECT) cameras. Radiopharmaceutical Products offers the world's first robotic systems for distribution and delivery of radiopharmaceuticals and provides radiopharmaceutical agents used for the diagnosis of cardiac diseases. The Company attempts to create revenue by offering inexpensive molecular imaging devices, disease specific software, radiopharmaceutical distribution and delivery systems, and radiopharmaceutical agents for cardiac nuclear medicine. The Company, participates in manufacturing of its PET scanner through its' joint venture with Neusoft Medical Systems Co., LTD. These systems will utilize the Company's patented and proprietary technology, an imaging technique which assesses the biochemistry, cellular metabolism and physiology of organs and tissues, as well as producing anatomical and structural images. Targeted markets include medical facilities and diagnostic centers located throughout the world. The Company's systems are used by physicians as diagnostic and treatment evaluation tools in the areas of cardiology, neurology and oncology.

On June 5, 2006, the Company, through a minority-owned subsidiary of the Company, Imaging PET Technologies, Inc. ("IPT"), and Quantum Molecular Pharmaceuticals Inc., a Canadian radiopharmaceutical corporation ("QMP") acquired all of the operating assets of IS2 Medical Systems Inc., a developer and manufacturer of nuclear imaging devices based in Ottawa, Ontario, Canada ("IS2"). Initially, the Company and QMP held 49.9% and 50.1%, respectively, of the total outstanding capital stock of IPT. On January 26, 2007, the Company acquired the remaining 50.1% of the capital stock of IPT from Imagin Diagnostic Centers, Inc.

On June 5, 2008, the Company, and its wholly-owned subsidiary Positron Pharmaceuticals Company, a Nevada corporation ("Positron Pharmaceuticals"), executed and consummated a Stock Purchase Agreement to acquire all of the issued and outstanding stock (the "Acquisition") of Dose Shield Corporation, an Indiana corporation ("Dose Shield"). The purchase price of the Acquisition consisted of: 80,000,000 shares of the Registrant's common stock, par value \$0.01 per share (the "Common Stock"), deliverable in two equal tranches, the first 40,000,000 shares at the closing, the second contingent upon verification by an independent third party that Dose Shield's Cardio-Assist device is deemed in commercially reasonable working order and is ready for resale not later than December 31, 2009; (ii) cash in the amount of \$600,000, \$60,000 payable at the closing and the balance due on December 31, 2008, unless extended for one year with interest at the rate of 8%; earn out payments through December 31, 2009 equal to the lesser of (x) 50% of the net revenue generated from sales of Pharm-Assist equipment, including receivables, or (y) \$600,000. In addition, the Company is obligated to pay royalties equal to 1.5% of net revenues generated from all future sales of all Dose Shield equipment sold by Positron Pharmaceuticals following the Closing. Future royalty obligations would be expensed to operations as incurred. As of December 31, 2009, the cardio-assist device was not deemed to be in commercially reasonable working order and ready for resale and Positron Pharmaceuticals had not made the final cash payment of \$540,000.

In October 2008, the Company closed the IPT facility in Canada and consolidated operations with Positron Pharmaceuticals in the United States. At December 31, 2009 and 2008, IPT continued to operate as a separate legal and accounting entity. However, the Company's management is currently considering structural changes that include a

merger of the U.S. and Canadian operations.

- 41 -

Table of Contents

The assets acquired and liabilities assumed included accounts receivable and deferred revenues from sales contracts that were executed by Dose Shield's majority shareholder NukeMed Corporation. NukeMed, acting as Dose Shield's sales and marketing agent, entered into several sales agreements for Nuclear Pharm -Assist™ systems. The agreements and all obligations were assigned to Positron Pharmaceuticals in the Acquisition. The Nuclear Pharm-Assist™ system is designed to support the staff of Nuclear Medicine Departments and Nuclear Pharmacies. The Nuclear Pharm -Assist™ compounds, kits, fills, assays and dispenses vials and syringes in a shielded container. The unique design reduces worker radiation exposure and repetitive motion injuries. The shielding is integrated into the design and is considered standard.

Principles of Consolidation

For the years ended December 31, 2009 and 2008, the financial statements include the transactions of Positron Corporation and its wholly-owned subsidiary Imaging Pet Technologies, Inc. ("IPT"). All Intercompany transactions and balances 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 of Positron include companies with common significant shareholders, joint venture companies, joint venture partners and companies with common management or control. Such companies include Imagin Diagnostic Centres, Inc. ("IMAGIN"), Quantum Molecular Pharmaceuticals, Inc. ("QMP"), Imagin Molecular Corporation ("IMGM"), Solaris Opportunity Fund ("Solaris"), Neusoft Medical Systems Co. ("NMS"), Neusoft Positron Medical Systems Co., Ltd. ("NPMS"), Positron Acquisition Corporation ("PAC") and Imagin Nuclear Partners ("INP"). PAC and INP are wholly-owned subsidiaries of IMGM.

Foreign Currency Translation

All assets and liabilities of IPT are translated from Canadian to United States dollars at period-end rates of exchange, while the statement of income is translated at the average exchange rates during the period. Accumulated translation adjustments are shown in equity under "Other comprehensive loss."

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.

Table of Contents

Concentrations of Credit Risk

Cash and accounts receivables are the primary financial instruments that subject the Company to concentrations of credit risk. The Company maintains its cash in banks or other financial institutions selected based upon management's assessment of the bank's financial stability. Cash balances periodically exceed the federal depository insurance limit.

Accounts receivable arise primarily from transactions with customers in the medical industry located throughout the world, but concentrated in the United States and Canada. The Company provides a reserve for accounts where collectability is uncertain. Collateral is generally not required for credit granted.

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.

Property and Equipment

Property and equipment are recorded at cost and depreciated for financial statement purposes using the straight-line and declining balance methods over estimated useful lives of three to seven years, and declining balance methods for IPT's computer software. 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 plant and equipment, and long-lived assets, which includes patents and other intangible assets, by comparing the anticipated future net cash flows associated with those assets to the related net book value. If an impairment is indicated as a result of such reviews, the Company would remove the impairment based on the fair market value of the assets, using techniques such as projected future discounted cash flows or third party valuations.

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.

Table of Contents

Revenue Recognition

Revenues from system contracts and other nuclear imaging devices are recognized when all significant costs have been incurred and the system has been shipped to the customer and in certain cases after installation is complete. Revenues from maintenance contracts are recognized over the term of the contract. Service revenues are recognized upon performance of the services.

Advertising

Indirect-response advertising costs are charged to operations the first time the advertising takes place. The cost of direct-response advertising is not significant. Advertising expenses for 2009 and 2008 were \$81,000 and \$126,000, respectively.

Research and Development Expenses

All costs related to research and development costs are charged to expense as incurred.

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.

Warranty Costs

The Company accrues for the cost of product warranty on the Company's systems, Pulse CDC gamma cameras and other nuclear imaging devices at the time of shipment. Warranty periods generally range up to a maximum of one year but may extend for longer periods. After warranty expiration many customers execute service contracts to cover their systems. Service contract periods vary with some customers on month to month contracts and others on quarterly and annual contracts. Revenue collected in advance of the service period is deferred and recognized over the term of the contract. Service costs under the contracts are expensed as incurred. For the years ended December 31, 2009 and 2008, service costs charged to expense were \$527,000 and \$706,000, respectively. The Company did not record warranty expense for the year ended December 31, 2009. Warranty expense for Pulse CDC gamma systems sold was \$97,000 for the year ended December 31, 2008.

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.

Fair Value of Financial Instruments

The Company includes fair value information in the notes to the financial statements when the fair value of its financial instruments is different from the book value. When the book value approximates fair value, no additional disclosure is made.

New Accounting Pronouncements

The Financial Accounting Standards Board (“ FASB ”), in June 2009, issued new accounting guidance that established the FASB Accounting Standards Codification, (“ Codification” or “ASC ”) as the single source of authoritative GAAP to be applied by nongovernmental entities, except for the rules and interpretive releases of the SEC under authority of federal securities laws, which are sources of authoritative GAAP for SEC registrants. The FASB will no longer issue new standards in the form of Statements, FASB Staff Positions, or Emerging Issues Task Force Abstracts; instead the FASB will issue Accounting Standards Updates. Accounting Standards Updates will not be authoritative in their own right as they will only serve to update the Codification. These changes and the Codification itself do not change GAAP. This new guidance became effective for interim and annual periods ending after September 15, 2009. Other than the manner in which new accounting guidance is referenced, the adoption of these changes did not have a material effect on the Company’s consolidated financial statements.

In May 2009, the FASB issued new accounting guidance, under ASC Topic 855 on subsequent events, which sets forth: 1) the period after the balance sheet date during which management of a reporting entity should evaluate events or transactions that may occur for potential recognition or disclosure in the financial statements; 2) the circumstances under which an entity should recognize events or transactions occurring after the balance sheet date in its financial statements; and 3) the disclosures that an entity should make about events or transactions that occurred after the balance sheet date. This guidance was effective for interim and annual periods ending after June 15, 2009. The adoption of this guidance did not have a material effect on the Company’s consolidated financial statements.

Table of Contents

In August 2009, FASB issued Accounting Standards Update 2009-05 which includes amendments to Subtopic 820-10, “Fair Value Measurements and Disclosure--Overall.” The update provides clarification that in circumstances in which a quoted price in an active market for the identical liability is not available, a reporting entity is required to measure fair value using one or more of the techniques provided for in this update. The amendments in this update clarify that a reporting entity is not required to include a separate input or adjustment to other inputs relating to the existence of a restriction that prevents the transfer of the liability and also clarifies that both a quoted price in an active market for the identical liability at the measurement date and the quoted price for the identical liability when traded as an asset in an active market when no adjustments to the quoted price of the asset are required are Level 1 fair value measurements. The adoption of this standard did not have a material impact on the Company’s financial position, results of operations and cash flows.

The FASB has published FASB Accounting Standards Update 2009-13, “Revenue Recognition (Topic 605)-Multiple Deliverable Revenue Arrangements,” which addresses the accounting for multiple-deliverable arrangements to enable vendors to account for products or services (deliverables) separately rather than as a combined unit. Specifically, this guidance amends the criteria in Subtopic 605-25, “Revenue Recognition-Multiple-Element Arrangements,” for separating consideration in multiple-deliverable arrangements. This guidance establishes a selling price hierarchy for determining the selling price of a deliverable, which is based on: (a) vendor-specific objective evidence; (b) third-party evidence; or (c) estimates. This guidance also eliminates the residual method of allocation and requires that arrangement consideration be allocated at the inception of the arrangement to all deliverables using the relative selling price method and also requires expanded disclosures. FASB Accounting Standards Update 2009-13 is effective prospectively for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010. Early adoption is permitted. The adoption of this standard is not expected to have a material impact on the Company’s financial position, results of operations and cash flows.

Table of Contents

2. Going Concern Consideration

Since inception, the Company has expended substantial resources on research and development. Consequently, we have sustained substantial losses. Due to the limited number of systems sold or placed into service 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 \$91,329,000 and a stockholders' deficit of \$6,959,000 at December 31, 2009. The Company will need to increase system sales and apply the research and development advancements to achieve profitability in the future. We expect to experience an increase in sales with the launch of Attrius™ Cardiac PET system and through sales from of radiopharmaceutical delivery systems and recurring revenue from delivery of radiopharmaceuticals with Nuclear Pharm-Assist® systems. Through the Company's joint venture with Neusoft Medical Systems, PET system 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 and service volumes and increased net margins. However, there is no assurance that the Company will be successful in selling new systems.

The Company utilized proceeds of \$3,632,000 from issuance of equity securities to fund operating activities during the year ended December 31, 2009. The Company had cash and cash equivalents of \$165,000 at December 31, 2009. At the same date, the Company had accounts payable and accrued liabilities of \$3,200,000. The secured convertible notes payable of \$1,358,000, are also in default, see note 6. In addition, debt service and working capital requirements for the upcoming year may 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. Positron Pharmaceuticals – Dose Shield Acquisition

On June 5, 2008, the Company, and its wholly-owned subsidiary Positron Pharmaceuticals Company, a Nevada corporation ("Positron Pharmaceuticals"), executed and consummated a Stock Purchase Agreement to acquire all of the issued and outstanding stock (the "Acquisition") of Dose Shield Corporation, an Illinois corporation ("Dose Shield"). The purchase price of the Acquisition consisted of: 80,000,000 shares of the Registrant's common stock, par value \$0.01 per share (the "Common Stock"), deliverable in two equal tranches, the first 40,000,000 shares at the closing, the second contingent upon verification by an independent third party that Dose Shield's Cardio-Assist device is deemed in commercially reasonable working order and is ready for resale not later than December 31, 2009; (ii) cash in the amount of \$600,000, \$60,000 paid at the closing and the balance due on December 31, 2008, which was extended for one year with interest at the rate of 8%; earn out payments through December 31, 2009 equal to the lesser of (x) 50% of the net revenue generated from sales of Pharm-Assist equipment, including receivables, or (y) \$600,000. In addition, the Company is obligated to pay royalties equal to 1.5% of net revenues generated from all future sales of all Dose Shield equipment sold by Positron Pharmaceuticals following the Closing. Future royalty obligations would be expensed to operations as incurred. As of December 31, 2009, the cardio-assist device was not deemed to be in commercially reasonable working order and ready for resale and Positron Pharmaceuticals had not made the final cash payment of \$540,000.

The assets acquired and liabilities assumed included accounts receivable and deferred revenues from sales contracts that were executed by Dose Shield's majority shareholder NukeMed Corporation. NukeMed, acting as Dose Shield's

sales and marketing agent, entered into several sales agreements for Nuclear Pharm -Assist™ systems. The agreements and all obligations were assigned to Positron Pharmaceuticals Company in the Acquisition. The Nuclear Pharm-Assist™ system is designed to support the staff of nuclear medicine departments and nuclear pharmacies. The Nuclear Pharm -Assist™ compounds kits, fills vials and syringes, assays vials and syringes and dispenses vial and syringes in a shielded container. The unique design reduces worker radiation exposure and repetitive motion injuries. The shielding is integrated into the design and is considered standard.

The cost of the Acquisition was allocated to the assets acquired and liabilities assumed from Dose Shield and NukeMed based on their preliminary fair values as of the acquisition date, with the amount exceeding the fair value recorded as an intangible asset. The contingent payment of 40,000,000 shares of common stock will be recorded as additional intangible asset at the time the contingency is resolved. The earn out payments would be recognized as compensation expense when and if earned. As the estimated fair values of certain assets and liabilities are preliminary in nature, they are subject to adjustment as additional information is obtained, including, but not limited to, settlement of the contingent payment, the final reconciliation and valuation of tangible assets and the Company incurring direct acquisition costs in connection with this transaction.

The following table summarizes the preliminary allocation of the cost of the acquisition to the assets acquired and liabilities assumed as of the close of the acquisition (in thousands):

Table of Contents

	As of June 5, 2008
Assets Acquired	
Trade accounts receivables	\$ 23
Inventory	374
Trademarks	6
Intangible asset	3,265
Total Assets Acquired	3,668
Liabilities Assumed	
Accounts payable and accrued expenses including direct costs of acquisition	282
Unearned revenues	786
Total Liabilities Assumed	1,068
Purchase Price	\$ 2,600

If the acquisition had occurred at the beginning of the year, net sales for the year ended December 31, 2008 would have been \$2,171,000. Net loss for the year would have been \$9,275,000, and loss per share would have been \$.06 per share.

In addition, John Zehner, Dose Shield's former principal shareholder and executive officer executed a three year employment agreement with the Registrant to serve as president of Positron Pharmaceuticals. Mr. Zehner's employment is for three years with a base salary of \$100,000 per year, with the Registrant's option to increase the base salary to \$150,000 in the event it has received appropriate funding.

During the year ended December 31, 2009, the Company, pursuant to the terms of the Stock Purchase Agreement the Company recorded \$69,000 of accrued commissions which represents 50% of net revenue generated from sales of all Pharm-Assist equipment and royalty expense royalty on sales of equipment acquired from Dose Shield totalling \$2,100. Additionally, interest expense on the loan due to the former owners of Dose Shield was \$43,200 during the year ended December 31, 2009. As of December 31, 2009, the principal balance of the note payable is \$540,000.

Intangible Asset and Goodwill Impairment

In accordance with generally accepted accounting principles, goodwill and certain intangible assets are deemed to have indefinite lives and are no longer amortized, but are reviewed at least annually for impairment. Other identifiable intangible assets are amortized over their estimated useful lives. Accounting guidance requires that goodwill be tested for impairment annually, utilizing the "fair value" methodology. The Company has adopted December 31st as the date of the annual impairment test for goodwill.

Goodwill impairment is determined using a two-step process. The first step of the goodwill impairment test is used to identify potential impairment by comparing the fair value of a reporting unit with the net book value (or carrying amount), including goodwill. If the fair value of the reporting unit exceeds the carrying amount, goodwill of the reporting unit is considered not impaired and the second step of the impairment test is unnecessary. If the carrying amount of the reporting unit exceeds the fair value, the second step of the goodwill impairment test is performed to measure the amount of impairment loss, if any. The second step of the goodwill impairment test compares the implied fair value of the reporting unit's goodwill with the carrying amount of that goodwill. If the carrying amount of the reporting unit's goodwill exceeds the implied fair value of that goodwill, an impairment loss is recognized in an amount equal to that excess. The implied fair value of goodwill is determined in the same manner as the amount of goodwill recognized in a business combination. Accordingly, the fair value of the reporting unit is allocated to all of the assets and liabilities of that unit as if the reporting unit had been acquired in a business combination and the fair value of the reporting unit was the purchase price paid to acquire the reporting unit.

In performing the first step of the fiscal 2008 intangible asset or goodwill impairment test, management determined there was an indicator of impairment in the intangible asset recorded for the acquisition of Dose Shield because the carrying value of the reporting unit exceeded its estimated fair value.

In performing the second step of the impairment test, the Company allocated the estimated fair values of the Positron Pharmaceuticals reporting unit determined in step one of the impairment test, to the assets and liabilities as if a new acquisition were being accounted for in accordance with accounting guidance. Based on the Company's annual review of goodwill in 2008, the Company recorded an impairment charge of \$3,265,000, for the Positron Pharmaceuticals reporting unit which represented the entire intangible asset balance.

Table of Contents

4. Inventories

Inventories at December 31, 2009 and 2008 consisted of the following (in thousands):

	2009	2008
Finished systems	\$ 120	\$ 111
Raw materials and service parts	388	526
Work in progress	205	156
	713	793
Less: Reserve for obsolete inventory	(98)	(38)
	\$ 615	\$ 755

5. Due From Affiliates

Due from affiliates at December 31, 2009 and 2008 consisted of the following (in thousands):

	2009	2008
IMGM	\$ 64	\$ 3
NPMS	5	37
Total	\$ 69	\$ 40

6. Investment in Joint Venture

On June 30, 2005 the Company entered into a Joint Venture Contract with Neusoft Medical Systems Co., Inc. of Shenyang, Lianoning Province, 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 "NPMS"), to engage in the manufacturing of PET and PET/CT medical imaging equipment. NPMS received its business license and was organized in September 2005.

The Company and Neusoft are active in researching, developing, manufacturing, marketing and/or selling Positron Emission Tomography ("PET") technology and both parties seek to mutually benefit from each other's strengths, and intend to cooperate in the research, development and manufacturing of PET technology. NPMS, has developed the PET imaging system to accommodate the growing need by cardiologists for competitively priced, high quality molecular imaging devices in today's challenging economy. The Attrius™ Cardiac PET system has been submitted to the FDA in January 2009.

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 is 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 initially represented 32.5% of the total registered capital of the 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. The Company's ownership of the JV Company has subsequently been diluted to 10% as a result of additional cash contributions by Neusoft. The Company has transferred to the JV Company certain of its PET technology, while Neusoft made available to the JV Company certain CT technology for the development and production of an integrated PET/CT system. Initially, the Company accounted for its investment in NPMS under the equity method of accounting and shared the profits, losses and risks of the JV Company in proportion to and, in the event of losses, to the extent of their respective contributions to the registered capital of the JV Company. During the year ended December 31, 2007 the Company's investment had been

written down to zero as a result of losses in NPMS. As a result of the dilution of the Company's ownership in NPMS to 1% the equity method of accounting is no longer applicable,

- 48 -

Table of Contents

7. Property and Equipment

Property and equipment at December 31, 2009 and 2008 consisted of the following (in thousands):

	2009	2008
Furniture and fixtures	\$ 5	\$ 8
Leasehold improvements	26	--
Computer equipment	20	33
Machinery and equipment	20	--
	71	41
Less: Accumulated depreciation	(15)	(13)
	\$ 56	\$ 28

8. Other Assets

Other assets at December 31, 2009 and 2008 consisted of the following (in thousands):

	2008	2007
Intangible assets	\$ 6	\$ 12
Deferred loan costs	--	31
Other	3	--
Total	\$ 9	\$ 43

9. Accounts Payable and Accrued Liabilities

Accounts payable and accrued liabilities at December 31, 2009 and 2008 consisted of the following (in thousands):

	2009	2008
Trade accounts payable	\$ 1,734	\$ 1,966
Accrued royalties	235	247
Accrued interest	724	103
Sales taxes payable including interest and penalty	183	107
Accrued compensation	214	175
Accrued property taxes	37	36
Accrued professional fees	2	31
Accrued warranty costs	--	22
Accrued commissions	71	--
Total	\$ 3,200	\$ 2,687

10. Notes Payable/Due to Affiliated Entities And Securities Exchange Agreement

Notes Payable – Affiliated Entities

During the year ended December 31, 2007, the Company received non-interest bearing advances from its affiliate, Imagin Molecular Corporation, (“IMGM”) totalling \$1,346,000. During the year ended December 31, 2008, IMGM advanced an additional \$835,000 to the Company. On April 10, 2008, the Company and its affiliate, IMGM,

formalized the advances of \$1,346,000 from IMG M in the form of a promissory note bearing interest at 8% per annum, due on December 31, 2008 (“Note 1”). Note 1 was secured by a pledge of 100,000,000 shares of Positron’s common stock, par value \$0.001, (the “Pledged Shares”) in accordance with a Stock Pledge Agreement (the “Pledge”). On August 18, 2008, the advances totalling \$835,000 were also formalized into a promissory note, with interest at 8%, due on December 31, 2008 (“Note 2”). Note 2 was also secured by the Pledged Shares. Prior to the “Securities Exchange Agreement ” (see discussion below), accrued interest on Notes 1 & 2 totalled \$68,000.

Table of Contents

Advances from Related Party

In December 2009, the Company issued 53,000 and 40,000 shares of Series B Preferred shares to Solaris Opportunity Fund and Solaris Management Fund, respectively, as settlement of notes payable.

During the year ended December 31, 2008, Solaris Opportunity Fund, L.P. (“Solaris”) loaned the Company a total of \$1,155,000. Solaris' Managing Member, Patrick G. Rooney, is also the Chairman of Positron. Pursuant to a Securities Exchange Agreement (see discussion below).

Securities Exchange Agreement among Positron Corporation, Imagin Molecular Corporation and Solaris Opportunity Fund, L.P.

On November 18, 2008, the Company, Solaris Opportunity Fund, L.P. and Imagin Molecular Corporation executed and consummated a Securities Exchange Agreement whereby Imagin transferred and assigned all of its rights title and interest to Note 1, Note 2 and the Pledged Shares to Solaris 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, to be retired and cancelled on Imagin's books and records and the retirement and satisfaction of any obligations to the advances made in the amount of \$200,000 to Imagin by Solaris. Simultaneously therewith, Solaris exchanged Note 1, Note 2 plus accrued interest and the Pledged Shares and the retirement and satisfaction of any obligations to the 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 (the “Exchange”). As a result of the Exchange, Solaris Opportunity Fund, L.P. became the Company's controlling shareholder, holding approximately 60% of the Company's voting capital stock.

11. Secured Convertible Notes Payable

Pursuant to the terms of a Security Agreement and a Registration Rights Agreement (the “Agreements”) dated May 23, 2006, the Company agreed to issue to private investors (the “Investors”) callable secured convertible notes (the “Debentures”) in the amount of \$2,000,000, with interest at the rate of 6% annually. The Debentures are convertible into shares of the Company's Common Stock as the product of the “Applicable Percentage” and the average of the lowest three (3) trading prices for the common stock during the twenty (20) day period prior to conversion. Applicable Percentage is 50%; provided, however that the percentage shall be increased to (i) 55% in the event that a Registration Statement is filed within thirty days of the closing of the transaction and (ii) 65% in the event the Registration Statement becomes effective within one hundred and twenty days of the closing of the transaction. The Company filed a Registration Statement on June 20, 2006 that was subsequently withdrawn. The Company may repay principal and interest in cash in the event that the price of the Company's Common Stock is below \$0.20 on the last business day of a month. Pursuant to the terms of the Agreements, the Company issued to the Investors warrants to purchase 30,000,000 shares of Common Stock at an exercise price of \$0.15 per share. These warrants are exercisable seven (7) years from the closing of the transaction.

On May 23, 2006 the Company issued Debentures in the amount of \$700,000 with a maturity date of May 23, 2009. On June 21, 2006 the Company issued Debentures in the amount of \$600,000 with a maturity date of June 21, 2009. Pursuant to the terms of the Agreements, the Company shall issue Debentures and receive the third tranch in the amount of \$700,000 when the Registration Statement is declared effective by the Securities and Exchange Commission. Legal and other fees incurred in conjunction with the Debentures issued on May 23, 2006 and June 21, 2006 were \$130,000 and \$90,000, respectively and are being amortized over the maturity periods of the Debentures. The Company, to satisfy the initial filing requirement, filed a registration statement on behalf of the Investors on June 20, 2006, which was subsequently withdrawn.

As of December 31, 2009, the Company is in default pursuant to the terms of the convertible debentures. The carrying amount of the debentures that is due immediately is \$1,266,000 plus all accrued interest and related charges pursuant to default provisions of approximately \$724,000. At the respective maturity dates of the debentures, the beneficial conversion features had an estimated fair value of \$2,104,000 which is recorded until such time as the debentures are paid in full or converted to common shares pursuant to the terms of the notes.

- 50 -

Table of Contents

12. Stock Options and Warrants

Options

Amended and Restated 2005 Stock Incentive Plan

Positron's Board administers the Amended and Restated 2005 Stock Incentive Plan ("2005 Plan"), which was adopted by the Board effective November 18, 2005 and approved by the shareholders at the 2006 Annual Meeting. The 2005 Plan provides for the grant of options and stock to directors, officers, employees and consultants. 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. Options granted under the plan may be incentive stock options or nonqualified stock options. The exercise price of incentive stock options may not be less than 100% of the fair market value of the Common Stock as of the date of grant (110% of the fair market value in the case of an optionee who owns more than 10% of the total combined voting power of all classes of the Company's capital stock). Options may not be exercised more than ten years after the date of grant (five years in the case of 10% shareholders). Upon termination of employment for any reason other than death or disability, each option may be exercised for a period of 90 days, to the extent it is exercisable on the date of termination. In the case of a termination due to death or disability, an option will remain exercisable for a period of one year, to the extent it is exercisable on the date of termination. A total of 40,000,000 shares of Common Stock have been authorized for issuance under the 2005 Plan. No shares were issued under the plan for the year ended December 31, 2008 while the 5,250,000 were issued during the year ended December 31, 2009. As of December 31, 2009, a total of 24,450,000 options have been granted under the 2005 Plan, none of which have been exercised, and of which 24,450,000 are fully vested. Effective January 2010, the 2005 Plan has been terminated, no further options will be granted.

2006 Stock Incentive Plan

On April 10, 2006, the Company's Board of Directors adopted a 2006 Stock Incentive Plan ("2006 Plan"). The 2006 Plan is administered by the Board and provides for the direct issuance of stock and grants of nonqualified stock options to directors, officers, employees and consultants. 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 5,000,000 shares of common stock have been authorized for issuance under the 2006 Plan. No shares were issued under the plan for the years ended December 31, 2009 or 2008. As of December 31, 2009, all shares available under the 2006 Plan had been issued.

Table of Contents

2007 Omnibus Securities and Incentive Plan

Positron's Board of Directors (the "Board") administers the 2007 Omnibus Securities and Incentive Plan ("2007 Plan"), which was adopted by the Board effective July 1, 2007. The 2007 Plan provides for the direct issuance of Awards including any Distribution Equivalent Right, Option, Performance Share Award, Performance Unit Award, Restricted Stock Award, Stock Appreciation Right or Unrestricted Stock Award to key management employees, non-employee directors and non-employee consultants. 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 5,000,000 shares of Common Stock have been authorized for issuance under the 2007 Plan. All shares had been issued as of December 31, 2009.

2008 Stock Incentive Plan

Positron's Board of Directors (the "Board") administers the 2008 Stock Incentive Plan ("2008 Plan"), which was adopted by the Board effective July 28, 2008. The purpose of the 2008 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 2008 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 2008 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 6,000,000 shares of Common Stock have been authorized for issuance under the 2008 Plan. . As of December 31, 2009, 4,650,000 shares had been issued under the 2008 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. As of December 31, 2009, no shares 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 20,000,000 shares of Common Stock have been authorized for issuance under the 2010 Plan. As of December 31, 2010, no shares had been issued under the 2010 Plan.

- 52 -

Table of Contents

A summary of stock option activity is as follows:

	Shares Issuable Under Outstanding Options	Price Range or Weighted Average Exercise Price
Balance at December 31, 2007	19,425,000	\$ 0.06
Granted	--	--
Forfeited	--	--
Exercised	--	--
Balance at December 31, 2008	19,425,000	\$ 0.06
Granted	7,250,000	\$ 0.05- 0.085
Forfeited	--	--
Exercised	(30,000)	\$ 0.02
Balance at December 31, 2009	26,645,000	\$ 0.06

Following is a summary of stock options outstanding at December 31, 2009 and 2008.

Range of Exercise Price	Shares	Options Outstanding		Options Exercisable		
		Weighted Average Remaining Term (in Years)	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price	
\$ 0.05	7,500,000	1.00	\$ 0.05	7,500,000	\$ 0.05	
\$ 0.06	11,500,000	1.00	\$ 0.06	11,500,000	\$ 0.06	
\$ 0.11	25,000	1.25	\$ 0.11	25,000	\$ 0.11	
\$ 0.08	25,000	2.00	\$ 0.08	25,000	\$ 0.08	
\$ 0.01	25,000	3.00	\$ 0.01	25,000	\$ 0.01	
\$ 0.05	20,000	3.33	\$ 0.05	20,000	\$ 0.05	
\$ 0.03	25,000	4.00	\$ 0.03	25,000	\$ 0.03	
\$ 0.02	175,000	4.42	\$ 0.02	175,000	\$ 0.02	
\$ 0.04 - \$0.12	100,000	5.06	\$ 0.09	100,000	\$ 0.09	
\$ 0.05-\$0.085	7,250,000	4.42	\$ 0.02	7,250,000	\$ 0.02	
Balance at 12/31/2009	26,645,000		\$ 0.06	26,645,000	\$ 0.06	
Balance at 12/31/2008	19,425,000		\$ 0.06	19,425,000	\$ 0.06	

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. Fair market value using the Black-Scholes option-pricing model for the year ended December 31, 2009 was determined using the following assumptions:

Expected life (years)	5
Risk free rate of return	2.125 %
Dividend yield	0
Expected volatility	327 %

During the year ended December 31, 2009, the Company granted 5,250,000 common stock options to employees and consultants with exercise prices ranging between \$0.05 and \$0.085 per share. For the years ended December 31, 2009 and 2008, the Company recorded compensation expense of \$256,926 and \$3,200, respectively, related to common stock option grants.

Additionally, in January 2010 the Company granted 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.

Table of Contents

Warrants

During the year ended December 31, 2009, the Company issued 29,500,000 shares of common stock to unrelated investors for cash of \$710,000. In connection with certain common shares issued, the Company issued warrants to purchase four shares of Series B Preferred stock for \$2, each share of Series B is convertible into 100 shares of common stock. The warrants expire on December 31, 2010. The warrants were valued using the Black Scholes Valuation Method. The fair value of the warrants of \$39,264 has been recorded as additional paid in capital. Additionally, in connection with certain common shares issued, the Company issued warrants to purchase 22,000,000 shares of common stock at an exercise price of \$0.02 per share. The warrants expire on December 31, 2010. The warrants were valued using the Black Scholes Valuation Method. The fair value of these warrants on the issue date was approximately \$900,000.

During the year ended December 31, 2009, the Company issued 1,332,000 shares of Series B Preferred Stock to unrelated investors for cash of \$1,449,000. In connection with certain preferred shares issued, the Company issued 825,000 warrants to purchase shares of Series B Preferred stock at an exercise price of \$2.00 per share. Each share of Series B is convertible into 100 shares of common stock. The warrants expire in on December 31, 2010. The warrants were valued using the Black Scholes Valuation Method. The fair value of the warrants of \$372,779 has been recorded as additional paid in capital.

In March 2008, the Company issued 162,500 shares of its Series B Preferred Stock in a private placement to investors for \$650,000. For every two shares of Series B Preferred purchased, the Company issued a warrant exercisable for 100 shares of common stock at an exercise price of \$0.10 per shares. The warrants were valued using the Black Scholes Valuation Method based on the fair value of the Company's common stock of \$0.06; an exercise price of \$0.10; a 2 year term; risk free rate of return of 2.125%; dividend yield of 0%;and a volatility factor of 181%. The fair value of the warrants of \$365,517 was recorded as an increase to Additional paid-in capital – stock warrants.

In October 2008, the Company issued 126,250 shares of its Series B Preferred Stock in a private placement to investors for \$465,000. For every two shares of Series B Preferred purchased, the Company issued a warrant exercisable for 100 shares of common stock at an exercise price of \$0.10 per shares. The warrants were valued using the Black Scholes Valuation Method based on the fair value of the Company's common stock of \$0.08; an exercise price of \$0.10; a 2 year term; risk free rate of return of 2.125%; dividend yield of 0%;and a volatility factor of 173%. The fair value of the warrants of \$127,442 was recorded as an increase to Additional paid-in capital – stock 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, 2007	57,624,100		\$ 0.11
Warrants expired in 2008	(11,474,100)	\$ 0.10-0.25	\$ 0.12
Warrants issued with Series B Preferred stock in private placement	14,437,500	\$ 0.10	\$ 0.10
<hr/>			
Balance at December 31, 2008	60,587,500		\$ 0.10
Warrants expired in 2009	(5,625,000)	\$ 0.10-\$0.25	\$ 0.05
Warrants issued with common and Series B Preferred stock in private placement	135,500,000	\$ 0.02	\$ 0.02

Balance at December 31, 2009	190,462,500	\$ 0.05
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All outstanding warrants are currently exercisable. A summary of outstanding stock warrants at December 31, 2009 follows:

Number of Common Stock Equivalents	Expiration Date	Remaining Contractual Life (Years)	Exercise Price
3,825,000	(a)	--	\$ 0.02
8,575,000	May 2010	.4	\$ 0.02
30,000,000	May 2013	3.4	\$ 0.15
6,250,000	March 2010	.25	\$ 0.10
6,312,500	October 2010	.75	\$ 0.10
135,500,000	December 2010	1.0	\$ 0.02
190,462,500			

(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.

Table of Contents

13. Preferred Stock

The Company's Articles of Incorporation, as amended authorize the Board of Directors to issue 10,000,000 shares of preferred stock from time to time in one or more series. The Board subsequently authorized an additional 9,000,000 shares designated as Series B Preferred Stock. Out of the 10,000,000 shares of preferred, the Board designated 3,000,000 shares Series G Preferred Stock on April 4 2006, and designated 100,000 shares Series S Preferred Stock on September 25, 2008. 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.

Series A Preferred Stock

In February, March and May of 1996, the Company issued 3,075,318 shares of Series A 8% Cumulative Convertible Redeemable Preferred Stock \$1.00 par value ("Series A Preferred Stock") and Redeemable common stock Purchase Warrants to purchase 1,537,696 shares of the Company's Common Stock. The net proceeds of the private placement were approximately \$2,972,000. 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.

On March 6, 2008 a shareholder converted 6,720 shares of Series A Preferred Stock into 16,922 shares of the Company's common stock, par value \$0.01 per share. The fair market value of the common stock on the date of conversion was \$0.05 per share. At December 31, 2009 there were 457,599 shares of Series A Preferred Stock were outstanding.

Series B Preferred Stock

On September 30, 2006 the Board of Directors authorized a series of preferred stock designated Series B Preferred Stock. The number of shares authorized was 9,000,000. 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.

Table of Contents

As of December 31, 2009, 6,729,421 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, 2009, 62,391 shares of Series G Preferred Stock were outstanding.

Series S Preferred

On November 7, 2008 the Board of Directors authorized a new series of preferred stock designated Series S Convertible Preferred Stock. The number of shares authorized was 100,000. 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.

On November 18, 2008, the Company, Solaris Opportunity Fund, L.P. and Imagin Molecular Corporation executed and consummated a Securities Exchange Agreement whereby Imagin transferred and assigned all of its rights title and interest to Note 1, Note 2 and the Pledged Shares (see "Amounts Due To Related Parties" in note 13) to Solaris 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, to be retired and cancelled on Imagin's books and records and the retirement and satisfaction of any obligations to the advances made in the amount of \$200,000 to Imagin by Solaris. Simultaneously therewith, Solaris exchanged Note 1, Note 2 and the Pledged Shares and the retirement and satisfaction of any obligations to the advances made to the Company in the aggregate amount of \$1,195,000 for the issuance of 100,000 shares of the Company's Series S Preferred Stock.

As of December 31, 2009, 100,000 shares of Series S Convertible Preferred Stock were outstanding.

Table of Contents

14. Income Taxes

The Company has incurred losses since its inception and, therefore, has not been subject to federal income taxes. As of December 31, 2009, the Company had domestic net operating loss ("NOL") carryforwards for income tax purposes of approximately \$29,000,000, which expire in 2010 through 2030. 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 carryforwards 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.

At December 31, 2007 the Company's deferred tax asset included \$661,000 of foreign net operating loss carryforwards from its wholly-owned Canadian subsidiary, IPT. During 2008, the Company closed IPT's Canadian facility and consolidated the operation in the United States. The Company's management is currently considering structural changes that include a merger of the U.S. and Canadian operations. For these reasons, it is unlikely that the foreign net operating losses will ever be utilized and therefore they were excluded from the calculation of the deferred tax asset and related valuation allowance at December 31, 2009 and 2008.

The composition of deferred tax assets and the related tax effects at December 31, 2009 and 2008 are as follows (in thousands):

	2009	2008
Deferred tax assets:		
Net operating losses:		
Domestic	\$ 10,062	\$ 8,595
Foreign	--	--
Stock option compensation	375	287
Accrued liabilities and reserves	400	147
	10,837	9,029
Valuation allowance	(10,837)	(9,029)
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):

	2009		2008	
	Amount	%	Amount	%

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Benefit for income taxes at federal statutory rate	\$ 1,954	34.0%	\$ 3,052	34.0%
Goodwill impairment – not deductible for tax purposes	--	--	(1,110)	(12.4)
Derivative Gains	170	3.0	21	.2
Foreign NOL's forfeited (1)	--	--	(739)	(8.2)
Discount amortization and other	(316)	(5.5)	(125)	(1.4)
Change in valuation allowance	(1,808)	(31.5)	(1,099)	(12.2)
	\$ --	--%	\$ --	--%

(1) Represents deferred tax benefit attributable to net operating losses of Canadian foreign subsidiary, Imaging Pet Technologies. The Company ceased all Canadian operations in 2008. Consequently, it is not likely that the Company will utilize any of the net operating losses accumulated in its foreign subsidiary.

- 57 -

Table of Contents

15. 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 2009 and 2008. The Board of Directors of the Company may authorize additional discretionary contributions; however, no such contributions were made by the Company in 2009 or 2008.

16. Related Party Transactions

Key Employee Incentive Compensation

The Company has an incentive compensation plan for certain key employees and its Chairman. The incentive compensation plan provides for annual bonus payments based upon achievement of certain corporate objectives as determined by the Company's compensation committee, subject to the approval of the board of directors. During 2008 or 2007 the Company did not pay any bonus pursuant to the incentive compensation plan.

The Company leases its facility in Fishers, Indiana from a Company owned by John Zehner, the Company's Chief Operating Officer. During the year ended December 31, 2009, the Company paid approximately \$56,000 to lease the facility. The current operating lease expires in September 2010.

17. Commitments and Contingencies

Employment Agreement

Effective December 27, 2005, the Company entered into an employment agreement with Joseph G. Oliverio, President of the Company. Under the Agreement, Mr. Oliverio receives an initial base salary of \$100,000 per annum which increases to \$150,000 per annum on March 1, 2006. Mr. Oliverio also received an option grant exercisable for 7,500,000 shares of Common Stock at an exercise price of \$0.05 per share. On the date of grant of the option 2,000,000 shares vested, with an additional 2,000,000 shares vesting on December 27, 2006 and the remainder on December 27, 2007. Mr. Oliverio is entitled to six months' severance upon a termination "without cause".

Royalty Agreements

The Company acquired the know-how and patent rights for Positron Imaging from three entities: the Clayton Foundation, K. Lance Gould (formerly a director) and Nizar A. Mullani (also formerly a director.) Pursuant to agreements with each of them, the Company was obligated to pay royalties of up to 4.0% in the aggregate of gross revenues from sales, uses, leases, licensing or rentals of the relevant technology. Royalty obligations amounting to approximately \$235,000 and \$247,000 are included in current liabilities at December 31, 2009 and 2008, respectively. The obligations to pay royalties for these know-how and patent rights have expired on July 14, 2008.

Lease Agreements

During the year ended December 31, 2009, the Company operated its facilities under two separate operating leases.

Positron's corporate headquarters are operated from a facility leased from a related party in Fishers, Indiana under a one year operating lease expiring in September 2010 with a monthly rent of \$4,671. The Company's Houston facility is leased under a one year operating lease that expires in January 2010. The cost of leasing the Company's operating facilities amounted to approximately \$51,000 and \$56,000 in 2009 and 2008, respectively.

In January 2010, the Company renewed its one year operating lease for its Houston facility. The lease term is from February 1, 2010 to January 31, 2011. Monthly rent for the facility is \$1000.

At December 31, 2009, future minimum rental payments under operating leases were approximately \$54,000.

Litigation

On or about August 11, 2009, the Company accepted service of a Summons and Complaint in the Supreme Court of the State of New York alleging that the Company breached its obligations to the Investors by failing to pay to the Investors principal and interest on the maturity date, together with all accrued interest on the Debentures and the Company has breached its obligations to convert the principal and accrued interest underlying the Debentures into shares of the Company's common stock. The Investors are seeking an amount to be proven at trial, to foreclose on their security interest covering the Company's assets, plus attorney's fees. On September 21, 2009, the Company served its answer to the action, asserting general and affirmative defenses to the Investors' claims. The action is currently in the discovery stage.

In July 2009, Mark Brett Scarbinsky commenced an action against the Company in the Court of Common Pleas of Berks County to recover alleged unpaid salaries, vacation time, bonuses, expenses and incentive shares as a result of the plaintiff's employment agreement from the Company in the aggregate approximate amount of \$43,000 plus 250,000 shares of the Company's common stock. The plaintiff and the Company settled the action for the payment of \$15,000 (\$10,000 which was paid on execution and the balance to be paid within 30 days) and the issuance of 250,000 shares of common stock.

In August 2009, Controlled Automation, Inc. commenced an action for breach of contract against the Company in the Superior Court of Hamilton County, Indiana alleging the Company is indebted to the Plaintiff for goods and services allegedly rendered to the Company. While the Company's time to respond to the action has not yet expired, the Company has indicated it intends to vigorously defend the action and may assert counterclaims in excess of the amount demanded. The plaintiff and the Company settled the action for the payment of \$23,885.09 and the return by the plaintiff of certain of the Company's property.

In September 2009, Sam Faivre, a former consultant of the Company, commenced an action for breach of contract against the Company for services rendered to the Company. Although the Company believed a settlement had been accepted by the Plaintiff, default judgment was entered against the Company in the amount of \$22,928 and the amount was subsequently paid.

Table of Contents

18. Loss Per Share

The following information details the computation of basic and diluted loss per share:

	Year Ended December 31, (In thousands, except for per share data)	
	2009	2008
Numerator:		
Basic and diluted net loss:	\$ (5,749)	\$ (8,975)
Denominator:		
Denominator for basic earnings per share-weighted average shares	239,033	134,556
Effect of dilutive securities		
Convertible Preferred Stock	--	--
Stock Warrants	--	--
Stock Options	--	--
Denominator for diluted earnings per share-adjusted weighted average shares and assumed conversions	239,033	134,556
Basic and diluted loss per common share	\$ (0.02)	\$ (0.07)

All common stock equivalents in the years ended December 31, 2009 and 2008 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):

	2009	2008
Convertible Series A Preferred Stock	457	457
Convertible Series B Preferred Stock	672,942	621,486
Convertible Series G Preferred Stock	6,239	11,139
Convertible Series S Preferred Stock	1,000,000	1,000,000
Stock Warrants	190,462	60,588
Stock Options	26,645	19,425
	1,896,745	1,713,095

Table of Contents

19. Selected Quarterly Financial Data (Unaudited) (in thousands, except per share data)

	Quarter ended			
	March 31, 2009	June 30, 2009	September 30, 2009	December 31, 2009
Net sales	\$ 367	\$ 334	\$ 188	\$ 557
Gross profit (loss)	128	135	(121)	(15)
Net loss	(746)	(929)	(1,189)	(2,885)
Net loss per share – basic and diluted	\$ (0.004)	\$ (0.005)	\$ (0.005)	\$ (0.008)
Weighted average basic and diluted shares	170,733	199,909	225,838	357,608

	Quarter ended			
	March 31, 2008	June 30, 2008	September 30, 2008	December 31, 2008
Net sales	\$ 426	\$ 767	\$ 384	\$ 549
Gross profit (loss)	(122)	221	(4)	(908)
Net loss	(1,099)	(2,017)	(265)	(5,594)
Net earnings (loss) per share – basic and diluted	\$ (0.010)	\$ (0.017)	\$ (0.001)	\$ (0.03)
Weighted average basic and diluted shares	106,428	116,076	156,240	158,974