# UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

# FORM SB-2 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

#### **Positron Corporation**

(Exact Name of Small Business Issuer in its Charter)

Texas (3845) 76-0083622

(State of Incorporation)

(Primary Standard Classification Code)

(IRS Employer ID No.)

1304 Langham Creek Dr #300 Houston, Texas 77084 (281) 492-7100

(Address and Telephone Number of Registrant's Principal Executive Offices and Principal Place of Business)

1304 Langham Creek Dr #300 Houston, Texas 77084 (281) 492-7100

(Name, Address and Telephone Number of Agent for Service)

Copies of communications to:

Peter Campitiello, Esq. Levy & Boonshoft, P.C. 477 Madison Avenue New York, New York 10022 Telephone No.: (212) 751-1414

Facsimile No.: (212) 751-6943

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective. If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. x

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act of 1933, please check the following box and list the Securities Act registration Statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act of 1933, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering." If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act of 1933, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering."

1	If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box.						
1							

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	AMOUNT TO BE REGISTERED	ľ	PROPOSED MAXIMUM OFFERING PRICE PER SHARE	PROPOSED MAXIMUM AGGREGATE FFERING PRICE	OUNT OF STRATION FEE
Common Stock, par value \$.01 per share (1)	13,246,240(2)	\$	0.055	\$ 728,543.20	\$ 77.95
Total	13,246,240			\$ 728,543.20	\$ 77.95

- (1) Represents shares of common stock issuable in connection with the conversion of the 6% Callable Secured Convertible Notes aggregating a maximum of \$2,000,000 in accordance with a Securities Purchase Agreement dated May 26, 2006 between us and AJW Partners, LLC, AJW Offshore, Ltd., AJW Qualified Partners, LLC and New Millennium Capital Partners II, LLC, respectively (the "Selling Stockholders"). The price of \$0.055 per share is being estimated solely for the purpose of computing the registration fee pursuant to Rule 457(c) of the Securities Act and is based on the estimated conversion price of the callable secured convertible notes (\$0.11 was the closing price on the date the transaction closed less a 50% discount).
- (2) The shares of our Common Stock underlying the 6% Callable Secured Convertible Notes being registered hereunder are being registered for resale by the Selling Stockholders named in the Prospectus upon the conversion of outstanding secured convertible notes. In accordance with Rule 416(a), the registrant is also registering hereunder an indeterminate number of shares that may be issued and resold to prevent dilution resulting from stock splits, stock dividends or similar transactions. The number of shares of our Common Stock registered hereunder is based upon a good faith estimate by us and the Selling Stockholders of the number of shares of our Common Stock issuable upon the conversion of the secured convertible notes. For purposes of estimating the number of shares of our Common Stock to be included in this registration statement, we calculated a good faith estimate of the number of shares that we believe will be issuable upon conversion of the secured convertible notes to account for market fluctuations, anti-dilution and price protection adjustments

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THE SELLING STOCKHOLDERS MAY NOT SELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IT IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

PRELIMINARY PROSPECTUS SUBJECT TO COMPLETION DATED AUGUST 7, 2007.

#### **PROSPECTUS**

#### POSITRON CORPORATION

# 13,246,240 SHARES OF COMMON STOCK ISSUABLE IN CONNECTION WITH THE CONVERSION OF PROMISSORY NOTES

Our selling security holders are offering to sell 13,246,240 shares of common stock issuable in connection with the conversion of promissory notes.

THE SECURITIES OFFERED IN THIS PROSPECTUS INVOLVE A HIGH DEGREE OF RISK. YOU SHOULD CAREFULLY CONSIDER THE FACTORS DESCRIBED UNDER THE HEADING "RISK FACTORS" BEGINNING ON PAGE 11.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is August 7, 2007.

Our shares of common stock are quoted on the OTC Bulletin Board under the symbol "POSC." The last reported sale price of our common stock on August 7, 2007 was \$0.08.

We will receive no proceeds from the sale of the shares by the selling stockholders.

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#### SUMMARY OF THE OFFERING

Summary of the Offering

Common stock offered by selling stockholders

Up to 13,246,240 shares of common stock underlying secured convertible notes in the principal amount of \$2,000,000 (includes a good faith estimate of the shares underlying the callable secured convertible notes to account for market fluctuations anti-dilution and price protection adjustments, respectively).

Common stock to be outstanding after the offering

Up to 100,451,442 shares

Use of proceeds

We will not receive any proceeds from the sale of the common stock. However, we have received gross proceeds \$1,300,000 from the sale of the secured convertible notes and the investors are obligated to provide us with an additional \$700,000 within five days of this registration statement being declared effective. The proceeds received from the sale of the callable secured convertible notes will be used for business development purposes, working capital needs, payment of consulting and legal fees and borrowing repayment.

Over-The-Counter Bulletin Board Symbol

"POSC"

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#### ABOUT OUR COMPANY

#### General

Positron Corporation (the "Company") was incorporated in the State of Texas on December 20, 1983, and commenced commercial operations in 1986. The Company designs, manufactures, markets and services advanced medical imaging devices utilizing positron emission tomography ("PET") technology under the trade-name POSICAM<sup>TM</sup> systems. POSICAM(TM) systems incorporate patented and proprietary software and technology for the diagnosis and treatment of patients in the areas of cardiology, oncology and neurology. Positron Corporation offers a unique combination of low cost technology and disease specific software solutions differentiating themselves from all other medical device manufacturers. Unlike other currently available imaging technologies, PET technology permits the measurement of the biological processes of organs and tissues as well as producing anatomical and structural images. POSICAM<sup>TM</sup> systems, which incorporate patented and proprietary technology, enable physicians to diagnose and treat patients in the areas of cardiology, neurology and oncology. The Food and Drug Administration ("FDA") approved the initial POSICAM<sup>TM</sup> system for marketing in 1985, and as of September 30, 2006, the Company has sold twenty eight (28) POSICAM<sup>TM</sup> systems, of which eleven (11) are in leading medical facilities in the United States and six (6) are installed in international medical institutions. The Company has reacquired one system, which is being held in inventory for resale. The Company presently markets its POSICAM<sup>TM</sup> systems at list prices of up to \$1.7 million depending upon the configuration and equipment options of the particular system.

PET technology is an advanced imaging technique, which permits the measurement of the biological processes of organs and tissues, as well as producing anatomical and structural images. Other advanced imaging techniques, such as magnetic resonance imaging ("MRI") and computed tomography ("CT"), produce anatomical and structural images, but do not image or measure biological processes. The ability to measure biological abnormalities in tissues and organs allows physicians to detect disease at an early stage, and provides information, which would otherwise be unavailable, to diagnose and treat disease. The Company believes that PET technology can lower the total cost of diagnosing and tracing certain diseases by providing a means for early diagnosis and reducing expensive, invasive or unnecessary procedures, such as angiograms or biopsies which, in addition to being costly and painful, may not be necessary or appropriate.

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Commercialization of PET technology commenced in the mid-1980s and the Company is one of several commercial manufacturers of PET imaging systems in the United States. Although the other manufacturers are substantially larger, the Company believes that its POSICAM<sup>TM</sup> systems have proprietary operational and performance characteristics, which may provide certain performance advantages over other commercially available PET systems. Such performance advantages include: (i) high count-rate capability and high sensitivity, which result in faster, more accurate imaging; (ii) enhanced ability to use certain types of radiopharmaceuticals, which reduces reliance on a cyclotron and enhances patient throughput; (iii) ability to minimize patient exposure to radiation; and (iv) ability to minimize false positive and false negative diagnoses of disease. The medical imaging industry in which the Company is engaged is, however, subject to rapid and significant technological change. There can be no assurance that the POSICAM<sup>TM</sup> systems can be upgraded to meet future innovations in the PET 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. See "Risk Factors - Risks Associated with Business Activities—Substantial Competition and Effects of Technological Change".

The Company's initial focus was the clinical cardiology market, where its POSICAM<sup>TM</sup> systems have been used to assess the presence and extent of coronary artery disease, such as the effect of arterial blockages and heart damage due to heart attacks. In 1994 and 1995, the Company made technological advances which allowed it to market its products to the neurological and oncological markets. Neurological applications of POSICAM<sup>TM</sup> systems include diagnoses of certain brain disorders, such as epileptic seizures, dementia, stroke, Alzheimer's disease, Pick's disease and Parkinson's disease. In oncology, POSICAM<sup>TM</sup> systems are used in the diagnosis and evaluation of melanoma and tumors of the bone and various organs and tissues such as the brain, lungs, liver, colon, breasts and lymphatic system.

#### **Medical Imaging Industry Overview**

Diagnostic imaging allows a physician to assess disease, trauma or dysfunction without the necessity of surgery. The diagnostic imaging industry includes ultrasound, X-ray, MRI, CT, and nuclear medicine (which includes PET and Single-Photon Emission Computed Tomography ("SPECT")). MRI technology uses powerful magnetic fields to provide anatomical and structural images of the brain, the spine and other soft tissues, as well as determining the location and size of tumors. CT scans use X-ray beams to obtain anatomical and structural images of bones and organs. Nuclear medicine focuses on providing information about the function and biological processes of organs and tissues through the use of radiopharmaceuticals.

The first prototype PET scanner was developed in the mid 1970s and the first commercial PET scanner was constructed in 1978. Approximately 1,600 dedicated PET systems are currently operational in the United States and approximately 500 additional dedicated PET systems are in commercial use internationally.

#### **PET Technology**

The PET imaging process begins with the injection of a radiopharmaceutical (a drug containing a radioactive agent) by a trained medical technician into a patient's bloodstream. After being distributed within the patient's body, the injected radiopharmaceutical undergoes a process of radioactive decay, whereby positrons (positively charged electrons) are emitted and subsequently converted along with free electrons into two gamma rays or photons. These paired gamma events are detected by the POSICAM<sup>TM</sup> systems as coincidence events. The source of the photons is determined and is reconstructed into a color image of the scanned organ utilizing proprietary computer software. Since certain functional processes, such as blood flow, metabolism or other biochemical processes, determine the concentration of the radiopharmaceutical throughout the body, the intensity or color at each point in the PET image directly maps the vitality of the respective function at that point within an organ.

In cardiology, PET imaging is an accurate, non-invasive method of diagnosing or assessing the severity of coronary artery disease. Unlike other imaging technologies, PET technology allows a physician to determine whether blood

flow to the heart muscle is normal, thereby identifying narrowed coronary arteries, and whether damaged heart muscle is viable and may benefit from treatment such as bypass surgery or angioplasty. In addition, dynamic and gated imaging can display and measure the ejection fraction and wall motion of the heart.

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In neurology, PET imaging is now being used as a surgical planning tool to locate the source of epileptic disturbances in patients with uncontrollable seizures. In other neurological applications, PET is used in the diagnosis of dementia, Alzheimer's disease, Pick's disease and Parkinson's disease, and in the evaluation of stroke severity.

In oncology, PET imaging has historically been used to measure the metabolism of tumor masses after surgery or chemotherapy. Clinical experience has shown that PET is more accurate than CT scans or MRI in determining the effectiveness of chemotherapy and radiotherapy in the treatment of cancer. PET scans are becoming commonly used to assess suspected breast cancer and whether the lymph system has become involved. Whole body PET scans are now routinely performed to survey the body for cancer. This application enables oncologists to see the total picture of all metastases in a patient, thereby allowing them to properly tailor the course of treatment.

The radiopharmaceuticals employed in PET imaging are used by organs in their natural processes, such as blood flow and metabolism, without affecting their normal function, and quickly dissipate from the body. Radiopharmaceuticals used in PET procedures expose patients to a certain amount of radiation, which is measured in units of milliRads. Exposure to radiation can cause damage to living tissue, and the greater the radiation exposure, the greater the potential for damage. Certain PET procedures expose a patient to less radiation than would be associated with other imaging technologies. A PET cardiac scan, using the radiopharmaceutical Rubidium-82, results in exposure of approximately 96 milliRads, while a neurological PET scan using 18-FDG, results in exposure of approximately 390 milliRads. In contrast, a typical chest X-ray results in exposure of approximately 150 milliRads and a CT scan results in exposure of approximately 500 to 4,000 milliRads, depending on the procedure.

Radiopharmaceuticals used in PET technology can be created using many natural substances including carbon, oxygen, nitrogen and fluorine. The PET procedure to be performed determines the type of radiopharmaceutical used. Radiopharmaceuticals are made ready for use at a clinic, hospital, or commercial nuclear pharmacy by either a cyclotron or generator. Cyclotrons require an initial capital investment of up to \$2 million, an additional capital investment for site preparation, and significant annual operating expenses. Generators require an initial capital investment of approximately \$60,000, no additional capital investment for site preparation, and monthly operating expenses of approximately \$30,000. While POSICAM<sup>TM</sup> systems have been designed flexibly to be used with both cyclotron and generator-produced radiopharmaceuticals, they have proprietary design features that enhance their ability to use generator-produced radiopharmaceuticals. As a result, clinics or hospitals intending to focus on certain cardiac PET applications can avoid the significant capital and operating expenses associated with a cyclotron.

#### **Marketing Strategy**

The Company's initial marketing strategy targeted clinical cardiology based on research conducted at the University of Texas. This research showed the commercial potential of clinical cardiology applications of PET imaging. With the development of the POSICAM<sup>TM</sup> HZ, POSICAM<sup>TM</sup> HZL series and now the mPoweries of systems, Positron is pursuing the full oncology, cardiology and neurology related PET application markets. The Company believes that it can capture additional market share by leveraging its strong reputation in the cardiology marketplace to continue to strengthen its leadership position in this sector, while building its expertise and reputation in the oncology and neurology application markets.

To market its systems, Positron relies on referrals from users of its existing base of installed scanners, 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. Positron incurs minimal expense for sales until there is a completed sale. Positron continued to broaden its communications with the market in support of sales through its developing distribution network and using the internet and directed mailings. We believe that this approach will be cost effective and allow Positron to compete cost effectively with larger competitors. There is no assurance that the Company's marketing strategy is sufficiently

aggressive to compete against larger, better funded competitors.

## The POSICAM<sup>TM</sup> System

At the heart of the POSICAM<sup>TM</sup> system is its detector assembly, which detects the gammas from positron emissions, and electronic circuits that pinpoint the location of each emission. POSICAM<sup>TM</sup> systems are easy to use and are neither physically confining nor intimidating to patients. POSICAM<sup>TM</sup> scans are commonly performed on an outpatient basis.

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The Company's POSICAM<sup>TM</sup> system compares favorably with PET systems produced by other manufacturers based upon count rate and sensitivity. The count-rate and sensitivity of an imaging system determine its ability to detect, register and assimilate the greatest number of meaningful positron emission events in the shortest period of time. The high count-rate capability and sensitivity of the POSICAM<sup>TM</sup> systems result in good diagnostic accuracy as measured by fewer false positives and false negatives. Further benefits of high count-rate and sensitivity include faster imaging and the ability to use short half-life radiopharmaceuticals, thereby reducing patient exposure to radiation and potentially reducing the capital cost to some purchasers by eliminating the need for a cyclotron for certain cardiac applications.

The detector assembly consists of crystals, which scintillate (emit light) when exposed to gamma photons from positron-electron annihilations, in combination with photomultiplier tubes, which are coupled to the crystals and convert the scintillations into electrical impulses. The Company employs its own patented staggered crystal array design for the POSICAM<sup>TM</sup> detectors. Unlike competing PET systems, this feature permits the configuration of the detector crystals to collect overlapping slices and more accurately measure the volume of interest by eliminating image sampling gaps. This is important since under-sampling, or gaps in sampling, can contribute to an inaccurate diagnosis. The crystal design also reduces "dead time" - the time interval following the detection and registration of an event during which a subsequent event cannot be detected. The basic unit of identification within each crystal module is small, thereby reducing the probability of multiple hits during a dead period for higher levels of radioactive flux (activity in the patient).

The POSICAM<sup>TM</sup> system creates a high number of finely spaced image slices. An image slice is a cross-sectional view that is taken at an arbitrary angle to the angle of the organ being scanned, and not necessarily the angle a physician wishes to view. The POSICAM<sup>TM</sup> computer can then adjust the cross-sectional view to create an image from any desired angle. The high number of finely spaced image slices created by the POSICAM<sup>TM</sup> system enhances the accuracy of the interpreted image set.

An integral part of a POSICAM<sup>TM</sup> system is its proprietary data acquisition microprocessor and its application system software. The Company's software can reconstruct an image in five seconds or less. The Company has expended substantial effort and resources to develop computer software that is user-friendly and clinically oriented. The only personnel needed to perform clinical studies with the POSICAM<sup>TM</sup> systems are a trained nurse, a trained technician and an overseeing physician for patient management and safety.

#### POSICAM<sup>TM</sup> HZ, HZL and Power<sup>TM</sup>

In addition to the basic POSICAM<sup>TM</sup> system, the Company offers two advanced versions, the POSICAM<sup>TM</sup> HZ and the POSICAM<sup>TM</sup> HZL, which are now being further enhanced to become the mPow<sup>TM</sup> product line. Oncologists and neurologists require enhanced resolution and a large field of view to detect small tumors and scan large organs, such as the liver. The mPower<sup>TM</sup> systems employ new detector concepts to satisfy these needs while maintaining the high count rate capability and sensitivity of the basic POSICAM<sup>TM</sup>. In May 1991, the Company received approval from the FDA to market the POSICAM<sup>TM</sup> HZ, and in May 1993, the Company received a patent for the innovative light guide and detector staggering concepts used in the POSICAM<sup>TM</sup> HZ and HZL. In July 1993, the Company received FDA approval to market in the United States the POSICAM<sup>TM</sup> HZL, which has a larger axial field of view than the POSICAM<sup>TM</sup> HZ, facilitating whole body scanning and the scanning of large organs. In July 2002, the Company received FDA approval to market in the United States the POSICAM<sup>TM</sup> mPower<sup>TM</sup> system.

The Company believes that the special features of the POSICAM<sup>TM</sup> HZL and mPow<sup>EM</sup> systems enhance their usefulness in oncology and neurology applications. Furthermore, many price sensitive hospitals and health care providers may seek to leverage external resources for the delivery of PET diagnostic services for their patients. To respond to this market need, the Company intends to expand into the mobile PET market, for which the Company has previously received 510(k) approval from the FDA. In addition, the POSICAM<sup>TM</sup> system has been registered with the

State of Texas Department of Health, Bureau of Radiation Control, as a Device suitable for both stationary and mobile use.

#### **Customer Service and Warranty**

The Company has three (3) 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 typically provides a one-year warranty to purchasers of POSICAM<sup>TM</sup> systems. However, in the past, the Company offered multi-year warranties to facilitate sales of its systems. Following the warranty period, the Company offers purchasers a comprehensive service contract under which the Company provides all parts and labor, system software upgrades and unlimited service calls. The Company offers to provide service to all of its POSICAM<sup>TM</sup> systems, however at year end 2006, the company had eight (8) service contracts in force and one (1) system under manufacturers warranty. The Company intends to negotiate the extension of all of the service contracts expiring in 2007; however, there can be no assurance that such extensions will be obtained.

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 POSICAM<sup>TM</sup> systems during 2005 and 2004.

#### Competition

The Company faces competition primarily from three very large commercial manufacturers of PET systems and from other imaging technologies. 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 other. However, magnetic resonance angiography ("MRA") is seen by some cardiologists to be competitive with PET myocardial perfusion imaging ("MPI").

The Company's primary competition from commercial manufacturers of PET systems comes from General Electric Medical Systems ("GEMS") a division of General Electric Company ("GE"), Siemens Medical Systems, Inc. ("Siemens") and ADAC Medical Systems, which was acquired by Philips Medical ("Philips"). GE, Siemens and Philips have substantially greater financial, technological and personnel resources than the Company. See "Risk Factors—Risk Associated with Business Activities—Substantial Competition and Effects of Technological Change". In addition, two Japanese manufacturers, Hitachi and Shimadzu, have manufactured and sold PET scanners in Japan and are beginning to sell in the United States. These manufacturers represent additional sources of competition that have greater financial, technological and personnel resources than the Company.

GE, Siemens and Philips have introduced a scanner that combines CT scanning and PET in one unit. This scanner type has put Positron at a competitive disadvantage. High field MRI technology, an advanced version of MRI, is in the development stage, but is a potential competitor to PET in certain neurology and oncology applications. Presently, high field MRI may be useful in performing certain research (non-clinical) applications such as blood flow studies to perform "brain mapping" to localize the portions of the brain associated with individual functions (such as motor activities and vision). However, high field MRI does not have the capability to assess metabolism. The Company cannot presently predict the future competitiveness of high field MRI.

#### **Third-Party Reimbursement**

POSICAM<sup>TM</sup> systems are primarily purchased by medical institutions and clinics, which provide health care services to their patients. Such institutions or patients typically bill or seek reimbursement from various third-party payers such as

Medicare, Medicaid, other governmental programs and private insurance carriers for the charges associated with the provided healthcare services. The Company believes that the market success of PET imaging depends largely upon obtaining favorable coverage and reimbursement policies from such programs and carriers.

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Medicare/Medicaid reimbursement. Prior to March 1995, Medicare and Medicaid did not provide reimbursement for PET imaging. Decisions as to such policies for major new medical procedures are typically made by the Center for Medicare and Medicaid Services ("CMS") formerly the U.S. Health Care Financing Administration, based in part on recommendations made to it by the Office of Health Technology Assessment ("OHTA"). Historically, OHTA has not completed an evaluation of a procedure unless all of the devices and/or drugs used in the procedure have received approval or clearance for marketing by the FDA. Decisions as to the extent of Medicaid coverage for particular technologies are made separately by the various state Medicaid programs, but such programs tend to follow Medicare national coverage policies. In 1999, CMS approved reimbursement on a trial basis for limited cardiac, oncological, and neurological diagnostic procedures. In December 2000, CMS expanded its coverage in cardiology, oncology and neurology for centers utilizing true PET scanners. In July 2001, CMS further expended its coverage of these procedures and virtually eliminated reimbursement for SPECT imagers performing PET scans. This helped to strengthen the market for "true" PET scanners. In 2001, CMS also implemented its procedures to differentiate hospital based outpatient services from free-standing outpatient services. Under this new program, hospital based PET centers are to be paid less for providing PET services than free-standing centers. This program was to be finalized in 2002. Through 2004, CMS has continued to approve additional procedures for reimbursement. Effective January 30, 2005, CMS announced PET coverage for cervical cancer. Although expanding, Medicare and Medicaid reimbursement for PET imaging continues to be restrictive. The Company believes that restrictive reimbursement policies have had a very significant adverse affect on widespread use of PET imaging and have, therefore, adversely affected the Company's business, financial condition, results of operations and cash flows.

In 1996, CMS approved reimbursement for one PET procedure in cardiology. In 1998, four additional procedures in cardiology, oncology and neurology were approved. In February 1999, three additional procedure reimbursements were approved in oncology. In December 2000, six additional procedure reimbursements were approved in oncology, one in cardiology and one in neurology. In 2001, further refinements of the reimbursement policies were introduced with expansion in oncology. Whether CMS will continue to approve additional reimbursable procedures, and whether private insurers will follow CMS's lead are unknown at this time. PET scanner demand in the US increased markedly after the announcement of increasing reimbursement. It is unknown at this time if the increase in demand will be sustained as reimbursement expands.

In March 2000, the FDA issued a "Draft Guidance" finding 18-FDG and 13-NH radiopharmaceuticals used in the Company's PET scanner) to be safe and effective for broad oncology and cardiology indications. There is no assurance, however, that the FDA's findings in the future will not change or that additional radiopharmaceuticals will be approved.

**Private insurer reimbursement**. Until the expansion of coverage of CMS, most insurance carriers considered PET imaging to be an investigational procedure and did not reimburse for procedures involving PET imaging. However, this perspective has begun to change as a result of Medicare's expanding acceptance of reimbursements for certain PET procedures. The Company believes that certain private insurance carriers are expanding coverage as experience is gained with PET imaging procedures. While they may not have broad PET reimbursement policies in place today, those providing some reimbursement for PET scans do so on a case-by-case basis.

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

#### Manufacturing

#### The Company has formed a 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, 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 "Manufacturing JV"), to engage in the manufacturing of PET and CT/PET medical imaging equipment. The Manufacturing JV 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. The purpose and scope of the Manufacturing JV's business is to research, develop and manufacture Positron Emission Tomography systems (PET), and an integrated X-ray Computed Tomography system (CT) and PET system (PET/CT), and to otherwise provide relevant technical consultation and services.

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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 Manufacturing JV 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 Manufacturing JV is 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. Positron has moved available to the Manufacturing JV certain of its PET technology, while Neusoft made available to the Manufacturing JV certain CT technology for the development and production of an integrated PET/CT system. The parties will share the profits, losses and risks of the Manufacturing JV in proportion to and, in the event of losses, to the extent of their respective contributions to the registered capital of the Manufacturing JV.

#### Sales of Neusoft Positron Medical Systems Co., Ltd. Products

The joint venture will sell products manufactured by the Manufacturing JV to both joint venture parties for further resale in the marketplace. After the ramp-up period of the Manufacturing JV, each party has rights to and risk obligations for its capacity of products required from the Manufacturing JV. The parties intend that the manufacturing capacity of the Manufacturing JV will be shared on an equivalent basis to each party's contribution to the registered capital of the Manufacturing JV, as measured by the manufacturing work and resources needed by the Manufacturing JV for the resulting products.

Under its Joint Venture Contract with Neusoft, the Company has the exclusive right to sell PET system products developed by the Manufacturing JV in the United States and Mexico under its registered trademarks, and PET/CT products developed by the Manufacturing JV in Canada and under the trademark of "Neusoft Positron." The Company and Neusoft have equal rights to sell PET/CT products developed by the Manufacturing JV in the U.S. and Mexico under the trademark of "Neusoft Positron." Neusoft has the exclusive right to sell products developed by the Manufacturing JV in China under its registered trademarks. Each of Neusoft and the Company has the right to sell products developed by the Manufacturing JV in the countries and regions worldwide with the exception of China, Canada, the U.S. and Mexico where select exclusive rights apply.

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 the development, production and timely delivery of PET and PET/CT systems.

The Company believes that although manufacturing and select research and development has been outsourced, if necessary, it has the ability to assemble its POSICAM<sup>TM</sup> scanners in its facility located in Houston, Texas. Scanners are generally produced by assembling parts furnished to the Company by outside suppliers. The Company believes that it can assemble and test a typical POSICAM<sup>TM</sup> system in two to three months.

There are several essential components of the Company's POSICAM<sup>TM</sup> and mPowersystems which are obtained from limited or sole sources, including bismuth germinate oxide ("BGO") crystals, which detect gamma photons from positron emissions, and photomultiplier tubes, which convert light energy emitted by such crystals into electrical impulses for use in the image reconstruction process. During 2000, the Company qualified a second vendor for BGO crystal assemblies. This has reduced the Company's exposure in this critical component. While the Company attempts to make alternate supply arrangements for photomultiplier tubes and other critical components, in the event that the supply of any of these components is interrupted, there is no assurance that those arrangements can be made and will provide sufficient quantities of components on a timely or uninterrupted basis. Further, there is no assurance that the cost of supplies will not rise significantly or that components from alternate suppliers will continue to meet the Company's needs and quality control requirements.

#### **Research and Development**

The Company's POSICAM<sup>TM</sup> systems are based upon proprietary technology initially developed at the University of Texas Health Science Center ("UTHSC") in Houston, Texas, under a \$24 million research program begun in 1979 and funded by UTHSC and The Clayton Foundation for Research ("Clayton Foundation"), a Houston-based, non-profit organization. Since that time, the Company has funded further product development and commercialization of the system. These research and development activities are costly and critical to the Company's ability to develop and maintain improved systems. The Company's research and development expenses were approximately \$1,165,000 and \$446,000 for the years 2006 and 2005, respectively and \$353,000 for the three months ended March 31, 2007. 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.

#### **Patent 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.) 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. As of March 31, 2007, the Company owed royalty obligations amounting to approximately \$375,000.

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

The Company seeks to protect its trade secrets and proprietary know-how through confidentiality agreements with its consultants. The Company requires each consultant 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 as a consultant and the assignment to the Company of patents and proprietary rights to such matters related to the business and technology of the Company.

#### **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. The Company maintains comprehensive liability insurance coverage for its products and premises exposures with an A++ industry leading insurance carrier.

#### **Employees**

As of March 31, 2007, the Company employed ten (10) full-time employees and three (3) consultants: four (4) in engineering, one (1) in customer support, four (4) in manufacturing, four (4) in the executive and administration department. None of the Company's employees are represented by a union.

#### **Summary Financial Information**

The following summary financial data should be read in conjunction with "Management's Discussion and Analysis," "Plan of Operation" and the Financial Statements and Notes thereto, included elsewhere in this prospectus. The statement of operations and balance sheet data are derived from our December 31, 2006 and 2005 audited financial

statements.

# **Summary Operating Information**

	For the three	months ended	For the years ended		
	March 31, 2007	March 31, 2006	December 31,	December 31,	
	(Unaudited)	(Unaudited)	2006	2005	
Revenues	1,201,000	198,000	2,213,000	762,000	
Total operating expenses	1,434,000	895,000	4,603,000	2,526,000	
Gross Profit	379,000	50,000	790,000	(526,000)	
Net loss	(1,119,000)	(1,156,000)	(6,586,000)	(3,806,000)	
Net loss per common share, basic and diluted	(0.01)	(0.01)	(0.08)	(0.06)	
Weighted average number of shares					
outstanding basic and diluted	87,083,000	77,997,000	81,508,000	65,044,000	

# **Summary Balance Sheet Data**

	March 31, 2007 (Unaudited)	December 31, 2006
Total current assets	2,841,000	4,932,000
Total assets	5,771,000	5,271,000
Total current liabilities	2,818,000	3,521,000
Total stockholders' (deficit)	(2,079,000)	(1,132,000)
10		

#### SECURITIES OFFERED BY US

We are not offering any securities. All shares being registered are for our selling security holders.

#### WHERE YOU CAN FIND US

Our corporate offices are located at 1304 Lanham Creek Drive, #300, Houston, Texas 77084 (281) 492-7100.

#### RISK FACTORS

An investment in our common stock involves a high degree of risk. You should carefully consider the risks described below and the other information in this prospectus and any other filings we may make with the United States Securities and Exchange Commission in the future before investing in our common stock. If any of the following risks occur, our business, operating results and financial condition could be seriously harmed. Please note that throughout this prospectus, the words "we", "our" or "us" refer to us and not to the selling stockholders.

#### Risks Associated with Business Activities

*History of Losses*. To date the Company has been unable to sell POSICAM<sup>TM</sup> systems in quantities sufficient to be operationally profitable. Consequently, the Company has sustained substantial losses. During the three months ended March 31, 2007, the Company had a net loss of approximately \$1,119,000 compared to a net loss of \$1,156,000 during 2006. At March 31, 2007, the Company had an accumulated deficit of approximately \$69,944,000. 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 POSICAM<sup>TM</sup> 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, 2006 expressed substantial doubt as to the Company's ability to continue as a going concern. The Company will need to increase system sales to become profitable or obtain additional capital.

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 \$472,000 at March 31, 2007. The Company received an additional \$200,000 and \$2,375,000 in loan proceeds from affiliated entities in 2006 and 2005, respectively and \$1,300,000 from the financing with the Selling Shareholders in the second quarter 2006. In spite of the loan 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.

*Going Concern.* In their report dated March 26, 2007, our independent registered public accounting firm stated that our financial statements for the year ended December 31, 2006 were prepared assuming that we would continue as a going concern. Our ability to continue as a going concern is an issue raised as a result of substantial losses for the year ended December 31, 2006. We continue to experience net operating losses. Our ability to continue as a going concern

is subject to our ability to generate a profit and/or obtain necessary funding from outside sources, including obtaining additional funding from the sale of our securities, increasing sales or obtaining loans and grants from various financial institutions where possible. Our continued net operating losses increases the difficulty in meeting such goals and there can be no assurances that such methods will prove successful.

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 POSICAM<sup>TM</sup> systems can be upgraded to meet future innovations in the PET 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. The Company faces competition in the United States PET market primarily from GE, CTI/Siemens and ADAC/Philips, each of which has significantly greater financial and technical resources and production and marketing capabilities than the Company. These organizations are better known than the Company and likely have greater access to medical facilities and potential purchasers of our systems. 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. The Company also faces competition from other imaging technologies, which are more firmly established and have a greater market acceptance, including SPECT. There can be no assurance that the Company will be able to compete successfully against any of its competitors.

*No Assurance of Market Acceptance.* The POSICAM<sup>TM</sup> systems involve new technology that competes with more established diagnostic techniques. The purchase and installation of a PET system involves a significant capital expenditure on the part of the purchaser. A potential purchaser of a PET 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 PET technology or the Company's POSICAM<sup>TM</sup> systems will be accepted by the target markets, or that the Company's sales of POSICAM<sup>TM</sup> 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 PET technology, which are of material importance to the Company and its future prospects. There can be no assurance, however, that the Company's patents will provide meaningful protection from competitors. Even if a competitor's products were to infringe on patents held by the Company, it would be costly for the Company to enforce its rights, and the efforts at enforcement would divert funds and resources from the Company's operations. Furthermore, there can be no assurance that the Company's products will not infringe on any patents of others.

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

Government Regulation. Various aspects of testing, remanufacturing, labeling, selling, distributing and promoting our systems and the radiopharmaceuticals used with them are subject to regulation on the federal level by the FDA and in Texas by the Texas Department of Health and other similar state agencies. In addition, sales of medical devices outside the United States may be subject to foreign regulatory requirements that vary widely from country to country. The FDA regulates medical devices based on their device classification. Positron's device is listed as a Class II medical device, the safety and effectiveness for which are regulated by the use of special controls such as published performance standards. To date, the FDA has not published performance standards for PET systems. If the FDA does publish performance standards for PET systems, there can be no assurance that the standards will not have a potentially adverse effect on our product, including substantial delays in manufacturing or disrupting the Company's marketing activities. Other FDA controls, reporting requirements and regulations also apply to manufacturers of medical devices, including: reporting of adverse events and injuries, and the mandatory compliance with the Quality System Regulations commonly known as Good Manufacturing Practices.

In addition to the regulatory requirements affecting the day-to-day operations of the Company's product, the FDA requires medical device manufacturers to submit pre-market clearance information about their proposed new devices

and/or proposed significant changes to their existing device prior to their introduction into the stream of commerce. This process, commonly referred to as a 510(k) Clearance, is an extensive written summary of performance information, comparative information with existing medical devices, product labeling information, safety and effectiveness information, intended use information, and the like. Until the FDA has had the opportunity to thoroughly review and "clear" the submission, commercial distribution of the product is specifically disallowed. Although the FDA is required to respond to all pre-market notifications within ninety days of receiving them, the FDA often takes longer to respond. Once the FDA has cleared the device, it notifies the manufacturer in terms of a "substantial equivalence" letter. The manufacturer may begin marketing the new or modified device when it receives the substantial equivalence letter. If the FDA requires additional information or has specific questions, or if the Company is notified that the device is not "substantially equivalent" to a device that has already been cleared, the Company may not begin to market the device. A non-substantial equivalence determination or request for additional information of a new or significantly modified product could materially affect the Company's financial results and operations. There can be no assurance that any additional product or enhancement that the Company may develop will be approved by the FDA. Delays in receiving regulatory approval could have a material adverse effect on the Company's business. The Company submitted an application for such a 510(k) clearance on June 18, 2002 and was granted a new 510(k) on July 12, 2002, number K022001.

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After being issued an FDA warning letter in April 2004, the Company was able to quickly respond and correct observations noted. Therefore, in June of 2005, the FDA removed the restrictions placed upon the Company by the April 2004 Warning Letter as a result of the corrections and improvements in the March 2005 inspection. The Company has satisfied the compliance requirements set forth by the FDA.

In addition to complying with federal requirements, the Company is required under Texas state law to register with the State Department of Health with respect to maintaining radiopharmaceuticals on premises for testing, research and development purposes. Positron submitted a new application to the Texas Department of Health for a Radioactive Material License on July 10, 2000 and was granted a Radioactive Material License with an expiration date of July 31, 2007. During a July 2005 Radiation audit, the company was noted for minor violations, which were addressed and corrected. At this time the company is in full compliance with Texas Radiation Codes, however, there is no assurance that violations may not occur in the future which could have a material adverse effect on the Company's operations. In addition, Texas state law requires a safety evaluation of devices that contain radioactive materials. The Company submitted an application for such an evaluation to the Texas Department of Health, Bureau of Radiation Control. As a result, Positron's medical diagnostic scanner has been placed on the Registry of Radioactive Sealed Sources and Devices as of September 20, 2001.

The Company's operations and the operations of PET systems are subject to regulation under federal and state health safety laws, and purchasers and users of PET systems are subject to federal and state laws and regulations regarding the purchase of medical equipment such as PET systems. All laws and regulations, including those specifically applicable to the Company, are subject to change. The Company cannot predict what effect changes in laws and regulations might have on its business. Failure to comply with applicable laws and regulatory requirements could have material adverse effect on the Company's business, financial conditions, results of operations and cash flows.

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

Certain Financing Arrangements. In order to sell its POSICAM<sup>TM</sup> systems, the Company has from time to time found it necessary to participate in ventures with certain customers or otherwise assist customers in their financing arrangements. The venture arrangements have involved lower cash prices for the Company's systems in exchange for interests in the venture. These arrangements expose the Company to the attendant business risks of the ventures. The Company has, in certain instances, sold its systems to financial intermediaries, which have, in turn, leased the system. Such transactions may not give rise to the same economic benefit to the Company as would have occurred had the Company made a direct cash sale at its regular market price on normal sale terms. There can be no assurance that the Company will not find it necessary to enter similar transactions to effect future sales. Moreover, the nature and extent of the Company's interest in such ventures or the existence of remarketing or similar obligations could require the Company to account for such transactions as "financing arrangements" rather than "sales" for financial reporting purposes. Such treatment could have the effect of delaying the recognition of revenue on such transactions and may increase the volatility of the Company's financial results.

**Product Liability and Insurance**. The use of the Company's products entails risks of product liability. There can be no assurance that product liability claims will not be successfully asserted against the Company. The Company maintains liability insurance coverage in the amount of \$1 million per occurrence and an annual aggregate maximum of \$1 million. However, there can be no assurance that the Company will be able to maintain such insurance in the future or, if maintained, that such insurance will be sufficient in amount to cover any successful product liability claims. Any uninsured liability could have a material adverse effect on the Company.

*Need for Future Funding.* We may need to raise additional funds through public or private debt or sale of equity to achieve our current business strategy. The financing we need may not be available when needed. Even if this financing is available, it may be on terms that we deem unacceptable or are materially adverse to your interests with respect to dilution of book value, dividend preferences, liquidation preferences, or other terms and may involve a substantial dilution to our shareholders. Our inability to obtain financing will inhibit our ability to implement our development strategy, and as a result, could require us to diminish or suspend our development strategy and possibly cease our operations.

If we are unable to obtain additional financing on reasonable terms, we could be forced to delay, scale back or eliminate certain product and service development programs. In addition, such inability to obtain additional financing on reasonable terms could have a negative effect on our business, operating results, or financial condition to such extent that we are forced to restructure, file for bankruptcy, sell assets or cease operations, any of which could put your investment dollars at significant risk.

**Potential Decrease in Market Price.** Sales of substantial amounts of our common stock in the public market could decrease the prevailing market price of our common stock. If this is the case, investors in our shares of common stock may be forced to sell such shares at prices below the price they paid for their shares, or in the case of the investors in the May 2006 financing, prices below the price they converted their notes and warrants into shares. In addition, a decreased market price may result in potential future investors losing confidence in us and failing to provide needed funding. This will have a negative effect on our ability to raise equity capital in the future.

General condition of the healthcare market. The Company's business is subject to global economic conditions, and in particular, market conditions in the healthcare industry. The Company's operations may be adversely affected by the continued declines in employee benefit spending by large corporations and small to medium sized businesses. If global economic conditions worsen, or a prolonged slowdown in providing such benefits exists, then the Company may experience adverse operating results.

**Product Acceptance.** The Company's business plan depends upon the acceptance of our Posicam<sup>TM</sup> systems and PET scanning generally for oncological caridological and neurological applications Lack of acceptance in the healthcare industry for our imaging systems and services could have a material adverse effect on the Company's business, results of operations and financial condition.

#### **Risks Relating to Our Current Financing Arrangement:**

**Potential Decrease in Stock Price.** As of August 7, 2007, we had 87,205,202 shares of common stock issued and outstanding and callable secured convertible notes outstanding or an obligation to issue callable secured convertible notes that may be converted into an estimated 13,246,240 shares of common stock at current market prices, and outstanding warrants or an obligation to issue warrants to purchase 30,000,000 shares of common stock. In addition, the number of shares of common stock issuable upon conversion of the outstanding callable secured convertible notes may increase if the market price of our stock declines. All of the shares, including all of the shares issuable upon conversion of the notes and upon exercise of our warrants, may be sold without restriction. The sale of these shares may adversely affect the market price of our common stock.

**Potential Dilution.** The issuance of shares upon conversion of the callable secured convertible notes and exercise of warrants may result in substantial dilution to the interests of other stockholders since the selling stockholders may ultimately convert and sell the full amount issuable on conversion. Although the selling stockholders may not convert their callable secured convertible notes and/or exercise their warrants if such conversion or exercise would cause them to own more than 4.99% of our outstanding common stock, this restriction does not prevent the selling stockholders from converting and/or exercising some of their holdings and then converting the rest of their holdings. In this way,

the selling stockholders could sell more than this limit while never holding more than this limit. There is no upper limit on the number of shares that may be issued which will have the effect of further diluting the proportionate equity interest and voting power of holders of our common stock, including investors in this offering.

Potential Repayment of Notes in Cash. On May 20, 2006, we entered into a financing arrangement involving the sale of an aggregate of \$2,000,000 principal amount of callable secured convertible notes and stock purchase warrants to buy 30,000,000 shares of our common stock. The callable secured convertible notes are due and payable, with 8% interest, three years from the date of issuance, unless sooner converted into shares of our common stock. Although we currently have \$1,300,000 callable secured convertible notes outstanding, the investor is obligated to purchase additional callable secured convertible notes in the aggregate amount of \$7,000,000. In addition, any event of default such as our failure to repay the principal or interest when due, our failure to issue shares of common stock upon conversion by the holder, our failure to timely file a registration statement or have such registration statement declared effective, breach of any covenant, representation or warranty in the Securities Purchase Agreement or related convertible note, the assignment or appointment of a receiver to control a substantial part of our property or business, the filing of a money judgment, writ or similar process against us in excess of \$100,000, the commencement of a bankruptcy, insolvency, reorganization or liquidation proceeding against us and the delisting of our common stock could require the early repayment of the callable secured convertible notes, including a default interest rate of 15% on the outstanding principal balance of the notes if the default is not cured within the specified grace period. We anticipate that the full amount of the callable secured convertible notes will be converted into shares of our common stock, in accordance with the terms of the callable secured convertible notes. If we are required to repay the callable secured convertible notes, we would be required to use our limited working capital and raise additional funds. If we were unable to repay the notes when required, the note holders could commence legal action against us and foreclose on all of our assets to recover the amounts due. Any such action would require us to curtail or cease operations.

Requirement of Effective Registration Statement. On May 20, 2006, we received financing from the selling security holders listed in this document. Such financing requires us to file this registration statement and have the registration statement declared effective by the SEC within 120 days of the closing of the financing, which occurred on May 26, 2006. While we executed an amendment to the registration rights agreement on July 13, 2007, to amend the number of shares to be registered to 13,246,240, no other terms were amended. Accordingly, we may begin incurring liquidated damages equal to 2% of the principal of the promissory notes issued for each 30 day period that this registration statement is not declared effective after September 26, 2006.

Discount on Conversion of Promissory Notes will Lead to Dilution. The conversion of the promissory notes in our recent financing is based on the applicable percentage of the average of the lowest three (3) Trading Prices for the Common Stock during the twenty (20) Trading Day period prior to conversion. The "Applicable Percentage" means 50%; provided, however, that the Applicable Percentage shall be increased to (i) 55% in the event that a Registration Statement is filed within thirty days of the closing and (ii) 60% in the event that the Registration Statement becomes effective within one hundred and twenty days from the Closing. The price of our common shares may fluctuate and the lower intra-day trading price in the future, will result in a conversion ratio resulting in issuance of a significant amount of our common shares to the promissory note holders. This will result in our present shareholders being diluted.

Repayment to Selling Shareholders. The inability of the Selling Shareholders to sell shares of Common Stock issuable in connection with the conversion of the Callable Secured Convertible Notes in amounts sufficient to satisfy the Company's contractual obligations with the Selling Shareholders could render the Company subject to significant financial penalties. The number of shares of Common Stock the Company is registering with this Registration Statement is likely not sufficient to cover all of the shares the Selling Shareholders are entitled to convert to under the Callable Secured Convertible Notes. We are relying upon the exemptions from registration afforded under Rule 144 (the "Rule") of the Securities Act of 1933, as amended. If the Company's Common Stock is not eligible for the exceptions from registration under the Rule, or the Selling Shareholders are not permitted to avail themselves to the provisions of the Rule, the Selling Shareholders may demand repayment of the Notes with interest and penalties as set forth in the Securities Purchase Agreement. It is unlikely the Company could repay the loan amount to the Selling Shareholders, which could cause a cessation in the Company's operations or the Selling Shareholders to convert the

Notes into shares of Common Stock and attempt to sell all of the shares. Either of these events would likely adversely impact the price of our common stock.

**Potential Risk of Short Selling.** Short sales are transactions in which a selling shareholder sells a security it does not own. To complete the transaction, a selling shareholder must borrow the security to make delivery to the buyer. The selling shareholder is then obligated to replace the security borrowed by purchasing the security at the market price at the time of replacement. The price at such time may be higher or lower than the price at which the security was sold by the selling shareholder. If the underlying security goes down in price between the time the selling shareholder sells our security and buys it back, the selling shareholder will realize a gain on the transaction. Conversely, if the underlying security goes up in price during the period, the selling shareholder will realize a loss on the transaction. The risk of such price increases is the principal risk of engaging in short sales. The selling shareholders in this registration statement could short the stock by borrowing and then selling our securities in the market, and then converting the stock through either the Note or Warrants at a discount to replace the security borrowed. Because the selling shareholders control a large portion of our common stock, the selling shareholders could have a large impact on the value of our stock if they were to engage in short selling of our stock. Such short selling could impact the value of our stock in an extreme and volatile manner to the detriment of other shareholders.

#### Risks Related to Our Stock Being Publicly Traded

NASDAQ SmallCap Market Eligibility Failure to Meet Maintenance Requirements: Delisting of Securities from the NASDAQ System. The Company's common stock was previously listed on the NASDAQ SmallCap Market. The Board of Governors of the National Association of Securities Dealers, Inc. ("NASD") has established certain standards for the continued listing of a security on the NASDAQ SmallCap Market. The standards required for the Company to maintain such listing include, among other things, that the Company have total capital and surplus of at least \$2,000,000. In 1997, the Company failed to maintain its NASDAQ stock market listing and may not meet the substantially more stringent requirements to be re-listed for some time in the future. There can be no assurances that the Company will ever meet the capital and surplus requirements needed to be re-listed under the NASDAQ SmallCap Market System.

Trading of the Company's common stock is currently conducted on the NASD's OTC Bulletin Board. Trading in the common stock is covered by rules promulgated under the Exchange Act for non-NASDAQ and non-exchange listed securities. Under such rules, broker/dealers who recommend such securities to persons other than established customers and accredited investors must make a special written suitability determination for the purchaser and receive the purchaser's written agreement to a transaction prior to sale. Securities are exempt from these rules if the market price is at least \$5.00 per share. As of August 6, 2007, the closing price of the Company's common stock was \$0.08. In addition, the SEC has adopted regulations that generally define a penny stock to be any equity security that has a market price of less than \$5.00 per share, subject to certain exceptions. The Company's common stock is currently subject to such penny stock rules. The regulations require the delivery, prior to any transaction involving a penny stock, of a disclosure schedule explaining the penny stock market and the risks associated therewith. As a penny stock, the market liquidity for the Company's common stock is severely affected due to the limitations placed on broker/dealers that sell the common stock in the public market.

The additional burdens imposed upon broker- dealers by such requirements may discourage broker-dealers from effecting transactions in our securities, which could severely limit the market price and liquidity of our securities. Broker-dealers who sell penny stocks to certain types of investors are required to comply with the Commission's regulations concerning the transfer of penny stocks. These regulations require broker- dealers to:

- Make a suitability determination to selling a penny stock to the purchaser;
  - Receive the purchaser's written consent to the transaction; and
    - Provide certain written disclosures to the purchase.

These requirements may restrict the ability of broker-dealers to sell our common stock and may affect your ability to resell our common stock.

Reporting Requirement. Companies trading on the OTC Bulletin Board, such as us, must be reporting issuers under Section 12 of the Securities Exchange Act of 1934, as amended, and must be current in their reports under Section 13, in order to maintain price quotation privileges on the OTC Bulletin Board. If we fail to remain current on our reporting requirements, we could be removed from the OTC Bulletin Board. As a result, the market liquidity for our securities could be severely adversely affected by limiting the ability of broker-dealers to sell our securities and the ability of stockholders to sell their securities in the secondary market.

#### FORWARD-LOOKING STATEMENTS

This prospectus, including information incorporated into this document by reference, contains "forward-looking statements" within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Statements that are not historical facts, including statements about our beliefs or expectations, are forward-looking statements, and are contained throughout this prospectus and in the information incorporated into this prospectus by reference. Forward-looking statements are identified by words such as "believe," "anticipate," "expect," "estimate," "intend," "plan," "project," "will," "may" and variations of such words and similar expressiaddition, any statements that refer to expectations, projections, plans, objectives, goals, strategies or other characterizations of future events or circumstances are forward-looking statements. These forward-looking statements speak only as of the date stated and we do not undertake any obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, even if experience or future events make it clear that any expected results expressed or implied by these forward-looking statements will not be realized. Although we believe that the expectations reflected in these forward-looking statements are reasonable, these expectations may not prove to be correct or we may not achieve the financial results, savings or other benefits anticipated in the forward-looking statements. These forward-looking statements are necessarily estimates reflecting the best judgment of our senior management and involve a number of risks and uncertainties, some of which may be beyond our control that could cause actual results to differ materially from those suggested by the forward-looking statements. Factors that could cause actual results or conditions to differ from those anticipated by these and other forward-looking statements are described more fully in the section entitled "Risk Factors" and in our reports we have filed with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act. Our business, financial condition or results of operations could also be adversely affected by other factors besides those listed here. However, these are the risks our management currently believes are material.

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You should carefully consider the trends, risks and uncertainties described in the section entitled "Risk Factors" of this prospectus and other information in this prospectus or reports filed with the SEC before making any investment decision with respect to the securities. If any of the trends, risks or uncertainties set forth in the section entitled "Risk Factors" and in our reports we have filed with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act actually occurs or continues, our business, financial condition or operating results could be materially adversely affected. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by this cautionary statement.

#### MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

Our common stock is currently traded on the OTC Bulletin Board under the symbol "POSC." The following range of the high and low reported closing sales prices for the Company's common stock for each quarter in 2005 and 2006, 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.

		2005				2006		
	H	Iigh		Low	High		Low	
First Quarter	\$	0.16	\$	0.06	\$ 0.27	\$	0.08	
Second Quarter	\$	0.09	\$	0.05	\$ 0.18	\$	0.12	
Third Quarter	\$	0.09	\$	0.04	\$ 0.12	\$	0.06	
Fourth Quarter	\$	0.09	\$	0.05	\$ 0.12	\$	0.06	

As of July 13, 2007 in accordance with our transfer agent records, we had approximately 268 shareholders of record. Such shareholders of record held 87,205,202 shares of our common stock.

#### MANAGEMENT'S DISCUSSION AND ANALYSIS OR PLAN OF OPERATION

The Company is including the following cautionary statement to make applicable and utilize the safe harbor provision of the Private Securities Litigation Reform Act of 1995 regarding 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, examination of historical operating trends, data contained in records and other data available from third parties, but there can be no assurance that the Company's expectations, beliefs or projections will result, or be achieved, or be accomplished.

Positron Corporation (the "Company") was incorporated in 1983 and commenced commercial operations during 1986. The Company designs, markets and services its POSICAM<sup>TM</sup> system advanced medical imaging devices, utilizing positron emission tomography ("PET") technology, and through its wholly-owned subsidiary IPT markets the IS2 PulseCDC<sup>TM</sup> compact digital cardiac camera. Since the commencement of commercial operations and prior to the acquisition of IPT in 2006, revenues have been generated primarily from the sale and service contract revenues derived from the Company's POSICAM<sup>TM</sup> system, 11 of which are currently in operation in certain medical facilities in the United States and 6 are operating in international medical institutions. The Company has never been able to sell its POSICAM<sup>TM</sup> systems in sufficient quantities to achieve operating profitability. For this reason, in 2005 the Company entered into a joint venture with Neusoft Medical Systems Co., Inc. of Shenyang, Lianoning Province, People's Republic of China. Through the joint venture the Company believes it can modernize and upgrade its technology and lower production costs of its systems.

#### Neusoft Positron Medical Systems Co. Ltd.

The Company's joint venture with Neusoft Medical Systems Co., Inc. of Shenyang, Lianoning Province, People's Republic of China ("Neusoft"), named Neusoft Positron Medical Systems Co., Ltd. ("NPMS"), is active in the development and manufacture of Positron Emission Tomography systems (PET), and an integrated X-ray Computed Tomography system (CT) and PET system (PET/CT). These systems 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. POSICAM<sup>TM</sup> systems are used by physicians as diagnostic and treatment evaluation tools in the areas of cardiology, neurology and oncology. The Company faces competition principally from three other companies which specialize in advanced medical imaging equipment. To date NPMS has not produced a PET or CT system for sale. NPMS will be required to make a submission to the United States Food and Drug Administration for approval of its system modernization to the POSICAM<sup>TM</sup> systems. The Company anticipates that the submission will be made late in 2007 or early in 2008. FDA review time for similar submissions is typically four months.

#### **Imaging Pet Technologies – Business Acquisition**

On January 26, 2007, the Company executed and consummated a Securities Purchase Agreement (the "Agreement") with Imagin Diagnostic Centres, Inc. ("IMAGIN"), to acquire 11,523,000 shares of common stock of Imaging Pet Technologies, Inc. ("IPT"). The Shares represented approximately a 50.1% of IPT's issued and outstanding common stock. As a result of the acquisition of the Shares, the Company owns 100% of the common stock of IPT. As consideration for the shares, the Company and IMAGIN agreed to cancel a promissory note in the principal amount of \$2,400,000 made by IMAGIN subsidiary, QMP and later assigned to IMAGIN. As of the date of the Agreement, the

Company had been advised by IMAGIN that it had acquired all of QMP's interest in IPT as well as QMP's other holdings of the Company's related securities.

# Comparison of the Results of Operations for the Three Months ended March 31, 2007 and 2006

The Company experienced a net loss of \$1,119,000 for the three months ended March 31, 2007 compared to a loss of \$1,156,000 for the same quarter in 2006. The decrease in the 2007 loss as compared to the 2006 loss is due primarily to a significant increase in revenues, the majority of which were generated by IPT.

**Revenues** - Revenues from the sales of IPT's gamma cameras were \$975,000 for the three months ended March 31, 2007. The Company did not have any system sales for the same period in 2006. Service revenue for the quarter was \$226,000 as compared to \$198,000 for the same period in 2006. The increase of 14% is due in part to service revenue from IPT and also from a new service contract for a Positron machine sold in September 2006 to its affiliate Imagin Nuclear Partners.

Gross profit for the three months ended March 31, 2007 and 2006, was \$379,000 and 50,000, respectively. Cost of sales related to the IPT systems was \$685,000. Costs of service and component sales for the three months ended March 31, 2007 decreased by \$11,000 to \$137,000 as compared to \$148,000 for the same period in 2006. The decrease is attributed to fewer service calls to customers and management's cost reduction efforts.

*Operating Expenses* - Operating expenses increased \$539,000 to \$1,434,000 for the three months ended March 31, 2007 from \$895,000 for the same period in 2006. Operating expenses for IPT only during the quarter were \$838,000.

Research and development costs for the three months ended March 31, 2007 were \$353,000 compared to \$144,000 for the 2006. IPT incurred \$105,000 in research costs related to improvements and developments of gamma cameras while its subsidiary, Quantum Molecular Technologies ("QMT") had research expense of \$123,000. QMT is developing certain next generation technologies including PET-enabled surgical tools and solid-state photo detector technology, which have implications in both molecular imaging and PET and which could have further application in the military and aerospace segments. Positron's research and development costs of \$125,000 were mostly costs associated with the NPMS joint venture and related costs of manufacturing modernization at the Company's Houston facility.

Sales and marketing expense for the three months ended March 31, 2007 increased to \$269,000 from \$70,000 for the same period in 2006. The increase is almost all due to the sales and marketing expenses of IPT, for which there were none in 2006. Positron's sales and marketing expenses were \$8,000 for the first quarter of 2007 compared to \$70,000 in 2006. The Company has significantly reduced sales and marketing costs at Positron since manufacturing of PET systems is currently not being done in the Houston facility. Manufacturing and plant modernization efforts are currently taking place in conjunction with the NPMS joint venture.

General and administrative expenses increased \$274,000 during the three months ended March 31, 2007 to \$709,000 as compared to \$435,000 for the same period in 2006. General and administrative expenses at IPT were \$361,000 which includes \$41,000 in warranty accruals. Positron's general and administrative expenses were \$359,000 which is \$76,000 less then 2006. The decrease is attributable primarily to overall cost reduction measures taken by the Company's management.

Stock based compensation for the three months ended March 31, 2007 and 2006 was \$103,000 and 246,000, respectively.

*Other Income (Expenses)* -.Interest expense of \$33,000 for the three months ended March 31, 2007 is a decrease from \$269,000 in interest expense during the same period in 2006, which was interest on convertible debentures to affiliated entities. The debentures were all converted to shares of the Company's Series B Preferred Stock in September 2006. The Company also recorded derivative losses of \$34,000 during the current quarter. For the three months ended March 31, 2007 and 2006 the Company recorded equity in the losses of NPMS \$22,000 and \$42,000, respectively. The current quarter charge of \$22,000 writes the Company's investment in NPMS down to zero.

#### **Financial Condition**

The Company had cash and cash equivalents of \$472,000 on March 31, 2007. On the same date, ccounts payable and accrued liabilities outstanding totaled \$2,525,000. The Company sold \$975,000 of gamma cameras through IPT but

did not sell any PET imaging systems in the three-month period ended March 31, 2007. Increased camera sales, sales of imaging systems and/or additional debt or equity financings will eventually be necessary to resolve the Company's liquidity issues and allow it to continue to operate as a going concern. However, there is no assurance that the Company will be successful in selling new systems or securing additional debt or equity financing.

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 \$69,944,000 at March 31, 2007. The Company will need to increase system sales and apply the research and development advancements to achieve profitability in the future. Through the Company's joint venture with Neusoft Medical Systems PET system cost of goods and labor will be significantly lower. In addition, the Company expects increased revenue from its IPT SPECT camera subsidiary to come from new sales campaigns and service division. The Company expects that these developments will have a positive impact on the PET, PET/CT and SPECT device products, sales & service volumes and increased net margins.

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, 2006, 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.

#### General

Positron Corporation (the "Company") was incorporated in 1983 and commenced commercial operations during 1986. The Company designs, markets and services its POSICAMTM system advanced medical imaging devices, utilizing positron emission tomography ("PET") technology. Since the commencement of commercial operations, revenues have been generated primarily from the sale and service contract revenues derived from the Company's POSICAM<sup>TM</sup> system, 11 of which are currently in operation in certain medical facilities in the United States and 6 are operating in international medical institutions. The Company has never been able to sell its POSICAM<sup>TM</sup> systems in sufficient quantities to achieve operating profitability.

The Company's joint venture with Neusoft Medical Systems Co., Inc. of Shenyang, Lianoning Province, People's Republic of China ("Neusoft"), named Neusoft Positron Medical Systems Co., Ltd. ("NPMS"), is active in the development and manufacture of Positron Emission Tomography systems (PET), and an integrated X-ray Computed Tomography system (CT) and PET system (PET/CT). These systems 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. POSICAMTM systems are used by physicians as diagnostic and treatment evaluation tools in the areas of cardiology, neurology and oncology. The Company faces competition principally from three other companies which specialize in advanced medical imaging equipment. To date NPMS has not produced a PET or CT system for sale.

In June 2006, the Company 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") through a minority-owned subsidiary of the Company, Imaging PET Technologies, Inc. ("IPT"). The Company and Quantum held 49.9% and 50.1%, respectively, of the total registered capital of IPT. However, in January 2007, the Company acquired Quantum's interest in IPT in exchange for preferred stock and the extinguishment of a note payable due the Company from QMP.

IS2 develops, builds and services gamma cameras that offer clinical users high quality performance specifications in the industry. IS2's signature product is its PulseCDC<sup>TM</sup> compact digital cardiac camera. Over 150 cameras have been sold, primarily in Canada.

On December 28, 2005, the Company entered into a Memorandum of Understanding with Imagin Diagnostic Centres, Inc. ("IMAGIN") and QMP. The Memorandum provided for the parties to form a joint venture to be called Quantum Molecular Technologies JV (the "QMT JV"). Initially, the joint venture was owned 20%, 29% and 51% by the Company, IMAGIN and QMP, respectively. On May 8, 2006, the Company amended certain aspects of the QMT JV. Whereas the Company originally held 20% of the interests of the QMT JV, Quantum and IMAGIN assigned 100% of their interest to the Company in exchange for the preferred stock of the Company. On April 13, 2006, the QMT JV incorporated under the name Quantum Molecular Technologies, Inc. ("QMT") and acquired certain intangible assets in the form of capitalized research and development costs from IMAGIN for a note payable.

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Using concepts and research and development activities conceived and to be implemented by Dr. Irving Weinberg, an exclusive consultant to QMP, QMT is developing certain next generation technologies including PET-enabled surgical tools and solid-state photo detector technology, which have implications in both molecular imaging and PET and which could have further application in the military and aerospace segments. The first solid-state detector technology patent has been filed by QMT. The Company will have the right to manufacture and sell any PET products developed by QMT in exchange for royalty payments still to be negotiated.

#### **Results of Operations**

Consolidated results of operations for the year ending December 31, 2006 include; full year operations of Positron; the operations of Positron's wholly-owned subsidiary, IPT, for the period October 1 – December 31, 2006; and the operations of Positron's wholly-owned subsidiary, QMT, from April 13 – December 31, 2006.

Revenues - The Company generated sales of systems in 2006 of \$1,268,000 including approximately \$850,000 of sales of IS2 gamma cameras. Positron system sales include two refurbished PET systems. The Company did not generate any revenue from system sales in 2005. Service and upgrade revenue in 2006 was \$945,000, an increase of 24% or \$183,000 over revenues of \$762,000 in 2005. Sales of parts and materials to NPMS accounted for \$180,000 of the increase.

Costs of Revenues - Costs of revenues increased by \$135,000 to \$1,423,000 during the year ended December 31, 2006 from \$1,288,000 in the prior year. Costs of system sales were \$689,000 in 2006. The Company incurred service revenue costs of \$721,000 and \$621,000 in 2006 and 2005, respectively. The 16% increase over the prior year is due in part to the warranty expiration of one system which was then moved to a service contract. In addition, the Company experienced several problems with one particular machine which resulted in significant services costs. In 2005 the Company expensed \$656,000 of excess inventory and field service parts as it ceased manufacturing activities at its Houston facility.

Operating Expenses - The Company's operating expenses increased \$2,077,000 to \$4,603,000 for the year ended December 31, 2006 from \$2,526,000 in 2005.

Selling, general and administrative expenses increased \$500,000 to \$2,639,000 from \$2,139,000 in the prior year. The acquisition of IPT is the primary reason for the increase. IPT's selling, general and administrative expenses in 2006 were \$401,000. Positron's selling, general and administrative costs were \$2,104,000, a decrease of 1.6% from the prior year. Positron recorded expenses of \$471,000 related to shares of its common stock that were issued for services performed, the majority of which was issued to firms promoting Positron common stock to the market place. Positron's selling, general and administrative salary expense decreased to \$383,000 in 2006 from \$778,000 in 2005. The decrease is a result of overall cost reduction efforts on the part of Positron's management.

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Research and development expenses increased \$719,000 to \$1,165,000 from \$446,000 in the prior year. IPT's research and developments costs were \$166,000 and QMT's were \$418,000. IPT continues improvement and development of the IS2 gamma cameras. QMT is developing certain next generation technologies including PET-enabled surgical tools and solid-state photo detector technology, which have implications in both molecular imaging and PET and which could have further application in the military and aerospace segments. Positron's research and development costs increased 30% to \$581,000 in 2006 from \$446,000 in 2005. The increase is due primarily to costs associated with the NPMS joint venture and related costs of manufacturing modernization at the Company's Houston facility.

Operating expenses in 2006 include a charge for impairment of the intangible asset recorded upon the acquisition of QMT. The impaired asset acquired consisted of capitalized patent and research and development costs. The Company wrote off the entire asset totaling \$369,000.

Stock based compensation expense for the year ended December 31, 2006 was \$430,000 and resulted primarily from the immediate vesting of 6,000,000 of the 11,500,000 options granted on November 16, 2006 to officers and directors of the Company, and stock based compensation expense related to 7,500,000 options issued in December of 2005 by the Company to Joseph Oliverio, Positron's President and Chief Executive Officer. Of Mr. Oliverio's options, 2,000,000 vested immediately, 2,000,000 vested in December 2006 and 3,500,000 vest in December 2007. The 2006 compensation also includes expense for the vesting of outstanding options granted to employees prior to 2005. For the year ended December 31, 2005 the Company reversed expense related to stock based compensation by \$59,000. The reversal resulted from the application of the variable accounting rules to the re-pricing of certain warrants and options, which preceded the application of FASB 123(R).

Other Income (Expenses) -.Interest expense of \$860,000 for the year ended December 31, 2006 is a decrease from \$985,000 in interest expense during 2005, but only includes nine months of interest on all convertible debentures to affiliated entities including IMAGIN, PAC, Solaris and Quantum. The debentures were all converted to shares of the Company's Series B Preferred Stock in September 2006. The Company also issued \$1,500,000 of new convertible secured debentures in 2006. Interest expense in 2006 includes amortization of loan costs, debt discounts and beneficial conversion features of the new convertible debenture. The Company also recorded derivative losses of \$1,784,000 resulting from embedded derivatives with the issuance of convertible debentures. For the year ended December 31, 2006 the Company recorded equity in the losses of joint ventures, IPT and NPMS, of \$373,000. NPMS did not have any operating activity during 2005.

Income Taxes – There is no provision for income taxes due to ongoing operating losses. As of December 31, 2006, we had net operating loss carryforwards of approximately \$18,000,000 for Federal reporting purposes. These amounts expire at various times through 2026. See Note 14 to the Notes to the Consolidated Financial Statements. The Company has provided a full valuation allowance against the net deferred tax assets at December 31, 2006 and 2005.

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Extraordinary Gain – The Company recorded an extraordinary gain on the acquisition of IS2 by IPT. The extraordinary gain is the excess of the net assets acquired over the purchase price paid for IS2. The extraordinary gain recognized for the year ended December 31, 2006 was \$241,000.

Net Operating Loss - For the year ended December 31, 2006, the Company had a net loss of \$6,586,000, or \$0.08 per share, of which \$5,657,000 was from domestic operations and \$929,000 was generated in Canada, compared to a net loss of \$3,806,000, or \$0.06 per share, for the year ended December 31, 2005. The increase is due to increases in research and development and selling and general and administrative costs primarily from the acquisition of IS2, and derivative losses from the issuance of convertible debentures. Increase in net loss per share in 2006 was offset in part by a significant increase in the weighted average number of shares outstanding of 81,508,000 in 2006 as compared to 65,044,000 in 2005.

## **Liquidity and Capital Reserves**

Since its inception the Company has been unable to sell POSICAMTM systems in quantities sufficient to be operationally profitable. Consequently, the Company has sustained substantial losses. At December 31, 2006, the Company had an accumulated deficit of \$68,825,000. Due to the sizable prices of the Company's systems and the limited number of systems sold or placed in service each year, the Company's revenues have fluctuated significantly year to year.

At December 31, 2006, the Company had cash and cash equivalents of \$115,000 compared to \$209,000 at December 31, 2005. The Company received \$2,478,000 and \$2,569,000 in 2006 and 2005 respectively, in equity and debt financings. In spite of the funding, the Company believes that it is possible that it may continue to experience operating losses and accumulate deficits in the foreseeable future. If the Company is 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.

The opinion of the Company's independent auditor for the year ended December 31, 2006, expressed substantial doubt as to the Company's ability to continue as a going concern. The Company will need to increase system sales to become profitable and/or obtain additional capital.

#### **Related Party Transactions**

**IMAGIN Transaction** 

Financing Agreements dated May 21, 2004

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On May 26, 2004 and June 17, 2004, the Company sold two separate secured convertible promissory notes under a Note Purchase Agreement dated May 21, 2004, to IMAGIN in the principal amounts of \$400,000 and \$300,000, respectively. Interest accrued on the outstanding principal at the rate of ten percent (10%) per annum and was payable annually to the extent of positive cash flow on the anniversary dates of these notes. The principal and any unpaid interest were due on the earlier to occur of May 21, 2006 or when declared due and payable by IMAGIN upon occurrence of an event of default. The notes were initially convertible into new shares of Series C Preferred Stock that, in turn was convertible into an aggregate of 35,000,000 shares of the Company's common stock. These notes were collateralized by all of the assets of the Company. On October 21, 2005, \$770,000 in principal and accrued and unpaid interest were converted into 770,000 shares of Series C Preferred Stock. These shares of Series C Preferred Stock were subsequently assigned by IMAGIN to Positron Acquisition Corp. In a second stage of the May 2004 financing IMAGIN agreed to purchase additional secured convertible promissory notes in the aggregate principal amount of \$1,300,000. These notes were to be purchased over a six and a half month period, commencing July 15, 2004 and were due and payable on May 21, 2006. These notes were initially convertible into new shares of Series D Preferred Stock that, in turn is convertible into an aggregate of 52,000,000 shares of the Company's common stock. As of June 30, 2005, principal of \$1,208,500 had been advanced related to these notes. On June 30, 2005, IMAGIN converted \$575,000 of these promissory notes into shares of Series D Preferred Stock that, in turn were converted into 23,000,000 shares of the Company's common stock. This conversion reduced the principal owed under these promissory notes from \$1,208,500 to \$633,500. The remaining \$633,500 of principal convertible notes plus notes for \$63,350 in accrued interest was assigned by IMAGIN to Positron Acquisition Corp, a wholly-owned subsidiary of Imagin Molecular Corporation, an affiliate of the Company.

In September 2006 the convertible instruments discussed above were converted to shares of Positron Corporation Series B Preferred Stock. See discussion below.

#### Financing Agreements dated August 8, 2005

On August 8, 2005, the Company sold to IMAGIN 10% secured convertible promissory notes under a Note Purchase Agreement, dated the same date, in the aggregate principal amount of \$400,000. As of September 30, 2005, IMAGIN has purchased \$400,000 of these notes. These notes are due and payable on August 7, 2008. These notes are convertible into an aggregate of 20,000,000 shares of the Company's common stock. Pursuant to the terms of the agreements, the Company granted to IMAGIN a security interest in all of its assets to secure payment of the convertible promissory notes. The security interest is subordinate to the security interest previously granted in the same collateral to IMAGIN and Solaris.

In September 2006 the convertible instruments discussed above were converted to shares of Positron Corporation Series B Preferred Stock. See discussion below.

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#### Financing Agreements dated October 31, 2005

On October 31, 2005, the Company sold to IMAGIN 10% secured convertible promissory notes under a Note Purchase Agreement, dated the same date, in the aggregate principal amount of \$400,000. As of January 2006, IMAGIN has purchased \$400,000 of these notes. These notes are due and payable on October 31, 2008. These notes are convertible into an aggregate of 20,000,000 shares of the Company's common stock.

Pursuant to the terms of the agreements, the Company granted to IMAGIN a security interest in all of its assets to secure payment of the convertible promissory notes. The security interest is subordinate to the security interest previously granted in the same collateral to IMAGIN and Solaris.

In September 2006 the convertible instruments discussed above were converted to shares of Positron Corporation Series B Preferred Stock. See discussion below.

## Transactions with Solaris Opportunity Fund, L.P.

# Financing Agreements dated February 28, 2005

On February 28, 2005, the Company entered into a series of agreements with Solaris pursuant to which Solaris agreed to purchase an aggregate of \$1,000,000 face amount of the Company's 10% secured convertible promissory notes. As of September 30, 2005, Solaris had purchased all \$1,000,000 of these notes. These notes are due and payable on March 6, 2007. The notes were initially convertible into new shares of Series E Preferred Stock that, in turn are convertible into an aggregate of 22,000,000 shares of the Company's common stock. Pursuant to the terms of the agreements, the Company granted to Solaris a security interest in all of its assets to secure payment of the convertible promissory notes. The security interest is subordinate to the security interest previously granted in the same collateral to IMAGIN.

During 2006 Solaris sold the \$1,000,000 principal amount of these notes to IMAGIN.

In September 2006 the convertible instruments discussed above were converted to shares of Positron Corporation Series B Preferred Stock. See discussion below Financing Agreements dated June 27, 2005

On June 27, 2005, the Company entered into a series of agreements with Solaris pursuant to which Solaris agreed to purchase an aggregate of \$400,000 face amount of the Company's 10% secured convertible promissory notes. As of September 30, 2005, Solaris had purchased all \$400,000 of these notes. These notes were due and payable on March 6, 2007. The notes are initially convertible into new shares of Series F Preferred Stock that, in turn are convertible into an aggregate of 20,000,000 shares of the Company's common stock. Pursuant to the terms of the agreements, the Company granted to Solaris a security interest in all of its assets to secure payment of the convertible promissory notes. The security interest is subordinate to the security interest previously granted in the same collateral to IMAGIN and Solaris.

During 2006 Solaris sold the principal amount of these notes to Quantum Molecular Pharmaceuticals, Inc. ("QMP").

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In September 2006 the convertible instruments discussed above were converted to shares of Positron Corporation Series B Preferred Stock. See discussion below

#### **Conversion To Series B Preferred Stock**

On September 30, 2006 the Board of Directors authorized a new 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. As of December 31, 2006, 5,739,860.5 shares of Series B Preferred Stock were outstanding.

The Company and IMAGIN, Inc converted principal and interest of \$1,164,192 outstanding upon the Series E Convertible Promissory Notes and principal and interest of \$877,669 of Convertible Secured Notes into 690,930.5 shares of Series B Preferred Stock.

The Company and Positron Acquisition Corp. converted principal and interest of \$818,066 outstanding upon the Series D Secured Convertible Promissory Notes and 770,000 shares of Series C Preferred Stock into 762,358 shares of Series B Preferred Stock. Positron Acquisition Corp. subsequently converted 40,000 shares of Series B Preferred Stock into 4,000,000 shares of the Company's Common Stock.

The Company and QMP converted principal and interest of \$453,144 outstanding upon the Series F Secured Convertible Promissory Notes into 226,572 shares of Series B Preferred Stock.

# **Acquisition of IMAGIN Interest in IPT**

On January 26, 2007, the Company executed and consummated a Securities Purchase Agreement (the "Agreement") with IMAGIN, to acquire 11,523,000 shares of common stock of IPT. The Shares represented approximately a 50.1% of IPT's issued and outstanding common stock. As a result of the acquisition of the Shares, the Company owns 100% of the common stock of IPT. As consideration for the shares, the Company and IMAGIN agreed to cancel a promissory note in the principal amount of \$2,400,000 made by IMAGIN subsidiary, Quantum and later assigned to IMAGIN. As of the date of the Agreement, the Company had been advised by IMAGIN that it had acquired all of QMP's interest in IPT as well as QMP's other holdings of the Company's related securities.

Immediately following the acquisition of the Shares, IPT acquired all of the outstanding capital stock of the Company's wholly-owned subsidiary, QMT. The purchase price of the acquisition was \$2,800,000, in the form of a promissory note made in favor of the Company, payable on or before July 1, 2008, and secured by a pledge of all of the issued and outstanding shares of QMT

#### **New Accounting Pronouncements**

In June 2005, the FASB issued SFAS No. 154, "Accounting Changes and Error Corrections," which will require entities that voluntarily make a change in accounting principle to apply that change retroactively to prior periods' financial statements unless this would be impracticable. SFAS No. 154supersedes Accounting Principles Board Opinion No. 20, "Accounting Changes" ("APB No. 20"), which previously required that most voluntary changes in accounting principle be recognized by including in the current period's net income the cumulative effect of changing to the new accounting principle. SFAS No. 154 also makes a distinction between "retrospective application" of an accounting principle and the "restatement" of financial statements to reflect the correction of an error. Another significant change in practice under SFA No. 154 will be that if an entity changes its method of depreciation, amortization, or depletion for long-lived, non-financial assets, the change must be accounted for as a change in accounting principle. SFAS No. 154 applies to accounting changes and error corrections that are made in fiscal years beginning after December 15, 2005. The provisions of SFAS No. 154 did not impact the Company's consolidated financial statements.

In June 2006, the FASB released FASB Interpretation No. 48, "Accounting for Uncertainty in Income Taxes," an interpretation of FASB Statement No. 109 ("FIN 48"). FIN 48 prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. A company must determine whether it is "more-likely-than-not" that a tax position will be sustained upon examination, including resolution of any related appeals or litigation procedures, based on the technical merits of the position. Once it is determined that a position meets the more-likely-than-not recognition threshold, the position is measured to determine the amount of benefit to recognize in the financial statements. This interpretation is effective for fiscal years beginning after December 15, 2006. Earlier application of the provisions of this interpretation is encouraged if the enterprise has not yet issued financial statements, including interim financial statements, in the period this interpretation is adopted. The provisions of FIN 48 are not expected to have a material effect the Company's consolidated financial statements.

#### **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:

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#### **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.

#### **Revenue Recognition**

Revenues from POSICAM<sup>TM</sup> system contracts, IPT's PulseCDC<sup>TM</sup> compact digital cardiac camera (sold under the IS2 brand name) 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-KSB 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<sup>TM</sup> 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.

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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<sup>TM</sup> 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.

#### **DIVIDENDS**

We have never paid a cash dividend on our common stock. It is our present policy to retain earnings, if any, to finance the development and growth of our business. Accordingly, we do not anticipate that cash dividends will be paid until our earnings and financial condition justify such dividends. There can be no assurance that we can achieve such earnings.

#### PENNY STOCK CONSIDERATIONS

Broker-dealer practices in connection with transactions in "penny stocks" are regulated by certain penny stock rules adopted by the Securities and Exchange Commission. 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 system). Penny stock rules require a broker-dealer, prior to a transaction in a penny stock not otherwise exempt from the rules, to deliver a standardized risk disclosure document that provides information about penny stocks and the risks in the penny stock market. The broker-dealer also must 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, and monthly account statements showing the market value of each penny stock held in the customer's account. The broker-dealer must also 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 requirements may have the effect of reducing the level of trading activity, if any, in the secondary market for a security that becomes subject to the penny stock rules.

#### SELLING STOCKHOLDERS

#### Selling Security Holders and Recent Financing

On May 26, 2006, we entered into a Securities Purchase Agreement for a total subscription amount of \$2,000,000 that included Stock Purchase Warrants and Callable Secured Convertible Notes with AJW Partners, LLC, AJW Offshore, Ltd., AJW Qualified Partners, LLC and New Millennium Capital Partners II, LLC (the "Selling Stockholders"). The initial funding of \$700,000 was completed on May 26, 2006 with the following parties and evidenced by callable secured convertible notes: AJW Partners, LLC invested \$71,400; AJW Offshore, Ltd. invested \$411,600; AJW Qualified Partners, LLC invested \$195,300 and New Millennium Capital Partners II, LLC invested \$9,100. The parties received the following number of warrants; AJW Partners, LLC - 3,060,000 warrants; AJW Offshore, Ltd. - 18,180,000 warrants; AJW Qualified Partners, LLC - 8,370,000 warrants; and New Millennium Capital Partners II, LLC - 390,000 Warrants. The callable secured convertible notes are convertible into shares of our common stock based upon an average of the lowest three intra-day trading prices of our common stock during the 20 days immediately prior to the conversion date multiplied by the "Applicable Percentage". Applicable percentage means 50% initially, 55% upon filing of the Registration Statement with the SEC and 65% when the Registration Statement is

declared effective by the SEC. The exercise price of the warrants is \$.15 per share and may be exercised on a cashless basis by exercising less than the number of shares underlying the warrants based upon the difference between the market price and the exercise price of the common stock. Under the terms of the callable secured convertible note and the related warrants, the callable secured convertible notes and the warrants are exercisable by any holder only to the extent that the number of shares of common stock issuable pursuant to such securities, together with the number of shares of common stock owned by such holder and its affiliates (but not including shares of common stock underlying unconverted shares of callable secured convertible notes or unexercised portions of the warrants) would not exceed 4.99% of the then outstanding common stock as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934. In addition, pursuant to the Securities Purchase Agreement, we are required to purchase key man life insurance and are in the process of securing such life insurance policies.

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There is a final funding commitment of \$700,000 once this registration statement is declared effective.

The following table sets forth the names of the Selling Stockholders, the number of shares of common stock beneficially owned by each of the Selling Stockholders as of August 7, 2007 and the number of shares of common stock being offered by the Selling Stockholders. The shares being offered hereby are being registered to permit public secondary trading, and the Selling Stockholders may offer all or part of the shares for resale from time to time. However, the Selling Stockholders are under no obligation to sell all or any portion of such shares nor are the Selling Stockholders obligated to sell any shares immediately upon effectiveness of this prospectus. All information with respect to share ownership has been furnished by the Selling Stockholders.

Name of Selling Stockholder (11)	Percent of Shares of common stock owned prior to the Offering (1)	Common Shares owned prior to the Offering (2)	Shares of common stock to be sold in the Offering	Number of Shares owned after the Offering
AJW Partners, LLC (7)	0%	0	1,351,084 (3)	0
AJW Offshore, Ltd. (8)	0%	0	8,027,353 (4)	0
AJW Qualified Partners, LLC (9)	0%	0	3,695,700 (5)	0
New Millennium Capital Partners II, LLC	0%	0	172,103 (6)	0

- (1) Based on 87,205,202 shares issued and outstanding as of August 7, 2007.
- The conversion has been calculated based on the maximum number of Shares the investors can receive in accordance with the 6% Callable Secured Convertible Notes. The number of shares set forth in the table for the Selling Stockholders represents an estimate of the number of shares of common stock to be offered by the Selling Stockholders. The actual number of shares of common stock issuable upon conversion of the notes and exercise of the warrants is indeterminate, is subject to adjustment and could be materially less or more than such estimated number depending on factors which cannot be predicted by us at this time including, among other factors, the future market price of the common stock. The actual number of shares of common stock offered in this prospectus, and included in the registration statement of which this prospectus is a part, includes such additional number of shares of common stock as may be issued or issuable upon conversion of the notes and exercise of the related warrants by reason of any stock split, stock dividend or similar transaction involving the common stock, in accordance with Rule 416 under the Securities Act of 1933. Under the terms of the notes, if the notes had actually been converted on May 26, 2006, the conversion price would have been \$0.05616. Under the terms of the notes and the related warrants, the notes are convertible and the warrants are exercisable by any holder only to the extent that the number of shares of common stock issuable pursuant to such securities, together with the number of shares of common stock owned by such holder and its affiliates (but not including shares of common stock underlying unconverted shares of notes or unexercised portions of the warrants) would not exceed 4.99% of the then outstanding common stock as determined in accordance with Section 13(d) of the Exchange Act. Accordingly, the number of shares of common stock set forth in the table for the selling stockholder exceeds the number of shares of common stock that the selling stockholder could own beneficially at any given time through their ownership of the notes and the warrants.
- (3) Calculated based upon a good faith estimate by us of the number of shares of our Common Stock issuable upon the conversion of the secured convertible notes. For purposes of estimating the number of shares of our Common Stock to be included in this registration statement, we calculated a good faith estimate of the number of shares that we believe will be issuable upon conversion of the secured convertible notes to account for market fluctuations,

anti-dilution and price protection adjustments

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- (4) Calculated based upon a good faith estimate by us of the number of shares of our Common Stock issuable upon the conversion of the secured convertible notes. For purposes of estimating the number of shares of our Common Stock to be included in this registration statement, we calculated a good faith estimate of the number of shares that we believe will be issuable upon conversion of the secured convertible notes to account for market fluctuations, anti-dilution and price protection adjustments
- (5) Calculated based upon a good faith estimate by us of the number of shares of our Common Stock issuable upon the conversion of the secured convertible notes. For purposes of estimating the number of shares of our Common Stock to be included in this registration statement, we calculated a good faith estimate of the number of shares that we believe will be issuable upon conversion of the secured convertible notes to account for market fluctuations, anti-dilution and price protection adjustments
- (6) Calculated based upon a good faith estimate by us of the number of shares of our Common Stock issuable upon the conversion of the secured convertible notes. For purposes of estimating the number of shares of our Common Stock to be included in this registration statement, we calculated a good faith estimate of the number of shares that we believe will be issuable upon conversion of the secured convertible notes to account for market fluctuations, anti-dilution and price protection adjustments
- (7) AJW Partners, LLC is a private investment fund that is owned by its investors and managed by SMS Group, LLC. SMS Group, LLC of which Mr. Corey S. Ribotsky is the fund manager, has voting and investment control over the shares listed below owned by AJW Partners, LLC.
- (8) AJW Offshore, Ltd. is a private investment fund that is owned by its investors and managed by First Street Manager II, LLC. First Street Manager II, LLC, of which Corey S. Ribotsky is the fund manager, has voting and investment control over the shares listed below owned by AJW Offshore Ltd.
- (9) AJW Qualified Partners, LLC is a private investment fund that is owned by its investors and managed by AJW Manager, LLC of which Corey S. Ribotsky and Lloyd A. Groveman are the fund managers, have voting and investment control over the shares listed below owned by AJW Qualified Partners, LLC.
- (10) New Millennium Capital Partners II, LLC is a private investment fund that is owned by its investors and managed by First Street Manager II, LLC. First Street Manager II LLC of which Corey S. Ribotsky is the fund manager, has voting and investment control over the shares listed below owned by New Millennium Capital Partners, LLC.
- (11) None of the Selling Stockholders are broker-dealers or affiliates of broker-dealers.

#### PLAN OF DISTRIBUTION

All of the stock owned by the selling security holders will be registered by the registration statement of which this prospectus is a part. The selling security holders may sell some or all of their shares immediately after they are registered. The selling security holders shares may be sold or distributed from time to time by the selling stockholders or by pledgees, donees or transferees of, or successors in interest to, the selling stockholders, directly to one or more purchasers (including pledgees) or through brokers, dealers or underwriters who may act solely as agents or may acquire shares as principals, at market prices prevailing at the time of sale, at prices related to such prevailing market prices, at negotiated prices or at fixed prices, which may be changed. The distribution of the shares may be effected in one or more of the following methods:

ordinary brokers transactions, which may include long or short sales,

- \* transactions involving cross or block trades on any securities or market where our common stock is trading,
- \*purchases by brokers, dealers or underwriters as principal and resale by such purchasers for their own accounts pursuant to this prospectus, "at the market" to or through market makers or into an existing market for the common stock,
- \*in other ways not involving market makers or established trading markets, including direct sales to purchasers or sales effected through agents,
- \* through transactions in options, swaps or other derivatives (whether exchange listed or otherwise), or
- \* any combination of the foregoing, or by any other legally available means.

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In addition, the selling stockholders may enter into hedging transactions with broker-dealers who may engage in short sales, if short sales were permitted, of shares in the course of hedging the positions they assume with the selling stockholders. The selling stockholders may also enter into option or other transactions with broker-dealers that require the delivery by such broker-dealers of the shares, which shares may be resold thereafter pursuant to this prospectus.

Brokers, dealers, underwriters or agents participating in the distribution of the shares may receive compensation in the form of discounts, concessions or commissions from the selling stockholders and/or the purchasers of shares for whom such broker-dealers may act as agent or to whom they may sell as principal, or both (which compensation as to a particular broker-dealer may be in excess of customary commissions). The selling stockholders and any broker-dealers acting in connection with the sale of the shares hereunder may be deemed to be underwriters within the meaning of Section 2(11) of the Securities Act of 1933, and any commissions received by them and any profit realized by them on the resale of shares as principals may be deemed underwriting compensation under the Securities Act of 1933. Neither the selling stockholders nor we can presently estimate the amount of such compensation. We know of no existing arrangements between the selling stockholders and any other stockholder, broker, dealer, underwriter or agent relating to the sale or distribution of the shares.

We will not receive any proceeds from the sale of the shares of the selling security holders pursuant to this prospectus. We have agreed to bear the expenses of the registration of the shares, including legal and accounting fees, and such expenses are estimated to be approximately \$100,000.

We have informed the selling stockholders that certain anti-manipulative rules contained in Regulation M under the Securities Exchange Act of 1934 may apply to their sales in the market and have furnished the selling stockholders with a copy of such rules and have informed them of the need for delivery of copies of this prospectus. The selling stockholders may also use Rule 144 under the Securities Act of 1933 to sell the shares if they meet the criteria and conform to the requirements of such rule.

# **USE OF PROCEEDS**

We will not receive any proceeds from the sale of the shares of our common stock offered by any of the selling security holders. The selling security holders will receive all proceeds directly.

#### **DILUTION**

The net tangible book value of the Company as of March 31, 2007 was (\$ 4,671,000) or (\$ 0.05) per share of Common Stock outstanding on March 31, 2007. Net tangible book value per share is determined by dividing the tangible book value of the Company (i.e., total assets less total intangible assets less total liabilities) by the number of outstanding shares of our Common Stock. Since this Offering is being made solely by the selling stockholders and none of the proceeds will be paid to the Company, our total assets less total intangible assets will be unaffected by this Offering.

#### LEGAL PROCEEDINGS

There are no legal proceedings pending or threatened legal actions against us.

#### DIRECTORS, EXECUTIVE OFFICERS, PROMOTERS AND CONTROL PERSONS

Our executive officers and directors and their respective ages as of August 7, 2007 are as follows:

#### **Directors and Executive Officers**

The following table sets forth for each director of the Company the current executive officers of the Company and the director nominee, their ages and present positions with the Company:

Name	Age	Position with the Company
Patrick G. Rooney	43	Chairman of the Board
Joseph G. Oliverio	36	President and Director
Corey N. Conn	43	CFO and EVP Operations
Sachio Okamura	54	Director
Dr. Anthony (Tony) C. Nicholls	57	Director

Each of the nominees, directors and named current executive officers of the Company has been engaged in the principal occupations set forth below during the past five (5) years.

Patrick G. Rooney. Mr. Rooney has served as Chairman of the Company since July 26, 2004. 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 was 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 managed Digital Age Ventures, Ltd., a venture capital investment company. Mr. Rooney attended Wagner College of New York from 1980 through 1984.

Joseph G. Oliverio. Mr. Oliverio has served as President of the Company since December 27, 2005. Prior to becoming President of the Company, Mr. Oliverio was the Chief Operating Officer of Michael E. Merhige, M.D., LLC, a well known 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. Mr. Oliverio has been involved with the Company in various capacities since 1995. Mr. Oliverio has also joined 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 and PET/CT products.

Corey N. Conn. Mr. Conn was appointed by the Board of Directors to serve as Chief Financial Officer and Executive Vice President of Operations in Operations. Mr. Conn brings over 15 years of experience in developing and managing information services companies. Mr. Conn currently is President of Imagin Molecular Corporation, a holding company whose focus is developing and acquiring equity positions in companies associated with Medical Imaging. Mr. Conn was Vice President of Business Development at iXL, an e-business and e-transformations services provider from 1995 - 1999 and also served as Managing Director of Virtual Partnerships, LLC, a business development and business strategy consulting firm from 1999 - 2004.

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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 was nominated for election to the Board of Directors by the vote of the Board of Directors. Dr. Nicholls is currently CEO of L3Technology Ltd in England, a company formed to commercialize patented medical technology developed in UK government research laboratories. Additionally, he is Chairman of the Alpha Omega Hospital Management Trust Ltd (London, UK) which undertakes the construction and management of cancer treatment "Centres of Excellence" and a Director of European Diagnostics plc (London UK) a company developing products for patient point-of-care testing. Until 2002, Dr Nicholls was Chairman and CEO of FAS Medical Ltd, a company primarily involved in the management of central venous catheterization complications. Prior to working with FAS Medical Ltd., Dr. Nicholls was the Head of Microbiology and Immunology at the Midhurst Medical Research Institute in the UK. Dr. Nicholls is a graduate of the University of Birmingham School of Medical Sciences and has a Ph.D. in Immunology.

#### Term of Office

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

# 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)

		% of
		Outstanding
	Number of Shares of	Common
Name and Address of Beneficial Owner	Common Stock	Stock(b)(c)
IMAGIN Diagnostic Centres, Inc.	460,299,250(d)	69.6%
Positron Acquisition Corp.	80,261,800(e)	12.1%
Imaging Pet Technologies, Inc.	65,000,000(f)(g)	9.8%

(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) Based on 87,205,202 shares of Common Stock outstanding on August 7, 2007.
- (c) The percentage of outstanding Common Stock assumes full conversion Convertible Series A and B Preferred Stock into Common Stock and is based on the Company's outstanding shares of Common Stock as of August 7, 2007.
- (d) Includes 18,974,000 shares owned directly, shares issuable upon full conversion of 4,367,503 shares of Series B Preferred Stock into Common Stock, and 4,575,000 shares that may be acquired pursuant to warrants that are or will become exercisable within 60 days of August 7, 2007. The address for IMAGIN is 5160 Yonge Street, Suite 300, Toronto, Ontario, M2N 6L9.
- (e) Includes 8,026,000 shares owned directly and shares issuable upon full conversion of 722,358 shares of Series B Preferred Stock into Common Stock. The address for Positron Acquisition Corp. is 104 W. Chestnut Street #315, Hinsdale, Illinois 60521.
- (f) Represents shares issuable upon full conversion of 650,000 shares of Series B Preferred Stock into Common Stock. The address for Imaging Pet Technologies, Inc. is 5160 Yonge Street, Suite 300, Toronto, Ontario, M2N 6L9.
- (g) In March 2007, holders of Imaging PET Technologies, Inc.'s Class A Preferred Stock exchanged their shares for 836,250 shares of the Registrant's Series B Preferred Stock. The Registrant has not consummated the exchange of these shares.

#### Security Ownership of Directors, Director Nominees and Executive Officers

		Beneficial	Percent of
Title of Class	Name of Beneficial Owner	Ownership (aa) (cc)	Class (bb)
Common	Joseph G. Oliverio	4,000,000 (dd)	4.4%
Common	Sachio Okamura	650,000 (ee)	*
Common	Patrick G. Rooney	2,575,000 (ff)	2.9%
Common	Dr. Anthony C. Nicholls	550,000 (gg)	*
Common	Corey N. Conn	2,000,000 (hh)	2.2%
Common	Timothy M. Gabel	1,500,000 (ii)	1.7%
	All Directors and Executive Officers		
Common	as a Group	11,275,000	11.4%

<sup>\*</sup> Does not exceed 1% of the referenced class of securities.

- (aa) Ownership is direct unless indicated otherwise.
- (bb) Calculation based on 87,205,202 shares of Common Stock outstanding as of April 10, 2007 plus stock options that are or will become exercisable within 60 days of August 7, 2007.
- (cc) The percentage of outstanding Common Stock assumes full conversion of the 10% secured convertible notes into Common Stock and is based on the Company's outstanding shares of Common Stock as of August 7, 2007.
- (dd) Includes 4,000,000 shares that may be acquired by Mr. Oliverio pursuant to stock options that are or will become exercisable within 60 days of August 7, 2007.
- (ee) Includes 650,000 shares that may be acquired by Mr. Okamura pursuant to stock options that are or will become exercisable within 60 days of August 7, 2007
- (ff) Includes 2,575,000 shares that may be acquired by Mr. Rooney pursuant to stock options that are or will become exercisable within 60 days of August 7, 2007.
- (gg) Includes 550,000 shares that may be acquired by Mr. Nicholls pursuant to options that are or will be exercisable within 60 days of August 7, 2007.
- (hh) Includes 2,000,000 shares that may be acquired by Mr. Conn pursuant to stock options that are or will become exercisable within 60 days of August 7, 2007.
- (ii) 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 August 7, 2007.

Name and Address of Beneficial Owner	Number of Shares of Series A Preferred	% of Outstanding Series A Preferred Stock <sup>(a)</sup>
Fleet Securities		
26 Broadway, NY, NY 10004	51,032	11.0%
Anthony J. Cantone		
675 Line Road, Aberdeen, NJ 07747	50,000	10.8%
Jamscor, Inc.		
170 Bloor St. W., #804		
Toronto, Ontario, Canada M5S 179	50,000	10.8%
Morgan Instruments, Inc.	41,666	9.0%
4382 Glendale - Milford Rd.		

Cincinnati, C	OH 45242		
John H. Wils 6309 Desco l	son Dr., Dallas, TX 75225	33,333	7.2%
(a)	Based on 464,319 Series A Preferred Sha	ares outstanding on August 7, 2007.	
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Name and Address of Beneficial Owner	Number of Shares of Series B Preferred	% of Outstanding Series B Preferred Stock <sup>(a)</sup>
Positron Acquisition Corp. 104 W. Chestnut Street #315 Hinsdale, Illinois 60521	722,358	12.6%
Imagin Diagnostic Centres, Inc. 5160 Yonge Street Suite 300, Toronto, Ontario M2N 619	4,367,503	76.1%

<sup>(</sup>a) Based on 5,739,861 Series B Preferred Shares outstanding on August 7, 2007.

#### **DESCRIPTION OF SECURITIES**

#### General

Our authorized capital stock consists of 800,000,000 shares of common stock at a par value of \$ 0.01 per share and 10,000,000 shares of preferred stock at a par value of \$1.00 per share.

#### Common Stock

As of August 7, 2007, 87,205,202 shares of common stock are issued and outstanding and held by 268 shareholders. Holders of our common stock are entitled to one vote for each share on all matters submitted to a stockholder vote.

Holders of common stock do not have cumulative voting rights.

Therefore, holders of a majority of the shares of common stock voting for the election of directors can elect all of the directors. Holders of our common stock representing a majority of the voting power of our capital stock issued and outstanding and entitled to vote, represented in person or by proxy, are necessary to constitute a quorum at any meeting of our stockholders. A vote by the holders of a majority of our outstanding shares is required to effectuate certain fundamental corporate changes such as liquidation, merger or an amendment to our Articles of Incorporation.

Holders of common stock are entitled to share in all dividends that the board of directors, in its discretion, declares from legally available funds. In the event of a liquidation, dissolution or winding up, each outstanding share entitles its holder to participate pro rata in all assets that remain after payment of liabilities and after providing for each class of stock, if any, having preference over the common stock. Holders of our common stock have no pre-emptive rights, no conversion rights and there are no redemption provisions applicable to our common stock.

#### **Preferred Stock**

The Company's Articles of Incorporation 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 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. At August 7, 2007, the Company had three classes of preferred stock outstanding, which are the Series A 8% Cumulative Convertible Redeemable Preferred Stock, the Series B Convertible Redeemable 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.

As of March 31, 2007 stated dividends that are undeclared and unpaid on the Series A Preferred Stock total \$464,000 and the Company anticipates that such dividends, if and when declared, will be paid in shares of Series A Preferred Stock.

#### **Series B Preferred Stock**

On September 30, 2006, the Company reorganized the structure of debt and convertible equity of its three largest finance partners: Positron Acquisition Corporation ("PAC"); Quantum Molecular Pharmaceuticals, Inc. ("QMP"); and Imagin Diagnostic Centres, Inc. ("IDC"). Through this reorganization, the Company converted all of its outstanding convertible debt held by PAC, QMP and IDC, together with all accrued interest and dividends on the convertible notes and the Series C, Series D and Series E Preferred Stock into a new class of the Company's Series B Convertible Preferred Stock.

The Company has designated 9,000,000 shares out of its 10,000,000 shares of authorized preferred stock as Series B Convertible Preferred Stock, \$1.00 par value ("Series B Preferred Stock"). Each share of the Series B Preferred Stock is convertible into 100 shares of Common Stock. The Series B Preferred Stock is senior to the Company's Common Stock and junior in priority to the Company's Series A Preferred Stock in liquidation. Holders of the Series B Preferred Stock are entitled to 100 votes per share on any matter requiring shareholder vote.

The Company and IDC converted the \$1,164,192 of principal and interest outstanding upon the Series E Convertible Notes and the \$877,669 of principal and interest outstanding upon the Convertible Secured Notes held by IDC into 690,930.5 shares of Series B Preferred Stock. The Company and PAC converted the \$818,066 of principal and interest outstanding upon the Series D Secured Convertible Promissory Notes and the 770,000 shares of Series C Preferred Stock into 762,358 shares of Series B Preferred Stock. PAC subsequently converted 40,000 shares of Series B Preferred Stock into 4,000,000 shares of the Company's Common Stock. The Company and QMP converted the \$453,144 of principal and interest outstanding upon the Series F Secured Convertible Promissory Notes into 226,572 shares of Series B Preferred Stock.

As of August 7, 2007, there were a total of 5,739,861 shares of Series B Preferred Stock outstanding, convertible into 573,986,100 shares of Common Stock.

#### **Series G Preferred Stock**

The Company has designated 500,000 shares out of its 10,000,000 shares of authorized preferred stock as 8% Cumulative Convertible Redeemable Series G Preferred Stock \$1.00 par value. Each share of the Series G Preferred Stock is convertible into 100 shares of Common Stock. Eight percent dividends accrue on the Series G Preferred Stock and may be paid in cash or in Common Stock depending on the Company's operating cash flow. The Series G Preferred Stock is senior to the Company's Common Stock and junior in priority to the Company's Series A and B 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 August 7, 2007 there are 110,581 shares of Series G Preferred Stock outstanding.

#### Convertible Notes

On March 3, 2006, we entered into a Securities Purchase Agreement for a total subscription amount of \$2,000,000 that included Stock Purchase Warrants and Callable Secured Convertible Notes with AJW Capital Partners, LLC, AJW Offshore, Ltd., AJW Qualified Partners, LLC and New Millennium Capital Partners II, LLC. The initial funding of \$700,000 (we received net proceeds of \$570,000) was completed on May 26, 2006 with the following parties and evidenced by callable secured convertible notes: AJW Partners, LLC invested \$71,400; AJW Offshore, Ltd. invested \$424,00; AJW Qualified Partners, LLC invested \$195,300; and New Millennium Capital Partners II, LLC invested \$9,100. The callable secured convertible notes are convertible into shares of our common stock at a variable conversion price based upon the applicable percentage of the average of the lowest three (3) Trading Prices for the Common Stock during the twenty (20) Trading Day period prior to conversion. The "Applicable Percentage" means 50%; provided, however, that the Applicable Percentage shall be increased to (i) 55% in the event that a Registration Statement is filed within thirty days of the closing and (ii) 60% in the event that the Registration Statement becomes effective within one hundred and twenty days from the Closing. Under the terms of the callable secured convertible note and the related warrants, the callable secured convertible note and the warrants are exercisable by any holder only to the extent that the number of shares of common stock issuable pursuant to such securities, together with the number of shares of common stock owned by such holder and its affiliates (but not including shares of common stock underlying unconverted shares of callable secured convertible notes or unexercised portions of the warrants) would not exceed 4.99% of the then outstanding common stock as determined in accordance with Section 13(d) of the Exchange Act. After the initial investment aggregating \$700,000 by the above parties, the parties funded an additional \$600,000 upon the filing of our Form S-3 Registration Statement on June 20, 2006, (the S-3 was withdrawn on August 29, 2006). Within 2 days after the effectiveness of this registration statement we will be funded an additional \$700,000 principal amount.

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#### Warrants

Based on our recent financing, we issued 30,000,000 warrants with an exercise price of \$0.15. Specifically, the parties received the following amount warrants: AJW Capital Partners, LLC - 8,370,000 warrants; AJW Offshore, Ltd. - 18,180,000 warrants; AJW Partners, LLC - 3,060,000 warrants; and New Millennium Capital Partners II, LLC - 390,000 warrants.

Each Warrant entitles the holder to one share of our common stock and is exercisable for seven years from May 26, 2006.

## **Options**

See "Summary of Equity Compensation Plans", page 43.

#### INTERESTS OF NAMED EXPERTS AND COUNSEL

No expert or counsel named in this prospectus as having prepared or certified any part of this prospectus or having given an opinion upon the validity of the securities being registered or upon other legal matters in connection with the registration or offering of the common stock was employed on a contingency basis, or had, or is to receive, in connection with the offering, a substantial interest, direct or indirect, in the registrant or any of its parents or subsidiaries. Nor was any such person connected with the registrant or any of its parents or subsidiaries as a promoter, managing or principal underwriter, voting trustee, director, officer, or employee. Levy & Boonshoft, P.C., our independent legal counsel, has provided an opinion on the validity of our common stock.

The financial statements for the year ending December 31, 2006 and December 31, 2005 included in this prospectus and the registration statement have been audited by Frank L. Sassetti & Company, L.P., and Ham, Langston & Brezina, L.L.P., respectively certified public accountants, to the extent and for the periods set forth in their report appearing elsewhere herein and in the registration statement, and are included in reliance upon such report given upon the authority of said firm as experts in auditing and accounting.

# DISCLOSURE OF COMMISSION POSITION OF INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Our directors and officers are indemnified as provided by the Texas Statutes and our Bylaws. We have been advised that in the opinion of the Securities and Exchange Commission indemnification for liabilities arising under the Securities Act is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities is asserted by one of our directors, officers, or controlling persons in connection with the securities being registered, we will, unless in the opinion of our legal counsel the matter has been settled by controlling precedent, submit the question of whether such indemnification is against public policy to a court of appropriate jurisdiction. We will then be governed by the court's decision.

## ORGANIZATION WITHIN LAST FIVE YEARS

We were incorporated in the State of Texas on December 20, 1983.

#### **USE OF PROCEEDS**

To date, we have received net proceeds of \$1,300,000 under the terms of the securities purchase agreement. We shall receive the balance as follows: net proceeds of \$700,000 within 2 days of this registration statement being declared effective by the SEC. If the SB-2 is not declared effective within 120 days after May 26, 2006, we must pay a penalty of 2% of the outstanding principal balance of the callable secured convertible notes for each thirty-day period that the SB-2 is not declared effective.

To date we have received \$1,300,000 under the terms of the securities purchase agreement. We have applied these funds in the manner outlined in the table below.

Gross Proceeds Received	\$ 1,300,000.
Less - Use of Proceeds	\$ -
Prorated Closing Costs and Fees	(220,000.)
Expenses for acquisition of IS2 Systems	\$ (638,750.)

Total Proceeds Utilized	\$ 140,000.
Net Retained for operating expenses	\$ 301,250

The remaining proceeds will be used to fund the Company's operations.

With an existing forecast of minimum revenues of approximately \$2,000,000 for the balance of 2007, management believes that with the operational cash to be generated and the retained working capital from our recent funding as well as the remaining \$700,000 of funding to be received, the overall cash requirements of operations are expected to be met. While there is no guarantee that we will generate the forecast revenues or that we will receive the remaining \$700,000 of funding, which is dependent upon this filing becoming effective, management believes that both the revenue generation forecast and the additional funding will be attained. At the present level of operations, working capital requirements to sustain operations approximates \$270,000.

It is management's estimate that with its existing working capital resources and with the insurance of the contemplated additional funding noted, we will be able to meet the working capital requirements of operations for the coming twelve months of operations.

#### **DESCRIPTION OF PROPERTY**

The Company currently rents office and facility space at 1304 Langham Creek Drive, Suite 310, Houston, Texas 77048. The term of the lease expired on March 31, 2004 and has continued on a month-to-month basis at a cost of \$4,671 per month.

#### CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

#### **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, 2006, 2005 and 2004. 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.

		Long-Term						
		Annu	al Comper	nsation	Co	mpensation Awar	ds	
Name and				Other	Restricted			
Principal				Annual	Stock	Options/	LTIP	All Other
Position	Year	Salary (a)	Bonus	Compensation	Awards	SARs	Payouts	Compensation
Patrick G.				_				_
Rooney	2006					5,000,000		\$ 110,000
Chairman of the								
Board	2005							\$ 10,000
Joseph G.								
Oliverio	2006	\$ 135,000						
President	2005					7,500,000		
J. David Wilson	2006							
Chief Executive								
Officer	2005							

Corey N. Conn 2006 \$ 96,000 4,000,000 Chief Financial Officer 2005 \$ 25,000  Timothy M. Gabel 2006 \$ 74,000 1,500,000  Vice President of	
Chief Financial Officer 2005 \$ 25,000  Timothy M. Gabel 2006 \$ 74,000 1,500,000  Vice President of	
Timothy M.  Gabel 2006 \$ 74,000 1,500,000  Vice President of	
Timothy M.  Gabel 2006 \$ 74,000 1,500,000  Vice President of	
Gabel 2006 \$ 74,000 1,500,000 Vice President of	
Vice President of	
Operations	
Gary H. Brooks	
(b) 2006	
President, CEO,	
CFO 2005 \$ 190,000 \$ 111,50	
and Secretary 2004 \$ 223,000 500,000 \$ 1,90	900
Griffith L. Miller	
II (c) 2006 \$ 55,000	
President, COO	
and CFO 2005 \$ 105,000	
2004 \$ 94,000	
David S. Yeh (d) 2006	
Executive V.P.	
Sales & 2005 \$ 130,000	
Marketing 2004 \$ 119,000	
1101 Δ00τ ψ 117,000	
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- (a) Amounts shown include cash compensation earned with respect to the year shown above.
- (b) Compensation for Mr. Brooks in 2005 includes regular compensation of \$167,000 and \$23,000 of vacation pay through September 29, 2005. All other compensation for Mr. Brooks includes an \$111,500 severance obligation.
- (c) Mr. Miller resigned in August 2006. Compensation for Mr. Miller in 2005 includes regular compensation of \$97,500 and \$7,500 of vacation pay.
- (d) Mr. Yeh served as an officer of the Company from July 2004 through July 2005.

#### **Employment Agreements**

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 \$150,000. 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 vesting on December 27, 2007. Mr. Oliverio is entitled to 6 months severance if terminated "without cause".

#### **Option Grants in Last Fiscal Year**

During 2006, the Company issued 11,575,000 stock options to officers and directors, 75,000 of which were issued in accordance with the Company's Non-Employee Director Stock Option Plan and 11,500,000 in accordance with the Amended and Restated 2005 Stock Incentive Plan.

#### **Equity Compensation Plan Information**

The following table summarizes share and exercise information about the Company's equity compensation plans as of July 16, 2007.

			Number of Securities Remaining
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	Available for Future Issuance Under Equity Compensation Plans (excluding securities included in 1st column)
All Equity Compensation Plans Approved by Security Holders	19,500,000	\$0.06	26,814,000 (1)

(1) Includes 3,275,000 shares available for issuance under the 1999 Stock Option Plan, 225,000 shares available for issuance under the 1999 Non-Employee Directors' Plan, 684,000 shares available for issuance under the 1999 Stock Bonus Incentive

Plan, 500,000 shares available under the 1999 Employee Stock Purchase Plan, 21,000,000 shares available under the 2005 Amended and Restated Stock Incentive Plan and 1,130,000 available under the 2006 Stock Incentive Plan.

#### SUMMARY OF EQUITY COMPENSATION PLANS

#### **Equity-Based Compensation**

Key Employee Incentive Compensation.

The Company has an incentive compensation plan for certain key employees and it's 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 2006, the Company did not pay any bonus pursuant to the incentive compensation plan.

1999 Employee Stock Option Plan

Positron's Board administers the 1999 Employee Stock Option Plan ("1999 Plan"), which was adopted by the Board effective June 15, 1999. The 1999 Plan provides for the grant of options to officers, employees (including employee directors) and consultants. The administrator is authorized to determine the terms of each option 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. The Board has authorized up to an aggregate of 4,000,000 shares of Common Stock for issuance under the 1999 Plan. As of July 16, 2007, 225,000 options are outstanding, of which 152,396 are vested.

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Non-Employee Directors' Stock Option Plan

The 1999 Non-Employee Directors' Stock Option Plan ("Directors' Plan") provides for the automatic grant of an option to purchase 25,000 shares of Common Stock to non-employee directors upon their election or appointment to the Board, and subsequent annual grants also in the amount of 25,000 shares of Common Stock. The exercise price of the options is 85% of the fair market value of the Common Stock on the date of grant. The Directors' Plan is administered by the Board. Options granted under the Directors' Plan become exercisable in one of two ways: either in four equal annual installments, commencing on the first anniversary of the date of grant, or immediately but subject to the Company's right to repurchase, which repurchase right lapses in four equal annual installments, commencing on the first anniversary of the date of grant. To the extent that an option is not exercisable on the date that a director ceases to be a director of the Company, the unexercisable portion terminates. The Board has authorized up to an aggregate of 500,000 shares of Common Stock for issuance under the Directors' Plan. As of July 16, 2007, 250,000 fully vested options remain outstanding under the Directors' Plan.

#### 1999 Stock Bonus Incentive Plan

In October 1999, the Board adopted an Employee Stock Bonus Incentive Plan, which provides for the grant of bonus shares to any Company employee or consultant to recognize exceptional service and performance beyond the service recognized by the employee's salary or consultant's fee. The Board has authorized up to an aggregate of 1,000,000 shares of Common Stock for issuance as bonus awards under the Stock Bonus Plan. The Stock Bonus Plan is currently administered by the Board. Each grant of bonus shares is in an amount determined by the Board, up to a maximum of the participant's salary. The shares become exercisable according to a schedule to be established by the Board at the time of grant. As of July 16, 2007, 316,000 shares of Common Stock have been granted under the 1999 Stock Bonus Incentive Plan.

1999 Employee Stock Purchase Plan

The Company's 1999 Employee Stock Purchase Plan ("Purchase Plan") was adopted by the Board of Directors and approved by the shareholders in 1999. A total of 500,000 shares of Common Stock have been reserved for issuance under the Purchase Plan, none of which has yet been issued. The Purchase Plan permits eligible employees to purchase Common Stock at a discount through payroll deductions during offering periods of up to 27 months. Offering periods generally will begin on the first trading day of a calendar quarter. The initial offering period began on January 1, 2000. The price at which stock is purchased under the Purchase Plan will be equal to 85% of the fair market value of Common Stock on the first or last day of the offering period, whichever is lower. No shares have been issued under the Purchase Plan at July 16, 2007.

#### 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 July 16, 2007, a total of 19,000,000 options have been granted under the 2005 Plan, none of which have been exercised, and of which 10,000,000 are fully vested.

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#### 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 July 16, 2007, 3,870,000 shares had been issued to consultants under the 2006 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 in the year ended December 31, 2006.

#### 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 2004 or 2005.

#### **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.

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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 exercise price is equal to 85% of the fair market value of the Common Stock on the date of grant. In addition, so long as the Plan is in effect and there are shares available for grant, each director in service on January 1 of each year (provided the director has served continuously for at least the preceding 30 days) is eligible to receive an option to purchase 25,000 shares of Common Stock at an exercise price equal to 85% of the fair market value of the Common Stock on the date of grant. Initial options as well as annual options granted under the Plan are subject to one or two schedules, either vesting over four years or vesting fully on the date of grant. In the latter event, the Common Stock acquired upon exercise of such options are subject to a right of repurchase in favor of the Company which lapses in four equal annual installments, beginning on the first anniversary of the date of grant. The Company anticipates, subject to shareholder approval, that future grants to non-employee directors may be made under the 2005 Stock Incentive Plan with exercise prices for such grants equal to 100% of the fair market value of the Common Stock on the date of grant.

#### **AVAILABLE INFORMATION**

We have filed a registration statement on Form SB-2 under the Securities Act of 1933 with the Securities and Exchange Commission with respect to the shares of our common stock offered through this prospectus. This prospectus is filed as apart of that registration statement and does not contain all of the information contained in the registration statement and exhibits. We refer you to our registration statement and each exhibit attached to it for a more complete description of matters involving us, and the statements we have made in this prospectus are qualified in their entirety by reference to these additional materials. You may inspect the registration statement and exhibits and schedules filed with the Securities and Exchange Commission at the Commission's principal office in Washington, D.C. Copies of all or any part of the registration statement may be obtained from the Public Reference Section of the Securities and Exchange Commission, 100 F Street NE, Washington, D.C. 20549. Please call the Commission at 1-800-SEC-0330 for further information on the operation of the public reference rooms. The Securities and Exchange Commission also maintains a web site at http://www.sec.gov that contains reports, proxy statements and information regarding registrants that file electronically with the Commission. In addition, we will file electronic versions of our annual and quarterly reports on the Commission's Electronic Data Gathering Analysis and Retrieval, or EDGAR System. Our registration statement and the referenced exhibits can also be found on this site as well as our quarterly and annual reports. We will not send the annual report to our shareholders unless requested by the individual shareholders.

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# POSITRON CORPORATION AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS

(In thousands, except share data)

ASSETS	4	arch 31, 2007 audited)
Current assets:		
Cash and cash equivalents	\$	472
Accounts receivable		242
Inventories		1,396
Due from affiliates		498
Prepaid expenses		166
Other current assets		67
Total current assets		2,841
Investment In Joint Ventures		
Property and equipment, net		65
Goodwill		2,592
Other assets		273
Total assets	\$	5,771
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable, trade and accrued liabilities	\$	2,525
Customer deposits		127
Unearned revenue		118
Due to affiliates		48
Total current liabilities		2,818
Obligation under capital lease		1
Convertible notes payable, less discount of \$1,258		42
Deposits of unissued preferred stock		2,790
Derivative liabilities for convertible debentures		2,199
Majority interest in loss of consolidated subsidiary		
Total liabilities		7,850
Stockholders' deficit:		
Series A Preferred Stock: \$1.00 par value; 8% cumulative, convertible, redeemable; 5,450,000 shares		
authorized; 464,319 shares issued and outstanding		464
Series B Preferred Stock: \$1.00 par value; convertible, redeemable 9,000,000 shares authorized;		
5,739,860.5 shares issued and outstanding		5,740
Series G Preferred Stock: \$1.00 par value; 8% cumulative, convertible, redeemable; 3,000,000 shares		
authorized; 204,482 shares issued and outstanding		204
Common Stock: \$0.01 par value; 800,000,000 shares authorized; 87,205,202 shares outstanding		872

Additional paid-in capital	60,583
Other comprehensive income	17
Accumulated deficit	(69,944)
Treasury Stock: 60,156 common shares at cost	(15)
Total stockholders' deficit	(2,079)
Total liabilities and stockholders' deficit	\$ 5,771
See accompanying notes	
F-1	

# POSITRON CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share data) (Unaudited)

Revenues:	Three Mont March 31, 2007		ths Ended March 31, 2006	
System sales	\$	975	\$	
Upgrades				
Service and component		226		198
Total revenues		1,201		198
Costs of revenues:				
System sales		685		
Upgrades				
Service, warranty and component		137		148
Total costs of revenues		822		148
Gross profit		379		50
Operating expenses:				
Research and development		353		144
Selling and marketing		269		70
General and administrative		709		435
Stock based compensation		103		246
Total operating expenses		1,434		895
Loss from operations		(1,055)		(845)
Other income (expense)				
Interest expense		(33)		(269)
Derivative gains (losses)		(34)		
Equity in losses of joint ventures		(22)		(42)
Total other income (expense)		(89)		(311)
Loss before income taxes and majority interest		(1,144)		(1,156)
Majority interest in loss of consolidated subsidiary		25		
Loss before income taxes		(1,119)		(1,156)
Income taxes				

Net loss	\$ (1,119)	\$ (1,156)
Other comprehensive income		
Foreign currency translation loss	(21)	
Comprehensive loss	\$ (1,140)	\$ (1,156)
·		
Basic and diluted loss per common share	\$ (0.01)	\$ (0.01)
·		
Weighted average number of basic and diluted common shares outstanding	87,083	77,997
See accompanying notes		
F-2		

# POSITRON CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands) (Unaudited)

	Three Months Ended		
	March 31,	March 31,	
	2007	2006	
Cash flaves from anarating activities			
Cash flows from operating activities: Net loss	\$ (1,119)	\$ (1,156)	
Adjustment to reconcile net loss to net cash used in operating activities	ψ (1,117)	$\Psi \qquad (1,130)$	
Depreciation and amortization	15	12	
Amortization of loan costs, debt discount and beneficial conversion features	18	194	
Stock based compensation	103	246	
Loss on derivative liabilities	34	210	
Common stock issued for services	90		
Equity in losses of joint ventures	22	42	
Majority interest in losses of consolidated subsidiary	(25)		
Changes in operating assets and liabilities:	(20)		
Accounts receivable	(32)	(21)	
Inventory	91	(10)	
Prepaid expenses	(49)	25	
Other current assets	(3)	(26)	
Field service parts and supplies	(42)	(17)	
Accounts payable and accrued liabilities	(116)	74	
Customer deposits	(115)		
Unearned revenue	(28)	(4)	
	` ,	. ,	
Net cash used in operating activities	(1,156)	(641)	
·			
Cash flows from investing activities:			
Purchase of property and equipment	(13)		
Net cash used in investing activities	(13)		
Cash flows from financing activities:			
Proceeds from notes payable to an affiliated entities		100	
Repayments of advances to affiliated entities	131		
Proceeds from private placements	1,903	505	
Capital lease payments	(1)		
Advance to affiliated entities	(512)	(78)	
Net cash provided by financing activities	1,521	527	
Effect of exchange rate changes on cash and cash equivalents	5		
Net (decrease) increase in cash and cash equivalents	357	(114)	

Cash and cash equivalents, beginning of period		115	209
Cash and cash equivalents, end of period	\$	472	\$ 95
Supplemental cash flow information:			
Interest paid	\$		\$ 
Income taxes paid			
See accompanying note	es		
F-3			

# POSITRON CORPORATION AND SUBSIDIARIES SELECTED NOTES TO FINANCIAL STATEMENTS

## 1. <u>Basis of Presentation</u>

The accompanying unaudited interim financial statements have been prepared in accordance with generally accepted accounting principles and the rules of the U.S. Securities and Exchange Commission, and should be read in conjunction with the audited financial statements and notes thereto contained in the Annual Report on Form 10-KSB for Positron Corporation (the "Company") for the year ended December 31, 2006. In the opinion of management, all adjustments, consisting of normal recurring adjustments, necessary for a fair presentation of financial position, results of operations and cash flows for the interim periods presented have been reflected herein. The results of operations for interim periods are not necessarily indicative of the results to be expected for the full year. Notes to the financial statements which would substantially duplicate the disclosures contained in the audited financial statements for the most recent fiscal year ended December 31, 2006, as reported in the Form 10-KSB, have been omitted.

For the three months ended March 31, 2007, the financial statements include the transactions of Positron Corporation ("Positron" or "the Company"), and Imaging Pet Technologies, Inc. ("IPT"). All Intercompany transactions and balances have been eliminated.

For the three months ended March 31, 2006, the financial statements include only the transactions of Positron Corporation.

## 2. <u>Accounting Policies</u>

#### **Foreign Currency Translation**

As of March 31, 2007 the accounts of the Company's subsidiaries, IPT and QMT were maintained, and their consolidated financial statements were expressed in Canadian dollars. Such consolidated financial statements were translated into U.S. Dollars (USD) in accordance with Statement of Financial Accounting Standards ("SFAS") No. 52, "Foreign Currency Translation." According to the Statement, all assets and liabilities were translated at the exchange rate on the balance sheet date, stockholder's equity are translated at the historical rates and statement of operations items are translated at the weighted average exchange rates. The resulting translation adjustments are reported under other comprehensive income in accordance with SFAS No. 130, "Reporting Comprehensive Income".

#### **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. Short-term investments include certificates of deposits, commercial paper and other highly liquid investments that do not meet the criteria of cash equivalents. Cash equivalents and short-term investments are stated at cost plus accrued interest which approximates fair value.

#### **Concentrations of Credit Risk**

Cash and accounts receivable 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 \$100,000 federal depository insurance limit.

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

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#### **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 method 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.

#### **Revenue Recognition**

Revenues from POSICAM<sup>TM</sup> system contracts, IPT's PulseCDC<sup>TM</sup> compact digital cardiac camera (sold under the IS2 brand name) 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.

#### **Stock-Based Compensation**

Effective January 1, 2006 the Company adopted the revision to SFAS 123 ("SFAS 123R"), "Share-Based Payment", that focuses primarily on accounting for transactions in which an entity obtains employee services in share-based payment transactions utilizing the modified prospective method. This statement replaces SFAS 123, "Accounting for Stock-Based Compensation", and supersedes APB Opinion No. 25, "Accounting for Stock Issued to Employees". SFAS 123R requires companies to expense the fair value of employee stock options and similar awards.

#### **Warranty Costs**

The Company accrues for the cost of product warranty on POSICAM<sup>TM</sup> systems 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. Actual results could differ from the amounts estimated.

#### **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 period presented in the Statement of Operations and Comprehensive Income, as the effect would be antidilutive.

#### **Income Taxes**

The Company accounts for income taxes under Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes". Under Statement No. 109, the asset and liability method is used in accounting for income taxes. Deferred taxes are recognized for temporary differences between the bases of assets and liabilities for financial statement and income tax purposes. The temporary differences relate primarily to net operating loss carryforwards. A valuation allowance is recorded for deferred tax assets when it is more likely than not that some or all of the deferred tax assets will not be realized through future operations.

In June 2006, the FASB released FASB Interpretation No. 48, "Accounting for Uncertainty in Income Taxes," an interpretation of FASB Statement No. 109 ("FIN 48"). FIN 48 prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. A company must determine whether it is "more-likely-than-not" that a tax position will be sustained upon examination, including resolution of any related appeals or litigation procedures, based on the technical merits of the position. Once it is determined that a position meets the more-likely-than-not recognition threshold, the position is measured to determine the amount of benefit to recognize in the financial statements. This interpretation is effective for fiscal years beginning after December 15, 2006. The provisions of FIN 48 were adopted in the first quarter of 2007 and did not have a material effect on the Company's financial statements.

#### **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**

In September 2006, the FASB issued Statement of Financial Accounting Standards No 157, "Fair Value Measurements". This statement defines fair value, establishes a framework for measuring fair value under generally accepted accounting principles, and expands disclosures about fair value measurements. The statement is effective in the fiscal first quarter of 2008 and the Company will adopt the statement at that time. The Company believes that the adoption of SFAS No 157 will not have a material effect on its results of operations, cash flows or financial position.

#### 3. Going Concern

Since inception, the Company has expended substantial resources on research and development. Consequently, the Company has 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. At March 31, 2007, the Company had an accumulated deficit of \$69,944,000 and a stockholder's deficit of \$2,079,000. The Company will need to increase system sales and apply the research and development advancements to achieve profitability in the future. Through the Company's joint venture with Neusoft Medical Systems, the Company intends to reduce significantly, overall costs to manufacture and deliver PET systems. In addition, the Company expects increased revenue from its IPT SPECT camera subsidiary to come from new sales campaigns and service division. The Company expects that these developments will have a positive impact on the PET, PET/CT and SPECT device products, sales and service volumes.

The Company had cash and cash equivalents of \$472,000 at March 31, 2007. At the same date, the Company had accounts payable and accrued liabilities of \$2,525,000. In addition, debt service and working capital requirements for the upcoming year may reach beyond current cash balances. The Company plans to continue to raise funds as required through equity and debt financings 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 oncern 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 and 3) meet current commitments and fund the continuation of its business operation in the near future.

#### 4. Imaging Pet Technologies – Business Acquisition

The Company 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") through a minority-owned subsidiary of the Company, Imaging PET Technologies, Inc. ("IPT"). The Company and QMP hold 49.9% and 50.1%, respectively, of the total registered capital of IPT. On May 8, 2006, to finalize certain obligations of QMP related to the Quantum Molecular Technologies Joint Venture, the Company agreed to issue 650,000 shares of its Series B Convertible Preferred Stock (the "Series B") to IPT in exchange for a promissory note in the amount of \$1,300,000. See, *Quantum Molecular Technologies*, below.

On June 5, 2006, IPT completed the acquisition of IS2 through a series of events which resulted in the net assets of IS2 being transferred to IPT. On April 28, 2006, debenture holders and promissory note holders of IS2 were put on notice that IS2 was in default of its covenants relating to revenue targets. In turn, the debenture/note holders demanded payment. On May 29, 2006, the debentures and notes totaling \$1,435,727 were assigned to IPT by the holders in exchange for \$1,000,000. The original holders assigned their security agreements to IPT who exercised those agreements immediately and assumed the net assets of IS2. In addition to the net assets, the Company assumed leases and contracts. Employments contracts were established with the Company upon acquisition.

On January 26, 2007, the Company executed and consummated a Securities Purchase Agreement (the "Agreement") with Imagin Diagnostic Centres, Inc. ("IMAGIN"), to acquire 11,523,000 shares of common stock of IPT. The Shares represented the remaining 50.1% of IPT's issued and outstanding common stock. As a result of the acquisition of the Shares, the Company owns 100% of the common stock of IPT. As consideration for the shares, the Company and IMAGIN agreed to cancel a promissory note in the principal amount of \$2,400,000 made by IMAGIN subsidiary, QMP and later assigned to IMAGIN. As of the date of the Agreement, the Company had been advised by IMAGIN that it had acquired all of QMP's interest in IPT as well as QMP's other holdings of the Company's related securities.

The acquisition of the remaining 50.1% of IPT on January 26, 2007 was accounted for using the purchase method of accounting. Initially, the excess of the purchase price over the amounts allocated to the assets acquired and liabilities assumed has been recorded as goodwill. Total goodwill recorded for this acquisition was \$2,592,256. Under Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets" ("SFAS No. 142"), goodwill and certain intangible assets are deemed to have indefinite lives and are no longer amortized, but are reviewed at least annually for impairment using the "fair value" methodology.

#### 5. <u>Quantum Molecular Technologies</u>

On December 28, 2005, the Company entered into a Memorandum of Understanding with Imagin Diagnostic Centres, Inc. ("IMAGIN") and Quantum Molecular Pharmaceutical, Inc. ("QMP"), a Canadian company and majority-owned subsidiary of IMAGIN. The Memorandum provides that the parties will form a joint venture to be called Quantum Molecular Technologies JV (the "QMT JV"). Initially, the joint venture would be owned 20%, 29% and 51% by the Company, IMAGIN and QMP, respectively. The Company had the right to increase its interest in the joint venture to a maximum of 51% by the issuance to QMP of up to 150 million shares of the Company's common stock. In consideration for the Company's 20% interest in the joint venture, the Company was obligated to loan to the joint venture sufficient funds, in the form of senior debt, to meet the joint venture's capital equirements as determined by the Company. In turn, IMAGIN and QMP had committed to purchase up to \$4 million in preferred equity in the Company.

On May 8, 2006, the Company amended certain aspects of the QMT JV transaction. Whereas the Company originally held 20% of the interests of the QMT JV, QMP and IMAGIN assigned 100% of their interest to the Company. Additionally, the investment amount QMP and IMAGIN originally committed to in the amount of \$4,000,000 was restated to \$2,400,000 to reflect the assignment of the QMT JV interests and participation by the Company in the IPT joint venture acquisition and subsequent financing. The \$2,400,000 investment is in the form of a promissory note to the Company. In exchange for the assignment of QMT JV interests and the investment, the Company issued 3,450,000 shares of Series B Convertible Preferred Stock.

On April 13, 2006, the QMT JV was incorporated under the name Quantum Molecular Technologies, Inc. ("QMT") and acquired certain intangible assets in the form of capitalized research and development costs from IMAGIN for a note payable in the amount of \$368,755. As discussed above, on May 8, 2006 the Company acquired 100% of the IMAGIN and QMP interests in QMT. QMT had limited operating activity during the period between April 13, 2006 and May 8, 2006, as such the Company has consolidated 100% of the operations of QMT from the date of acquisition.

Using concepts and research and development activities conceived and to be implemented by Dr. Irving Weinberg, QMT is developing certain next generation technologies including PET-enabled surgical tools and solid-state photo detector technology, which have implications in both molecular imaging and PET and which could have further application in the military and aerospace segments. The first solid-state detector technology patent has been filed by QMT.

On January 26, 2007 IPT acquired all of the outstanding capital stock of the Company's wholly-owned subsidiary, QMT.

#### 6. Inventories

Inventories at March 31, 2007 consisted of the following (in thousands):

Raw materials	\$ 1,176
Work in process	270
Subtotal	1,446
Less reserve for obsolescence	(50)
Total	\$ 1,396

#### 7. <u>Due from affiliates</u>

Due from affiliates at March 31, 2007 consisted of the following (in thousands):

Imagin Diagnostic Centres, Inc.	\$ 194
Quantum Molecular Pharmaceuticals, Inc.	17
Imagin Nuclear Partners, Inc.	224
Neusoft Positron Medical Systems Co., Ltd.	63
	\$ 498

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#### **Investment in Joint Ventures**

#### Neusoft Positron Medical Systems Co. Ltd.

The Company has entered into a joint venture with a Chinese company for the production of its PET scanners. 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 "JV Company"), to engage in the manufacturing of PET and CT/PET medical imaging equipment. The JV Company received its business license and was organized in September 2005.

The 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. The purpose and scope of the JV Company's technology business is to research, develop and manufacture Positron Emission Tomography systems (PET), and an integrated X-ray Computed Tomography system (CT) and PET system (PET/CT), and to otherwise provide relevant technical consultation and services.

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 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 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. The parties will 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.

#### CONDENSED FINANCIAL STATEMENTS FOR THE JV COMPANY

## NEUSOFT POSITRON MEDICAL SYSTEMS CO., LTD. CONDENSED BALANCE SHEET MARCH 31, 2007

(In thousands)

<u>ASSETS</u>	2	2007
Current assets:	\$	62
Cash and cash equivalents Other current assets	Ф	376
Total current assets		438
Intangibles and other assets		642
Total assets	\$	1,080
Current liabilities:		
Accounts payable and other current liabilities		16

Total current liabilities	16
Capital	1,064
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Total liabilities and capital	\$ 1,080
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## NEUSOFT POSITRON MEDICAL SYSTEMS CO., LTD. CONDENSED STATEMENT OF OPERATIONS THREE MONTHS ENDED MARCH 31, 2007

(in thousands)

	2	2007
Revenue	\$	
Expense		
General and administrative expense		382
Total expense		382
Net loss	\$	(382)
9. Property and Equipment		
Property and equipment at March 31, 2007 consisted of the following (in thousands):		
		arch 31, 2007
Furniture and fixtures	\$	130
Computers and peripherals		79
Machinery and equipment		34
Subtotal		243
Less: accumulated depreciation		(178)
Total	\$	65
10. Other Assets		
Other assets at March 31, 2007 consisted of the following (in housands):		
	/	2007
Field service parts and supplies	\$	59
Intangible assets		54
Deferred loan costs		160
Total	\$	273
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#### 11. Accounts Payable and Accrued Liabilities

Accounts payable and accrued liabilities at March 31, 2007 consisted of the following (in thousands):

	2007
Trade accounts payable	\$ 1,421
Accrued royalties	375
Accrued interest	64
Sales taxes payable	259
Accrued compensation	137
Accrued property taxes	76
Accrued professional fees	60
Accrued warranty costs	133
Total	\$ 2,525

#### 12. Series B Preferred Stock

On September 30, 2006 the Board of Directors authorized a new 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, C, and G Preferred Stock in liquidation. Holders of the Series B Preferred Stock are entitled to 100 votes per share on all matters requiring shareholder vote. While Series B Preferred Stock is outstanding no Common Stock dividends may be paid or declared by the Company. The Series B Preferred Stock may be redeemed in whole or in part, at the option of the Company, at any time at a price of \$1.00 per share. As of March 31, 2007, 5,739,860.5 shares of Series B Preferred Stock were outstanding.

#### Conversion of Notes Payable to Series B Preferred Stock

In 2006, the Company converted all outstanding convertible notes payable and accrued interest due to affiliated entities to Series B Preferred Stock. Following is a description of each conversion:

The Company and IMAGIN converted principal and interest of \$1,164,192 outstanding upon the Series E Convertible Promissory Notes and principal and interest of \$877,669 of Convertible Secured Notes into 690,930.5 shares of Series B Preferred Stock.

The Company and Positron Acquisition Corp. converted principal and interest of \$818,066 outstanding upon the Series D Secured Convertible Promissory Notes and 770,000 shares of Series C Preferred Stock into 762,358 shares of Series B Preferred Stock. Positron Acquisition Corp. subsequently converted 40,000 shares of Series B Preferred Stock into 4,000,000 shares of the Company's Common Stock.

The Company and QMP converted principal and interest of \$453,144 outstanding upon the Series F Secured Convertible Promissory Notes into 226,572 shares of Series B Preferred Stock. The Company has been advised by IMAGIN that it had acquired all of QMP's interest in the securities of the Company.

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#### 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 at 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. 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 traunch 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.

As a result of the beneficial conversion features contained in the Convertible Debentures, the derivatives embedded in the Debentures have been classified as derivative liabilities. Fair value of the embedded derivatives is determined using the Black Sholes Valuation Method. The combined liabilities recorded during the three months ended March 31, 2007 totaled \$2,198,000. The Company recorded a loss on derivative obligations of \$34,000 for the three months ended March 31, 2007.

#### 14. Loss Per Share

Basic loss per common share is based on the weighted average number of common shares outstanding in each period and earnings adjusted for preferred stock dividend requirements. Diluted earnings per common share assume that any dilutive convertible preferred shares outstanding at the beginning of each period were converted at those dates, with related interest, preferred stock dividend requirements and outstanding common shares adjusted accordingly. It also assumes that outstanding common shares were increased by shares issuable upon exercise of those stock options and warrants for which market price exceeds exercise price, less shares which could have been purchased by the Company with related proceeds. The convertible preferred stock and outstanding stock options and warrants were not included in the computation of diluted earnings per common share for the three month periods ended March 31, 2007 and 2006 since it would have resulted in an antidilutive effect.

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The following table sets forth the computation of basic and diluted earnings per share.

	Three Months Ended			
	Ma	arch 31,	M	arch 31,
		2007		2006
Numerator				
Basic and diluted loss	\$	(1,119)	\$	(1,156)
Denominator				
Basic and diluted earnings per share-weighted average shares				
outstanding		87,083		77,997
Basic and diluted loss per common share	\$	(0.01)	\$	(0.01)

### 15. <u>Stock Based Compensation</u>

Total stock-based compensation expense related to currently outstanding options was approximately \$103,000 and \$246,000 for the three months ended March 31, 2007 and 2006, respectively.

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 three months ended March 31, 2007 and 2006 was determined using the following assumptions:

The Company issued 1,000,000 shares of common stock to consultants under the 2006 Stock Incentive Plan during the three months ended March 31, 2007. Accordingly the Company recorded consulting expense equal to the fair market value of the shares issued of \$90,000 during the three months ended March 31, 2007.

#### 16. Related Party Transactions

In September 2006, the Company sold Imagin Nuclear Partners ("INP"), a wholly-owned subsidiary of Imagin Molecular Corporation, a publicly owned Delaware corporation and affiliate of the Company, a refurbished HZL Pet Imaging machine. The sales price of the machine was \$200,000. For the three months ended March 31, 2007 the Company billed approximately \$11,000 under a maintenance contract for the machine. As of March 31, 2007 INP owes the Company \$196,222.

As of March 31, 2007 the Company has a receivable in the amount of \$63,476 from Neusoft Positron Medical Systems Co. Ltd., for parts and materials purchased on behalf of the joint venture.

## POSITRON CORPORATION AND SUBSIDIARIES

FINANCIAL STATEMENTS
WITH REPORTS OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRMS
for the years ended December 31, 2006 and 2005

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Frank L. Sassetti & Co. Certified Public Accountants

The Board of Directors Positron Corporation

#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have audited the accompanying balance sheet of Positron Corporation as of December 31, 2006, and the related statements of operations and comprehensive income, stockholders' equity, and cash flows for the year ended December 31, 2006. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the 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 audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Positron Corporation as of December 31, 2006, and the results of its operations and its cash flows for the year ended December 31, 2006, in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company has 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 uncertainly.

/s/ Frank L. Sassetti & Co.

March 26, 2007 Oak Park, Illinois

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

#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders Positron Corporation

We have audited the accompanying balance sheet of Positron Corporation as of December 31, 2005 and the related statement of operations, changes in stockholders' deficit and cash flows for each of the two years in the period ended December 31, 2005. 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 audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Positron Corporation as of December 31, 2005, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2005 in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company has suffered recurring losses from operations and low inventory turnover. These factors raise substantial doubt about the Company's ability to continue as a going concern. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Ham, Langston & Brezina, L.L.P.

Houston, Texas March 30, 2006

# POSITRON CORPORATION AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS

December 31, 2006 and 2005 (In thousands, except share data)

<u>ASSETS</u>		2006	2005
Current assets:			
Cash and cash equivalents	\$	115	\$ 209
Accounts receivable		208	
Inventories		1,476	202
Due from affiliates		2,955	
Prepaid expenses		115	66
Other current assets		63	21
Total current assets		4,932	498
Investment in Joint Venture		23	230
Property and equipment, net		64	120
Other assets		252	57
Other assets		232	31
Total assets	\$	5,271	\$ 905
	-	- ,	1 112
LIABILITIES AND STOCKHOLDERS' DEFICIT			
Current liabilities:			
Accounts payable, trade and accrued liabilities	\$	2,627	\$ 1,694
Customer deposits		241	15
Unearned revenue		146	66
Due to affiliates		507	
Convertible notes payable to affiliated entity, less discount of \$6			627
		2 721	2.402
Total current liabilities		3,521	2,402
Obligation under capital lease		7	
Convertible notes payable to affiliated entities, less discount of \$884			1,216
Convertible notes payable, less discount of \$1,272		28	
Deposits for unissued preferred stock		850	195
Derivative liabilities for convertible debentures		2,165	
Majority interest in income of consolidated subsidiary		(168)	
Total liabilities		6,403	3,813
Total natifices		0,403	5,015
Stockholders' deficit:			
Series A Preferred Stock: \$1.00 par value; 8% cumulative, convertible,			
redeemable; 5,450,000 shares authorized; 464,319 shares issued and			
outstanding.		464	464

Series B Preferred Stock: \$1.00 par value; convertible, redeemable; 9,000,000 shares authorized; 5,739,860.5 shares issued and outstanding in 2006	5,740	
Series C Preferred Stock: \$1.00 par value; 6% cumulative, convertible,	5,710	
redeemable; 840,000 shares authorized; 770,000 shares issued and outstanding		
in 2005		770
Series G Preferred Stock: \$1.00 par value; 8% cumulative, convertible,		
redeemable; 3,000,000 shares authorized; 204,482 shares issued and		
outstanding in 2006	204	
Common stock: \$0.01 par value; 800,000,000 shares authorized; 86,205,202		
and 77,775,046 shares outstanding.	862	778
Additional paid-in capital	60,400	57,364
Other comprehensive income	38	
Subscription receivable		(30)
Accumulated deficit	(68,825)	(62,239)
Treasury Stock: 60,156 shares at cost	(15)	(15)
Total stockholders' deficit	(1,132)	(2,908)
Total liabilities and stockholders' deficit	\$ 5,271 \$	905

See notes to financial statements

# POSITRON CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME

For the years ended December 31, 2006 and 2005 (In thousands, except per share data)

	2006	2005
Revenue:		
System sales	1,268	
System upgrades	180	37
Service and components	765	725
Total revenue	2,213	762
Costs of revenues:		
System sales	689	
System upgrades	13	11
Service, warranty and components	721	621
Write-off of inventory and field service parts		656
Total costs of revenues	1,423	1,288
Gross (loss) profit	790	(526)
Selling, general and administrative	2,639	2,139
Research and development	1,165	446
Impairment of intangible asset		