POSITRON CORP
Form SB-2/A
October 27, 2006

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

Amendment No. 1 to
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:

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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. ¨

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

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TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	AMOUNT TO BE REGISTERED	PROPOSED MAXIMUM OFFERING PRICE PER SHARE	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE	AMOUNT OF REGISTRATION FEE
Common Stock, par value $.01 per share (1)	24,340,560(2)	$ 0.055	$ 1,338,730.80	$ 143.25
Total	24,340,560		$ 1,338,730.80	$ 143.25

(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 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 OCTOBER 26, 2006

PROSPECTUS

POSITRON CORPORATION

24,340,560 SHARES OF COMMON STOCK ISSUABLE IN CONNECTION
WITH THE CONVERSION OF PROMISSORY NOTES

Our selling security holders are offering to sell 24,340,560 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 October 26, 2006

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 October 25, 2006 was $0.07.

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 24,340,560 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 109,475,762 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™ 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™ 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™ system for marketing in 1985, and as of June 30, 2006, the Company has sold twenty eight (28) POSICAM™ 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™ systems at list prices of up to $1.7 million depending upon the configuration and equipment options of the particular system.

The following table provides summary information regarding the Company’s installed base of POSICAM™ systems, which were operational as of June 30, 2006:

Site	Location	Clinical Application	Install Date
Crawford Long Hospital	Atlanta, GA	Cardiology/Oncology	1992
Hermann Hospital	Houston, TX	Cardiology/Oncology/Neurology	1993
Buffalo Cardiology & Pulmonary Assoc.	Williamsville, NY	Cardiology/Oncology	1995
Baptist Hospital	Nashville, TN	Cardiology/Oncology/Neurology	1996
Nishidai Clinic (3 systems)	Japan	Cardiology/Oncology/Neurology	2000
National Institute of Radiological Sciences	Japan	Cardiology/Oncology/Neurology	2000
Nishidai Clinic (2 systems)	Japan	Cardiology/Oncology/Neurology	2002
Crawford Long Hospital	Atlanta, GA	Cardiology/Oncology	2002
Lancaster Cardiology Medical Group	Lancaster, CA	Cardiology/Oncology	2003
Health Imaging Services	Cullman, AL	Cardiology/Oncology	2003
Hermann Hospital	Houston, TX	Cardiology/Oncology	2003
Decatur Health Imaging	Decatur, AL	Cardiology/Oncology/Neurology	2004
Baptist Hospital	Nashville, TN	Cardiology/Oncology/Neurology	2004
Laredo Molecular Imaging	Laredo, TX	Cardiology/Oncology/Neurology	2004

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™ 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™ 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™ 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™ 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™ 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™ 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™ 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™ HZ, POSICAM™ HZL series and now the mPower™ series 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™ System

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

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The Company's POSICAM™ 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™ 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™ 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™ 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™ 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™ system enhances the accuracy of the interpreted image set.

An integral part of a POSICAM™ 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™ systems are a trained nurse, a trained technician and an overseeing physician for patient management and safety.

POSICAM™ HZ, HZL and mPower™

In addition to the basic POSICAM™ system, the Company offers two advanced versions, the POSICAM™ HZ and the POSICAM™ HZL, which are now being further enhanced to become the mPower™ 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™ systems employ new detector concepts to satisfy these needs while maintaining the high count rate capability and sensitivity of the basic POSICAM™. In May 1991, the Company received approval from the FDA to market the POSICAM™ HZ, and in May 1993, the Company received a patent for the innovative light guide and detector staggering concepts used in the POSICAM™ HZ and HZL. In July 1993, the Company received FDA approval to market in the United States the POSICAM™ HZL, which has a larger axial field of view than the POSICAM™ 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™ mPower™ system.

The Company believes that the special features of the POSICAM™ HZL and mPower™ 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™ 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.

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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™ 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™ systems, however at year end 2005, 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 2006; 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™ 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™ 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_3 (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™ 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.

The Company recently 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 "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™ 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™ system in two to three months.

There are several essential components of the Company’s POSICAM™ and mPower™ systems 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.

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Research and Development

The Company's POSICAM™ 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 $446,000 and $401,000 for the years 2005 and 2004, respectively and $260,000 for the six months ended June 30, 2006. 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 June 30, 2006, the Company owed royalty obligations amounting to approximately $356,000.

The Company has several historic domestic and international patents pertaining to positron emission tomography technology and currently maintains two active U.S. patents relating to the unique construction and arrangement of the photo detector module array used in its devices. The older of these two patents was issued in March of 1988 and will expire in June of 2006. The second patent was issued in May 1993 and 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 June 30, 2006, 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, 2005 and 2004 audited financial statements.

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Summary Operating Information

	For the six months ended		For the years ended	
	June 30, 2006 (Unaudited)	**June 30, 2005 (Unaudited)**	**December 31, 2005**	**December 31, 2004**
Revenues	464,000	384,000	762,000	2,780,000
Total operating expenses	1,832,000	1,307,000	2,526,000	2,499,000
Net loss	(4,271,000)	(1,587,000)	(3,806,000)	(1,658,000)
Net loss per common share, basic and diluted	($.0.05)	($0.03)	($0.06)	($0.03)
Weighted average number of shares outstanding basic and diluted	78,995,000	53,286,000	65,004,000	53,186,000

Summary Balance Sheet Data

	June 30, 2006 (Unaudited)	**December 31, 2005**
Total current assets	770,000	498,000
Total assets	935,000	905,000
Total current liabilities	3,464,000	2,597,000
Total stockholders' (deficit)	14,627,000	2,908,000

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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™ systems in quantities sufficient to be operationally profitable. Consequently, the Company has sustained substantial losses. During the six months ended June 30, 2006, the Company had a net loss of approximately $4,271,000, compared to a net loss of $3,806,000 during 2005. At June 30, 2006, the Company had an accumulated deficit of approximately $66,510,000. 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™ 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, 2005 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 $248,000 at June 30, 2006. The Company received an additional $2,375,000 and $1,550,000 in loan proceeds from affiliated entities in 2005 and 2004, 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 30, 2006, our independent registered public accounting firm stated that our financial statements for the year ended December 31, 2005 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, 2005. 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.

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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™ 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™ 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™ systems will be accepted by the target markets, or that the Company's sales of POSICAM™ 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™ 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.

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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™ 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 October 26, 2006, we had 85,135,202 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 24,340,560 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.

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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. We recently 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. If this registration statement is not declared effective by September 26, we 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.

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.

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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 June 30, 2006, 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 expre addition, 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	
	High	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	$ -	$ -

As of October 26, 2006 in accordance with our transfer agent records, we had approximately 268 shareholders of record. Such shareholders of record held 85,135,202 shares of our common stock.

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MANAGEMENT'S DISCUSSION AND ANALYSIS OR PLAN OF OPERATION

General

The Company was incorporated in December 1983 and commenced commercial operations in 1986. Since that time, the Company has generated revenues primarily from the sale and service contract revenues derived from the Company's POSICAM™ 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™ systems in sufficient quantities to achieve operating profitability.

Transactions with IMAGIN Diagnostic Centres, Inc.

Financing Agreements dated May 21, 2004

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 Diagnostic Centres, Inc. ("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 was 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 was 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. Full convertibility of the shares of Series C Preferred Stock into common stock will require an amendment to the Company's Articles of Incorporation which must be approved by the shareholders.

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 are due and payable on May 21, 2006. These notes are 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. Full convertibility of the shares of Series D Preferred Stock into common stock will require an amendment to the Company's Articles of Incorporation, which must be approved by the shareholders.

The agreements with IMAGIN provided for a $200,000 transaction fee payable to IMAGIN upon completion of the financing. Under terms of these agreements, this fee obligation was to be reduced by an amount equal to $0.02 multiplied by the number of warrants issued to IMAGIN. The agreements with IMAGIN also provided for the issuance of new warrants for the purchase of 4,575,000 shares of common stock, which resulted in a $91,500 decrease in this fee obligation to $108,500. This fee obligation is included in the principal of the notes.

Patrick G. Rooney, Chairman of the Board of the Company is the son of Patrick Rooney, Director of Corporate Development of IMAGIN Diagnostic Centres, Inc. Patrick G. Rooney was appointed to the Board of Directors of the Company in connection with the financing with IMAGIN.

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. Full convertibility of the notes into shares of common stock will require an amendment to the Company's Articles of Incorporation which must be approved by the shareholders.

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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 Opportunity Fund, L.P. (“Solaris”).

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. Full convertibility of the notes into shares of common stock will require an amendment to the Company’s Articles of Incorporation which must be approved by the shareholders.

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.

Imaging PET Technologies Inc.

The Company and Quantum Molecular Pharmaceuticals Inc., a Canadian radiopharmaceutical corporation (“Quantum”) 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 hold 49.9% and 50.1%, respectively, of the total registered capital of IPT. On May 8, 2006, to finalize certain obligations of Quantum related to the Quantum Molecular Technologies Joint Venture, the Company agreed to issue Series B Convertible Preferred Stock (the "Series B"), convertible into 65,000,000 shares of the Company's common stock, to IPT in exchange for a promissory note in the amount of $1,300,000. See, *Quantum Molecular Technologies Joint Venture*, below.

On June 5, 2006, IPT completed the acquisition of IS2. Pursuant to an assumption agreement with IS2 and assignment agreements with IS2’s secured debt holders, IPT acquired all of IS2’s operating assets and assumed certain of its liabilities.

Quantum Molecular Technologies Joint Venture

On May 8, 2006, the Company amended certain aspects of the Quantum Molecular Technologies Joint Venture (“QMT”) formed with Quantum Molecular Pharmaceuticals, Inc. and IMAGIN Diagnostic Centres, Inc. on December 28, 2005. 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 could have further application in the military and aerospace segments. The first solid-state detector technology patent application has been filed by QMT.

Whereas the Company originally held 20% of the interests of QMT, Quantum and IMAGIN assigned 100% of their interests in QMT to the Company. Additionally, the investment amount Quantum 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 interests and participation by the Company in the IPT joint venture and subsequent financing. The investment will be in the form of installment payments, the first of which is due on October 1, 2006. In exchange for the assignment of QMT interests and the investments, the Company will issue Series B Convertible Preferred Stock, convertible into 345,000,000 shares of the Company’s common stock to Quantum and IMAGIN, pro rata. The installment payments are secured by the pledge of the Series B, which have not yet been issued by the Company.

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The joint venture was formed to develop a new generation of PET technologies using concepts and research and development activities conceived and to be implemented by Dr. Irving Weinberg, an exclusive consultant to QMP. The Company will have the right to manufacture and sell any PET products developed by the joint venture in exchange for royalty payments still to be negotiated.

Dr. Weinberg has been at the forefront of the evolution of PET, tracing his roots back to the UCLA group that created the PET industry. Later, as a practicing radiologist and entrepreneur, Dr. Weinberg designed and built the first breast-specific PET scanner, which was able to detect the earliest form of breast cancer better than any other modality.

Dr. Weinberg's participation is directly attributable to the efforts of J. David Wilson, who at the time of the joint venture and capital commitment between QMT and the Company, was CEO of the Company and Quantum Molecular Pharmaceutical, which is a majority owner of Quantum Molecular Technologies.

There can be no assurance that the joint venture will meet the parties objectives. The issuance of shares of preferred stock and any common stock to IMAGIN and QMP will involve substantial dilution to the Company's current shareholders.

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 are 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. Full convertibility of the shares of Series E Preferred Stock into common stock will require an amendment to the Company’s Articles of Incorporation which must be approved by the shareholders.

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. We have been advised by Solaris that it has since sold the $1,000,000 principal amount of these notes to IMAGIN.

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 are 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. Full convertibility of the shares of Series F Preferred Stock into common stock will require an amendment to the Company’s Articles of Incorporation, which must be approved by the shareholders.

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.

Patrick G. Rooney, Chairman of the Board of the Company, is the managing director of the manager of Solaris.

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Results of Operations

The operations of the Company for the six months ended June 30, 2006 resulted in a loss of $4,271,000 compared to a loss of $1,587,000 for the same period in 2006.

Revenues. The Company generated no revenues from sales of systems for the three months ended June 30, 2006 or the three months ended June 30, 2005. We earned revenues of $266,000 from service contracts during this period compared to $205,000 during this period in 2005, of which $171,000 was derived from service contracts and $34,000 from service upgrades. Our service revenues decreased $214,000 to $725,000 in the year ended December 31, 2005 from $939,000 in 2004. Service revenues in 2004 included fees of $200,000 relating to support provided to GE Medical Systems in conjunction with the sale of our Cardiac PET Software.

The Company generated gross profits of $86,000 during the three months ended June 30, 2006 compared to gross profits of $35,000 for the same three months in 2005. Costs of sales and services for the three months ended June 30, 2005 included $87,000 related to system sales; there were no costs of system revenues for the same period in 2006. Cost of revenues associated with service contracts were $180,000 and $75,000 for the three month periods ending June 30, 2006 and 2005, respectively.

Operating expenses increased $224,000 to $936,000 for the three months ended June 30, 2006 from $712,000 for the same period in 2005. Sales and marketing expense for the three months ended June 30, 2006 increased to $375,000 from $213,000 for the same period in 2005. This significant increase resulted primarily from $292,000 of consulting fees which were exchanged for shares of the Company's common stock. Sales and marketing salaries for the second quarter of 2006 were $16,000 compared to $122,000 during the second quarter of 2005. General and administrative expenses increased $78,000 to $470,000 in the quarter ended June 30, 2006 from $392,000 in the same period in 2005. This increase in general and administrative expenses primarily resulted from increased consulting fees expensed in 2006. Net stock based compensation of $(25,000) for the quarter ended June 30, 2006 is due to the reversal of previously recorded compensation associated with re-priced options resulting from a decrease in the price of the Company’s common stock.

Interest expense was $301,000 in the second quarter of 2006 compared to $273,000 of interest expense in the same period in 2005. During the three months ended June 30, 2006 equity in losses of joint ventures was $77,000. The Company’s investments in the joint ventures were made subsequent to the quarter ended June 30, 2005 and therefore no equity adjustments were recorded during the second quarter 2005.

Comparison of the Results of Operations for the Six Months ended June 30, 2006 and 2005

The company had net losses of $4,271,000 and $1,587,000 for the six months ended June 30, 2006 and June 30, 2005, respectively. The increase in the loss in 2006 resulted primarily from derivative losses. Increases in interest expense, stock based compensation, and equity in losses of joint venture investments also contributed to the increased loss in 2006.

No revenues were generated from sales of systems during the six months ended June 30, 2006 or the six months ended June 30, 2005. Revenues of $464,000 for the six months ended June 30, 2006 consisted exclusively of revenue from service contracts and components, as compared to $350,000 of service revenue for the same period in 2005 while total revenues for the 2005 period were $384,000. Increased service revenue is attributed to new service contract with customers whose warranties on their PET systems expired.

Gross profit for the six months ended June 30, 2006 was $136,000 or 29.3% compared to $74,000 or 19.2% for the same period in 2005. Improved gross profit is attributable in large part to decreases in cost of revenues expenses

including a decrease in salaries and related expenses of nearly $50,000.

Operating expenses increased $523,000 to $1,832,000 for the six months ended June 30, 2006 from $1,309,000 for the same period in 2005. Research and development expenses were consistent at $260,000 for each of the six month periods. Sales and marketing expense for the six months ended June 30, 2006 was $445,000 compared to $443,000 for the same period in 2005. The increase in general and administrative expenses primarily resulted from increased consulting fees for certain outsourced services and projects. Overall general and administrative increased to $906,000 from $708,000 for the six months ended June 30, 2006 and 2005, respectively. The company recorded stock based compensation of $221,000 for the six months ended June 30, 2006. A reversal of stock based compensation of $102,000 relating to the application of the variable accounting rules to the re-pricing of warrants and options was recorded in the first six months of 2005.

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Interest expense of $570,000 for the six months ended June 30, 2006 is an increase of $217,000 over interest expense of $353,000 for the six months ended June 30, 2005. The Company issued $1,500,000 of new convertible secured debentures during the six months ended June 30, 2006. Interest expense in the first six months of 2006 includes $414,700 in amortization of loan costs, debt discounts and beneficial conversion features. For the six months ended June 30, 2006 the Company recorded equity in the losses of joint ventures of $118,000.

Financial Condition

The Company had cash and cash equivalents of $248,000 on June 30, 2006. On the same date, accounts payable and accrued liabilities outstanding totaled $1,673,000. The Company did not sell any imaging systems in the six-month period ended June 30, 2006. 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, we have been unable to sell our POSICAM™ systems in quantities sufficient to be operationally profitable. Consequently, we have sustained substantial losses. Due to the sizable selling prices of our systems and the limited number of systems sold or placed into service each year, revenues have fluctuated significantly from year to year. We have an accumulated deficit of $66,510,000 at June 30, 2006. The Company will need to increase system sales to achieve profitability in the future.

These events raise doubt as to our ability to continue as a going concern. The report of our independent registered public accounting firm, which accompanied our financial statements for the year ended December 31, 2005, was qualified with respect to that risk. If we are unable to obtain debt or equity 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.

Costs of Revenues. Costs of revenues decreased by $495,000 to $1,288,000 in the year ended December 31, 2005 from $1,783,000 in the prior year. The Company incurred costs of $1,081,000 relating to the sale of one system in 2004. In addition, we incurred costs of $284,000 relating to upgrades of systems in 2004. The Company expensed $656,000 of excess inventory and field service parts as it ceased manufacturing activities at its Houston facility in 2005.

Operating Expenses. The Company's operating expenses increased $27,000 to $2,526,000 for the year ended December 31, 2005 from $2,499,000 in 2004. Sales, general and administrative expenses increased $404,000 to $2,114,000 from $2,139,000 in the prior year. This increase in general and administrative expenses primarily resulted from increased legal fees and the recording of an obligation of $111,500 for severance pay in 2005. Research and development expenses increased $45,000 to $446,000 from $401,000 as a result of increased personnel costs. We reversed expense related to stock based compensation by $59,000 in the year ended December 31, 2005 relating to the application of the variable accounting rules to the re-pricing of warrants and options. We recorded expense of $363,000 relating to stock based compensation in 2004.

Other Income (Expenses). We recognized interest expense of $985,000 in the year ended December 2005 compared to $157,000 of interest expense in 2004. Interest expense in 2005 and 2004 primarily relates to the notes payable to IMAGIN Diagnostic Centres, Inc., Solaris Opportunity Fund, L.P. and Positron Acquisition Corp. and includes amortization of loan costs, debt discounts and beneficial conversion features of $690,000 and $92,000 in 2005 and 2004 respectively. The Company recognized royalty income of $250,000 on the sale of its software license in 2005.

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Related Party Transactions

On December 28, 2005, the Company entered into a Memorandum of Understanding with 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. Initially, the joint venture will be owned 20%, 29% and 51% by the Company, IMAGIN and QMP, respectively. The Company has 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 is obligated to loan to the joint venture sufficient funds, in the form of senior debt, to meet the joint venture's capital requirements as determined by the Company. In turn, IMAGIN and QMP have committed to purchase up to $4 million in preferred equity in the Company.

The joint venture will be formed to develop a new generation of PET technologies using concepts and research and development activities conceived and to be implemented by Dr. Irving Weinberg, an exclusive consultant to QMP. The Company will have the right to manufacture and sell any PET products developed by the joint venture in exchange for royalty payments still to be negotiated.

Dr. Weinberg has been at the forefront of the evolution of PET, tracing his roots back to the UCLA group that created the PET industry. Later, as a practicing radiologist and entrepreneur, Dr. Weinberg designed and built the first breast-specific PET scanner, which was able to detect the earliest form of breast cancer better than any other modality.

Dr. Weinberg's participation is directly attributable to the efforts of J. David Wilson, who at the time of the joint venture and capital commitment between QMT and the Company, was CEO of the Company and Quantum Molecular Pharmaceutical, which is a majority owner of Quantum Molecular Technologies.

There can be no assurance that the joint venture will meet the parties objectives. The issuance of shares of preferred stock and any common stock to IMAGIN and QMP will involve substantial dilution to the Company's current shareholders.

IMAGIN Transaction

Financing Agreements dated May 21, 2004

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 was 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 was 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. Full convertibility of the shares of Series C Preferred Stock into common stock will require an amendment to the Company’s Articles of Incorporation which must be approved by the shareholders.

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 are due and payable on May 21, 2006. These notes are 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. Full convertibility of the shares of Series D Preferred Stock into common stock will require an amendment to the Company's Articles of Incorporation, which must be approved by the shareholders.

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The agreements with IMAGIN provided for a $200,000 transaction fee payable to IMAGIN upon completion of the financing. Under terms of these agreements, this fee obligation was to be reduced by an amount equal to $0.02 multiplied by the number of warrants issued to IMAGIN. The agreements with IMAGIN also provided for the issuance of new warrants for the purchase of 4,575,000 shares of common stock, which resulted in a $91,500 decrease in this fee obligation to $108,500. This fee obligation is included in the principal of the notes.

Patrick G. Rooney, Chairman of the Board of the Company is the son of Patrick Rooney, Director of Corporate Development of IMAGIN Diagnostic Centres, Inc. Patrick G. Rooney was appointed to the Board of Directors of the Company in connection with the financing with IMAGIN.

Several agreements were reached involving option and warrants contracts for the purchase of common stock of the Company.

- The Company agreed to exchange 917,068 outstanding options currently held by its employees for new options that are exercisable for the purchase of common stock at a price of $0.02 per share. The new options issued to the employees are subject to four year vesting in equal monthly installments. This re-pricing will require the Company to apply the variable accounting rules established in Interpretation No. 44 of the Financial Accounting Standards Board ("FIN 44") to these options and record changes in compensation based upon movements in the stock price. The Company recognized $13,000 in compensation expense in 2004, in accordance with the variable accounting rules established in FIN 44. The market value of the company's common stock increased to $0.12 per share at December 31, 2004, resulting in an intrinsic value of $0.10 per share.
- The Company agreed to re-price the outstanding warrants currently held by its former President and CEO for the purchase of 3,500,000 shares of common stock at $0.02 per share. The Company recognized $350,000 in compensation expense in 2004, in accordance with the variable accounting rules established in FIN 44. The market value of the Company's common stock increased to $0.12 per share at December 31, 2004, resulting in an intrinsic value of $0.10 per share. The Company will record changes in compensation based upon movements in the stock price.
- The Company agreed to issue a new warrant to its President & CEO for the purchase of 4,000,000 shares of common stock at $0.02 per share.
- The Company agreed to re-price outstanding warrants for the purchase of 9,150,000 shares of common stock. These warrants have been surrendered and new warrants will be issued to the same third party holders for the purchase of 4,575,000 shares of common stock at $0.02 per share. New warrants for the purchase of 4,575,000 shares of common stock at $0.02 per share (the remaining half of the surrendered warrants) will also be issued to IMAGIN.

In connection with the financing, IMAGIN entered into an additional agreement to purchase an aggregate of 10 PET scanners at a purchase price of $1,300,000 each. As a result of the regulatory difficulties encountered in connection with attempts to import and use scanners in Canada, the parties have since agreed to terminate IMAGIN's obligation to purchase these scanners.

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. Full convertibility of the notes into shares of common stock will require an amendment to the Company's Articles of Incorporation which must be approved by the shareholders.

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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.

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. Full convertibility of the notes into shares of common stock will require an amendment to the Company's Articles of Incorporation which must be approved by the shareholders.

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.

Transaction 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 are 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. Full convertibility of the shares of Series E Preferred Stock into common stock will require an amendment to the Company's Articles of Incorporation, which must be approved by the shareholders.

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.

We have been advised by Solaris that it has since sold the $1,000,000 principal amount of these notes to IMAGIN.

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 are 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. Full convertibility of the shares of Series F Preferred Stock into common stock will require an amendment to the Company's Articles of Incorporation, which must be approved by the shareholders.

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.

Patrick G. Rooney, Chairman of the Board of the Company, is the managing director of the manager of Solaris.

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New Accounting Pronouncements

In December 2004, the Financial Accounting Standards Board ("the FASB") issued ("SFAS") No. 123(R), *Share-Based Payment.* SFAS 123(R) requires compensation costs related to share-based payment transactions to be recognized in the financial statements. With limited exceptions, the amount of compensation cost is to be measured based on the grant-date fair value of the equity or liability instruments issued. In addition, liability awards are to be remeasured each reporting period. Compensation cost will be recognized over the period that an employee provides service in exchange for the award. SFAS 123(R) is a revision of SFAS 123, *Accounting for Stock-Based Compensation*, as amended by SFAS 148, *Accounting for Stock-Based Compensation-Transition and Disclosure* and supersedes APB NO. 25, *Accounting for Stock Issued to Employees*. SFAS 123(R) is effective for private companies as of the beginning of the first annual reporting period that begins after December 15, 2005. The Company adopted SFAS 123R effective January 1, 2006, using the modified prospective method. This method applies the fair value based method to new awards and to awards modified, repurchased or cancelled after the required effective date. Also, compensation cost for the portion of awards for which the requisite service has not been rendered that are outstanding as of the required effective date shall be recognized as the service is rendered on or after the required effective date. Any options issued subsequent to January 1, 2006 will be accounted for under SFAS 123R.

In November 2004, the FASB issued SFAS No. 151, *Inventory Costs*. The new Statement amends ARB No. 43, Chapter 4, *Inventory Pricing*, to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs and wasted material. This Statement requires that those items be recognized as current period charges and requires that allocation of fixed production overhead to the cost of conversion be based on the normal capacity of the production facilities. This Statement is effective for fiscal years beginning after June 15, 2005. The adoption of this statement is not expected to have a material impact on the Company's financial position or results of operations.

In December 2004, the FASB issued SFAS No. 153, *Exchanges of Nonmonetary Assets - An Amendment of APB Opinion No. 29*. SFAS No. 153 amends APB Opinion No. 29 to eliminate the exception for exchanges of similar productive assets and replaces it with a general exception for exchanges of nonmonetary assets that do not have commercial substance. SFAS No. 153 is to be applied prospectively for nonmonetary exchanges occurring in fiscal periods beginning after June 15, 2005. The Company's adoption of SFAS No. 153 is not expected to have a material impact on its financial position or results of operations.

In May 2005, the FASB issued SFAS No. 154, *Accounting Changes and Error Corrections—a replacement of APB Opinion No. 20 and FASB Statement No. 3.* This Statement replaces APB Opinion No. 20, *Accounting Changes*, and FASB Statement No. 3, *Reporting Accounting Changes in Interim Financial Statements*, and changes the requirements for the accounting for and reporting of a change in accounting principle. This Statement applies to all voluntary changes in accounting principle. It also applies to changes required by an accounting pronouncement in the unusual instance that the pronouncement does not include specific transition provisions. This Statement is effective for fiscal years beginning after December 15, 2005. The adoption of this statement is not expected to have a material impact on the Company's financial position or results of operations.

In February 2006, the FASB issued Financial Accounting Standard ("FAS") No. 155, "Accounting for Certain Hybrid Financial Instruments, an amendment of FAS No. 133 and 140." FAS No. 155 resolves issues addressed in FAS No. 133 Implementation Issue No. D1, "Application of Statement 133 to Beneficial Interests in Securitized Financial Assets," and permits fair value remeasurement for any hybrid financial instrument that contains an embedded derivative that otherwise would require bifurcation, clarifies which interest-only strips and principal-only strips are not subject to the requirements of FAS No. 133, establishes a requirement to evaluate interests in securitized financial assets to identify interests that are freestanding derivatives or that are hybrid financial instruments that contain an embedded derivative requiring bifurcation, clarifies that concentrations of credit risk in the form of subordination are not embedded derivatives and amends FAS No. 140 to eliminate the prohibition on a qualifying special-purpose entity

from holding a derivative financial instrument that pertains to a beneficial interest other than another derivative financial instrument. FAS No. 155 is effective for all financial instruments acquired or issued after the beginning of the first fiscal year that begins after September 15, 2006. The Company is currently evaluating the effect of the adoption of FAS No. 155 but believes it will not have a material impact on its financial position or results of operations.

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In March 2006, the FASB issued FAS No. 156, "Accounting for Servicing of Financial Assets, an amendment of FAS No. 140." FAS No. 156 requires an entity to recognize a servicing asset or liability each time it undertakes an obligation to service a financial asset by entering into a servicing contract under a transfer of the servicer's financial assets that meets the requirements for sale accounting, a transfer of the servicer's financial assets to a qualified special-purpose entity in a guaranteed mortgage securitization in which the transferor retains all of the resulting securities and classifies them as either available-for-sale or trading securities in accordance with FAS No. 115, "Accounting for Certain Investments in Debt and Equity Securities" and an acquisition or assumption of an obligation to service a financial asset that does not relate to financial assets of the servicer or its consolidated affiliates. Additionally, FAS No. 156 requires all separately recognized servicing assets and servicing liabilities to be initially measured at fair value, permits an entity to choose either the use of an amortization or fair value method for subsequent measurements, permits at initial adoption a one-time reclassification of available-for-sale securities to trading securities by entities with recognized servicing rights and requires separate presentation of servicing assets and liabilities subsequently measured at fair value and additional disclosures for all separately recognized servicing assets and liabilities. FAS No. 156 is effective for transactions entered into after the beginning of the first fiscal year that begins after September 15, 2006. The Company is currently evaluating the effect of the adoption of FAS No. 156 but believes it will not have a material impact on its financial position or results of operations.

Critical Accounting Policies

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

Inventory

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

Revenue Recognition

Revenues from POSICAM™ system contracts 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.

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.

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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™ 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 October 23, 2006 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	2,482,737 (3)	0
AJW Offshore, Ltd. (8)	0%	0	14,750,380 (4)	0
AJW Qualified Partners, LLC (9)	0%	0	6,791,016 (5)	0
New Millennium Capital Partners II, LLC	0%	0	316,427 (6)	0

(1) Based on 85,135,202 shares issued and outstanding as of October 26, 2006.

(2) 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 June 30, 2006 was ($4,482,000) or ($0.06) per share of Common Stock outstanding on June 30, 2006. 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.

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DIRECTORS, EXECUTIVE OFFICERS, PROMOTERS AND CONTROL PERSONS

Our executive officers and directors and their respective ages as of October 26, 2006 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)]

Name and Address of Beneficial Owner	Number of Shares of Common Stock	% of Outstanding Common Stock[(b)(c)]
IMAGIN Diagnostic Centres, Inc.	92,642,050 (d)	52.1%
Positron Acquisition Corp.	80,261,800 (e)	48.5%
Quantum Molecular Pharmaceuticals, Inc.	22,657,200 (f)	21.1%
Gary H. Brooks	8,050,000 (g)	9.5%

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(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 information made known to the Company.

(b) Based on 85,135,202 shares of Common Stock outstanding on October 26, 2006.

(c) 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 October 26, 2006.

(d) Includes 18,974,000 shares owned directly, 69,093,050 shares issuable upon the conversion of Series B Convertible Preferred Stock and 4,575,000 shares that may be acquired pursuant to warrants. The address for IMAGIN is 5160 Yonge Street, Suite 300, Toronto, Ontario, M2N 6L9.

(e) Includes 8,026,000 shares owned directly and 72,235,800 shares issuable upon conversion of Series B Convertible Preferred Stock . The address for Positron Acquisition Corp. is 104 W. Chestnut Street #315, Hinsdale, Illinois 60521.

(f) Includes 22,657,200 shares issuable upon the conversion of Series B Convertible Preferred Stock. The address for QMP is 1090 West Georgia Street, Suite 830, Vancouver, British Columbia V6E 3V7.

(g) Includes 550,000 shares owned directly and 7,500,000 shares that may be acquired pursuant to warrants. Mr. Brooks resigned as officer and director of the Company on September 29, 2005. The address for Mr. Brooks is c/o Positron Corporation, 1304 Langham Creek Drive, Suite 300, Houston, Texas 77084.

Name and Address of Beneficial Owner	Number of Shares of Series A Preferred	% of Outstanding Series A Preferred Stock[(a)]
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. 4382 Glendale - Milford Rd. Cincinnati, OH 45242	41,666	9.0%
John H. Wilson 6309 Desco Dr., Dallas, TX 75225	33,333	7.2%

(a) Based on 464,319 Series A Preferred Shares outstanding on October 26,2006.

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Name and Address of Beneficial Owner	Number of Shares of Series B Preferred	% of Outstanding Series B Preferred Stock[(a)]
Positron Acquisition Corp. 1304 Langham Creek Drive Suite 300 Houston, Texas 77084	722,358	44.0%
Imagin Diagnostic Centres, Inc. 5160 Yonge Street Suite 300, Toronto, Ontario M2N 61 9	690,930.5	42.2%
Quantum Molecular Pharmaceuticals, Inc. 1090 West Georgia Street, Suite 830 Vancouver, British Columbia V6E 3V7	226,572	13.8%

(a) Based on 1,639,860.5 Series B Preferred Shares outstanding on October 26, 2006.

Security Ownership of Directors and Executive Officers

Title of Class	Name of Beneficial Owner	Beneficial Ownership [(aa)]	Percent of Class[(bb)(cc)]
Common	Patrick G. Rooney	75,000[(dd)]	*
Common	Joseph G. Oliverio	2,000,000[(ee)]	2.5%
Common	Corey N. Conn	--	--
Common	Sachio Okamura	150,000[(ff)]	*
Common	Dr. Anthony C. Nicholls	50,000[(gg)]	*
Common	All Directors and Executive Officers as a Group	2,644,992	3.2%

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

(aa) Ownership is direct unless indicated otherwise.

(bb) Calculation based on 85,135,202 shares of Common Stock outstanding as of October 26, 2006.

(cc) The percentage of outstanding Common Stock assumes full conversion of the Series B Convertible Preferred Stock into Common Stock and is based on the Company's outstanding shares of Common Stock as of October 26, 2006.

(dd) Includes 75,000 shares that may be acquired by Mr. Rooney pursuant to stock options.

(ee) Includes 2,000,000 shares that may be acquired pursuant to stock options.

(ff) Includes 150,000 shares that may be acquired pursuant to stock options.

(gg) Includes 50,000 shares that may be acquired pursuant to options that are or will be exercisable.

The address for all officers and directors of the Company is 1304 Langham Creek Drive, Suite 300, Houston Texas, 77084.

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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 October 26, 2006, 85,135,202 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 October 26, 2006, 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 and the Series G 8% Convertible Redeemable Preferred Stock.

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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 December 31, 2005 and 2004 and June 30, 2006 stated dividends that are undeclared and unpaid on the Series A Preferred Stock total $448,000, $399,000 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 October 26, 2006, there were a total of 1,639,860.5 shares of Series B Preferred Stock outstanding, convertible into 163,986,050 shares, of Common Stock.

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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. Currently there are 204,482 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 and the instant Registration Statement was subsequently filed within 2 days after the effectiveness of this registration statement. We 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.

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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, 2005 included in this prospectus and the registration statement have been audited by Ham Langston & Brezina, L.L.P., 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.

DESCRIPTION OF BUSINESS

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	$ (220,000.)
	$.
Prorated Closing Costs and Fees	.
Expenses for acquisition of IS2 Systems	$ (638,750.)

Total Proceeds Utilized	$	140,000.
Net Retained for operating expenses	$	0

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

With an existing forecast of minimum revenues of approximately $700,000 in 2006, 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 per month exclusive.

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, 2003, 2004 and 2005. 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.

		Annual Compensation			Long-Term Compensation Awards			
Name and Principal Position	**Year**	**Salary (a)**	**Bonus**	**Other Annual Compensation**	**Restricted Stock Awards**	**Options/ SARs**	**LTIP Payouts**	**All Other Compensation (b)**
Patrick G. Rooney Chairman of the Board	2005	--	--	--	--	--	--	$ 10,000
Joseph G. Oliverio President	2005	--	--	--	--	7,500,000	--	$ 10,000
J. David Wilson Chief Executive Officer(b)	2005	--	--	--	--	--	--	--
Corey N. Conn	2005	$ 25,000	--	--	--	--	--	--

CFO and EVP Operations								
Gary H. Brooks (c)	2005	$ 190,000	--	--	--	--	--	$ 111,500
President, CEO, CFO	2004	$ 223,000	--	--	--	--	--	--
and Secretary	2003	$ 265,000	--	--	--	500,000	--	$ 1,851