DAXOR CORP
Form 10-K
March 23, 2009

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

Form 10-K

x **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES Exchange Act of 1934**

For the fiscal year ended: **December 31, 2008**

Or

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

For the transition period from _____ to _____

Commission file number 0-12248

Daxor Corporation

(Exact name of registrant as specified in its charter)

New York	**13-2682108**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

350 5th Avenue, Suite 7120, New York, New York 10118
(Address of Principal Executive Offices)

Registrant s telephone number, including area code: **212-244-0555**

Name of each exchange on which registered: NYSE Amex

Securities registered pursuant to Section 12(b) of the Act: NONE

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

COMMON STOCK, PAR VALUE $.01 PER SHARE
(Title of each class)

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

o Yes x No

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

o Yes x No

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

x Yes o No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this form 10-K.

o Yes x No

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

Large accelerated filer o	Accelerated filer o
Non-accelerated filer o	Smaller reporting company x

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act

o Yes x No

The aggregate market value of the voting stock held by non-affiliates of the registrant, based upon the closing price of the registrant s common stock on June 30, 2008, the last day of the registrant s most recently completed second fiscal quarter was $18,355,365. As of February 28, 2009 there were 4,285,718 shares of the Registrant s common stock, par value $.01 per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The Registrant maintains an internet website at www.daxor.com for Daxor Corporation. For the Scientific Medical Systems subsidiary, the website is www.Idant.com. None of the information contained on this website is incorporated by reference into this Form 10-K or into any other document filed by the Registrant with the Securities and Exchange Commission.

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Introductory Note: Forward Looking Statements

This Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These statements include statements regarding our plans, goals, strategies, intent, beliefs or current expectations. These statements are expressed in good faith and based upon reasonable assumptions when made, but there can be no assurance that these expectations will be achieved or accomplished. Sentences in this document containing verbs such as believe , plan , intend, anticipate target, estimate, expect, and the like, and/or future tense or conditional constructions (will , may, could, should, , etc.) constitute forw statements that involve risks and uncertainties. Items contemplating or making assumptions about, actual or potential future sales, market size, collaborations and trends or operating results also constitute such forward-looking statements. These statements are only predictions and actual results could differ materially. Certain factors that might cause such a difference are discussed throughout this Annual Report on Form 10-K, including the section entitled Risk Factors . Any forward-looking statement speaks only as of the date we made the statement, and we do not undertake to update the disclosures contained in this document or reflect events or circumstances that occur subsequently or the occurrence of unanticipated events.

PART I

Item 1. Business

Daxor Corporation is a medical device manufacturing company with additional biotechnology services. Daxor was originally founded in 1970 for cryobanking services and continues these services through its wholly owned subsidiary, Scientific Medical Systems. For the past 14 years, the Company s major focus has been on the development of the BVA-100® Blood Volume Analyzer, an instrument that rapidly and accurately measures human blood volume. The instrument is used in conjunction with Volumex®, a single-use radiopharmaceutical diagnostic injection and collection kit. The Company also performs cryobanking of blood through Scientific Medical Systems and of semen through Idant, a subdivision of Scientific Medical Systems. The Company maintains websites at www.daxor.com and www.idant.com that describe its operations.

BVA-100 BLOOD VOLUME ANALYZER

Blood volume measurement has a large potential market. Blood volume derangements are associated with a variety of medical conditions, and it is well established that clinical assessments of blood volume using physical examination or simple blood tests such as hematocrit testing are frequently inadequate to determine total blood volume. Previous methods of directly measuring blood volume have been extremely complex and time-consuming. The BVA-100 is a CLIA-rated medium complexity instrument that can measure blood volume with 98% accuracy within 60 to 90 minutes. Participating institutions utilize the BVA-100 for diagnosing and treating patients with heart failure, kidney failure, and syncope, and to aid in fluid and blood transfusion management in the critical care unit. The BVA-100 has also been used to aid in the diagnosis and treatment of polycythemia, hypertension, anemia, chronic fatigue, and to aid in presurgical evaluation. Additional possible uses include management of kidney dialysis, ultrafiltration, and blood optimization for elective surgery.

History and Development of the BVA-100

Blood volume measurement has been available for more than 60 years, although previous methods required as much as 4 to 8 hours of technician time with variable degrees of accuracy. Measurement of blood volume is achieved by infusing a radioisotope indicator, or tracer, into a patient s vein and then collecting timed blood samples after the tracer has distributed evenly throughout the circulatory system. The volume of blood in a patient is inversely proportional to the dilution of the tracer, which can be determined by measuring the level of radioactivity in the individual blood samples and applying the inverse proportion calculations. The measurement, while relatively simple in principle, has been difficult to perform accurately and rapidly because of the high degree of precision required in each step. Consequently, the technical complexity and significant time required for achieving an accurate blood volume result before the introduction of Daxor s BVA-100 Blood Volume Analyzer limited the use of blood volume measurements in most hospitals in the United States.

An alternative method used for blood volume measurement involves taking a sample of the patient s blood and incubating it with the radioisotope chromium-51 (Cr-51).. After a series of complex steps performed by a laboratory technician, the patient s chromated red blood cells are then re-transfused into the patient. This test is used by nuclear medicine departments to evaluate the red cell volume in polycythemia vera, a condition in which the patient may have too many red cells, which can predispose to thrombosis and other complications. Daxor s BVA-100 Blood Volume Analyzer system uses a kit which contains an injectable iodine-131 (I-131)-albumin tracer, which greatly simplifies this process, and eliminates the need to re-transfuse patient blood. Historically, it was thought that the chromated red blood cell method was a more accurate method to determine a patient s red blood cell volume. However, a recent publication in the *American Journal of Medical Sciences* [Am J Med Sci 2007;334(1):37-40] compared the Cr-51 method to Daxor s semi-automated method and found the two techniques to be equivalent, with significant time savings and ease of use benefits with Daxor s Blood Volume Analyzer BVA-100.

Blood volume measurement is an infrequently performed test. Instead of directly and objectively measuring blood volume, physicians who needed to assess volume status commonly relied upon clinical assessment with physical examination or surrogatetests such as hemoglobin and hematocrit measurements. However, these methods have frequently been shown to give inaccurate determinations of total blood volume. An additional problem has been the difficulty of determining the ideal blood volume for a specific individual. Daxor s Chief Scientific Officer, Dr. Joseph Feldschuh, and Dr. Yale Enson from Columbia University College of Physicians and Surgeons, published their research studies in *Circulation* in October 1977 and the *American Journal of Medical Sciences* in June 2007 which showed that normal blood volume varies as a function of the degree of deviation from ideal body weight. This research was conducted in the laboratory of Nobel Prize Winner Dr. Andre Cournand, and the results of that original and ongoing research have provided the basis for the proprietary calculation engine of the BVA-100 Blood Volume Analyzer s software.

Daxor s patented injection and collection kit(Volumex) utilizes Albumin I-131, a classic tracer used in blood volume measurement. This kit eliminates most of the previously time-consuming steps involved in preparation for a blood volume measurement. The BVA-100 software automatically calculates the blood volume, evaluates the statistical reliability of the measurement, and compares the results to the most accurate known predicted norm, which is a function of the patient s height, weight and gender. Results are available within 60 to 90 minutes. In emergency situations, preliminary results can be available within just 20 to 25 minutes.

The Company initially obtained marketing clearance from the FDA for the BVA-100 Blood Volume Analyzer in 1997, and for its Volumex specialized single use injection kit in 1998. The Company manufactures its own injection kit components and specialized collection kit, and injection kit filling is performed by an FDA-licensed radiopharmaceutical manufacturer. The Company can provide customized collection kits for customers with special needs.The Company has received United States, European Common Market, and Japanese patents for its Blood Volume Analyzer. In January 2007, the Company purchased two 10,000 square foot buildings in Oak Ridge, Tennessee to expand its research, development, and manufacturing capabilities

MARKET OPPORTUNITY

Utilization of the BVA-100

The Company believes that the most significant market for its blood volume measurement equipment consists of approximately 8,500 hospitals and Radiology Imaging Centers in the United States. The Company believes that there is an additional international market of 10,000-14,000 potential users of the BVA-100. This section describes some of the many widespread conditions in which blood volume measurement promises to improve diagnosis and treatment.

Blood volume measurement is an approved test with six separate CPT codes. Reimbursement has been received from a number of insurance companies, including Medicare, for measurement of blood volume using the BVA-100 Blood Volume Analyzer. Reimbursement is particularly important for hospitals because revenue from patients who are admitted to the hospital is based upon set amounts from the insurance companies. However, out-patients provide an additional stream of cash flow with well defined costs and the ability for the hospital to be profitable by providing such services.

Scientific Studies Utilizing the BVA-100

Since 2002, eighteen original research articles have been published utilizing data obtained from the BVA-100, one of which was cited in the American College of Cardiology/American Heart Association treatment guidelines for heart failure. Several clinical studies are ongoing or are in the final approval phase to investigate the clinical application of blood volume measurements in critical care, heart failure, ultrafiltration, and pre- and post-surgical applications, as outlined below. In addition, several studies are in the early approval phase to investigate the clinical application of blood volume measurement in hemodialysis, hypertension, subarachnoid hemorrhage and hyponatremia. Presentations from a recent symposium held at Vanderbilt University were published in the *American Journal of Medical Sciences* in June 2007 and featured the results of significant research involving current and potential clinical applications of blood volume measurement. Daxor has worked extensively with facilities that use the BVA-100 Blood Volume Analyzer in research studies, providing equipment, training, ongoing consultation, and assistance with interpretation and display of results. For some research projects, Daxor has also provided Volumex kits as well as direct financial support.

Heart Failure

Approximately five million individuals are treated annually in the United States for heart failure. It is estimated that $38 billion is spent each year on heart failure treatment, of which $23 billion is spent on hospital treatment. Heart failure is the number one reason for admission to hospitals in the US for patients over 65 years of age. The overwhelming majority of patients treated for heart failure must be treated with a combination of powerful drugs that may drastically change the patients blood volume. Three thousand patients annually receive heart transplants, and an increasing number are receiving left ventricular assist devices (LVAD), which is a type of mechanical heart.

In the May 2004 issue of the *American Journal of Cardiology*, Dr. Ana-Silvia Androne, Dr. Stuart Katz and their colleagues at Columbia Presbyterian Medical Center published a landmark study utilizing the BVA-100 to measure blood volume in NYHA Class III and IV heart failure patients. In this observational study, cardiologists treated the patients according to standard clinical guidelines without incorporating blood volume measurement which was performed on the patients. Patients were categorized as hypovolemic, normovolemic, or hypervolemic, and their outcomes over time were recorded. At the end of one year, 39% of the hypervolemic patients had died or received an urgent heart transplant. In contrast, *none* of the normovolemic or hypovolemic patients died or received an urgent transplant. At the end of two years, 55% of hypervolemic patients had died or received an urgent heart transplant, while the normovolemic patients continued to have a 0% mortality rate. This study showed a remarkable correlation between blood volume and outcome and suggests that effectively treating patients to normovolemia may dramatically improve outcomes.

The study also reported on the accuracy of clinical assessment of volume status in these patients. Physicians who were trained in cardiology assessed patients blood volume statuses using standard laboratory tools and physical examination. When choosing between three possible choices decreased, normal, or increased blood volume specialists were correct only 51% of the time in evaluating these severely ill cardiac patients when compared to the direct measurement results provided by the BVA-100. This study was cited in the most recent revision of the American College of Cardiology/American Heart Association 2005 guidelines for the treatment of chronic heart failure. These guidelines are updated once every 3 to 5 years. This landmark study highlights the importance of correcting a heart failure patient s expanded blood volume to normal and is the first to provide direct evidence that achievement of normovolemia is associated with improved outcomes, and that treating to normovolemia is a legitimate goal. As a result, the use of blood volume measurement in heart failure treatment may significantly prolong lives and reduce expensive and risky interventions.

Critical Care (Intensive Care Unit)

One of the essential components of critical care is the optimal management of fluid status. Correct interpretation of clinical signs and symptoms is essential for fluid resuscitation and fluid management in the critical care setting. Blood volume measurement promises to take the guesswork out of volume assessment and to enable more precise and appropriate treatment. Dr. Feldschuh published a chapter entitled Blood Volume Measurements in Critical Care in the 4th edition (2009) of *Critical Care* which reviews the importance of volume measurement in the critical care setting.

Dr. Mihae Yu and colleagues at The Queen s Medical Center in Honolulu, Hawaii, have been studying the use of blood volume measurement in the critical care unit. They have performed blood volume measurement in the surgical intensive care unit and recorded how results have influenced treatment decisions. Their most recent results were published in the February 2009 issue of the American Journal of Surgery. The findings were based on 86 data points from 40 patients, and showed that blood volume measurement results led to a change in treatment plan 36% of the time. Among patients who received a pulmonary artery catheter (PAC) for hemodynamic measurements, treatment would have been changed 50% of the time if blood volume data were available to treating physicians. Among patients who did not receive PAC measurement, treatment would have been changed 33% of the time if blood volume data had been available. In addition, Dr. Yu and her colleagues have presented their findings at the Society of Critical Care annual meetings from 2006-2009 and their studies were featured in the November 2005 issue of *Anesthesiology News,* the January 2008 *Hawaii Medical Journal* and the June 2008 *Anesthesia and Analgesia* These preliminary studies are being followed up by additional studies evaluating how incorporating blood volume measurement into critical care treatment affects outcomes.

Dr. Yu is now engaged in a major study, partially funded by Daxor, involving blood volume measurement in the intensive care unit. The purpose of the study will be to determine specifically whether clinical outcomes and length of hospital stays can be improved by incorporating blood volume measurement as a routine clinical tool in the intensive care unit.

Syncope

The Cleveland Clinic Cardiovascular Department is ranked first in the United States by the annual survey in *U.S. News & World Report*. There have been more blood volumes performed at the Cleveland Clinic to date than at any other hospital in the United States.

Syncope, or sudden loss of consciousness, has been estimated to be responsible for 3-5% of emergency department visits and 1- 6% of hospital admissions. As many as one million individuals per year experience an episode of syncope.

Since March 2000, the Syncope Clinic in the Cardiovascular Department of the Cleveland Clinic has been utilizing the BVA-100 to aid in diagnosing over 2000 syncope patients. These patients have presented with a wide range of blood volume derangements, including moderate to severe hypovolemia that would not have been detected without blood volume measurement. Results from blood volume measurement and tilt table testing (a standard test in syncope diagnosis) were published in June of 2007 in the *American Journal of Medical Sciences* by Dr. Fetnat Fouad-Tarazi, Head of the Hemodynamic and Neuroregulation Lab. Dr. Fouad-Tarazi s study demonstrated that blood volume derangements are a frequent finding in syncope patients and that blood volume measurements should be incorporated into the diagnostic work-up of a syncope patient to guide therapy.

Postural Orthostatic Tachycardia Syndrome (POTS) is a condition in which patients, primarily women, develop a rapid heart beat and symptoms suggesting impending fainting. POTS affects an estimated 500,000 people in the United States alone. POTS (an excessive increase in heart rate [>30 bpm] on standing, associated with orthostatic symptoms in the absence of orthostatic hypotension) can produce substantial disability among otherwise healthy people. Dr. Satish Raj and colleagues at the Vanderbilt University Medical School published a study in the April 2005 *Circulation* which utilized the blood volume analyzer.Patients with POTS - particularly those with rapid heart beats are sometimes diagnosed as having panic attacks and treated inappropriately with psychiatric medications. This study, using the BVA-100, demonstrated that many of these patients have a marked reduction in their plasma volume as well as a significant reduction in their red cell volume. This was the first study of its type to document that these patients have low blood volume as a cause of their condition and they could theoretically be treated with medications (such as epoietin alfa) to increase their blood volume and decrease these attacks. This is one of the first studies to provide clear evidence that low blood volume may play a major role in POTS and provides guidance for specific corrective therapy.

Anemia in Chronic Heart Failure

Anemia is frequently found in patients with chronic heart failure (CHF) and is associated with poor prognosis. Low hematocrit in CHF patients can result from either increased plasma volume (hemodilution) or from reduced red cell volume (true anemia). It is difficult, if not impossible, to distinguish dilutional anemia (pseudoanemia) from true anemia without performing a blood volume measurement. A study conducted by Ana-Silvia Androne and colleagues at the Columbia Presbyterian Medical Center published in the January 2003 issue of *Circulation* used the BVA-100 to show that patients with hemodilution experienced worse outcomes than did patients with true anemia. This suggests that volume overload may be a key mechanism which contributes to poor outcome in anemic CHF patients. The study also showed that anemic CHF patients experienced worse outcomes than did non-anemic CHF patients.

In another study by Dr. Mancini and colleagues from Columbia Presbyterian Medical Center which was also published in the January 2003 issue of *Circulation*, 26 patients with anemia and CHF were randomized to receive either erythropoietin or placebo for 3 months. CHF patients who received erythropoietin showed significant increases in red cell volume as measured by the BVA-100 and corresponding significant improvements in exercise capacity. This is one of the first studies to prove that correct treatment of anemia in CHF patients can significantly improve their heart failure status.

Transfusion Decisions in Surgery

Effective volume management in surgical situations requires accurate assessment of a patient s need for transfusions. Knowing whether and when to transfuse blood depends on effectively balancing the benefits vs. risks of transfusion for each patient at any given time. Under current transfusion practices, patients may undergo major surgery with just half the concentration of normal red cells. This degree of anemia has its own inherent risks. There was a report in the February 2001 issue of the *New England Journal of Medicine* that as many as 40 - 50% of patients undergoing cardiac bypass graft surgery (CABG) experience some degree of measurable permanent brain damage such as memory loss. In the journal *Transfusion*, Dr. Robert Valeri, a senior researcher at the Boston Naval Hospital, estimated that there may be as many as 40,000 heart attacks per one million operations due to undertransfusion. Blood volume measurement, by quantifying a patient s blood volume prior to surgery, can provide important information about how much blood loss a patient can safely sustain.

Dt. Ketan Shevde and colleagues at Maimonides Medical Center (Brooklyn, NY) published a study in the November 2002 issue of the *Journal of Clinical Anesthesia* which used the BVA-100 to show that there was a mean loss in red cell volume of 6.5% in females and 23.7% in males following coronary bypass graft (CABG) surgery. The mean number of intraoperative pRBC transfusions was 1.38 units for females and 0.39 units for males.

Daxor is currently sponsoring a study at the Virginia Commonwealth University which measures changes in blood volume before, during and after elective cardiac surgery (i.e. CABG or valve repair/replacement). Dr. Mark Nelson and colleagues have enrolled 30 patients in this study to date, which has shown greater than anticipated loss of red cells and total blood volume during and after surgery.

Clinical Validation of the BVA-100

In addition to examining the role of blood volume in relation to various medical conditions, some studies have examined how blood volume measurement with the BVA-100 compares to other measurement methods. These reports provide important validation for physicians to accept the use of the BVA-100 in clinical settings.

Dr. S. J. Alrawi and colleagues from the Lutheran Medical Center (New York) published an article in the November 2002 *Saudi Medical Journal* comparing the BVA-100 with pulmonary artery catheterization. The study found that pulmonary artery catheterization does not provide an accurate estimate of blood volume. Direct blood volume measurement is less invasive and more accurate.

Similarly, Dr. Yu and colleagues have given presentations at major medical conferences which compare the BVA-100 to a variety of surrogate volume measures including stroke volume variation, pulse pressure variation, right ventricular end diastolic volume, brain natriuretic peptide, PAC and peripheral hematocrit. Most of these surrogate volume measures showed poor correlation with intravascular volume status. Several publications which describe these findings in detail can be expected in the next two years.

Dr. Howard Dworkin and colleagues from William Beaumont Hospital compared blood volume measurement with the BVA-100 to the previous gold standard blood volume measurement method, which consists of simultaneous radioisotopic measurement of red cell and plasma volume. They found that results correlated very closely with each other, but measurement with the BVA-100 took 90 minutes as opposed to 3.5 hours required for the standard method. These results were published in the July 2007 issue of the *American Journal of Medical Sciences*.

Other Medical Conditions for Blood Volume Measurement Utilizing the BVA-100

There are several other major conditions for which blood volume measurement promises to improve diagnosis and treatment. While no research studies have been published yet which address the role of the BVA-100 in diagnosing and treating these conditions, some physicians have foundBVA-100 measurements useful for treating such patients, and the Company is currently exploring the potential for expanded use of blood volume measurement in the treatment protocols for these conditions at other facilities:

Ultrafiltration in Heart Failure

Alterations in blood volume are an intrinsic element of the pathophysiology and treatment of heart failure. Patients with decompensated heart failure typically experience volume overload, which can contribute to further morbidity and mortality. Ultrafiltration (UF) has been used in patients with decompensated heart failure with demonstrated diuretic resistance as an early alternative to diuresis with strong positive clinical results. Daxor is currently sponsoring a study led by Dr. Mitchell Saltzberg at the Christiana Care Medical Center (Wilmington, DE) to assess blood volumes before and after ultrafiltration, as well as at 30 and 90 day follow-ups. Study endpoints include mortality, all-cause rehospitalization rate, and need for long-term hemodialysis. To date, 5 out of a projected 50 patients with acute decompensated heart failure have been enrolled in this study.

In addition, Valley Hospital (Ridgewood, NJ) is currently conducting a retrospective study to examine whether blood volume analysis should become a standard of care in heart failure patients. Their findings will be published in the near future.

Hypertension

Hypertension can be induced by two primary physiological processes: expanded blood volume or constricted blood vessels. Similarly, anti-hypertensive therapy falls into two broad categories: diuretic therapy which leads to reductions in plasma volume, or vasodilator therapy which relaxed blood vessels. Daxor is currently in the early stages of developing a protocol with Dr. Elijah Saunders of the University of Maryland (Baltimore, MD) to use the BVA-100 to identify the presence or absence of blood volume expansion in hypertension patients and to evaluate whether they are being correctly treated with regard to the underlying mechanisms of hypertension.

Hemodialysis

Hemodialysis (HD) removes excess intravascular and extravascular volume as well as solutes that accumulate during end-stage renal disease (ESRD). An understanding of fluid changes that occur during HD with ultrafiltration (UF) is essential for determining the efficacy of HD, as well as for reducing complications: If an excessive volume of fluid is removed during HD, patients are more likely to experience complications such as hypotension, cramping and/or lightheadedness. In contrast, if patients are not dialyzed to their target weights, they are at risk of remaining in a state of chronic volume overload, which may lead to hypertension, left ventricular hypertrophy, and/or congestive heart failure.

Daxor is currently in the early stages of developing a proposal with Dr. David Goldfarb of the Dialysis Center at the Department of Veteran Affairs New York Harbor Healthcare System which will compare blood volumes before and after a hemodialysis session. Moreover, this study will explore how changes in blood volume in the course of a single hemodialysis session relate to patient outcomes particularly the occurrence of hypotensive episodes.

Blood Substitutes

BioPure Corporation develops and manufactures two proprietary blood substitutes one for human use and one for veterinary use. These hemoglobin-based products are administered intravenously to help transport oxygen to the body s tissues; BioPure has been seeking FDA approval for its human blood substitute HemoPure. It was in the process of conducting a trial with the US Naval Medical Research Center to see whether HemoPure could be used to treat casualties when traditional blood transfusions are not available. However, the FDA put a clinical hold on this trial due to high mortality rates in past trials with HemoPure. Given the unmet medical need for blood substitutes, and the close fit between this research and our long-term interest in blood products, Daxor recently explored the possibility of investing in BioPure to keep the company afloat until some of its ongoing clinical studies could be completed. However, after conducting extensive due diligence, the management of Daxor has decided not to invest in BioPure at this time. The company has, however, offered to assist BioPure with blood volume measurements for future studies.

SCIENTIFIC MEDICAL SYSTEMS SUBSIDIARY (wholly owned by Daxor)

Scientific Medical Systems is a subsidiary wholly owned by Daxor that engages in cryobanking of human blood. Idant, a division of Scientific Medical Systems, offers semen banking services.

Blood Banking

The blood banking industry is a group of for-profit and not-for-profit corporations whose total revenue is estimated to exceed $6 billion. Blood banking services are provided by a broad spectrum of organizations. Approximately one-half of the blood supply used for transfusions is supplied by the American Red Cross and its affiliates. The other portion is supplied by various other tax-exempt and for-profit organizations. Some hospitals operate their own donor services but require the services of outside vendors such as the Red Cross for adequate supplies of blood products.

There are approximately 15-18 million blood transfusions administered annually to 4 million patients. The present donor system of blood transfusions presents risks to individuals receiving blood, such as infectious disease transmission, under- or over-tranfusion, and pre- and post-surgical complications. Many risks from donor blood, such as the risks of infectious disease transmission, can be avoided by utilizing autologous (the patient s own) blood. Additionally, physicians who fear the complications of transfusion with donor blood may be more likely to transfuse autologous blood as soon as it is needed, rather than withholding transfusion until a patient is extremely anemic and at higher risk from blood-loss-related complications.

In 1985, the Company established the first facility in the United States for frozen, long-term autologous blood banking and maintains the only blood bank in New York that allows people to store their own blood for up to 10 years. Currently, the Company is in the process of developing partnership programs whereby corporations can provide frozen long-term blood storage as a benefit to their employees. Taglich Brothers is a full-service brokerage firm in New York City which has offered each of its employees the opportunity to store two units of autologous blood at Idant Laboratories free-of-charge.

Recent Improvements and Innovations

In 2005, the Company began using a recently available FDA-approved technology (manufactured by another company) that extends the shelf-life of thawed frozen blood from 24 hours to 14 days. This development greatly increases the flexibility with which frozen blood can be used and greatly increases the number of situations in which thawed frozen blood can be provided to patients as needed. As part of this program the company has also purchased new freezers and equipment that incorporate this technology. It has also installed a back-up liquid nitrogen system at its headquarters so that in the event of electrical failure, the stored blood can be maintained in a frozen state for 2 3 weeks.

The Company has recently received a trademark for a proposed program of Quality Assured Blood (QAB). This concept is similar to existing safety protocols used to ensure the safety of frozen donor semen (see Idant Semen Banking below) and is only possible because of the unique advantages of frozen blood storage. Infectious diseases such as HIV and Hepatitis have a window period of 3-6 months during which a donor may be infected but has not yet produced the antibodies that are required for the diseases to be detected. With Quality Assured Blood, a donor can be tested for infectious disease, and can donate blood to be frozen and placed in quarantine. The blood will then be retested after six months has elapsed, and the blood will be removed from quarantine if it re-tests free of infectious agents. This blood can then be used as donor blood with markedly reduced risk of infectious disease transmission.

The Company has also trademarked its Blood Optimization Program® (BOP) for maximizing blood safety during surgery. The BOP uses a combination of blood volume measurement, pre-surgical treatment of blood volume deficits, and frozen autologous blood transfusion to maximize patient outcomes following surgery. The Company has applied for and received trademark protection for the BOP name and filed in February of 2007 for a methods patent for the Blood Optimization Concept.

Under the Blood Optimization Program, a patient can donate blood well in advance of surgery and store it in a frozen state, leaving sufficient time to restore of the depleted blood before entering surgery. Frozen red blood cells can be stored for 10 years, and frozen plasma can be stored for 7 years. This lengthy storage time contrasts with the 42 day storage period for red blood cells that have been refrigerated. Once thawed, frozen blood remains fresh and highly oxygenated for 2 weeks, rather than just 24 hours. Additionally, blood volume measurement prior to surgery can identify patients with existing blood volume deficits such as reduced red cell volume, which can be treated with the medication erythropoietin.

The main elements of the Blood Optimization Program are (a) blood volume measurement to determine the current blood volume status of the patient and suitability for blood donation; (b) if the patient is anemic or red cell volume deficient, treatment with epoietin alfa (Procrit® and Epogen® manufactured by Amgen) to stimulate rapid red cell replacement; (c) if the patient is suitable for blood donation, remove one unit of blood and process for freezing of both red cells and plasma. Frozen blood requires special processing with a sterile cryopreservative agent to prevent destruction of the red cells during freezing; (d) treat the patient with epoietin alfa where appropriate to stimulate more rapid replacement of red cells; (e) repeat blood donation to provide enough blood availability at the time of surgery so the patient will not need to receive any blood but their own; and (f) quantify the amount of blood donated, where time permits, so that patients will have no more than a 20% red cell deficit at the end of the post operative period. At the present time, elderly patientsare sometimes permitted to remain with red cell volume deficits as great as 50% without receiving replacement transfusions.

In addition to the desire to provide improved patient care, hospitals may have a significant monetary incentive to participate in the Blood Optimization Program. Surgical patients who experience complications from undertransfusion or adverse donor transfusion reactions require extended hospital stays, for which the hospitals are often not reimbursed. Hospitals operate under a Diagnostic Regulatory Guideline (DRG) system for reimbursement, which means that a hospital will be reimbursed according to a diagnosis, not according to the number of days that a patient spends in the hospital. A low blood volume detection and treatment program could significantly reduce complications and enable shorter hospital stays, with corresponding financial rewards for the host hospital.

In 2005 the Company hired a part-time individual with marketing experience to work on the Blood Optimization Program (BOP). This program is intended to incorporate Daxor s BVA-100 Blood Volume Analyzer and its subsidiary s frozen autologous blood banking, increasing awareness and utilization of both these technologies. This individual has been meeting with administrative blood bank representatives to develop strategies that would enable hospitals to utilize these technologies to optimize blood volumes in patients undergoing surgery. The combination of blood volume measurement and frozen blood banking provides the unique opportunity to simultaneously minimize the consequences of blood loss by optimizing a patient s blood volume before surgery, and maximize transfusion safety by making sure that a patient s own blood is available if transfusion is required. While response to this program has been limited so far, the Company has signed agreements with four hospitals to participate in this program.

Idant Semen (Sperm) Banking

Idant, a subdivision of the wholly owned subsidiary Scientific Medical Systems, has been a pioneer in the technology and commercial application of long-term cryopreservation of human sperm. The division provides frozen semen services to physicians worldwide. Idant holds approximately 50,000 human semen units in long-term storage at its central New York City facility. The Company was a founding member of the American Association of Tissue Banks. The company stores semen from a large cross-section of anonymous donors and is able to offer semen from donors with varying physical characteristics that meet our clients needs. The Company maintains a complete physical description of each donor on file and, when needed, can match multiple physical characteristics and other desired special characteristics to those of the sterile father. The increased likelihood of a child who resembles his recipient father can make a child conceived via artificial insemination much more psychologically acceptable to the father.

The Company also provides cryostorage for later personal use. Semen storage may be desirable for men who have been found to be marginally fertile and who may therefore attain improved fertility with artificial insemination, who anticipate impaired fertility or sterility such as may occur with chemotherapy or radiation for cancer treatment, or who are undergoing a vasectomy but may nevertheless wish to father children in the future. Cancer patients who store semen are frequently in their teens or twenties; by utilizing cryopreservation they will be able to father their own children in later years, despite the high risk of sterility and birth defects associated with anti-cancer treatments. The Company receives referrals for these services from multiple sources, primarily physicians.

Idant has been a pioneer in the safety of anonymous semen donation. In 1985, Idant was the first semen bank to institute an AIDS quarantine period for frozen semen. Viruses such as HIV and Hepatitis B or C may be undetectable for up to six months in infected individuals. By testing the donor prior to and then again six months after donation, the risk of Hepatitis and HIV transmission can be virtually eliminated. Four years after Idant Laboratories pioneered this approach (in 1989), New York and a number of other states enacted laws requiring semen banks to quarantine frozen sperm for a minimum of six months.

In 2004 Idant received confirmation of two successful conceptions utilizing sperm stored at Idant for, respectively, 21 and 28 years. This was the longest successful cryopreservation of sperm in medical history, and these achievements were published in an October 2005 publication in *Fertility and Sterility*. The Company believes that its unique storage system for human sperm is responsible for this extraordinary success.

RESEARCH AND DEVELOPMENT

As detailed in Item 2 Properties , in January of 2007 Daxor acquired additional space with the intention of being able to further expand our research and development and to be prepared, in the future, for increased demand for our products.

When Daxor Corporation developed the first semi-automated blood volume measurement system approved by the FDA, it encountered a generation of physicians who had little or no direct experience with blood volume measurements. The one exception was hematologists who used the test to diagnose a single condition, polycythemia vera (elevated red cell volume) and who preferred to use another method (Chromium 51) to measure red cell volume.

Daxor presumed that the benefits of an automated system which involved no transfusion risks and which measured both red cell count and plasma volume would be readily and widely accepted. However, key personnel at the first facilities to use the BVA-100 (Lutheran Medical Center, Maimonides Hospital, Englewood Hospital, Brooklyn Hospital, Coney Island Hospital, and Long Island Jewish Hospital) returned the system after performing beta testing because they could not convince their administrators that the test was cost-effective. A blood volume measurement can cost the hospital $450 - $600 to perform. In contrast, a surrogate test such as a hemoglobin or hematocrit, although it may be quite inaccurate, can be performed for just $5 - $10. The company therefore has to demonstrate that the savings obtained through increased lifespans and shortened hospital stays makes the test cost-effective.

Until mid-2002 the company employed a limited sales staff with heavy emphasis on scientific training. Management then began to recruit a professional sales and marketing team. By mid-2003, it became apparent from feedback acquired by the new sales team that in addition to cost concerns associated with the instrument, there were additional technical problems that needed to be overcome.

Among the major problems was that the blood volume analyzer was functioning on a DOS operating platform that dated from the mid-1980s. This placed a number of restrictions on the flexibility of the system. Another major problem was that all gamma counters in use at that time for clinical measurement were considered high complexity instruments under the Clinical Laboratory Improvement Act (CLIA). This meant that the instrument had to be used by a facility headed by an individual with advanced specialized background training.

By 2003 the company sold only five instruments despite the fact that it instituted trial agreements with a number of hospitals. It had become clear that major changes were needed. By early 2004 the company decided to expand its research and development facilities in Oak Ridge, Tennessee, to develop a more advanced version of the system which would run on a Windows operating platform. The Company developed a new network of subcontractors, including a group of specialized computer programmers, who were absorbed into the Company as full-time employees in January 2005. The Company also contracted with an original equipment manufacturer (OEM) to build the instrument and to retain for itself the final quality assurance testing operations.

A significant number of engineering changes were included in converting the BVA-100 DOS version into the BVA-100 Windows version. As a result of these improvements, the new BVA-100 system was categorized by CLIA as a medium complexity instrument, which made it accessible to a wider group of potential users. In addition, the many improvements allowed the system to better meet users needs. To the best of our knowledge, this is the only radioisotope nuclear medical instrument which has been designated as a medium complexity instrument because of the quality assurance controls that have been built into the instrument.

In addition to improving the BVA-100, the Company has dedicated considerable time and effort to physician education. A limited number of account representatives work primarily to educate physicians (clinicians) on how best to utilize the instrument. The company also offers unlimited clinical assistance through the services of its Chief Scientist and CEO, Joseph Feldschuh, M.D., as well as Gary Fischman, PhD, Dpm, Director of Research. Additional staff members, including John Reyes-Guerra, the Vice President of Sales and Marketing, and Sandra Gilbert, PhD, the Clinical Research Coordinator, devote part or all of their time to supporting the development, completion, and publication of clinical studies. In addition, the Company has four Medical Directors on staff: (1) Donald Margouleff, M.D., former Professor of Medicine at NYU School of Medicine and former Chief of the Division of Nuclear Medicine at North Shore University Hospital; (2) Ariel Distenfeld, M.D., former Director of the Blood Bank at Cabrini Medical Center, who established the second autologous blood bank in New York; (3) Robert Rosenthal, M.D., former hematologist and former Director of the Blood Bank for the Hospital for Joint Diseases; (4) Elena Agranovsky, Medical Director at Bayside Diagnostics Laboratory and former Chief of the Hematology Laboratory at Elmhurst General Medical Center. The Company also continues to provide financial and clinical support for studies at various institutions.

MARKETING

The Company s marketing of the blood volume analyzer can be divided roughly into three phases: initial beta testing at local facilities, late-stage beta testing at nationally recognized institutions with an emphasis on developing studies for publication, and marketing of the instrument for clinical use. During late-stage beta testing and the marketing phase, the instrument continued to experience a number of major technical improvements and alternations.

Initial Beta Testing (1999-2000)

After obtaining FDA approval for the instrument and the accompanying Volumex kit, the Company began beta testing the BVA-100 at local hospitals in 1999. The Company had no prior experience in marketing a medical instrument or device and relied on a limited number of sales staff who had specialized technical knowledge and a background in physiology. From 1999 to 2000, the Company loaned the instrument and provided associated kits to a number of local hospitals free of charge. In some cases, these hospitals also received direct financial support for performing research studies. The participating facilities at that time included Lutheran Medical Center, Maimonides Hospital, Brooklyn Hospital, Coney Island Hospital, and Long Island Jewish Hospital.

Some hospitals, such as Lutheran Medical Center, were able to publish their findings in peer-reviewed clinical journals. Some of these early studies clearly demonstrated that invasive techniques such as pulmonary artery catheterization (PAC) were not nearly as accurate as direct measurement of blood volume in assessing a patient s volume status. In some cases, the hospitals performed studies but were unsuccessful in publishing their results.

After these facilities completed their studies, they returned the BVA-100 instruments to the Company because they could not convince their respective administrators that the test was cost-effective. During this time, the Company sold only a single Blood Volume Analyzer.

Late Stage Beta Testing (2000-2002)

As a result of feedback from the initial beta testing, the Company recognized that it was essential for the instrument to be placed in nationally recognized facilities. These facilities, because they worked with more complex medical conditions and had wider name recognition, were more likely to recognize the benefits of blood volume measurement and to publish their results. Additionally, studies from these prestigious institutions were more likely to be highly regarded by other facilities. The Company arranged for the loan of an instrument to the Cleveland Clinic, the Mayo Clinic, and the NYU Medical Center. *US News & World Report* publishes an annual ranking of 6200 hospitals in the United States. At the time, the Mayo Clinic and The Cleveland Clinic ranked respectively #2 and #3 in the annual ranking of hospitals, while the Cleveland Clinic Cardiovascular Department ranked # 1 in the U.S. After trial agreements lasting more than 1 year, these facilities purchased their instruments and paid for Volumex kits as they continued to utilize the Blood Volume Analyzer.

Despite the positive response from these facilities, it became increasingly apparent that the company needed significantly more clinical studies to support the reliability, utility, and cost-effectiveness of blood volume measurement with the BVA-100. It also became clear that the original version of the BVA-100, which was based on a DOS platform, needed to be changed in order to provide adequate features and flexibility to meet users needs (see Research and Development section above).

It has been an ongoing goal of the Company to partner with medical facilities to develop studies that will result in publications in peer-reviewed journals, with the intent of increasing awareness and acceptance of the need for accurate, rapid blood volume measurement. A number of studies initiated between 2000 and 2002 were eventually published in 2004 and later. This time lag in publishing clinical study results reflects both the time needed to complete the study itself, as well as the fact that it can take a year or more from submission of a manuscript to its final publication.

Marketing Phase (2002-present)

By 2002, the Company recognized that it needed to recruit an experienced medical device marketing staff. In September 2002 the Company hired a National Sales Manager and three Regional Sales Managers with extensive experience in the medical device and nuclear medicine field. Subsequently, several different sales programs were tested. It was believed that the best program format consisted of a National Sales Manager supported by regional sales representatives. John Reyes-Guerra, one of the original regional vice presidents, was made Vice President of Sales and Marketing.

The marketing team has made great progress in identifying which facilities and departments are most able to utilize the BVA-100 in a cost-effective manner and has developed a repertoire of educational and marketing material. Depending on a facility s needs and its ability to perform studies that are likely to increase widespread acceptance of the BVA-100, the Company offers the Blood Volume Analyzer to potential users on a sale, lease, or loan basis. Facilities that receive a loan of the instrument for research pay for the Volumex kits that are not used purely for research purposes, which can provide a source of ongoing revenue for the Company. These users include hospitals, surgery centers, intensive care units, and imaging centers (radiology). The Company also has been demonstrating its equipment at major trade shows such as nuclear medicine, surgical anesthesiology, and trauma conferences. In 2007 the Company exhibited at a total of 20 national, local and regional trade shows, and in 2008 it exhibited at 31 national and regional trade shows.

Despite its success at a few key institutions, the BVA-100 continues to encounter some significant obstacles to widespread acceptance. The Company has attempted to balance sales efforts with education and the development and support of continued clinical research. Towards this goal, the following eighteen original research articles have been published since 2002 which utilize blood volume data obtained from the BVA-100:

1. Kalra P, Anagnostopoulos C, Bolger AP et al. The Regulation and Measurement of Plasma Volume in Heart Failure. *JACC*. 2002; 391: 1901-1908.

2. Shevde K, Pagala M, Tyagaraj C et al. Preoperative Blood Volume Deficit Influences Blood Transfusion Requirements in Females and Males Undergoing Coronary Bypass Graft Surgery. *J Clin Anesth*. 2002; 14:512-517.

3. Alrawi SJ, Miranda LS, Cunningham JN et al. Correlation of Blood Volume Values and Pulmonary Artery Catheter Measurements. *Saudi Med J*. 2002; 23:1367-1372.

4. Androne AS, Katz SD, Lund L et al. Hemodilution is Common in Patients with Advanced Heart Failure. *Circulation*. 2003; 107:226-229.

5. James KB, Stelmach K, Armstrong R et al. Plasma Volume and Outcome in Pulmonary Hypertension. *Tex Heart Inst J*. 2003; 30:305-307.

6. Mancini DM, Katz SD, Lang CC et al. Effect of Erythropoietin on Exercise Capacity in Patients with Moderate to Severe Chronic Heart Failure. *Circulation*. 2003; 107:294-299.

7. Katz SD, Mancini D, Androne AS et al. Treatment of Anemia in Patients with Chronic Heart Failure. *J Card Fail*. 2004; 10 (Suppl 1): S13-S16.

8. Androne AS, Hryniewicz K, Hudaihed A et al. Relation of Unrecognized Hypervolemia in Chronic Heart Failure to Clinical Status, Hemodynamics, and Patient Outcomes. *Am J Cardiol*. 2004; 93:1254-1259.

9. James KB, Troughton RW, Feldschuh J et al. Blood Volume and Brain Natriuretic Peptide in Congestive Heart Failure: A Pilot Study. *Am Heart J*, 2005; 150:984.e1-984.e6.

10. Jacob G, Raj S, Ketch T et al. Postural Pseudoanemia: Posture-Dependent Change in Hematocrit. *Mayo Clin Proc*. 2005; 80:611-614.

11. Raj SR, Biaggioni I, Yamhure PC et al. Renin-Aldosterone Paradox and Perturbed Blood Volume Regulation Underlying Postural Tachycardia Syndrome. *Circulation*. 2005; 111:1574-1582.

12. Dworkin HJ, Premo M, Dees S. Comparison of Red Cell and Whole Blood Volume as Performed Using Both Chromium-51 Tagged Red Cells and Iodine-125 Tagged Albumin and Using I-131 Tagged Albumin and Extrapolated Red Cell Volume. *Am J Med Sci*, 2007; 334:37-40.

13. Feldschuh J and Katz S. The Importance of Correct Norms in Blood Volume Measurement. *Am J Med Sci*, 2007; 334:41-46.

14. Fouad-Tarazi F, Calcatti J, Christian R et al. Blood Volume Measurement as a Tool in Diagnosing Syncope. *Am J Med Sci*. 2007; 334:53-56.

15. Abramov D, Cohen RS, Katz SD et al. Comparison of Blood Volume Characteristics in Anemic Patients with Low Versus Preserved Left Ventricular Ejection Fractions. *Am J Cardiol*. 2008; 102:1069-1072.

16. Yamauchi H, Buik-Aghai EN, Yu M et al. Circulating Blood Volume Measurements Correlate Poorly with Pulmonary Artery Catheter Measurements. *Hawai I Medical Journal*. 2008; 67:8-11.

17. Takanishi DM, Yu M, Lurie F et al. Peripheral Blood Hematocrit in Critically Ill Surgical Patients: An Imprecise Surrogate of True Red Blood Cell Volume. *Anesth Analg*. 2008; 106:1808-1812.

18. Takanishi DM, Biuk-Aghai EN, Yu M et al. The Availability of Circulating Blood Volume Values Alters Fluid Management in Critically Ill Surgical Patients. *Am J Surg*. 2009; 197:232-237.

In addition, the following presentations which were made at major medical conferences may be published in the near future:

1. 2006 Heart Failure Society of America Poster Presentations - Columbia Presbyterian College of Surgeons and Physicians, New York, NY -The Administration of Subcutaneous Erythropoietin in Elderly Patients with Heart Failure and Normal Ejection Fraction Over Three Months is Safe and Effective

2. 2006 Society of Critical Care Medicine Poster Presentation - The Queen s Medical Center, Honolulu, HI Blood Volume Measurements: Impact on Fluid Management

3. 2007 Society of Critical Care Medicine Poster Presentation The Queen s Medical Center, Honolulu, HI Does Blood Volume and Brain Natriuretic Peptide Correlate?

4. 2008 Society of Critical Care Medicine Poster Presentation The Queen s Medical Center, Honolulu, HI Right Ventricular End Diastolic Volume and Brain Natriuretic Peptide May Not Reflect Intravascular Volume Status in Critically Ill Patients.

5. 2008 Society of Critical Care Medicine Poster Presentation The Queen s Medical Center, Honolulu, HI Stroke Volume Variation as a Marker of Intravascular Volume Compared to Blood Volume Measurement

6. 2009 Society of Critical Care Medicine Poster Presentation The Queen s Medical Center, Honolulu, HI A Comparison of Pulse Pressure Variation and Blood Volume Measurement

PATENT AND COPYRIGHT PROTECTION

Existing Patents

The Company owns separate United States patents on its Blood Volume Analyzer BVA-100 and on its Volumex injection kit. These are the only U.S. patents ever issued for an automated instrument dedicated to the measurement of total human blood volume for a specific individual. The Company also received a European patent covering 12 countries and received the first patent ever issued in Japan for an instrument to measure human blood volume.

The instrument is designed to work with the Volumex injection kit, which is manufactured by the Company. It is theoretically possible to use the Blood Volume Analyzer without the kit by preparing the reagents used for the test. However, the cost and time for such preparations would be non economical and it is unlikely that a purchaser of the instrument would use it without purchasing the reagent kit. This is the first U.S. patent ever issued for a system that permits a fixed quantified amount of isotope to be injected for diagnostic purposes. The injection system was specifically designed for use with the BVA-100. However, it can be used for other diagnostic test purposes where a precise complete quantitative injection of a diagnostic reagent is required.

The blood bank has received two recent trademarks: one is for Quality Assured Blood and the other is for the Blood Optimization Program (BOP). The Company has applied for and received trademark protection for the BOP name.

In February, 2007 the company s patent attorneys filed a methods patent for the Company s Blood Optimization Program (BOP). The program is designed to ensure, where possible, that patients undergoing surgery enter surgery with a normal amount of blood, both plasma volume and red cell volume. It is also designed to enable patients to have their own autologous blood available to them to replace blood lost during surgery and in the post-operative period.

The Blood Optimization Methods Program Patent is designed to eliminate, where possible, the types of medical and surgical situations which can result in stroke, heart attack, or even death. The use of frozen blood as opposed to refrigerated blood eliminates many of the aging effects which have been demonstrated in refrigerated blood.

Future Projects and Potential Patents

The Company expects to file additional patents for tests associated with the BVA-100 in the near future to provide additional applications, as outlined below:

Glomerular Filtration Rate

The Company is working on an instrument that will automate the measurement of glomerular filtration rate (GFR), whichis a very important and sensitive test of kidney function. At present, this test is performed infrequently because of the difficulty in the current methodology. The Company believes that it can automate the glomerular filtration rate test, which will make it more feasible for regular medical use.

Measurement of Total Body Albumin

The Company is planning to file a patent for the measurement of total body albumin using measurements from the Blood Volume Analyzer. Albumin is a major carrier of hundreds of vital components within the circulatory system and is a key molecule responsible for maintaining oncotic pressure. Abnormal total body albumin is common in many disease states, such as heart failure, cancer, and diabetes. Burn patients in particular experience serious loss of albumin, and replacement quantities may be difficult to calculate. The ability to measure total body albumin accurately would be expected to facilitate more precise albumin replacement therapy.

Needleless Injection System

The Company is reviewing an alternative injection kit system that can be used without a needle. Some intensive care units emphasize an elimination of needles wherever possible. The Volumex kit is injected into an intravenous system flowing into the patient s vein, rather than through a direct needle stick. Thus, a person using a kit who accidentally stuck himself would not be exposed to the patient s blood. Nevertheless, we think it would be an advantage if we can develop a needleless system.

UL and CE Mark

In March, 2007, Daxor finished the final phase, inspection, to receive U.L. (Underwriters Laboratory) approval. The process consisted of Daxor submitting the complete BVA-100 and associated panel P.C. for physical inspection and testing, including the strenuous electrical inspection safety examination. Blood volume analyzers shipped after April 2007 bear the U.L. mark.

Daxor is in the process of achieving the CE mark. CE is a self-certification mark for which the manufacturer must possess proof of compliance with the standards. Daxor s immediate goal is to pass the U.S. and Canadian standards for CE. As part of the UL testing, Daxor has passed the electrical safety part and possesses its verification from the UL for this component. The second component is EMC (electromagnetic compatibility). For Daxor to be able to market and distribute the instrument in countries other than the U.S. and Canada, it would need to pass those country s specific requirements, which may or may not have been met by the EMC and electrical testing, and would be required in many countries to translate existing documentation into that country s primary language.

Idant Semen Storage Client Identification

The Company is also exploring the submission of a patent for methodology of improving client identification in its semen bank. It is introducing additional patient protection for stored donor semen, which may be eligible for patent protection. In the 34 years of Idant Semen Bank operations, there has never been a mix-up in any stored specimen.

COMPETITION

BVA-100 Blood Volume Analyzer

The medical technology market is intensely competitive. However, there are no direct competing instruments manufactured or marketed that perform rapid, accurate semi-automated blood volume analysis, similar to the BVA-100. The Company believes that its receipt of United States, European and Japanese patents for its Blood Volume Analyzer provides significant protection against any future potential competition in the blood volume analysis field.

The receipt of the U.S. patent for the injection kit system provides significant additional protection, as the Company believes that the kits will be a major source of ongoing revenue. The Company believes that its main hindrance to market acceptability, rather than any specific competition, will be the need to demonstrate that its blood volume measurement equipment is capable of producing accurate data in a cost-effective manner.

Blood Banking

The Scientific Medical System s frozen blood bank is the only facility that provides long-term personal frozen blood storage in the Northeastern United States. Multiple companies that previously attempted to provide long-term personal blood storage to members of the public were unsuccessful.

To date, the Company has not made a profit from its blood banking services. However, the Company believes that its acquisition of new FDA-approved technology (see above) may enable frozen blood banking services to eventually become financially self-sustaining and profitable. This technology also opens up the potential for paid, double-tested donors, who are tested before blood storage, then placed in quarantine for 6 months, and then tested again.

In the past, the Company has experienced significant opposition from some non-profit blood banking organizations that viewed frozen autologous blood as a potential competitive threat to their operations. It is the Company s intention to form alliances with hospitals utilizing the Blood Optimization Program. The Company views personal blood storage as a supplement to and not as competition to other existing blood donor services. The Company will initially focus its attention on facilities within a 200 mile radius of New York City. If the Program proves successful, the Company will then develop satellite facilities in conjunction with other medical partners in other parts of the United States. For further discussion, please see the patent and copyright section above.

Semen Banking

There are at least 300 sperm banks in the United States operated either by commercial entities or by academic institutions. The Company believes that its unique storage system, coupled with clear documentation of successful conception from the longest-term frozen stored semen in medical history, will help to expand its marketing efforts. The Company s use of straws for semen storage, and the unique carousel storage system which keeps the frozen semen straws continuously submerged in liquid nitrogen, avoids any type of cross contamination with other samples. The Company has also developed a web site (www.Idant.com) that will be helpful for marketing purposes.

WARRANTIES

The Company recognizes warranty and indemnification obligations under SFAS No.5 (As Amended), Accounting for Contingencies (SFAS 5), FASB Interpretation No. 45, Guarantor s Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others and FASB Concepts Statement (SFAC) No.7 (As Amended), Using Cash Flow Information and Present Value in Accounting Measurements. These pronouncements require a guarantor to recognize and disclose a liability for obligations it has undertaken in relation to the issuance of the guarantee.

The Company warrants that its products are free from defects in material and workmanship for a period of one year from the date of initial acceptance by our customers. The warranty does not cover any losses or damage that occurs as a result of improper installation, misuse or neglect and repair or modification by anyone other than the Company or its authorized repair agent. The Company s policy is to accrue anticipated warranty costs based upon historical percentages of items returned for repair within one year of the initial sale. The Company s repair rate of product under warranty has been minimal and a historical percentage has not been established. The Company has not provided for any reserves for such warranty liability.

The Company generally warrants its Blood Volume Analyzers against defects in material and workmanship for a period of up to one year from the date of shipment, plus any extended warranty period purchased by the consumer. With respect to semen banking and blood banking, the Company warrants that its methods of storage are in compliance with all existing federal and state regulations.

GOVERNMENT REGULATION

The development, testing, production and marketing of medical devices are subject to regulation by the FDA under the Federal Food, Drug and Cosmetic Act, and may be subject to regulation by similar agencies in various states and foreign countries.

The governing statutes and regulations generally require manufacturers to comply with regulatory requirements designed to assure the safety and effectiveness of medical devices. The FDA clearance for marketing of the Blood Volume Analyzer, BVA-100, and the associated quantitative injection kit marks one of the most important milestones in the history of Daxor. The products manufactured by and for the Company with regard to the BVA-100 are subject to continuing FDA regulations and inspections.

The New York State Department of Health regulates the Company s Idant Semen and Blood Banks within New York State. The Idant Semen Bank and Blood Bank are divisions of Scientific Medical Systems, which is a subsidiary wholly owned by the Daxor Corporation. Scientific Medical Systems has its own separate directors. These facilities are licensed and annually inspected by the New York State Department of Health.

PRODUCT LIABILITY EXPOSURE

The Company s business involves the inherent risk of product liability claims. The Company currently maintains general product liability insurance and an umbrella liability policy, which the Company believes are sufficient to protect the Company from any potential liability risks to which it may be subject. However, there can be no assurances that product liability insurance coverage will continue to be available or, if available, that it can be obtained in sufficient amounts or at a reasonable cost.

ENVIRONMENTAL

The Company believes it is in compliance with the current laws and regulations governing the protection of the environment and that continued compliance would not have a material adverse effect on the Company or require any material capital expenditures. Compliance with local codes for the installation and operation of the Company s products is the responsibility of the end user.

EMPLOYEES

On February 24, 2009, the Company had a labor force of thirty six, all of which were leased through ADP Total Source. The Company maintains a work force at its main headquarters in the Empire State Building in New York City, as well as a manufacturing division and a technology support group in Oak Ridge, Tennessee, and a technology support group. The Company believes that its labor force relations are good.

Item 1A: Risk Factors

The Company has incurred substantial operating losses over the past five years. These losses have mainly resulted from steadily increasing expenses for marketing and research and development as the Company attempts to build a market for its products. During this time, the Company has relied on income from investments to partially cover operating losses and provide the necessary funds for expanded research and

development and marketing.

In the Company s fiscal year ended December 31, 2008, the sale of Blood Volume Kits accounted for 57.1% of the Company s total consolidated sales. There were three customers (hospitals) that accounted for 49.5% of the Company s sale of Blood Volume Kits. Management believes that the loss of any one customer would have an adverse effect on the Company s consolidated business for a short period of time. All three of these hospitals have purchased their BVA-100 equipment. The Company has not had any situations in which a hospital, after having purchased a blood volume analyzer, discontinued purchasing Volumex kits. This suggests that, when more hospitals purchase equipment, they will continue with ongoing purchase of Volumex kits. The Company continues to seek new customers, so that any one hospital will represent a smaller percentage of overall sales.

As disclosed in our Form 10-Q for the period ended September 30, 2008, the Centers for Medicare and Medicaid Services (CMS) implemented a significant policy change affecting the reimbursement for all diagnostic radiopharmaceutical products and contrast agents which was effective as of January 1, 2008. Diagnostic radiopharmaceuticals such as Daxor s Volumex will not be separately reimbursable by Medicare for outpatient services. At this time, it is unclear if this policy change will also be implemented by private third party health insurance companies.

The reimbursement policy for hospital outpatients through December 31, 2007 included payment for both the cost of the procedure to perform a blood volume analysis (BVA) and the radiopharmaceutical (Daxor s Volumex radiopharmaceutical). CMS s new policy only includes the reimbursement for the procedure and would require the hospital to absorb the cost of the radiopharmaceutical. There will be an upward adjustment for the procedure code to include some of the costs of the radiopharmaceutical. However, this upward adjustment does not entirely cover the costs associated with the procedure and the radiopharmaceutical.

In response to Medicare s change in its reimbursement policy for diagnostic radiopharmaceuticals, Daxor has lobbied CMS both individually and as a member of the Society of Nuclear Medicine s APC Task Force, which is a select group of representatives from industry and healthcare that represents the more than 16,000 nuclear medicine professionals in the United States. One of the missions of the APC Task Force is to work directly with the CMS in an attempt to amend the current policy limiting the reimbursement of diagnostic radiopharmaceuticals for outpatient diagnostic services.

Daxor has also begun to concentrate its marketing and sales effort on inpatient diagnostic services by demonstrating the cost savings associated with the use of the blood volume analysis in the care of critically ill patients.

At December 31, 2008, approximately 80% of the fair market value of the Company s investment portfolio consisted of utility stocks whose market price can be sensitive to rising interest rates. There is a risk that in an environment of rising interest rates that the market value of these stocks could decline and the utilities could reduce their dividend payments to compensate for increased interest expense. This could have an adverse effect on the Company s ability to fund research and development and marketing efforts necessary to build a market for their products.

At December 31, 2008, the Company s investment portfolio consisted of 104 separate stocks. The top three holdings at December 31, 2008 comprised approximately 35% of the value of the investment portfolio. These same three holdings accounted for approximately 36% of the dividend income for the year ended December 31, 2007. A reduction in dividend payments by these companies could have a material effect on the Company s dividend income.

The Company also receives significant income from option sales related to its investment portfolio. The income from options is variable, and less predictable than income from dividends from the Company s portfolio, which have minor variations.

The Company has a significant dependence on a single individual, Dr. Joseph Feldschuh, who is the CEO of the Company. Dr. Feldschuh is the Chief Scientist of the Company and is believed to have more experience with blood volume measurement than any other physician in the United States. He is involved in assisting and advising various physician groups that are conducting research. His scientific knowledge would be difficult to replace. Dr. Feldschuh is also the sole individual responsible for investment decisions with respect to the Company s investment portfolio. Loss of his part time services in this area would be expected to result in a material reduction in return on the Company s assets.

The Company s Volumex syringes are filled by an FDA approved radio pharmaceutical manufacturer. This manufacturer is the only one approved by the FDA in the United States to manufacture Volumex for interstate commerce. If this manufacturer were to cease filling the Volumex syringes for Daxor before the Company had a chance to make alternative arrangements, the effect on Daxor s business could be material.

Item 2: Properties

In December 2002, the Company signed a twelve year lease extension commencing January 1, 2003, for its existing facility at the Empire State Building. The Company has occupied this space since January 1992. The Company currently occupies approximately 7,200 square feet. The lease has a two year option for renewal after ten years. There are options for an additional 18,000 square feet of space. The Company has a pilot manufacturing facility in Oak Ridge, Tennessee which is currently manufacturing the BVA-100 Blood Volume Analyzers, and where R&D activities are performed.

On January 3, 2007, Daxor closed on the purchase of 3.5 acres of land at 107 and 109 Meco Lane, Oak Ridge, Tennessee that contains two separate 10,000 sq. ft. buildings. The buildings were constructed in 2004; each structure is a single story steel frame with metal shell and roof constructed on a concrete slab. The total purchase price for the land and property was $775,000 plus closing fees. Daxor financed the purchase with a $500,000 10-year mortgage, with the first five years fixed at 7.49%, and the second 5 years to be reset in 2012. For the years ending December 31, 2008 through December 31, 2011, principal and interest payments will total $71,190 per year.

All Warehousing and Distribution for the BVA-100 takes place along with related software support and development at the facility located at 107 Meco Lane. Most of the Company s Research and Development (R&D) and Verification and Validation (V&V) functions are also fulfilled at this location. The Management Information Support Function and Hardware Disaster Relief Center which mirrors and backs up all computer activity in the New York City Headquarters is also located at 107 Meco Lane.

The building at 109 Meco Lane is currently being used for radiopharmaceutical distribution. In order to be able to use the facility for this type of distribution, we have obtained our licenses from the Federal Nuclear Regulatory Commission and the State of Tennessee for nuclear capability. The Company subsequently obtained a license from the Food and Drug Administration (FDA) to become a re-shipper. This license enables Daxor to receive batches of Volumex from our third party manufacturer and to ship the doses to our clients.

In November of 2008, a construction project commenced at 109 Meco Lane. Management expects the project to be completed by the end of March 2009 and the total cost to be approximately $1,500,000. The project involves the construction of laboratory and office space.

The Company subleases a small portion of its New York City office space to the President of the Company for five hours per week. This sublease agreement has no formal terms and is executed on a month to month basis. The annual amount of rental income received from the President of the Company in each of the years ended December 31, 2008, 2007 and 2006 was $11,478, $11,022 and $10,646. For the years ended December 31, 2008, 2007 and 2006 the Company had sublease income from non-affiliated third parties of $0, $0 and $3,000. The sublease income is shown on the Income Statement as part of other revenues.

Item 3: Legal Proceedings

The Company has one pending legal action which covers the normal range of it s business. It is the opinion of management that the Company has substantial legal and factual defenses to contest this action. The Company intends to aggressively and vigorously defend this action.

Item 4: Submission of Matters to a Vote of Security Holders.

No matters were submitted to a vote of the stockholders during the fourth quarter of the fiscal year ended December 31, 2008.

PART II

Item 5: Market for Registrant s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

The common stock is traded on the American Stock Exchange under the symbol DXR.

2008	High	Low
First Quarter	$ 14.75	$ 8.51
Second Quarter	$ 19.00	$ 11.55
Third Quarter	$ 18.53	$ 14.99
Fourth Quarter	$ 16.98	$ 13.47

2007	High	Low
First Quarter	$ 14.65	$ 12.75
Second Quarter	$ 15.75	$ 12.96
Third Quarter	$ 16.99	$ 14.02
Fourth Quarter	$ 18.30	$ 12.75

On February 20, 2009, the Company had approximately 143 holders of record of the Common Stock. The Company believes there are approximately 900 beneficial holders of their Common Stock.

For the Year Ended December 31, 2008, the Company paid total dividends of $6,452,502 or $1.50 per share on its Common Stock. The dividend of $1.50 per share was paid as follows: $0.25 per share on August 26th, $0.25 per share on November 26th and a special dividend of $1.00 per share on December 30, 2008.

This is the first time the Company has paid dividends since a single cash dividend of $0.50 per share on the Common Stock in 1997. No dividends have been declared or paid in 2009 and any future dividends will be dependent upon the Company s earnings, financial condition and other relevant factors.

Item 6: Selected Financial Data.

The following table sets forth certain selected financial data with respect to the Company. The consolidated statements of operations data for the years ended December 31, 2008, 2007, 2006 and 2005 are derived from our audited consolidated financial statements that are included in this Form 10-K. The consolidated statements of operations data for the year ended December 31, 2004 has been derived from audited consolidated financial statements that are not included in this report.

Operations Data:

	Year Ended December 31,				
	2008	2007	2006	2005	2004
Operating revenues	$ 1,761,055	$ 1,869,779	$ 1,486,449	$ 1,343,538	$ 1,066,314
Total revenues	$ 1,761,055	$ 1,869,779	$ 1,486,449	$ 1,343,538	$ 1,066,314
Costs and expenses:					
Operations of laboratories & costs of production	717,278	682,786	631,567	565,742	251,622
Research and development	2,438,423	2,576,708	2,332,399	2,152,261	1,566,115
Selling, general and administrative	3,812,506	4,041,155	3,947,404	3,528,560	2,790,444
Total costs and expenses	6,968,207	7,300,649	6,911,370	6,246,563	4,608,181
Loss from operations	(5,207,152)	(5,430,870)	(5,424,921)	(4,903,025)	(3,541,867)
Other income and expenses:					
Dividend income	2,509,966	2,419,476	2,273,737	2,511,054	1,990,669
Gains on sale of investments	17,249,716	14,853,934	3,316,710	1,515,653	989,599
Mark to market of short positions	5,364,215	357,337	(544,629)	(204,225)	266,807
Other revenues	11,924	11,112	13,838	14,686	15,245
Investment recovery				75,000	
Admin expense relating to portfolio investments	(99,935)	(55,538)	(44,564)	(36,842)	(1,126)
Interest expense, net of interest Income	(147,501)	(197,211)	(363,952)	(296,114)	(108,949)
Total other income and expenses	24,888,385	17,389,110	4,651,140	3,579,212	3,152,245
Income (loss) before income taxes	19,681,233	11,958,240	(773,781)	(1,323,813)	(389,622)
Provision for income taxes	4,557,964	1,311,024	11,750	12,168	
Net Income (loss)	$ 15,123,269	$ 10,647,216	$ (785,531)	$ (1,335,981)	$ (389,622)
Weighted average number of common shares outstanding - basic	4,350,951	4,572,119	4,625,168	4,638,384	4,615,993

Weighted average number of common shares outstanding - diluted	4,375,623	4,572,119	4,625,168	4,638,384	4,615,993
Income (loss) per common equivalent share - basic	$ 3.48	$ 2.33	$ (0.17)	$ (0.29)	$ (0.08)
Income (loss) per common equivalent share - diluted	$ 3.46	$ 2.33	$ (0.17)	$ (0.29)	$ (0.08)
Dividends paid per common share	$ 1.50				

Selected Balance Sheet Data:

	Year Ended December 31,				
	2008	2007	2006	2005	2004
Total assets	$ 76,824,181	$ 102,560,500	$ 78,166,312	$ 59,565,053	$ 55,746,607
Total liabilities*	$ 33,363,540	$ 47,644,615	$ 32,528,520	$ 20,820,252	$ 15,493,319
Stockholders equity	$ 43,460,641	$ 54,915,885	$ 45,637,792	$ 38,744,801	$ 40,253,288
Return on equity**	30.74%	21.18%	0.00%	0.00%	0.00%

* Total liabilities include deferred taxes on unrealized gains.

** Return on equity is calculated by dividing the Company s net income or loss for the period by the average stockholders equity for the period.

Item 7: Management s Discussion and Analysis of Financial Condition and Results of Operations.

RESULTS OF OPERATIONS

Operating Revenues

In 2008 revenue from operations was $1,761,055.vs. 2007 revenue from operations of $ 1,869,779 for a decrease of 6%. In 2006, operating revenues were $1,486,449.

Equipment sales and kit sales decreased from $1,453,201 in 2007 to $1,381,105 in 2008. In 2008 the Company sold four blood volume analyzers for a total of $260,000 versus six in 2007 for $390,500. Kit sales increased by 4% in 2008 over 2007 and by 15% in 2007 over 2006. Kit sales increased by 35% in 2006 over 2005 and by 53% in 2005 over 2004. 3,113 patients, utilizing the BVA-100, had blood volume measurements in 2008 vs. 3,015 in 2007, 2,886 in 2006 and 2,132 in 2005. For the year ended December 31, 2008 the Company provided 472 Volumex doses free of charge to facilities utilizing the BVA-100 for research versus 328 in 2007, 194 in 2006,95 in 2005 and 83 in 2004.

The major reasons for the current year increase in kit sales are an increase in utilization of existing instruments along with 53 Blood Volume Analyzers placed in service at December 31, 2008 versus 50 placed in service at December 31, 2007. Effective February 1, 2007, the Company raised prices by approximately 5% on Blood Volume Kits which was the first price increase in two years. The Company did not raise prices on Blood Volume Kits in 2008.

The decrease in Gross Profit Percentage on Kit Sales for the year ended December 31, 2008 is mainly due to the aforementioned increase in Volumex doses provided free of charge to facilities using the BVA-100 for research. The main reason for the decrease in Gross Profit Percentage for Equipment Sales and Related Services from 56.3% for the year ended December 31, 2007 to 51.2% for the year ended December 31, 2008 is that six blood volume analyzers were sold in 2007 versus four in 2008. The gross margin on the blood volume analyzer is substantially higher than the gross margin on Volumex Kits.

The following table provides gross margin information on Equipment Sales & Related Services for the years ended December 31, 2008 and December 31, 2007:

Equipment Sales and Related Services:	Kit Sales Year Ended December 31, 2008	Equipment Sales and Other Year Ended December 31, 2008	Total Year Ended December 31, 2008
Revenue	$ 1,005,981	$ 375,124	$ 1,381,105
Cost of Goods Sold	516,054	158,522	674,576
Gross Profit	489,927	216,602	706,529
Gross Profit Percentage	48.7%	57.7%	51.2%

Equipment Sales and Related Services:	Kit Sales Year Ended December 31, 2007	Equipment Sales and Other Year Ended December 31, 2007	Total Year Ended December 31, 2007
Revenue	$ 963,318	$ 489,883	$ 1,453,201
Cost of Goods Sold	475,811	159,127	634,938
Gross Profit	487,507	330,756	818,263
Gross Profit Percentage	50.6%	67.5%	56.3%

Operating revenues from Cryobanking and related services decreased in 2008 by $36,628 or 8.8% from 2007. This was due mainly to revenue from semen storage decreasing by $19,392 or 6.9% to $262,675 versus $282,067 in the year ended December 31, 2007. There was also a decrease of $14,743 in semen analysis and other lab services. The Company s Idant Laboratories subsidiary contributed 21.6%, 22.3%, and 29.0% of operating revenues in 2008, 2007 and 2006 respectively.

Operating Expenses

For 2008, consolidated expenses from operations including cost of sales totaled $6,968,207 and the loss from operations was $5,207,152. In 2007, expenses from operations including cost of sales totaled $7,300,649; the loss from operations was $ 5,430,870. In 2006, expenses from operations including cost of sales totaled $6,911,370; the loss from operations totaled $5,424,921.

Total Operating costs including cost of sales for Daxor and the BVA segment were $6,017,752 for the year ended December 31, 2008 versus $6,351,501 for the year ended December 31, 2007 for a decrease of $ 333,749 or 5.2%. The main reason for this decrease is a reduction of $278,489 in payroll and related expenses.

Research and Development expenses for Daxor and the BVA segment decreased in 2008 by $132,751 or 5.5% to $2,257,601 from $2,390,352 in 2007. However, Daxor remains committed to making Blood Volume Analysis a standard of care in at least three disease states. In order to achieve this goal, we are continuing to spend time and money in research and development in order to get the best product to market. We are still working on the following three projects: 1) GFR: Glomeril Filtration Rate, 2) Total Body Albumin Analysis, and 3) Wipe Tests for radiation contamination and detection. We are also progressing on the next version of the delivery device for the radioactive dose Volumex. The current version is the Max-100 which has a patent. The next version, the Max-200 will be without a needle and should give the company extended protection with a second patent when it is completed.

Total Operating Costs including cost of sales for the Cryobanking segment were $950,455 for the year ended December 31, 2008 versus $949,148 for the year ended December 31, 2007 for an increase of $1,307 or 0.1%.

Dividend Income

Dividend income earned in 2008 was $2,509,966 vs. $2,419,476 in 2007, for an increase of $90,490, or 3.7%. In 2006, dividend income was $2,273,737.

Investment Gains

Gains on the sale of investments were $17,249,716 in 2008 vs. $14,853,934 in 2007, and $3,316,710 in 2006. A major reason for the increase in Gains on the sale of investments in 2008 is that the Company realized $1,173,622 in gains on a security that was sold as the result of a merger. This stock would not have otherwise been sold but would have been held by the Company as of December 31, 2008.

The sum of dividend income plus investment gain from sale of securities was $19,759,682 in 2008, $17,273,410 in 2007, and $5,590,447 in 2006.

LIQUIDITY AND CAPITAL RESOURCES

The Company s management has pursued a policy of maintaining sufficient liquidity and capital resources in order to assure continued availability of necessary funds for the viability and projected growth of all ongoing projects.

At December 31, 2008, the Company had $32,973,248 in short-term debt versus $47,214,047 at December 31, 2007. The following amounts are included in short-term debt at December 31, 2008 and December 31, 2007: Income Taxes Payable of $2,643,958 and $1,295,668 respectively, Deferred Tax Liability of $8,066,823 and $15,726,213 respectively, and Securities borrowed at fair market value of $107,871 and $20,362,259. The Deferred Tax Liability represents taxes due on the unrealized gain of the investment portfolio and Securities borrowed at fair market value represent short positions in common stock.

At December 31, 2008, stockholders equity was $43,460,641 vs. $54,915,885 at December 31, 2007. At December 31, 2008 the Company s security portfolio had a market value of $68,339,143 versus $74,919,193 at December 31, 2007. At December 31, 2008, the Company s total liabilities and stockholders equity were $76,824,181 versus $102,560,500 at December 31, 2007.

Income from the Company s security portfolio is a major asset for the Company as it conintues its efforts in research and marketing staff. At December 31, 2008, the Company is in a satisfactory financial position with adequate funds available for its immediate and anticipated needs. The Company plans its budgetary outlays on the assumption that the raising of additional financial capital may be difficult in the next 2 to 4 years. The Company believes that its present liquidity and assets are adequate to sustain the expenses associated with its sales and marketing program.

The following table shows the Cost, Market Value, Net Unrealized Gain, Unrealized Gain and Loss at December 31st from 2004 through 2008.

Valuation Date:	Cost	Fair Market Value	Net Unrealized Gain	Unrealized Gains	Unrealized Losses
December 31, 2008	$ 50,709,601	$ 68,339,143	$ 17,629,542	$ 28,469,540	$ (10,839,998)
December 31, 2007	29,987,157	74,919,193	44,932,036	47,386,399	(2,454,363)
December 31, 2006	23,307,390	66,968,446	43,661,056	43,927,770	(266,714)
December 31, 2005	25,649,467	57,246,006	31,596,539	32,440,131	(843,592)
December 31, 2004	22,907,780	54,806,400	31,898,620	32,133,292	(234,672)

The Company s invested capital has increased over the past 5 years, going from $22,907,780 in 2004 to $50,709,601 in 2008. The value of the Company s investments increased from $54,806,400 in 2004 to $68,339,143 during this 5 year period. The Company has been able to partially offset the continuing operating losses which in 2007 were the highest in the Company s history. The increase in value of the Company s assets provides an underpinning for the Company s expanding activities. While there can be no assurance that these assets will not decrease in value, it is unlikely, at the present time, that they will go back to historical cost. The Company feels, however, that with respect to the Blood Volume Analyzer and the Blood Optimization Program, it is undercapitalized. Recent inquiries have indicated that additional capital is not available on reasonable terms without great dilution to existing shareholders. The Company believes that if the blood volume analyzer becomes a standard of care in any one of the areas described in this 10-K filing, it will then have much easier access to additional capital.

CRITICAL ACCOUNTING POLICIES

Available for Sale Securities

Available-for-sale securities represent investments in debt and equity securities (primarily common and preferred stock of utility companies)that management has determined meet the definition of available-for-sale under SFAS No. 115, Accounting for Certain Investments in Debt and Equity Securities. Accordingly, these investments are stated at fair market value and all unrealized holding gains or losses are recorded in the Stockholders Equity section as Accumulated Other Comprehensive Income (Loss). Conversely, all realized gains, losses and earnings are recorded in the Statement of Operations under Other Income (Expense).

The company will also engage in the short selling of stock. When this occurs, the short position is marked to the market and this adjustment is recorded in the Statement of Operations. Any gain or loss is recorded for the period presented

Historical cost is used by the Company to determine all gains and losses, and fair market value is obtained by readily available market quotes on all securities.

The Company s investment goals, strategies and policies are as follows:

1. The Company s investment goals are capital preservation and maintaining returns on this capital with a high degree of safety.

2. The Company maintains a diversified securities portfolio comprised primarily of electric utility preferred and common stocks. The Company also sells covered calls on portions of its portfolio and also sells puts on stocks it is willing to own. It also sells uncovered calls and will engage in short positions up to 15% of the value of its portfolio. The Company s short position may temporarily rise to 20% of the Company s portfolio without any specific action because of changes in valuation, but should not exceed this amount. The Company s investment policy is to maintain approximately of 80% of its portfolio in electric utilities. Investments in utilities are primarily in electric companies. Investments in non-utility stocks will not exceed 15% of the portfolio.

3. Investment in speculative issues, including short sales, maximum of 15%.

4. Limited use of options to increase yearly investment income.

    a. The use of Call Options. Covered options can be sold up to a maximum of 20% of the value of the portfolio. This provides extra income in addition to dividends received from the company s investments. The risk of this strategy is that investments the company may have preferred to retain can be called away. Therefore, a limitation of 20% is placed on the amount of stock on which options which can be written. The amount of the portfolio on which options are actually written is usually between 3-10% of the portfolio. The actual turnover of the portfolio is such that the average holding period is in excess of 5 years for available for sale securities.

    b. The use of Put options. Put options are written on stocks which the company is willing to purchase. While the company does not have a high rate of turnover in its portfolio, there is some turnover; for example, due to preferred stocks being called back by the issuing company, or stocks being called away because call options have been written. If the stock does not go below the put exercise price, the company records the proceeds from the sale as income. If the put is exercised, the cost basis is reduced by the proceeds received from the sale of the put option. There may be occasions where the cost basis of the stock is lower than the market price at the time the option is exercised.

    c. Speculative Short Sales/Short Options. The company limits its speculative transactions to no more than 15% of the value of the portfolio. The company may sell uncovered calls on certain stocks. If the stock price does not rise to the price of the calls, the option is not exercised, and the company records the proceeds from the sale of the call as income. If the call is exercised, the company will have a short position in the related stock. The company then has the choice of covering the short position or selling a put against it. If the put is exercised, the short position is covered. The company s current accounting policy is to mark to the market at the end of each quarter any short positions, and include it in the income statement. While the company may have so-called speculative positions equal to 15% of its accounts, in actual practice the average short stock positions usually account for less than 10% of the assets of the company.

5. In the event of a merger, the Company will elect to receive shares in the new company. In the event of a cash only offer, the Company will receive cash and be forced to sell its stock.

Management s Discussion and Analysis of Financial Condition and Results of Operations discuss the Company s condensed consolidated financial statements, which have been prepared in accordance with US GAAP. The Company considers the following accounting policies to be critical accounting policies.

Revenue Recognition

The Company recognizes operational revenues from several sources. The first source is the outright sale of equipment, the Blood Volume Analyzer, to customers. The second source is the sale and associated shipping revenues of single-use radioisotope doses (Volumex) that are injected into the patient and measured by the Blood Volume Analyzer. The third source of revenue is service contracts on the Blood Volume Analyzer, after it has been sold to a customer. The fourth source of revenue is the storage fees associated with cryobanked blood and semen specimens. The fifth is lab revenues from laboratory services, and the sixth is revenue from semen sales.

The Company currently offers three different methods of purchasing the Blood Volume Analyzer equipment. A customer may purchase the equipment directly, lease the equipment, or rent the equipment on a month-to-month basis. The revenues generated by a direct sale or a monthly rental are recognized as revenue in the period in which the sale or rental occurred. If a customer is to select the lease option, the Company refers its customer to a third party finance company with which it has established a relationship, and if the lease is approved, the Company receives 100% of the sales proceeds from the finance company and recognizes 100% of the revenue. The finance company then deals directly with the customer with regard to lease payments and related collections. Daxor Corporation does not guarantee payments to the leasing company.

The sales of the single-use radioisotope doses (Volumex) that are used in conjunction with the Blood Volume Analyzer are recognized as revenue in the period in which the sale occurred.

When Blood Volume Analyzer equipment has been sold to a customer, the Company offers a one year warranty on the product, which covers all mechanical failures. This one year warranty is effective on the date of sale of the equipment. After the one year period expires, customers may purchase a service contract through the Company. Historically, service contracts were recorded by the Company as deferred revenue and were amortized into income in the period in which they were earned. Effective January 1, 2006, the Company began offering service contracts priced on an annual basis which are billed annually or quarterly depending upon the contractual arrangement with the customer. There were four hospitals that the Company billed during the year ended December 31, 2008 for the entire amount of their annual service contract. At December 31, 2008 and December 31, 2007, deferred revenue pertaining to the historical service contracts was $17,042 and $7,417 respectively.

The storage fees associated with the cryobanked blood and semen samples are recognized as income in the period for which the fee applies. The Company invoices customers for storage fees for various time periods. These time periods range from one month up to one, two or