

DAXOR CORP  
Form 10-K  
March 28, 2012  
**UNITED STATES**

**SECURITIES AND EXCHANGE COMMISSION**

**Washington, D.C. 20549**

**Form 10-K**

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

For the fiscal year ended: **December 31, 2011**

Or

£ 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 001-09999

**Daxor Corporation**

(Exact name of registrant as specified in its charter)

New York 13-2682108  
(State or Other Jurisdiction of (I.R.S. Employer  
Incorporation or Organization) 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.

Yes  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.

Yes  No

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

Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232-405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes  No

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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.

Yes  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  Accelerated filer   
Non-accelerated filer  Smaller reporting company  S

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

Yes  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, 2011, the last day of the registrant's most recently completed second fiscal quarter was \$10,055,445. As of March 22, 2012 there were 4,196,182 shares of the Registrant's common stock, par value \$.01 per share, outstanding.

#### **DOCUMENTS INCORPORATED BY REFERENCE**

The information required by Part III of this report, to the extent not set forth herein, is incorporated by reference to the registrant's proxy statement for its 2012 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission within 120 days of December 31, 2011.

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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 forward-looking 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 which provides additional biotechnology services. Daxor Corporation was originally incorporated in New York State as Iatric Corporation in May 1971 for cryobanking services and continues these services through its wholly-owned subsidiary, Scientific Medical Systems. In October 1971, the name Iatric Corporation was changed to Idant Corporation. In May 1973, the name Idant Corporation was changed to Daxor Corporation.

Our principal executive offices are located at 350 Fifth Avenue, Suite 7120, New York, NY 10118. The “Investor Relations” section of our website provides free copies of our annual reports on Form 10-K, our quarterly reports on Form 10-Q, and any current reports on Form 8-K, Forms 3, 4 and 5.

For the past 16 years, the Company’s major focus has been the creation and development of the BVA-100<sup>®</sup> Blood Volume Analyzer, an instrument that rapidly and accurately measures human blood volume. This instrument is used in conjunction with Volumex<sup>®</sup>, a single-use radiopharmaceutical diagnostic injection and collection kit. The Company also offers cryobanking services for blood storage through Scientific Medical Systems and for semen storage through Idant, a subsidiary of Scientific Medical Systems. The Company also owns the Daxor Oak Ridge Operations (DORO) facility in Oak Ridge, TN, which manufactures, tests, and develops next-generation models of the BVA-100<sup>®</sup>.

The Registrant maintains an internet website at [www.daxor.com](http://www.daxor.com) for Daxor Corporation and a website for the Scientific Medical Systems subsidiary at [www.Idant.com](http://www.Idant.com). None of the information contained on these websites is incorporated by reference into this Form 10-K or into any other document filed by the Registrant with the Securities and Exchange Commission. The websites for Daxor and Scientific Medical Systems describe the operations of each company.

### **Investment Company**

In 2005 and 2007, the Company and Dr. Joseph Feldschuh, its President and Chief Executive Officer, respectively, received Wells Notices from the Securities and Exchange Commission (“SEC”) requesting their comments on the SEC Staff’s view that the Company was in violation of Section 7(a) of the Investment Company Act in that it was operating as an unregistered investment company. The Company and Dr. Feldschuh responded to those requests when made.

In November 2009, the staff of the Northeast Regional Office of the SEC contacted the Company and invited both the Company and Dr. Feldschuh to make a new Wells submission based upon more recent operations and results. The Company and Dr. Feldschuh responded to the staff's invitation on December 20, 2009.

The Company disclosed in its Form 10-Q for September 30, 2010, Form 10-K for December 31, 2010 and Form 10-Q's for March 31, 2011, June 30, 2011 and September 30, 2011 that the SEC instituted administrative proceedings pursuant to the Investment Company Act of 1940 on September 17, 2010. The New York City staff of the Enforcement Division of the SEC claimed that Daxor is primarily an investment company and not primarily an operating company.

The Company has disclosed in previous public filings that it is dependent upon earnings from its investment portfolio to fund operations and that a single individual, Dr. Joseph Feldschuh, makes all investment decisions.

The administrative proceeding took place from March 7, 2011 through March 9, 2011 in New York City. The Company feels strongly that the extensive documentation of its history of operations presented at the administrative proceeding demonstrated that it is primarily an operating medical instrumentation and biotechnology company and not primarily an investment company.

On August 31, 2011, an Administrative Law Judge of the SEC issued his decision finding Daxor to be an Investment Company as defined by the Investment Company Act of 1940. A major factor in the decision was his opinion that we are in the business of investing and more than 40% of our assets are comprised of investment securities.

On October 26, 2011, the Company filed a petition for review of the decision and requested that it be withdrawn on November 22, 2011. On February 10, 2012, the SEC notified the Company that the request to withdraw the petition for review and notice of finality had been approved.

The Company plans to file a Form N-8A (Notification of Registration Filed Pursuant to Section 8(a) of the Investment Company Act of 1940) shortly after our Form 10-K for the year ended December 31, 2011 is filed. We have 90 days from when the N-8A is filed to file our Form N-2 which is the Registration Statement. The Company plans to file the N-2 as soon as possible after the N-8A is filed and to begin reporting as an Investment Company effective January 1, 2012.

The management of the Company believes the additional disclosures that will be necessary when Daxor reports as an Investment Company will not materially affect investment policies and practices currently in place.

## **BVA-100 BLOOD VOLUME ANALYZER**

There is a large potential market for blood volume measurement, given that blood volume derangements are associated with a variety of medical and surgical conditions. Furthermore, it has been well established that clinical assessment of blood volume using physical examination or simple blood tests such as hematocrit and hemoglobin measurements are frequently inaccurate as surrogate measures of 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 a 60 to 90 minute time frame. The BVA-100 is used to diagnose and treat patients with heart failure, kidney failure, hypertension 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 disorders of red blood cell volume including polycythemia and anemia, and to aid in pre-surgical evaluation of red blood cell volume. It may also be possible to use the BVA-100 to manage kidney dialysis, ultrafiltration, and blood optimization for elective surgery.

## **History and Development of the BVA-100**

The technique of blood volume measurement has been available for over 60 years, although previous methods required as much as 4 to 8 hours of technician time and produced results with varying degrees of accuracy. Measurement of blood volume is generally 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 an individual's blood is inversely proportional to the dilution of the tracer, which can be determined by measuring the level of radioactivity present in each blood sample and applying the inverse proportional 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 sometimes used by Nuclear Medicine departments to evaluate the red cell volume in polycythemia vera patients, a condition in which patients have too many red cells present, which can predispose them to thrombosis and other complications. Daxor's BVA-100 Blood Volume Analyzer system uses a Volumex<sup>o</sup> 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 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 reported that the two techniques produced equivalent results, with Daxor's Blood Volume Analyzer BVA-100 providing significant time savings and ease-of-use benefits.

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Blood volume measurement is an infrequently performed test in the clinical setting. Instead of directly and objectively measuring blood volume, physicians who need to assess volume status commonly rely upon subjective criteria such as clinical assessment with physical examination or surrogate tests such as hemoglobin and hematocrit measurements. However, these methods have repeatedly been shown to provide inaccurate assessments of blood volume. An additional problem has been the difficulty of determining the ideal blood volume for a given individual, for comparison and categorization of the blood volume findings. 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. André 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 obtained marketing clearance from the FDA for the BVA-100 Blood Volume Analyzer in 1997 and for its Volumex® 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 the 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 medical conditions for which blood volume measurement may lead to improved diagnosis and treatment.

Blood volume measurement is an approved test with six separate CPT codes. Reimbursement has been obtained from numerous insurance companies, including Medicare, for measurement of blood volume using the BVA-100 Blood Volume Analyzer. Reimbursement rates are of great importance in hospitals' decisions to use the BVA-100 for inpatient use. BVA-100 testing of outpatients provide an additional stream of cash flow with well-defined costs and an opportunity for making a profit by providing such services.

### **Scientific Studies Utilizing the BVA-100**

Daxor has worked extensively with facilities that use the BVA-100 Blood Volume Analyzer to promote blood volume research studies, and to provide equipment, training, ongoing consultation, and assistance with interpretation and publication of results. For many research projects, Daxor has provided Volumex® kits as well as direct financial support. This support has resulted in publication of nineteen original research and seven review articles on blood volume analysis since 2002. One of these articles was cited in the American College of Cardiology/American Heart Association Treatment Guidelines for Heart Failure to support the recommendation that heart failure patients' volume status be assessed at each visit. Presentations from a 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. Several clinical studies have recently been completed, which investigated the clinical application of blood volume measurement in critical care, and in monitoring blood loss throughout surgery. Other clinical studies are ongoing, including: (1) a multicenter study to assess whether blood volume testing lead to improved outcomes in heart failure patients, (2) use of blood volume analysis to guide ultra filtration in heart failure patients, (3) an exploratory study to assess whether obesity is associated with hemodilution of serum cancer markers and (4) a prospective study looking at blood loss during complete knee replacement surgery done under tourniquet. Results from these studies have led to 22 presentations at major medical conferences in the past six years. 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. Daxor is also planning to support a multicenter study of blood volume measurement in critical care, to expand upon its previous research findings of a significant mortality improvement when blood volume is used to guide resuscitation in critical care patients.

Since 2002, the following nineteen original research articles have been published, which report research findings obtained using the BVA-100:

1. 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.
2. 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.
3. Androne AS, Katz SD, Lund L et al. Hemodilution is Common in Patients with Advanced Heart Failure. *Circulation* . 2003; 107:226-229.
4. James KB, Stelmach K, Armstrong R et al. Plasma Volume and Outcome in Pulmonary Hypertension. *Tex Heart Inst J* . 2003; 30:305-307.
5. 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.
6. 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.
7. 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.
8. Jacob G, Raj S, Ketch T et al. Postural Pseudoanemia: Posture-Dependent Change in Hematocrit. *Mayo Clin Proc* . 2005; 80:611-614.
9. 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.
10. Gamboa A, Gamboa JL, Holmes C et al. Plasma catecholamines and blood volume in native Andeans during hypoxia and normoxia. *Clin Auton Res* . 2006 Feb;16(1):40-5.
11. 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.
12. 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.
13. 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.
14. 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.
15. 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.
16. Mayuga KA , Butters KB , Fouad-Tarazi F. Early versus late postural tachycardia: a re-evaluation of a syndrome. *Clin Auton Res*. 2008;18:155-7.
17. 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.
18. Noumi B, Teruya S, Salomon S, Helmke S, Maurer MS. Blood Volume Measurements in Patients with Heart Failure and a Preserved Ejection Fraction: Implications for Diagnosing Anemia. *Congest Heart Fail* . 2011; 17:14-18.
19. Yu M, Pei K, Moran S et al. A Prospective Randomized Trial Using Blood Volume Analysis in Addition to Pulmonary Artery Catheter (PAC), Compared to PAC Alone, to Guide Shock Resuscitation in Critically Ill Surgical Patients. *Shock* . 2011; 35:220-228.

Since 2002, the following seven review articles have been published, which describe findings obtained using 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. 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.
3. Katz, SD. Unrecognized Volume Overload in Congestive Heart Failure. *US Cardiology* , 2004; 141-144
4. Feldschuh J and Katz S. The Importance of Correct Norms in Blood Volume Measurement. *Am J Med Sci* , 2007; 334:41-46.
5. Vahid B. Measurement of Blood Volume at Bedside: New Era in Critical Care Medicine. *The Internet J of Emergency and Intensive Care Medicine* . 2007; 10:1.
6. Manzone TA, Dam HQ, Soltis D, Sagar VV. Blood volume analysis: a new technique and new clinical interest reinvigorate a classic study. *JNucl Med Technol* . 2007; 35:55-63.
7. Katz, SD. Blood Volume Assessment in the Diagnosis and Treatment of Chronic Heart Failure. *Am J Med Sci* , 2007; 334:47-52.

Two book chapters have also been published which describe blood volume measurement using the BVA-100 in various clinical conditions:

1. Feldschuh J. (1990). Blood Volume Measurements in Hypertensive Disease. In *Hypertension: Pathophysiology, Diagnosis, and Management*, by John H. Laragh, First Edition (pp.339-347). New York, NY: Lippincott Williams & Wilkins.
2. Feldschuh J. (2009). Blood Volume Measurements in Critical Care. In Civetta, Taylor and Kirby (Eds.), *Critical Care*, Fourth Edition (pp.283-295). Philadelphia, PA: Lippincott Williams & Wilkins.

In addition, the following 22 presentations of Daxor-sponsored research have been made at major medical conferences since 2006. Some of these findings have also been published, either as abstracts or as complete articles. We anticipate that additional studies from this list will also be published in the near future:

1. 2006 Heart Failure Society of America Poster Presentation - 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 – Correlation Between Blood Volume and Pulmonary Artery Catheter Measurements
3. 2007 Society of Critical Care Medicine Poster Presentation – The Queen’s Medical Center, Honolulu, HI – Do Blood Volume and Brain Natriuretic Peptide (BNP) Correlate?
4. 2007 Society of Critical Care Medicine Poster Presentation – The Queen’s Medical Center, Honolulu, HI – Does Hematocrit Reflect Red Cell Volume when Adjusted for Plasma Volume?
5. 2008 Society of Critical Care Medicine Poster Presentation – The Queen’s Medical Center, Honolulu, HI – Right Ventricular End Diastolic Volume (RVEDVI) and Brain Natriuretic Peptide (BNP) May Not Reflect Volume Status in the Critically Ill Patient.
6. 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
7. 2008 American Society of Nephrology Poster Presentation – NYU School of Medicine, New York, NY and Christiana Care Health System, Newark, DE – Accuracy of Anemia Evaluation is Improved in Acutely and Chronically Ill Patients by Accounting for Volume Status
8. 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
9. 2009 National Kidney Foundation Poster Presentation – NYU School of Medicine, New York, NY and Christiana Care Health System, Newark, DE – Peripheral Blood Hematocrit is a Poor Surrogate for Red Blood Cell Volume in Patients with Volume Excess or Depletion
10. 2010 Society of Nuclear Medicine Poster Presentation – Christiana Care Health System, Newark, DE – “Normalized Hematocrit” from Blood Volume Analysis Offers Enhanced Accuracy Over Peripheral Hematocrit in Assessment of Red Blood Cell Volume
11. 2010 Society of Critical Care Medicine Poster Presentation – The Queen’s Medical Center, Honolulu, HI – A Prospective Randomized Trial Using Blood Volume Analysis vs. Pulmonary Artery Catheter Measurements to Guide Fluid and Red Cell Management
12. 2010 Society of Critical Care Medicine Poster Presentation – The Queen’s Medical Center, Honolulu, HI – Elevated Transcapillary Albumin Escape: A Marker of Increased Mortality

13. 2010 Society of Critical Care Medicine Poster Presentation – The Queen’s Medical Center, Honolulu, HI – Activated Protein C and Corticosteroids Decrease the Rate of Albumin Transudation in Septic Shock  
2010 Society of Critical Care Medicine Poster Presentation – The Queen’s Medical Center, Honolulu, HI – The
14. Relationship Between Inferior Vena Cava Collapsibility Ratio and Measured Whole Blood Volume in Surgical Critical Care Patients  
2010 Society of Critical Care Medicine Poster Presentation – The Queen’s Medical Center, Honolulu, HI – A
15. Comparison of Pulse Pressure and Blood Volume Measurement  
2010 Western Trauma Association Annual Meeting Oral Presentation – Oregon Health and Science University,
16. Portland, OR – Blood Volume Analysis can Distinguish True Anemia from Hemodilution in Critically Ill Trauma Patients  
2010 Society of Cardiovascular Anesthesiologists Poster Presentation – The Virginia Commonwealth University,
17. Richmond, VA – Red Cell Mass is Not Well Conserved Following Elective Cardiac Surgery Despite Use of Cell Salvage and Transfusion Guided by Peripheral Hematocrit  
2010 Society of Cardiovascular Anesthesiologists Poster Presentation – The Virginia Commonwealth University,
18. Richmond, VA – Patients are Not Normovolemic Following Cardiac Surgery Despite Concerted Efforts to Manage Fluid and Volume Status  
2010 Heart Failure Society of America Poster Presentation – Columbia-Presbyterian Medical Center, New York
19. City, NY – Racial Differences in Blood Volumes in Patients with Heart Failure and a Preserved Ejection Fraction (HFPEF): Implications for Diagnosing Anemia.  
2010 Heart Failure Society of America Poster Presentation – The Valley Hospital, Ridgewood, NJ – Lack of
20. Correlation Between I-131-Labeled Albumin Measurements of Blood Volume and Serum B-Natriuretic Peptide Levels in Heart Failure Patients  
2011 Society of Critical Care Medicine Poster Presentation – The Queen’s Medical Center, Honolulu, HI – A
21. Comparative Study of Systolic Pressure Variation and Blood Volume Measurements  
2011 Society of Critical Care Medicine Poster Presentation – The Queen’s Medical Center, Honolulu, HI – Is There a
22. Relationship Between SOFA Scores and Albumin Leak Rates as a Marker of Endothelial Dysfunction?

## *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 II to IV heart failure patients. In this observational study, cardiologists treated the patients according to standard clinical assessment, without incorporating blood volume findings which were 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 in that same time period. At the end of two years, 55% of hypervolemic patients had died or received an urgent heart transplant, while the normovolemic patients continued to exhibit 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 physicians' clinical assessment of volume status in these patients. Experienced cardiologists assessed patients' blood volume status using standard laboratory tests and physical examination. When choosing between three possible choices—decreased, normal, or increased blood volume—the specialists were correct only 51% of the time in determining the correct blood volume status of these severely ill cardiac patients as determined by the results provided by the BVA-100. This study was cited in the most recent revision of the American College of Cardiology/American Heart Association 2010 guidelines for the treatment of chronic heart failure. These guidelines are updated once every 3 to 5 years. This landmark study is the first to provide direct evidence that normovolemia is associated with better outcomes, and suggests 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.

The passage of the Patient Protection and Affordable Care Act (PPACA) in March 2010 gave Centers for Medicare and Medicaid Services (CMS) the authority to penalize hospitals for excess readmission rates in heart failure, acute myocardial infarction, and pneumonia beginning in 2013. This has important financial implications for hospitals, as it effectively penalizes hospitals for not optimally treating patients at their initial visits. This highlights a significant opportunity for the BVA-100, which may be used to identify patients at higher risk of mortality due to residual volume overload.



***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 successful fluid resuscitation and fluid management in the critical care setting. Direct blood volume measurement using the BVA-100 promises to take the guesswork out of volume assessment and to enable more precise and appropriate treatment. Dr. Feldschuh was the author of a chapter entitled “Blood Volume Measurements in Critical Care” in the 4th edition (2009) of the textbook *Critical Care*. The chapter 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 conducted a research study to evaluate 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 blood volume results have influenced their treatment decisions. Their most recent findings were published in the March 2011 issue of the journal *Shock* .. The results showed that use of the BVA-100 to guide fluid and red blood cell management led to a significant improvement in mortality in critically ill surgical patients with septic shock, severe sepsis, severe respiratory failure and/or cardiovascular collapse. Patients in the control group demonstrated statistically significant untreated volume abnormalities and red blood cell deficiencies more often than patients in the blood volume measurement group (48% vs. 37% and 33% vs. 16%, respectively). This correlated with significantly greater mortality for patients in the control group (24% mortality) than for patients in the blood volume measurement group (8% mortality; P=0.03). These findings indicate that blood volume analysis permits more accurate assessment of patients’ volume status and more precise fluid resuscitation and saves lives. In addition, Dr. Yu and her colleagues have presented their findings at the Society of Critical Care annual meetings from 2006-2011 and their studies were featured in the November 2005 issue of *Anesthesiology News*, the January 2008 issue of the *Hawaii Medical Journal*, the June 2008 issue of *Anesthesia and Analgesia* and the February 2009 issue of the *American Journal of Surgery* .. These single-center studies will be followed up by a multicenter study to evaluate whether incorporating blood volume measurement into critical care treatment affects outcomes in a number of hospitals across the United States.

## *Syncope*

The Cleveland Clinic Cardiovascular Department was ranked first in the United States by the 2010-2011 annual survey in *U.S. News & World Report*. This is the sixteenth consecutive year they have received the number one ranking in this category. The survey also ranked the Cleveland Clinic as the fourth best hospital on an overall basis. More blood volumes have been 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 4,300 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 females, develop a rapid heartbeat and symptoms suggesting impending fainting when standing upright. 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 issue of *Circulation* which utilized the blood volume analyzer. Patients with POTS - particularly those with rapid heartbeats - 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. The information from the BVA-100 allows the physician to quantify the degree of the blood volume abnormality and to select the appropriate treatment. There are two major classes of drugs which can be used to treat POTS: (1) mineralocorticoids, a class of steroid hormones which increase the volume of blood through their influence on salt and water balance, and (2) ProAmitine/midodrine, a vasoconstrictor that produces an increase in blood pressure. Use of the BVA-100 allows the physician to distinguish between the two potential etiologies of POTS so as to administer the appropriate therapy.

Another study examined postural pseudoanemia, which results from posture-dependent changes in hematocrit. The simple act of standing upright can increase hydrostatic pressure in some regions, such as the lower extremities, which leads to a net movement of fluid from the intravascular to interstitial spaces. The hemoconcentration resulting from this plasma loss was shown to alter hematocrit in a clinically significant manner in a study by Dr. Giris Jacob and colleagues that was published in *The Mayo Clinic Proceedings* in 2005. They reported that plasma volume decreases upon standing in normal individuals can range from 6-25%. This was accompanied by a mean change in hematocrit from  $37.7\% \pm 2.8\%$  while supine to  $41.8\% \pm 3.2\%$  within 30 minutes of standing.

### ***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.

One of these studies was sponsored by Amgen, Inc. Because these studies showed that use of the BVA-100 to correctly diagnosis and treat anemia led to improvements in heart failure status, Daxor contacted Amgen about the possibility of conducting follow-up studies with the BVA-100 in patients receiving erythropoietin therapy. These studies are all the more important given that black-box warnings have been added to the safety labeling of erythropoietin advising physicians to monitor patients to insure that patients' hemoglobin levels do not exceed 12 g/dL. Despite the potential safety benefits of accurately determining RBCV in patients receiving erythropoietin, Amgen has chosen not to pursue these studies to date.

### ***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 their normal amount of red blood cells present. This degree of anemia has its own inherent risks. A report in the February 2001 issue of the *New England Journal of Medicine* noted 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 of red blood cells. 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.

Dr. 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 sponsored a study at the Virginia Commonwealth University which measured changes in blood volume before, during and after elective cardiac surgery (i.e. CABG or valve repair/replacement). Dr. Mark Nelson and colleagues enrolled 50 patients in this study, which has now been completed. This findings from this study demonstrated greater than anticipated loss of red cells and total blood volume during and after surgery. This study showed that the standard use of the hematocrit to estimate red cell volume significantly underestimates the blood loss and the need for

transfusions in some of these patients, thereby exposing them to additional risks. Results of this major study were presented at the Society of Cardiovascular Anesthesiologists in 2010 and are expected to be submitted for publication in the near future.

### ***Obesity Related Hemodilution of Serum Cancer Markers***

Prostate cancer is a fairly common disease, with over 200,000 new diagnoses each year in the United States. Prostate-specific antigen (PSA) screening has decreased mortality significantly over the last 20 years. However, the diagnostic accuracy of this test is far from perfect. Obesity is one factor which contributes to suboptimal efficacy of PSA screening. Epidemiological studies have shown that obese men are diagnosed with more advanced stages of the disease, and are at greater risk of death from prostate cancer relative to men of normal body weight. One hypothesis to account for this finding is that the increased plasma volume associated with obesity may lead to hemodilution of the cancer markers, which causes their levels to appear artificially low in the screening process. Daxor is partially funding a study which will examine whether lower serum levels of cancer markers in obese men are the result of increased plasma volume. By direct plasma volume measurement using the BVA-100, it may be possible to develop a correction factor which improves the accuracy of the cancer screening process. This may serve to improve early detection of this malignant disease, and to promote the timely institution of therapy.

### ***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 blood volume measurement methods. These reports provide important validation for physicians to accept the use of the BVA-100 in clinical settings. 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*.

In addition, there have been several studies which compare surrogate measures of volume status with the results obtained from direct blood volume measurement: 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 the results of 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.

### ***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 found BVA-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 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, 26 out of a projected 50 patients with acute decompensated heart failure have been enrolled in this study.

In addition, Valley Hospital (Ridgewood, NJ) conducted a retrospective study to assess the correlation between B-type natriuretic peptide (BNP), which is sometimes used as a surrogate measure for volume status in heart failure patients, and measured blood volume. BNP is a hormone released from the ventricles in response to stretch of ventricular myocytes or an increase in wall tension, which is why it is sometimes assumed to provide information regarding volume status. Dr. John Strobeck presented his research findings that BNP does not, in fact, correlate with blood volume in heart failure patients at the 2010 Heart Failure Society of America annual meeting.

#### ***Hypertension***

Hypertension can be induced by two primary, underlying physiological processes: (1) an expansion of the blood volume or (2) a constriction of the blood vessels. As a result, anti-hypertensive therapy falls into two broad categories: (1) diuretic therapy which leads to reductions in plasma volume, or (2) vasodilator therapy which causes relaxation of the blood vessels. Daxor is currently in discussion with Dr. Elijah Saunders of the University of Maryland (Baltimore, MD) to develop a protocol to distinguish between these two primary causes of hypertension by identifying the presence or absence of blood volume expansion in hypertensive patients and to evaluate whether patients are being correctly treated with regard to the underlying etiology of their disease.

### *Hemodialysis*

Hemodialysis (HD) removes excess intravascular and extravascular volume as well as solutes that accumulate during end-stage renal disease (ESRD). An understanding of the fluid changes that occur during HD with ultrafiltration (UF) is essential for determining the efficacy of HD, as well as for reducing any associated 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 has worked with Dr. David Goldfarb of the Dialysis Center at the Department of Veterans Affairs New York Harbor Healthcare System to develop a protocol to compare blood volumes before and immediately after a single session of hemodialysis. 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. This small 10 patient study was completed in early 2012 and a poster presentation with the preliminary findings should be presented in the fourth quarter of 2012 at the National Meeting for Nephrology.

### *Hyponatremia*

Hyponatremia is a condition where the concentration of sodium, a basic salt in the blood, drops below normal levels. This condition is easily detectable by measuring the sodium concentration in the blood. The condition occurs in congestive heart failure patients, patients who have received an excessive amount of intravenous fluids, patients who become dehydrated and inpatients who have incurred head trauma.

Low sodium concentration is potentially a life threatening condition. It decreases the ability of muscles to contract, including cardiac muscle; it causes mental derangements and may predispose to cardiac arrhythmias.

One of the primary causes of decreased sodium concentration is excess secretion of the pituitary hormone known as the anti-diuretic hormone. This hormone causes excessive retention of water and dilution of the serum sodium concentration and a decrease in the level of this critical substance. The excessive retention of water results in an expansion of the patient's blood volume. Treatment of this condition includes restriction of the patient's water intake. It also includes the use of an FDA approved drug called Tolvaptan which has received extensive promotion by its pharmaceutical manufacturer.

Another major cause of hyponatremia is damage to the kidney tubules. Under these circumstances the kidney is unable to concentrate the sodium which is filtered through the kidney, and excess quantities of sodium and water are lost in the urine. Under these circumstances, the blood volume contracts sharply which may ultimately lead to a collapse of the blood pressure. This condition is also called renal salt wasting. Two treatment methods for this condition involve intravenous and oral infusions of salt water. This treatment is the exact opposite of the treatment for the anti-diuretic hormone syndrome.

Literature enclosed by the manufacturer of Tolvaptan, sold as Samsca, states that the drug should not be used in patients with hyponatremia and low blood volume. A published study (the EVERESTStudy) on the drug showed that there was no documented benefit in long-term survival utilizing the drug.

Despite the warning not to use this drug in patients who have hyponatremia and low blood volume Daxor has found, based on informal surveys, that these patients treated with Tolvaptan almost never have a blood volume determination. This means that patients are being treated with this powerful drug on the basis of non-specific surrogate tests which may be very misleading as to the cause of hyponatremia. In effect, hyponatremia may be caused by conditions which require polar opposite treatments. Measuring a patient's blood volume is basic to determine what the underlying cause of the hyponatremia is. By treating patients with a powerful drug without measuring their blood volume, patients are put at increased risk of serious consequences.



Over the past two months Dr. Donald Margouleff, the Director of Nuclear Medicine at Daxor, has attempted to contact representatives of the manufacturer in order to discuss this matter and has yet to receive a response.

### ***Blood Substitutes***

BioPure Corporation developed and manufactured 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 had sought 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. Dr. Feldschuh was invited to give a presentation to the FDA in June of 2008 about his belief that one of the main design problems with the blood substitute studies was that there was no way of knowing how much blood the patients who were being transfused with blood substitutes had lost. In fact, none of the companies conducting clinical trials with blood substitutes have performed blood volume measurements on their patients.

Given the unmet medical need for blood substitutes, and the close fit between this research and our long-term interest in blood products, Daxor had 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 ultimately decided not to invest in BioPure. BioPure went bankrupt and has been purchased by overseas investors as part of their reorganization process. Dr. Feldschuh has been in continuous communication with the current management and new owners in an attempt to facilitate studies using the BVA-100.

### **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 Laboratories, a division of Scientific Medical Systems, provides 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-transfusion, 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 (i.e., 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.

Dr. Fouad-Tarazi and Dr. Feldschuh published a Letter to the Editor of the Journal of the American Medical Association ( *JAMA* 2002 287: 3077) which offered a potential explanation for the high frequency of memory loss and dementia following coronary artery bypass grafting (CABG). They proposed that the extremely low hemoglobin levels which many CABG patients experience in the wake of surgery may put them at elevated risk for cognitive deficit. This highlights one of the many dangers of undertransfusion.

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 state that allows clients to store their own blood for up to 10 years. There are benefits for individuals who elect to store autologous blood in advance of a scheduled surgery: in the event that there is considerable blood loss during surgery, the patient can be transfused with his/her own previously banked blood. 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.

## **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.

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The Company has 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 <sup>TM</sup> (BOP) for maximizing blood safety during surgery. The BOP uses a combination of blood volume measurement and pre-surgical treatment of blood volume deficits to maximize patient outcomes following surgery. The Company applied for and received trademark protection for the BOP name..

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. Recent studies (Koch et al, *NEJM*, 2008; 358:1229) have shown that refrigerated red blood cells undergo progressive functional and structural changes. These reversible and irreversible changes begin after 2-3 weeks of storage. This reduces the function and viability of red cells after transfusion. Once it is 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 <sup>®</sup> and Epogen <sup>®</sup> 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 patients are 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 either complications from being under transfused 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 an individual with marketing experience to promote 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, with the goal of increasing awareness and utilization of both of these technologies. This marketing specialist has met with a variety of blood bank representatives to discuss 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 to 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 the following ten hospitals located in New York State to participate in this program: NYU Medical Center, the Hospital for Special Surgery, the Hospital for Joint Diseases, Stony Brook University Hospital, the White Plains Hospital Center, Brookhaven Memorial Hospital Medical Center, Mercy Medical Center of Rockville Center, Brookdale University Hospital and Medical Center, St. Lukes Roosevelt Medical Center and North Shore Medical Center. Cooley Dickinson Hospital, is located in Northampton, MA. and has also agreed to participate in the program.

.One group that would greatly benefit from the BOP is Jehovah's Witnesses. Since their religious beliefs prevent blood transfusions, this procedure would allow doctors to identify more easily and accurately, patients who have hidden anemia and to treat them with appropriate red cell therapy. We are in discussions with representatives from two hospitals in the New York Metropolitan area in an effort to implement this program for Jehovah's Witnesses.

## **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 of semen 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. Cryopreservation also allows young male cancer patients the opportunity to father their own children in later years, despite the high risk of sterility and birth defects associated with the anti-cancer treatments they are receiving.

The Company was selected as a potential service provider for the Memorial Sloan-Kettering Cancer Center to provide semen collection and storage services for their hospitalized cancer patients who wish to cryopreserve sperm prior to initiating cancer treatment. To date, a number of outpatients from Memorial Sloan-Kettering Cancer Center have stored semen at Idant Laboratories. In addition, The Company has sent representatives to collect bedside semen samples for storage from Columbia-Presbyterian Hospital, St. Luke's-Roosevelt Hospital, and Bellevue Hospital. These hospitals are all located in New York City. 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.

For the years ended December 31, 2011 and 2010, the Company spent \$2,705,952 and \$3,041,640 respectively, on Research and Development.

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.

There is additional information regarding the Company’s research and development efforts in the sections labeled “Patent and Copyright Protection” and “Competition.”

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 large number of significant 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 and Gary Fischman, PhD, DPM, Director of Research. Each of these individuals devotes part or all of their time to supporting the development, completion, and publication of clinical studies. In addition, the Company has three Medical Directors on staff: (1) Donald Margouloff, M.D., 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. 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 alterations.

***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 loans of instruments to the Cleveland Clinic, the Mayo Clinic, and the NYU Medical Center. *US News & World Report* publishes an annual ranking of 6,200 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, each of these facilities purchased their instruments and paid for Volumex kits as they continued to utilize the Blood Volume Analyzer. The Cleveland Clinic now performs over 500 Blood Volume tests per year.

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)***

The marketing team has made 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 2008 the Company exhibited at a total of 31 national, local and regional trade shows and in 2009 it exhibited at 20 national and regional trade shows. In 2010 it exhibited at 19 national, local and regional trade shows and in 2011 it exhibited at

20 national, local and regional trade shows.

*Challenges in the Marketplace*

The major challenge facing the Company is achieving acceptance of the technology. Since 2002, there have been 19 original research articles published in peer-reviewed journals. Since 2006, 22 presentations have been made at major medical conferences regarding the Blood Volume Analyzer. Although management believes there is strong evidence for the benefits of blood volume measurement, the technology has not yet achieved acceptance as a standard of care.

In order to place a Blood Volume Analyzer at a client site, our sales staff must generally obtain the following three levels of acceptance from hospital personnel:

Level 1 – Acceptance by the Director of Nuclear Medicine and laboratory technicians that they agree to perform the test.

Level 2 – Convince physicians to order and utilize the test.

Level 3 – Administrative belief that the test will be profitable.

It has been extremely difficult for the Company to obtain significant administrative agreement that the BVA-100 technology will generate significant profitability. There have been hospitals where physicians have strongly endorsed the test and the nuclear medicine technicians have been willing to perform the test. However, hospital administrators have decided that the hospital would not be able to generate adequate profits by utilizing the test or, even worse, lose money administering the test even if it has been shown to be medically beneficial to patients. In many cases, the decisions of hospital administrators overrule the desire of physicians and the willingness of Nuclear Medicine staff to provide BVA-100 testing.

A study from Columbia Presbyterian Hospital by Dr. Stuart Katz and colleagues entitled “Relation of Unrecognized Hypervolemia in Chronic Heart Failure to Clinical Status, Hemodynamics, and Patient Outcomes”, demonstrated the clear ability of the BVA-100 to differentiate hypervolemic, normovolemic, and hypovolemic patients, and to document, for the first time, that the guidelines of the American College of Cardiology/American Heart Association (ACC/AHA) that the goal of achieving normovolemia is appropriate as it is associated with improved mortality.

This study demonstrated that after one year of observation utilizing various standard therapies based on clinical observation and other parameters, but not utilizing measured blood volume except as part of an observation study, that 39% of the patients who were hypervolemic died or received an urgent heart transplant, as compared to 0% of the patients who were normovolemic, or slightly hypovolemic. After 2 years, 55% of the hypervolemic patients died or required urgent heart transplantation, while there were still no deaths or transplants in the normovolemic group.

The patients in this study were all Class II to IV cardiac patients who were considered candidates for cardiac transplants or assisted ventricular device surgery. These death rates, therefore, were not unexpected in this group of terminally ill cardiac patients. What was remarkable, however, was that maintaining patients in a normovolemic state correlated with better survival. This is the first study not only to document that the goals of establishing normal volume in Class II to IV cardiac patients are appropriate, but there is a remarkable difference in survival rates between patients with normal vs. expanded blood volumes.

This study also raises major questions about which Class II to IV cardiac patients are appropriate candidates for cardiac transplantation and/or ventricular assist device surgery if their cardiac volume status has not been established. Some patients who may be considered intractable Class IV cardiac patients may, in fact, be patients who - if their red cell volume status and whole blood volume status was corrected to normal - might no longer be classified as Class IV cardiac patients in need of a ventricular assist device (VAD). Another study conducted by Dr. Stuart Katz and colleagues entitled “Hemodilution is Common in Patients with Advanced Heart Failure” demonstrated the benefits of correctly determining the red cell status of the patient using the BVA-100 so as to differentiate hemodilution from true red cell deficit.

Despite what the Company considers strong evidence of the medical benefits, physicians at the hospital where this research was conducted still do not routinely perform blood volume measurements.

There are an increasing number of specialized heart failure departments being set up in hospitals across the country. These hospitals earn significant income from cardiac surgery and related services. The use of the blood volume analyzer, which may enable more cost effective treatment (from a governmental or insurance provider's point of view), may significantly cut into the hospital's revenue stream. The company is slowly beginning to overcome some of these objections. It is unfortunate that cost considerations are such a powerful influence in the choice of treatment for cardiac disease.

The role of the federal government is an important factor influencing acceptance of our technology. Medicare reimbursement formulae are essential in determining which procedures will be reimbursed, and the level of reimbursement.

Congestive heart failure is the leading reason for hospital admission in patients over 65. A single day in an intensive care unit may cost \$1,500 to \$3,500. Medicare has begun to recognize that patients are sometimes prematurely discharged because of the institution of Diagnostic Related Guidelines (DRG). Medicare currently bases reimbursement on a diagnosis rather than on length of a hospital stay. This creates a strong incentive for hospitals to discharge patients as early as possible for a specific diagnosis so as to maximize their profits. In fact, hospitals sometimes discharge patients early, before they have recovered, and then readmit them again in less than 30 days, at which point the hospital receives another full course of payment reimbursement.

In order to rectify this situation, which leads to overpayment by Medicare, and inadequate treatment for patients, the Patient Protection and Affordable Care Act (PPACA) was passed in March 2010 to give Centers for Medicare and Medicaid Services (CMS) the authority to penalize hospitals for excess readmission rates in heart failure, acute myocardial infarction, and pneumonia beginning in 2013. One hospital which just purchased the blood volume analyzer has recognized this problem and has implemented a policy that every patient admitted for congestive heart failure must be diagnosed and treated on the basis of a blood volume measurement and followed with a subsequent blood volume measurement prior to discharge to ensure that patients are not prematurely discharged.

Out of the 54 hospitals that have the Blood Volume Analyzer technology available, only one has implemented this type of a protocol. The company is working with hospital administrators to educate them about the cost and patient benefits of utilizing blood volume measurement in their diagnosis and treatment of congestive heart failure patients. There are three Hospitals that have more than one Blood Volume Analyzer.

In addition, CMS (Centers for Medicare and Medicaid Services) changed its reimbursement rules as of January 1, 2008, which has had the effect of reducing reimbursement for blood volume measurement by approximately 33%. The new CMS policy combined the cost of performing a test with the cost of the Volumex® reagent used for the test, thereby reducing the combined payment by 33%. This type of arbitrary change markedly reduced the incentive for a hospital to perform blood volume measurements. Daxor was not the only company affected by this administrative change. Many other tests involving radioisotopes were similarly impacted by this change. Despite efforts by the Society of Nuclear Medicine and other interested parties, there has been no change in this policy as of December 31, 2011.

A major threat is the potential for government mandated changes to our medical care system. If there are drastic cuts in reimbursement similar to what was enacted for whole blood volume measurement payment, this is likely to be a formidable challenge for implementation of blood volume measurements. The company continues to sponsor ongoing medical studies demonstrating the clinical advantages of blood volume measurement. However, even with existing evidence of the life-saving benefits of blood volume measurement, there can be no assurance that this test will be implemented as a standard of care”

## **PATENT AND COPYRIGHT PROTECTION**

### **Existing Patents**

The Company owned a patent on its Blood Volume Analyzer BVA-100 which expired in 2010. The Company owns a separate patent on its Volumex injection kit which expires in 2016. 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 and filled by an FDA-approved radiopharmaceutical manufacturer. It is theoretically possible to use the Blood Volume Analyzer without the Volumex® injection 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 as well. 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.

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**

***Measurement of Total Body Albumin***

The Company filed a patent in the fourth quarter of 2011 for a semi-automated instrument to measure total body albumin. Albumin is the major carrier molecule in the human body. It functions as a transfer molecule for hundreds of different molecules and as a parallel circulation within the human body. Albumin I-131 is the tracer used by the BVA-100 Blood Volume Analyzer for measuring total blood volume.

Albumin is a key molecule in maintaining effective blood pressure within the body. There are many conditions such as kidney failure, heart failure, liver failure and diabetes. When albumin levels drop, there may be a serious disruption in the ability of the circulating blood to retain plasma within circulation. This may result in swelling of a patient's extremities, accumulation of fluid in the abdomen, and most serious of all, transudation of fluid in the lungs known as pulmonary edema. Pulmonary edema is a major complication in heart failure patients.

At the present time the standard test for determining albumin level is to measure concentration in the blood plasma. This does not measure the total amount of albumin in a patient's body. Daxor has worked on a method to measure the total amount of body albumin for approximately five years. Daxor attorneys filed for a patent on the first accurate automated method to measure the total amount of albumin in the human body. The test will require measurement of the total amount of blood in an individual. Precise results will be available within 24 hours of the quantity of albumin in an individual's body.

Albumin circulates at approximately 1/400 at the rate at which blood circulates. The albumin transudates out of the capillary system and is eventually recycled via the lymphatic system back into the blood stream. Albumin is greatly underutilized in the treatment of many medical and surgical problems because physicians have been unable to measure the total amount of albumin in the human body.

The ability to accurately measure the total amount of albumin in the human body could be expected to increase the utilization of this substance. Albumin also has the capability of expanding a patient's blood volume and has sometimes been used to support situations where blood pressure has collapsed, where transfusions are not immediately available.

The company will begin Beta testing after March 31, 2012 of a semi-automated instrument to measure total body albumin. The inventors of the total body albumin analyzer are Dr. Joseph Feldschuh and his son, Jonathan Feldschuh. The patents have been assigned to Daxor Corporation.

### ***UL and CE Mark***

In March, 2007, Daxor finished the final phase, an 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 has obtained the CE mark. CE is a self-certification mark for which the manufacturer must possess proof of compliance with the standards. Daxor has satisfied 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.

## **COMPETITION**

### **BVA-100 Blood Volume Analyzer**

Our patent for the original BVA 100 expired in 2010. The Company filed two additional patent applications for a semi-automated instrument to measure human blood volume in March of 2012. The filings describe innovations which will be incorporated into the Company's BVA-100 Blood Volume Analyzer. These applications supplement the patent application filed in the fourth quarter of 2011 for a Total Body Albumin Analyzer.

The key innovations described in the patent applications filed in March of 2012 are as follows:

- Automated quality control module, which improves accuracy and ease of use for the instrument. It ensures that the isotopic counter is optimally calibrated with minimal operator intervention.
- Integrated peak-search method for channel determination.
- Automated linearity adjustment using external stable isotopic standards.
- Automated standards, background and linearity check.



- Injectate verification system, using bar-coding to insure consistency between standards and patient samples.
- Database for quality control checks.
- Remote diagnostic system for the instrument which allows for remote verification of the accuracy of the instrument and user support; including:
  1. Trend analysis of machine results.
  2. Full spectrum capture and analysis.
  3. Full system and usage logging.
- A new protocol for measuring blood volume in amputee patients.
- A new protocol for measurement of radio-hematocrit, which measures the proportion of red cells in the blood using the radio-labeled plasma component. This provides for more accurate measurements than the traditional centrifuge method, and also eliminates the need for this extra step outside using the BVA-100.
- A Bad Points Removal Algorithm, that allows for automated detection and removal of bad points in the Blood Volume calculation that may have arisen from errors in an individual sample collection or preparation. A blood volume measurement uses multiple patient samples (typically five), and this algorithm allows for an accurate and precise measurement of blood volume to be obtained, even if a single point is invalid. This protocol features a three-part statistical method for identifying suspect points.

Daxor is the only company able to provide true semi-automated direct measurement of a patient's total blood volume, red cell volume and plasma volume. There are no other technologies that have been brought into commercial use that we consider a threat to our current system. The BVA 100 is the only method available which provides the ideal volume norms for each individual patient. The BVA-100 contains an algorithm which automates the blood volume calculation and provides a very accurate prediction of the ideal norm for a each tested patient.

At the present time we are unaware of any other technology or methodology which is competitive with the BVA-100 or which measures total body albumin. It is possible; however, that someone might develop a Blood Volume Analyzer based on our current model. The Blood Volume Analyzer, however, works most efficiently with the Volumex® tracer injection kit system which has a separate patent that expires in 2016.

Albumin is a very important carrier molecule in the body and helps prevent the collapse of the plasma volume due to the oncotic pressure it exerts within the vascular system. Without adequate albumin a patient may develop pulmonary edema, which is a condition where water leaks from the blood vessels into the lungs. This is a very serious complication which is frequently observed in heart failure patients.

We believe, but cannot be certain at this time, that we will achieve a patent for this type of instrument.

We expect that sales of our Volumex® tracer kit will ultimately be our most important source of revenue. We do not believe at the present time someone would attempt to manufacture another blood volume analyzer without having access to our patented kit system.

There are a number of indirect, or surrogate, tests of blood volume which are often used due to the fact that they are inexpensive or easy to obtain. These include hematocrit or hemoglobin measurements, and measurements of pressures within the heart itself following cardiac catheterization. We do not consider these surrogate tests to pose a significant competitive threat to our product. With respect to the use of hematocrit, this is a common method of estimating a person's blood volume. This test is known to be particularly inaccurate in clinical scenarios which involve a sudden and large loss of blood, such as may occur post-injury or post-surgery. In addition, there is also indirect competition from surrogate measures such as central venous pressure (CVP) obtained from cardiac catheterization that is sometimes used as an estimate of total blood volume. Cardiac catheterization involves an invasive procedure of threading a catheter into the right chambers of the heart and lungs. For many years this procedure was almost universally used until it was recognized that the intra-cardiac pressures it records may not correlate with total body blood volume and the results could be highly misleading. This procedure is used much less frequently now but could still be considered an indirect competing technique for blood volume measurement.

It is our belief that tens of thousands of patients every year develop kidney failure, strokes, or heart attacks, some of which result in death, because physicians are late in recognizing the degree of blood loss due to utilization of inaccurate surrogate measurement such as hematocrit and hemoglobin. It is our goal to replace these inaccurate tests – and their potential to result in misguided therapy – with the accurate test results provided by the Blood Volume Analyzer.

### **Blood Banking**

The blood banking industry has organizations ranging from small, limited service, providers to large full service organizations. The American Red Cross and its affiliates dominate the market and have significantly greater public exposure, goodwill and resources than we do. We compete for customers based on a variety of factors, including reputation, customer service, performance, expertise, price and scope of service offerings. The Company believes it

competes favorably in these areas.

Fees charged for products and services are generally set at levels based on the supply and demand for specific products, and are influenced by the competition among blood products suppliers and federal reimbursement rates to hospital customers. Since many of the Company's competitors are tax-exempt, they do not bear the tax burden the Company faces, and they have access to lower cost tax-exempt debt financing. Their status as charitable institutions may also give them an advantage in recruiting volunteer donors. In addition, certain competitors have advantages over the Company as a result of established positions and relationships with the communities they serve.

To the best of our knowledge, our frozen blood bank is the only facility that provides long-term personal frozen blood storage in the Northeastern United States. The Red Cross and similar organizations provide blood storage prior to surgery. The blood is refrigerated but is usable for only 42 days. However, recent studies have demonstrated that refrigerated blood loses key enzymes within two weeks which causes significant loss of ability to transport oxygen effectively.

One study by Dr. Sukhjeewan Basran, published in a 2006 issue of the journal *Anesthesia Analgesia* has shown that use of aged red blood cells in transfusions is associated with a significantly higher risk of complications, as well as death. In contrast, frozen blood retains needed enzymes for at least 4-6 days after it is thawed and processed for use.

The freezing and thawing of blood involves a complicated process utilizing a special cryoprotective agent which must be processed in a sterile manner. At the time of processing and thawing, the cryoprotective agent must be removed in a sterile manner.

The previous methodology used to thaw and process the removal of the cryoprotective agent allowed it to be used for only 24 hours after thawing. A new process approved by the FDA, which we use, allows blood to be used for up to 14 days after it has been thawed and separated from the cryoprotective agent. To the best of our knowledge, no other facility in the Northeastern United States provides this type of service.

Our personal blood storage service allows a patient to store his or her own blood in case they require a transfusion during surgery. This would not be competitive with existing blood donor services such as the Red Cross, as it provides a patient's own autologous blood rather than blood donated from a stranger – which we believe to be a superior resource.

Our Idant Labs subsidiary pioneered the concept of storage and re-testing of donor semen in 1985. This concept is now legally mandated in most states with semen banking facilities. For example, semen bank donors are required to freeze donated semen which is then quarantined for six months. The donor is required to be re-tested six months later. This double testing process is employed because there is a several month window of non-detect ability for individuals who may be infected with diseases such as HIV or hepatitis, and this helps to insure that the individuals have been tested at the appropriate time interval.

Double testing of blood donors is not done in most instances due to cost considerations. The use of autologous blood storage eliminates the risk of someone receiving contaminated blood from another source. To date, our frozen blood banking services have not been profitable because of inadequate utilization. However, with increased utilization this service could indeed be profitable.

The use of autologous blood storage eliminates the risk of someone receiving contaminated blood from another source since they are now using their own blood. To date, frozen blood banking services have not been profitable because of inadequate utilization. With increased utilization, this service could become profitable.

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 semen 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 heat-sealable straws rather than vials for semen storage, avoids the risk of cross-contamination with other samples.

The high security straws used by Idant also have a larger volume-to-surface ratio than is provided by vials, which helps to optimize the freezing process. Moreover, Idant Laboratories employs a customized carousel storage system which keeps the frozen semen straws continuously submerged in liquid nitrogen. This carousel system allows for withdrawal of a single specimen without any other specimens leaving the liquid nitrogen and becoming partially

defrosted. The Company has also developed a web site ([www.Idant.com](http://www.Idant.com)) that is helpful for marketing purposes.

In 2004, Idant received confirmation of two successful conceptions utilizing sperm stored at Idant respectively for, 21 and 28 years. This was the longest successful cryopreservation of sperm in medical history. The Company believes that its unique storage system for human sperm is responsible for this extraordinary success.

There are other semen banking companies that Idant competes with that have larger donor bases and are better known because they have more resources to devote to marketing and advertising their services. There is always a possibility that another Company with more resources will develop a superior technology for storing human sperm.

Our Idant Labs subsidiary pioneered the concept of storage and re-testing of donor semen in 1985. This concept is now legally mandated in most states with semen banking facilities.

## **WARRANTIES**

The Company recognizes warranty and indemnification that require a guarantor to recognize and disclose a liability for obligations it has undertaken in relation to the issuance of the guarantee. Due to the Company's history, a liability has not been recorded with respect to product or warranty liability.

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, production and marketing of medical devices are subject to regulation by the FDA under the Federal Food, Drug and Cosmetic Act. Daxor is a FDA registered medical device manufacturer that has processes and procedures in place to ensure compliance with the FDA Good Manufacturing (GMP) regulations.

The FDA has established three classes of controls for medical devices. Class I includes devices with the lowest risk, Class II includes devices of intermediate risk including most diagnostic devices and Class III includes those with the greatest risk that must meet the most stringent regulatory requirements. Daxor currently manufactures five different medical devices registered with the FDA; three Class I devices and two Class II devices. The two Class II devices, the BVA-100 software (WinBVA) and the MAX-100 drug delivery device required and have received FDA 510(k) approval prior to market introduction. Any currently planned new products are also expected to be categorized as Class I or Class II devices. Daxor Research and Development (R&D) follows a design control process that minimizes the risk of delay in receiving 510(k) approval to market new products.

As a registered medical device manufacturer, Daxor is subject to periodic inspection by the FDA of manufacturing facilities, production records, product design records and complaint files. If an FDA inspection identifies a non-compliance with GMP regulations, a regulatory action might possibly occur. Daxor conducts regular internal audits to ensure compliance with all GMP regulations. The last FDA inspection of Daxor was in August 2010 and no adverse findings were noted.

In addition to the FDA, Daxor is subject to inspection by other state, federal and private agencies. Investigators from these agencies have all inspected Daxor facilities in Oak Ridge, Tennessee with no adverse findings. The dates of the inspections and names of the agencies are as follows:

Tennessee Board of Pharmacy on November 30, 2007.  
Underwriters Laboratory on February 16, 2011.  
Tennessee Bureau of Radiological Health on July 15, 2011

Our facilities in New York City were also inspected over the last two years with no adverse findings. The dates of the inspections and the names of the agencies are as follows:

American Association of Blood Banks on August 24, 2010  
New York City Department of Environmental Protection on January 19, 2011  
New York City Fire Department on February 15, 2012

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 March 5, 2012, the Company had a labor force of thirty seven, all of whom were leased through ADP Total Source. The Company maintains a work force at its main headquarters in New York City, a manufacturing division and a technology support group in Oak Ridge, Tennessee and account managers in various parts of the Continental United States and Hawaii.

We have a contract with ADP Total Source to provide certain professional employment services such as health insurance to our employees at rates that we would not qualify for otherwise, a retirement plan and payroll services to our personnel. Pursuant to this contract, our personnel are employees of, and paid by, ADP Total Source as part of an employee leasing arrangement. We lease the services of these employees from ADP, and reimburse ADP for the costs of compensation and benefits. All of the employees referred to in the Annual Report are full time employees. For purposes of our Annual Report, we consider employees of ADP covered by this contract to be employees of the Company.

## **INVESTING ACTIVITIES**

The Company maintains a portfolio of Available for Sale Securities. As described in Item 1A: Risk Factors, the income generated by the portfolio has been instrumental in offsetting the Company's cumulative operating loss for the five year period ended December 31, 2011. The Company's investing activities are also discussed in Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations and in the Notes to the Consolidated Financial Statements. The Company's investing activities are not part of its operating business and function as a separate segment.

The Company also engages in the short selling of stock. When this occurs, the short position is marked to market and this adjustment is recorded as a unrealized gain or loss in the Statement of Operations 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, maintaining returns on capital with a high degree of safety and generating income from dividends and option sales to help offset operating losses.

In order to achieve these goals, the Company maintains a diversified securities portfolio comprised primarily of electric utility common and preferred 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 may have net short positions in common stock up to 15% of the value of the portfolio. The Company's net short position may temporarily rise to 2. 15% 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 a minimum of 80% of its portfolio in electric utilities. The Board of Directors has authorized this minimum to be temporarily lowered to 70% when Company management deems it to be necessary. Investments in utilities are primarily in electric companies. Investments in non-utility stocks will generally not exceed 20% of the value of the portfolio.

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

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

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 may be called away, which the company may have preferred to retain. Therefore, a a. limitation of 20% is placed on the amount of stock on which options can be written. The amount of the portfolio on which options are actually written is usually between 3-10% of the portfolio. The historical turnover of the portfolio is such that the average holding period is in excess of five years for available for sale securities.

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 b. 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.

Speculative Short Sales/Short Options . The Company normally 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 call, 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. c. The company then has the choice of covering the short position, or selling a put against it. If the put is exercised, then the short position is covered. The Company's current accounting policy is to mark to 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 net 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 if this is an option. If the proposed merger is a cash only offer, the Company will receive cash and be forced to sell the stock.

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

### **Operating Losses**

The Company has incurred cumulative net operating losses of \$27,192,735 during the five year period ended December 31, 2011. These losses have mainly resulted from ongoing expenses for marketing and research and development as the Company attempts to build a market for its products. During this same time period, the Company's cumulative net income from investments and other items exceeded the operating losses and provided the necessary funds for our continued research and development and marketing. It is the opinion of management that the financial health of the Company would have been adversely affected if our net income from investments during this time had been substantially less than losses from operations.

There is no guarantee that future net income from investments will continue to completely offset operating losses as was the case for the five year period ended December 31, 2011.

### **Sales of Blood Volume Kits**

In the Company's fiscal year ended December 31, 2011, the sale of Blood Volume Kits accounted for 67.0% of the Company's total consolidated operating revenue. There were four customers (hospitals) that accounted for 63.7% of the Company's revenue from 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 four of these hospitals have purchased their BVA-100 equipment. Management believes that when more hospitals purchase equipment, they will continue to purchase Volumex kits. The Company continues to seek new customers, so that any one hospital will represent a smaller percentage of overall sales.

In the Company's fiscal year ended December 31, 2010, the sale of Blood Volume Kits accounted for 64.6% of the Company's total consolidated operating revenue. There were four customers (hospitals) that accounted for 60.8% of the Company's revenue from the sale of Blood Volume Kits.

### **Medicare and Medicaid Reimbursement**

As disclosed in our previous filings, 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. As a result of this policy change, diagnostic radiopharmaceuticals such as Daxor's Volumex are no longer separately reimbursable by Medicare for outpatient services. At this time, it is still 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 policy now 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. There is no guarantee that the APC task force will be successful in their efforts to persuade the CMS to amend their policy of limiting the reimbursement of diagnostic radiopharmaceuticals for outpatient diagnostic services. This change in Medicare's reimbursement policy was still in effect at December 31, 2011.

### **Health Insurance Legislation**

On March 21, 2010, the U.S. House of Representatives passed The "Patient Protection and Affordable Care Act (H.R.3590)." This legislation was signed into law by President Obama on March 23, 2010. The goal of this legislation is to make health care more accessible to Americans. At this time, we are unable to quantify how this legislation will affect our operating income. Although it is possible that increased coverage could lead to greater access to our products and services if the reimbursement rate is lower, this would limit the benefit to Daxor and could have a negative effect on our operating results and our business.

### **Available for Sale Securities**

At December 31, 2011, 81.3% 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. At December 31, 2010, 80.9% of the Company's investment portfolio consisted of utility stocks. The Company's investment policy calls for a minimum of 80% of the investment portfolio to consist of utility stocks. The Board of Directors has authorized this minimum to be temporarily lowered to 70% when management deems it to be necessary.

At December 31, 2011, the Company's investment portfolio consisted of 87 separate stocks. The top five holdings as of this date in the investment portfolio were the Common Stock of Entergy, Exelon, First Energy, Bank of America and National Grid. These five holdings comprised 46.5% of the value of the investment portfolio. Entergy, Exelon, First Energy and National Grid accounted for 49.6% of the dividend income for the year ended December 31, 2011.

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 ability of the Company to sell options is related to the market value of its available for sale securities. If there is a decrease in the market value of the Company's available for sale securities, this could negatively impact income from option sales.

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 our products.

### **Key Individual**

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. The loss of his services in this area would be expected to result in a material reduction in return on the Company's assets.

## **Patents**

Our patents for the BVA 100 expired in 2010. The Company filed two additional patent applications for an automated instrument to measure human blood volume in March of 2012. The filings describe innovations which will be incorporated into the Company's BVA-100 Blood Volume Analyzer. These applications supplement the patent application filed in the fourth quarter of 2011 for a Total Body Albumin Analyzer. The Company does not know when, or if these patent applications will be approved.

The blood volume analyzer, however, works most efficiently with the tracer injection kit system which has a separate patent and which expires in 2016. It is possible that another Company could develop another version of the Blood Volume Analyzer which would use a different tracer injection kit. To the best of our knowledge, this has not happened yet and Management views the development of a competing tracer injection kit as unlikely.

## **Volumex Syringes**

All of the Company's orders for Volumex syringes are filled by a single 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 operating revenue could be material.

## **Regulatory Risk or Approvals**

There is a risk of delay until regulatory approvals are received for any new products the Company may attempt to bring to market in the future. At this point, management is unable to assess how long such a delay would be or the effect on sales that it could have.

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

See Item 3, "Legal Proceedings" for additional information.



## 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 with an option for an additional 18,000 square feet of space.

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. 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. The project was completed during the first quarter of 2010 and the total cost was approximately \$2,750,000. The project involved the construction of laboratory and office space. The validation for the laboratory space and related instruments started during the first quarter of 2010 and Management believes it will be completed by the end of the summer of 2012.

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 for the years ended December 31, 2011 and 2010 was \$12,374 and \$12,166 respectively.

## Item 3. Legal Proceedings

See Part I, Item 1 for discussion of Legal Proceedings.

#### **Item 4. Mine Safety Disclosures**

## **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 NYSE Amex Equities Exchange under the symbol DXR.

2011	High	Low
First Quarter	\$ 10.51	\$ 8.91
Second Quarter	\$ 11.06	\$ 9.69
Third Quarter	\$ 10.59	\$ 9.65
Fourth Quarter	\$ 10.94	\$ 9.08

2010	High	Low
First Quarter	\$ 12.84	\$ 10.98
Second Quarter	\$ 12.25	\$ 9.87
Third Quarter	\$ 10.32	\$ 9.27
Fourth Quarter	\$ 10.96	\$ 8.75

On March 5, 2012, the Company had approximately 124 holders of record of the Common Stock. The Company believes there are approximately 1,200 beneficial holders of their Common Stock.

For the year ended December 31, 2011, the Company paid total dividends of \$1,054,450 or \$0.25 per share on its Common Stock. The \$0.25 per share was paid as follows: \$0.10 per share on June 16<sup>th</sup> and \$0.15 per share on November 30<sup>th</sup>.

For the year ended December 31, 2010, the Company paid total dividends of \$4,229,520 or \$1.00 per share on its Common Stock. The \$1.00 per share was paid as follows: \$0.10 per share on June 16<sup>th</sup>, \$0.25 per share on September 30<sup>th</sup> and a special dividend of \$0.65 per share on December 30, 2010.



No dividends have been declared or paid in 2012 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, 2011, 2010, 2009, 2008 and 2007 are derived from our audited consolidated financial statements that are included in this Form 10-K.

**Operations Data:**

	Year Ended December 31,				
	2011	2010	2009	2008	2007
Total operating revenues	\$1,446,345	\$1,579,257	\$1,688,826	\$1,761,055	\$1,869,779
Costs and expenses:					
Operations of laboratories & costs of production	652,511	727,650	704,866	717,278	682,786
Research and development	2,705,952	3,041,640	2,825,151	2,438,423	2,576,708
Selling, general and administrative	3,874,296	3,469,078	3,267,997	3,812,506	4,041,155
Total costs and expenses	7,232,759	7,238,368	6,798,014	6,968,207	7,300,649
Loss from operations	(5,786,414 )	(5,659,111 )	(5,109,188 )	(5,207,152 )	(5,430,870 )
Other income and expenses:					
Dividend income	2,237,734	2,226,198	2,936,976	2,509,966	2,419,476
Gains on sale of investments	33,189	13,509,318	10,911,200	17,249,716	14,853,934
Mark to market of short positions	(8,501,859 )	(1,526,064 )	(1,301,530 )	5,364,215	357,337
Other revenues	12,374	12,166	11,854	11,924	11,112
Admin expense relating to portfolio investments	(153,816 )	(150,675 )	(134,457 )	(99,935 )	(55,538 )
Interest expense, net of interest income	(168,923 )	(61,676 )	(162,983 )	(147,501 )	(197,211 )
Total other (expenses) and income	(6,541,301 )	14,009,267	12,261,060	24,888,385	17,389,110
(Loss ) income before income taxes	(12,327,715)	8,350,156	7,151,872	19,681,233	11,958,240
(Benefit) provision for income taxes	(5,142,076 )	3,381,892	1,329,114	4,557,964	1,311,024
Net (loss) income	\$(7,185,639 )	\$4,968,264	\$5,822,758	\$15,123,269	\$10,647,216
Weighted average number of common shares outstanding – basic	4,219,654	4,237,216	4,262,643	4,350,951	4,572,119
	4,219,654	4,237,216	4,284,643	4,375,623	4,572,119

Weighted average number of common shares outstanding – diluted

(Loss)income per common equivalent share – basic	\$(1.70	) \$1.17	\$1.37	\$3.48	\$2.33
(Loss)income per common equivalent share –diluted	\$(1.70	) \$1.17	\$1.36	\$3.46	\$2.33
Dividends paid per common share	\$0.25	\$1.00	\$1.35	1.50	—

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## Selected Balance Sheet Data:

	December 31,				
	2011	2010	2009	2008	2007
Total assets	\$85,724,861	\$91,195,415	\$75,186,990	\$76,824,181	\$102,560,500
Total liabilities*	\$49,508,270	\$44,200,371	\$27,561,653	\$33,363,540	\$47,644,615
Stockholders' equity	\$36,216,591	\$46,995,044	\$47,625,337	\$43,460,641	\$54,915,885

\* Total liabilities include deferred taxes on unrealized gains.

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

### CAUTION REGARDING FORWARD-LOOKING STATEMENTS

The following discussion of our financial condition and results of our operations should be read in conjunction with the Condensed Consolidated Financial Statements and Notes thereto included elsewhere in this Annual Report on Form 10-K for the year ended December 31, 2011. This Annual Report on Form 10-K contains forward-looking statements based on our current expectations, assumptions, estimates and projections about us and our industry. These forward-looking statements are usually accompanied by words such as "believes," "may," "should," "anticipates," "estimates," "expects," "future," "intends," "hopes," "plans," and similar expressions, and the negative thereof. Forward-looking statements involve risks and uncertainties and our actual results may differ materially from the results anticipated in these forward-looking statements as a result of certain factors.

### BUSINESS OVERVIEW

Daxor Corporation is a medical device manufacturing company which provides additional biotechnology services, such as cryobanking and frozen blood storage, through its wholly owned subsidiary Scientific Medical Systems Corp. The main focus of Daxor Corporation has been the development and marketing of the BVA-100 Blood Volume Analyzer, an instrument that rapidly and accurately measures human blood volume. This instrument is used in conjunction with a single-use diagnostic injection and collection kit (Volumex®) that the Company also sells to its customers.

### RECENT DEVELOPMENTS

Blood volume derangements are associated with a variety of medical and surgical conditions. It is well established that clinical assessments of blood volume using physical examination or simple blood tests are frequently inadequate to determine total blood volume. Daxor is therefore actively supporting blood volume research in several strategic areas including Heart Failure, Critical Care/Trauma, and Transfusion Decisions during Surgery. These therapeutic areas are ones in which patient diagnosis and/or treatment may be greatly improved by the information obtained from a blood volume analysis, as outlined below.

## **Heart Failure**

Heart failure, a major cause of morbidity and mortality among the elderly, is a serious public health problem. Expenditures related to the care of heart failure patients approach \$38 billion annually, which makes congestive heart failure the most expensive condition covered by Medicare. The majority of patients treated for heart failure must be treated with medications which produce drastic changes in their blood volumes.

Daxor has previously sponsored several studies to assess the benefits of blood volume analysis in heart failure patients. One landmark study, conducted by Dr. Stuart Katz when he was an Investigator at the Columbia Presbyterian Medical Center, categorized patients as hypervolemic (volume expanded), normovolemic (having a normal blood volume), or hypovolemic (volume contracted) and recorded their outcomes over time. 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 suggested that effectively treating patients to normovolemia may dramatically improve their outcomes.

This study also examined the accuracy of clinical assessment of volume status in these patients. Experienced cardiologists assessed patients' blood volume status using standard laboratory tests and physical examination. When choosing between three possible choices—decreased, normal, or increased blood volume—specialists were correct only 51% of the time in categorizing these severely ill cardiac patients relative to the direct measurement results provided by the BVA-100. This study was cited in the American College of Cardiology/American Heart Association guidelines for the treatment of chronic heart failure in support of the recommendation to assess blood volume status of heart failure patients at every doctor's visit.

Daxor has enrolled patients in a multi-center study which is a follow-up to this earlier study. The TEAM-HF ( **T**reatment to **E**uvolemia/Normovolemia by **A**ssessment and **M**easured Blood Volume in **H**ear**F**ailure) Study will enroll a total of 300 patients from thirteen (13) participating medical centers. The TEAM-HF Study will compare heart failure management strategies based on clinical assessment of volume status versus direct measurement of blood volume using the BVA-100 to determine whether use of blood volume data leads to decreases in re-hospitalization and mortality, and improved function and quality of life for heart failure patients. Dr. Stuart Katz, who is now the Director of the Heart Failure Program at New York University, is extending his previous research by serving as the National Principal Investigator for this study. Data collection and management for the TEAM-HF Study is being performed by an independent Data Collection Center – the Nathan S. Kline Institute for Psychiatric Research. Daxor has also retained the services of three statisticians, two of whom are faculty members at New York University, to assist with data analysis for the TEAM-HF Study.

In addition, Daxor is currently supporting a study which will determine whether use of blood volume measurement to help guide fluid removal by ultrafiltration (UF) in patients hospitalized with decompensated Heart Failure (HF) leads to improved outcomes. The 50 patients who enroll in this interventional study will undergo 4 blood volume measurements: (1) immediately before UF, (2) 30 minutes after UF is complete, (3) at 30-day follow-up and (4) at 90-day follow-up. Patients will be randomized into two groups: in the experimental group, the physician will be given the BVA-100 results, which – in conjunction with continuous hematocrit monitoring – will guide fluid removal during UF. In the control group, the physician will not be given the BVA-100 results. In this case, fluid removal will be based upon physicians' clinical assessment. Some of the outcomes that will be compared between the two groups include survival, rehospitalization, the incidence of decreased kidney function, and the need for long-term hemodialysis. This study is currently in progress, and 26 patients have enrolled to date.

Daxor also provided support along with Medtronic, Inc. for a clinical study to assess whether the OptiVol® implantable cardiac device is able to provide an accurate estimate of patients' blood volume status. At the present time, it is difficult to accurately identify increases in blood volume that may predict which patients are likely to experience a worsening of symptoms and future heart failure events. One invasive method that is sometimes used to identify early blood volume increases is Medtronic's OptiVol® system, which continuously monitors the thoracic fluid status of heart failure patients. The objective of this study was to determine whether there is a correlation between intrathoracic bio-impedance, as measured by Medtronic's OptiVol® system, and total blood and plasma volume as measured by Daxor's non-invasive BVA-100 Blood Volume Analyzer. This study was led by Dr. Adrian Van Bakel, the Medical Director of the Heart Failure and Cardiac Transplant Program of the Medical University of South Carolina.

The study was part of a larger study (FAST Study) of 1,400 patients. The lead investigator was Dr. D.J. van Veldhuisen. The study, however, was prematurely terminated. The reason for the termination was that patients treated on the basis of the OptiVol® bio impedance monitor had a higher death rate. The bio impedance monitor was essentially a surrogate measure of changes in the patient's blood volume or fluid congestion in the lungs. With the exception of the study in South Carolina, none of the other institutions used a blood volume measurement in evaluating the Optivol® instrument. In reviewing the published reports and communicating with the senior investigator, Dr. Feldschuh noted that the Optivol® instrument was never calibrated to the individual patient's blood volume. There have been a number of recent communications with senior researchers at Medtronic regarding the problem with the utilization of the Optivol® most likely stemming from the fact that there was no calibration of the patient's individual blood volume to the instrument. In discussions with the Company, Dr. Feldschuh has expressed his opinion that if the instrument was calibrated by measuring a patient's actual blood volume, then it could be possible, on a daily basis, to monitor changes in blood volume in congestive heart failure patients. These discussions have taken place over the past three months and are continuing.

### **Critical Care/Trauma**

Optimal management of fluid status is an essential component of critical care medicine. At the present time, physicians rely on imprecise clinical signs and symptoms to guide their fluid resuscitation decisions. Direct blood volume measurement can be used to take the guesswork out of volume assessment and to enable more precise and appropriate treatment.

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 the results have influenced their treatment decisions. Some of their results were published in the February 2009 issue of the *American Journal of Surgery* .. The findings were based on 86 blood volume measurements 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 had been available to treating physicians. Among patients who did not receive PAC measurement, treatment would have changed 33% of the time if the blood volume data had been available.

Dr. Yu recently completed a major study, partially funded by Daxor, in which blood volume measurement was conducted in the intensive care unit. The purpose of the study was to determine whether survival and length of hospital stay could be improved by incorporating blood volume measurement into treatment decisions in the intensive care unit. They found that use of the BVA-100 to guide fluid and red blood cell management led to a significant improvement in mortality in critically ill surgical patients with septic shock, severe sepsis, severe respiratory failure and/or cardiovascular collapse. Patients in the control group, whose resuscitation was guided by findings from pulmonary artery catheterization (PAC) demonstrated statistically significant untreated volume abnormalities and red blood cell deficiencies more often than patients in the group who were resuscitated based on blood volume measurement data (48% vs. 37% and 33% vs. 16%, respectively). This correlated with significantly greater mortality for patients in the control group (24% mortality) than for patients in the blood volume measurement group (8% mortality;  $P=0.03$ ). These findings indicate that blood volume analysis permits more accurate assessment of patients' volume status and more precise fluid resuscitation and saves lives. Their most recent findings were published in the March 2011 issue of the journal *Shock*.

Daxor also supported a second study of blood volume analysis in critically injured trauma patients. This study, which assessed blood volume changes over a three-day period, was led by Dr. Marty Schreiber, Chief of Trauma at the Oregon Health and Science University. They found that the peripheral hematocrit – which is traditionally used as a marker for blood loss – does not provide an adequate estimate of red blood cell volume in critically ill patients who have been fluid resuscitated. Although the peripheral hematocrit was relatively accurate in patients with normal or contracted blood volumes, based on comparison to the results of direct blood volume measurement, it was quite inaccurate in patients with expanded blood volumes. In fact, the peripheral hematocrit led to overdiagnosis of anemia in 46.7% of critically ill patients with expanded blood volumes. These findings were published in the March 2011 issue of *The Journal of Trauma*.

### **Transfusion Decisions During Surgery**

Effective volume management during surgery requires accurate assessment of a patient's need for transfusions. The decision to transfuse a patient depends on appropriately balancing the benefits vs. risks of transfusion for each patient at any given time. 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.

Daxor recently sponsored a study of blood volume changes throughout cardiac surgery as measured by the BVA-100. This study was led by Principal Investigator Dr. Mark Nelson at the Virginia Commonwealth University. Three sequential blood volume analyses were conducted: (1) before surgery; (2) immediately after surgery; (3) and 2 hours after transfer to the intensive care unit. The hypothesis was that red cell volume would be well conserved as a result of cell salvage and transfusion practices employed in the operating room. The preliminary findings from this study demonstrated a greater than anticipated loss of red cells and total blood volume during and after surgery. These results were presented at the 2010 Society of Cardiovascular Anesthesiologists meeting and are expected to be published in the future.



## RESULTS OF OPERATIONS

### Operating Revenues

For the year ended December 31, 2011, consolidated revenue from operations was \$1,446,345 versus \$1,579,257 for the year ended December 31, 2010 for a decrease of \$132,912 or 8.4%.

Equipment sales and kit sales decreased from \$1,242,264 in 2010 to \$1,125,249 in 2011. In 2011, the Company did not sell any blood volume analyzers versus a sale of one for \$65,000 versus one in 2010.

Revenue from service contracts on BVA-100 Blood Volume Analyzers and related maintenance services increased from \$99,390 for the year ended December 31, 2010 to \$102,865 for the year ended December 31, 2011.

The revenue from kit sales decreased by 5.1% for the year ended December 31, 2011 versus the same period in 2010. The number of kits sold decreased by 3.8% for the year ended December 31, 2011 versus the same period in 2010. For the year ended December 31, 2011, the Company sold 3,031 blood volume measurement kits versus 3,152 in 2010. For the year ended December 31, 2011, the Company provided 206 Volumex doses free of charge to facilities utilizing the BVA-100 for research versus 269 in 2010.

The number of Blood Volume Analyzers placed into service was 61 at December 31, 2011 and 56 at December 31, 2010. The decrease in revenue from kit sales in 2011 versus 2010 can be attributed to a decrease in visits by patients with the type of conditions that would require blood volume measurement to facilities utilizing the Blood Volume Analyzer on a trial basis.

The following tables provide gross margin information on Equipment Sales & Related Services for the years ended December 31, 2011 and December 31, 2010:

Equipment Sales and Related Services:	Kit Sales Year Ended December 31, 2011	Equipment Sales and Other Year Ended December 31, 2011	Total Year Ended December 31, 2011
Revenue	\$ 968,536	\$ 156,713	\$ 1,125,249
Cost of Goods Sold	439,475	176,588	616,063
Gross Profit (Loss)	529,061	(19,875 )	509,186
Gross Profit (Loss) Percentage	54.6 %	(12.7 %)	45.3 %

Equipment Sales and Related Services:	Kit Sales Year Ended December 31, 2010	Equipment Sales and Other Year Ended December 31, 2010	Total Year Ended December 31, 2010
Revenue	\$ 1,020,906	\$ 221,358	\$ 1,242,264
Cost of Goods Sold	475,959	215,827	691,786
Gross Profit	544,947	5,531	550,478
Gross Profit Percentage	53.4 %	2.5 %	44.3 %

There is a gross loss on Equipment Sales and Other for the Year Ended December 31, 2011 even though no blood volume analyzers were sold because the Company still incurred certain fixed production costs.

Operating revenues from Cryobanking and related services decreased during the year ended December 31, 2011 by \$15,897 or 4.7% from 2010. A major factor in this decrease was a reduction in revenue from semen storage and analysis by \$20,370 or 8.1% to \$230,065 versus \$250,435 in the year ended December 31, 2010.

The Company's Idant Laboratories subsidiary contributed 22.2% and 21.3% of operating revenues in 2011 and 2010, respectively.

## Operating Expenses

For the years ended December 31, 2011 and 2010, consolidated expenses from operations totaled \$6,580,248 and \$6,510,718 respectively.

For the years ended December 31, 2011 and 2010, the consolidated loss from operations was \$5,786,414 and \$5,659,111 respectively.

The total Operating costs for Daxor and the BVA segment were \$5,727,861 for the year ended December 31, 2011 versus \$5,576,694 for the year ended December 31, 2010 for an increase of \$151,167 or 2.7%. Professional fees increased by \$552,698 in 2011 which is mostly due to costs relating to the SEC proceeding. This was partially offset by a reduction of \$224,859 in payroll and related expenses.

Research and development expenses for Daxor and the BVA segment decreased in 2011 by \$317,411 or 11.2% to \$2,508,657 from \$2,826,068 in 2010. The major reasons for this decrease were reductions in the year ended December 31, 2011 of \$178,421 in salary and related expenses, \$70,000 in software development and \$75,894 in laboratory expenses.

Daxor remains committed to making Blood Volume Analysis a standard of care in multiple disease conditions. In order to help achieve this goal, the Company filed a patent in the fourth quarter of 2011 for a semi-automated instrument to measure total body albumin. As a supplement to this application, the Company filed two additional patents in March of 2012 for a semi-automated instrument to measure human blood volume analysis.

The Company is sponsoring a multi-center study to compare heart failure management studies based on clinical assessment of volume status versus direct measurement of blood volume using the BVA-100 to determine whether use of blood volume data leads to decreases in re-hospitalization and mortality, and improved function and quality of life for heart failure patients. Daxor is also currently supporting a study which will determine whether use of blood volume measurement to help guide fluid removal by ultrafiltration (UF) in patients with decompensated Heart Failure (HF) leads to improved outcomes.

Total Operating Costs for the Cryobanking segment were \$852,387 for the year ended December 31, 2011 versus \$934,024 for the year ended December 31, 2010 for a decrease of \$81,637 or 8.7%.

## **INVESTING SEGMENT**

### **Investment Portfolio**

At December 31, 2011, the Company's investment portfolio consisted of 87 separate stocks. The top five holdings as of this date in the investment portfolio were the Common Stock of Entergy, Exelon, First Energy, Bank of America and National Grid. These five holdings comprised 46.5% of the value of the investment portfolio. Entergy, Exelon, First Energy and National Grid accounted for 49.6% of the dividend income for the year ended December 31, 2011.

The net realized gains on the sale of investments were \$33,189 for the year ended December 31, 2011 versus \$13,509,318 for the year ended December 31, 2010. For the year ended December 31, 2011 the Company had a loss from marking to market short positions of options and equity securities of \$(8,501,859) versus a loss of \$(1,526,064) in 2010. The decrease in investment gains and increased mark to market losses were the main reason the Company had a loss in 2011.

### **Dividend Income**

Dividend income earned for the year ended December 31, 2011 was \$2,237,734 versus \$2,226,198 for the year ended December 31, 2010.

### **Investment Gains**

The net realized gains on the sale of investments were \$33,189 for the year ended December 31, 2011 versus \$13,509,318 for the year ended December 31, 2010 which represents a decrease of \$13,476,129 or 99.8%. A large part of this decrease was due to the Company having realized losses of \$944,348 on First Solar options and common stock and \$2,795,873 on Netflix options and common stock. The Company also incurred losses on closing short positions of \$1,672,625 in Apple, \$490,104 in Simon Properties and \$927,844 in Intuitive Surgical Group.

### **Unrealized Losses on Available for Sale Securities**

At December 31, 2011, 82.1% or \$6,550,065 of the total unrealized losses of \$7,981,968 was comprised of the following three securities: \$4,078,970 for Bank of America, \$872,787 for Citigroup Inc. and \$1,598,308 for USEC.

#### Bank of America

At December 31, 2011, Daxor owned 612,095 shares of Bank of America with a cost basis of \$12.22 per share and a market value of \$5.56 per share. On March 14, 2012, the market value was \$8.84 per share which is \$3.38 or 28% lower than our cost basis of \$12.22 per share. As of December 31, 2011, the book value of the Company was \$20.09 per share which is substantially more than the current market price and the cost basis of the shares owned by Daxor.

Revenue, net of interest expense for the year ended December 31, 2011 decreased to \$93.4 billion from \$110.2 billion during the year ended December 31, 2010.

On January 19, 2012, Bank of America reported net income of \$1.4 billion for the year ended December 31, 2011 versus a net loss of \$2.2 billion for the same period in 2010.

In order to be “well capitalized” under federal bank regulatory agency definitions, a bank holding company must have a Tier 1 Capital Ratio of at least 6%, a Total Capital Ratio of at least 10%, and a Leverage ratio of at least 3% not to be subject to a Federal Reserve Board directive to maintain higher capital levels. At December 31, 2011, the Tier 1 Capital Ratio was 12.40%, the Total Capital Ratio was 16.75% and the leverage ratio was 7.53%. Bank of America is considered “well capitalized” under the federal regulatory agency definitions at December 31, 2011.

After considering the available positive and negative evidence in addition to the ability of Daxor to hold the stock until the market price exceeds our cost as it did at March 31, 2011, management has determined that an impairment charge is not necessary at December 31, 2011 on Bank of America.

#### Citigroup

At December 31, 2011, Daxor owned 48,940 shares of Citigroup with a cost basis of \$44.14 per share and a market value of \$26.31. On March 14, 2012, the market value was \$35.21 per share which is \$8.93 or 20% lower than our cost basis of \$44.14 per share. During the first quarter of 2009, the stock was at \$10.00 per share and as of March 5, 2012, was trading at \$33.68 per share. As of December 31, 2011, the book value of the Company was \$60.70 which is substantially more than the current market price and the shares owned by Daxor.

Citigroup reported net income of \$11.0 billion for the year ended December 31, 2011 versus net income of \$10.6 billion for the year ended December 31, 2010. Revenue was \$78.3 billion during the current year versus \$86.6 billion for the same period in 2010.

Citigroup has increased headcount to 266,000 at December 31, 2011 from 260,000 at December 31, 2010. This is still less than the peak level of 375,000 from 2007. Total Operating Expenses were 8% higher during the year ended December 31, 2011 as compared to the same period in 2010.

During 2009, Citigroup repaid \$20 billion of TARP (Troubled Asset Relief Program) trust preferred securities and exited a loss sharing agreement. As a result of these transactions, effective in 2010, Citigroup is no longer deemed to be a beneficiary of “exceptional financial assistance” under TARP.

In order to be “well capitalized” under federal bank regulatory agency definitions, a bank holding company must have a Tier 1 Capital Ratio of at least 6%, a Total Capital Ratio of at least 10% , and a Leverage ratio of at least 3%, and not be subject to a Federal Reserve Board directive to maintain higher capital levels. At December 31, 2011, the Tier 1 Capital Ratio was 13.6%, Total Capital Ratio was 17.0% and the Leverage Ratio was 7.2%. Citigroup is considered “well capitalized” under the federal regulatory agency definitions at December 31, 2011 and all of these percentages have improved since December 31, 2010.

The operating environment for Citigroup continues to be difficult but the stock price has mostly been trending upward since the first quarter of 2010. Citigroup has now recorded a profit for eight consecutive quarters versus a loss for the year ended December 31, 2009. Citigroup is no longer deemed to be a beneficiary of “exceptional financial assistance” under TARP and is considered to be “well capitalized” under the federal regulatory agency definitions at December 31, 2011.

After considering the available positive and negative evidence in addition to the ability of Daxor to hold the stock until the market price exceeds our cost, management has determined that an impairment charge is not necessary at December 31, 2011 on Citigroup.

## USEC

At December 31, 2011, Daxor owned 444,100 shares of USEC with a cost basis of \$4.74 per share and a market value of \$1.14 per share. On March 14, 2012 the market value of USEC was \$1.27 per share which is \$3.47 or 73% less than our cost basis of \$4.74 per share.

The stock price has decreased by 79% from January 1, 2011 through March 14, 2012, going from \$5.99 per share to \$1.27 per share. As of December 31, 2012, the Book Value of the Company was approximately \$5.78 per share. This is substantially more than the current market price and the cost basis of the shares owned by Daxor.

USEC Inc., together with its subsidiaries, supplies low enriched uranium (LEU) to commercial nuclear power plants in the United States and internationally. It also performs contract work for the U.S. Department of Energy (DOE) and DOE contractors at the Paducah and Portsmouth gaseous diffusion plants. USEC Inc's contract work includes support services and the maintenance of Portsmouth gaseous diffusion plant in a state of cold shutdown. In addition, the company provides nuclear energy solutions and services, including the design, fabrication, and implementation of spent nuclear fuel technologies; nuclear materials transportation and storage systems; and nuclear fuel cycle and energy consulting services.

USEC reported a net loss of \$540.7 million for the year ended December 31, 2011, versus net income of \$7.5 million for the same period in 2010. Revenue for the current year was \$1.67 billion which is an 18% decrease from 2010. The Gross Profit Margin was 5.0% during the year ended December 31, 2011 versus 7.8% for the year ended December 31, 2010. In spite of having a net loss, USEC had positive cash flow from operating activities of \$56.3 million during the current year.

USEC expensed \$136.7 million of capitalized work-in-progress cost related to damaged centrifuges as well as earlier machines that were determined to no longer be compatible with the commercial plant design. The Company also recorded a full valuation allowance for the net deferred tax assets of \$369.1 million due to cumulative losses incurred in recent years and the substantial uncertainty of generating future taxable income that would lead to realization of the net deferred tax assets. The charge and the valuation allowance did not affect the company's cash flow from operations.

The market price of USEC has declined by approximately 70% since a tsunami caused an accident at a nuclear plant in Fukushima, Japan in March of 2011. One year after the accident, the total number of reactors in operation and development in the world has not changed. This means that the long term demand for uranium has not diminished since last year, even though short-term demand may have been affected by the minor decrease in reactors currently operating.

After considering the available positive and negative evidence in addition to the ability of Daxor to hold the stock until the market price exceeds our cost, management has determined that an impairment charge is not necessary at December 31, 2011 on USEC.



Daxor Corporation

Summary of Unrealized Losses on Bank of America, Citigroup and USEC

As of December 31, 2011

Security	Total Cost	Less Than Twelve Months		Twelve Months or Greater		Total	
		Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Bank of America	\$7,482,218	\$1,482,296	\$1,513,806	\$1,920,952	\$2,565,164	\$3,403,248	\$4,078,970
Citigroup	2,160,398	828,765	299,530	458,846	573,257	1,287,611	872,787
USEC	2,104,582	249,660	682,330	256,614	915,978	506,274	1,598,308
Total	\$11,747,198	\$2,560,721	\$2,495,666	\$2,636,412	\$4,054,399	\$5,197,133	\$6,550,065

## LIQUIDITY AND CAPITAL RESOURCES

As of December 31, 2011, cash and cash equivalents totaled \$59,625 versus \$57,741 at December 31, 2010. Cash used in operating activities was \$6,508,648 for the year ended December 31, 2011. This use of cash was primarily due to funding the operating loss for the current year.

Cash used in investing activities was \$11,388,438 for the year ended December 31, 2011. This decrease is mainly attributable to the acquisition of available for sale securities of \$25,722,529 and the purchase of put and call options of \$8,961,293. This was partially offset by the sales of put and call options of \$14,318,728 and available for sale securities of \$9,181,156.

A total of \$17,898,970 of cash was provided during the current year in financing activities and this was primarily due to the proceeds from margin loans payable of \$44,633,031 which was partially offset by the repayment of margin loans of \$25,404,421 and payment of a dividend of \$1,054,450.

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.

Income from the Company's security portfolio is a major asset for the Company as it continues its efforts in research and development and marketing. At December 31, 2011, 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 research and development and marketing efforts.

The following table shows the fair market value, cost, net unrealized gain, unrealized gain and loss at December 31st from 2007 through 2011.

Valuation Date:	Fair Market Value	Cost	Net Unrealized Gain	Unrealized Gains	Unrealized Losses
December 31, 2011	\$55,804,364	\$36,463,635	\$19,340,729	\$27,322,697	\$(7,981,968 )
December 31, 2010	53,876,071	30,967,959	22,908,112	23,498,072	(589,960 )
December 31, 2009	53,270,726	28,630,149	24,640,577	27,141,931	(2,501,354 )
December 31, 2008	68,339,143	50,709,601	17,629,542	28,469,540	(10,839,998)
December 31, 2007	74,919,193	29,987,157	44,932,036	47,386,399	(2,454,363 )

It is the opinion of Management that the Company is undercapitalized with respect to the Blood Volume Analyzer and the Blood Optimization Program. Based on present conditions, it is unlikely that additional capital can be raised on reasonable terms without significant 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.

The Company's investment portfolio has been a critical source of supplemental income which has offset the cumulative operating losses for the five year period ended December 31, 2011. Without the income from the investment portfolio, the Company would have needed to raise additional operating funds through either debt or equity financing or a combination of the two. The Company's portfolio has maintained a net value above historical cost for each of the past 108 consecutive quarters.

The income derived from these investments has been essential to help offset the research, operating and marketing expenses of developing the Blood Volume Analyzer. The Company has followed a conservative policy of assuring adequate liquidity so that it can expand its marketing and research and development without the sudden necessity of raising additional capital. The securities in the Company's portfolio are selected to provide stability of both income and capital. The Company has been able to achieve financial stability because of these returns, which have covered the Company's cumulative losses from operations for the five year period ended December 31, 2011. The Company's investment policy is reviewed at least once yearly by the Board of Directors and the Audit Committee. Individual investment decisions are made solely by the Company's President and CEO, Dr. Joseph Feldschuh.

The Company currently has adequate resources for the current level of marketing and research and development expenses for the BVA-100 Blood Volume Analyzer as well as capital to sustain its localized semen and blood banking

services. At present, the Company does not have adequate resources to expand its marketing force to all areas of the country. The Company is simultaneously expanding its research and development efforts to develop additional instrumentation for renal function testing, specifically glomerular filtration testing. The current primary focus is on the BVA-100 Blood Volume Analyzer with respect to expenditure of resources.

## 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 FASB ASC 320, "Investments." 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, maintaining returns on capital with a high degree of safety and generating income from dividends and option sales to help

offset  
operating  
losses.

2. In order to achieve these goals, the Company maintains a diversified securities portfolio comprised primarily of electric utility common and preferred 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 may have net short positions in common stock up to 15% of the value of the portfolio. The Company's net short position may temporarily rise to 15% 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 a minimum of 80% of its portfolio in electric utilities. The Board of Directors has authorized this minimum to be temporarily lowered to 70% when Company management deems it to be necessary. Investments in utilities are primarily in electric companies. Investments in non-utility stocks will generally not exceed 20% of the value of the portfolio.

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

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

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 may be called away, which the company may have preferred to retain. Therefore, a limitation  
a. of 20% is placed on the amount of stock on which options can be written. The amount of the portfolio on which options are actually written is usually between 3-10% of the portfolio. The historical turnover of the portfolio is such that the average holding period is in excess of five years for available for sale securities.

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  
b. 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.

Speculative Short Sales/Short Options . The company normally 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 call, 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  
c. company then has the choice of covering the short position, or selling a put against it. If the put is exercised, then 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 net 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 if this is an option. If the proposed merger is a cash only offer, the Company will receive cash and be forced to sell the stock.

Our investment policy calls for a minimum of 80% of the value of our portfolio of Available for Sale Securities to be maintained in utility stocks. Operating under this policy, Management's investment strategy is to purchase utility stocks which it considers to be undervalued relative to the market in anticipation of an increase in the market price.

It is possible that the market value of a stock may go below our cost after we purchase it even though we considered the stock to be undervalued relative to the market at the time we purchased it. When that occurs, we follow the provisions of *SEC Staff Accounting Bulletin: Codification of Staff Accounting Bulletins, Topic 5-M ("SAB 5-M")*: *Miscellaneous Accounting, Other Than Temporary Investments in Debt and Equity Securities* in determining whether an investment is other than temporarily impaired. The factors we review and/or consider include the following:

The extent to which the market value has been less than cost.

An evaluation of the financial condition of an issuer including a review of their profit and loss statements for the most recent completed fiscal year and the preceding two years.

The examination of the general market outlook of



the issuer.  
This could  
include but  
is not limited  
to the issuer  
having a  
unique  
product or  
technology  
which would  
appear likely  
to have a  
positive  
impact on  
future  
earnings.

A review of  
the general  
market  
conditions.

Our intent  
and ability to  
retain the  
investment  
for a period  
of time  
sufficient to  
allow for the  
anticipated  
recovery in  
market  
value.

Specific  
adverse  
conditions  
related to the  
financial  
health of,  
and business  
outlook for,  
the issuer.

Changes in  
technology  
in the  
industry and  
its affect on  
the issuer

Changes in  
the issuer's  
credit rating.

## **Revenue Recognition**

The Company recognizes operational revenues from several sources. The first source is the sale of equipment, the Blood Volume Analyzer, to customers. The second source is the sale of single-use tracer doses supplied as Volumex Kits 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, and associated laboratory tests.

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 revenue generated by a direct sale is recognized in the period in which the equipment is shipped. 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 in the period in which the equipment is shipped. 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 doses are shipped.

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, which is usually offered in one year increments. These service contracts are recorded by the Company as deferred revenue and are amortized into income in the period in which they apply.

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 on a quarterly basis. The Company will only recognize revenue for those storage fees that are earned in the current reporting period, and will defer the remaining revenues to the period in which they are earned.

### **Comprehensive Income (Loss)**

The Company reports components of comprehensive income under the requirements of FASB ASC 220, “Comprehensive Income”. This statement establishes rules for the reporting of comprehensive income and requires certain transactions to be presented as separate components of stockholders’ equity. The Company currently reports the unrealized holding gains and losses on available-for-sale securities, net of deferred taxes, as accumulated other comprehensive income (loss).

### **Product Warranties and Related Liabilities**

The Company offers a one year warranty on the Blood Volume Analyzer equipment. This warranty is effective on the date of sale and covers all mechanical failures of the equipment. All major components of the equipment are purchased and warranted by the original third party manufacturers.

Once the initial one year warranty period has expired, customers may purchase annual service contracts for the equipment. These service contracts warranty the mechanical failures of the equipment that are not associated with normal wear-and-tear of the components.

To date, the Company has not experienced any major mechanical failures on any equipment sold. In addition, the majority of the potential liability would revert to the original manufacturer. Due to this history, a liability has not been recorded with respect to product / warranty liability.

### **Contractual Obligations**

In December 2002, the Company signed a lease which commenced on January 1, 2003, for its existing facility at the Empire State Building. The lease expires on December 31, 2015. The Company has occupied this space since January 1992. The company currently occupies approximately 7,200 square feet. There are options for an additional 18,000 square feet of space. The Company has acquired a 20,000 square foot manufacturing facility in Oak Ridge, Tennessee which is currently manufacturing the BVA-100 Blood Volume Analyzers, and where R&D activities are performed. The Company’s Volumex syringes are filled by an FDA approved radio pharmaceutical manufacturer. The manufacturer has worked with Daxor since 1987. The manufacturer’s prices are reviewed annually.

## TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

Contractual Obligations	Total	Payments Due By Period			
		Less Than 1 Year	1 – 3 Years	3 – 5 Years	More Than 5 years
(Long-Term Debt Obligations) <sup>1</sup>	\$345,101	\$73,950	\$147,900	123,251	—
(Capital Lease Obligations)	—	—	—	—	—
(Operating Lease Obligations) <sup>2</sup>	\$1,302,720	\$325,680	\$651,360	\$325,680	—
(Purchase Obligations)	—	—	—	—	—
(Other Long-Term Liabilities Reflected on the Registrant's Balance Sheet under GAAP)	—	—	—	—	—
Total	\$1,647,821	\$399,630	\$799,260	\$448,931	\$—

<sup>1</sup>This amount represents the total monthly mortgage payment of \$6,162 which includes principal and interest for the property purchased at 107 and 109 Meco Lane in Oak Ridge, Tennessee. The last payment on the lease is due in August 2016.

<sup>2</sup>This amount represents a total monthly rental payment of \$27,140 which consists of base rent of \$26,349 and \$791 for two separate spaces at 350 5th Avenue.

## **CODE OF ETHICS AND BUSINESS CONDUCT**

The Company has a Code of Ethics and Business Conduct which was approved by the Board of Directors in March 2005. The Code of Ethics and Business Conduct applies to all directors, officers, employees and other representatives of the Company including the Chief Executive Officer and Chief Financial Officer. A copy of the Code of Ethics and Business Conduct is available for free at [www.daxor.com](http://www.daxor.com)

### **Summary of Actual Portfolio Investments**

The company's portfolio value is exposed to fluctuations in the general value of utilities. An increase of interest rates could affect the company in two ways: one would be to put downward pressure on the valuation of utility stocks as well as increase the company's cost of borrowing.

Because of the size of the unrealized gains in the company's portfolio, the company does not anticipate any changes which could reduce the value of the company's utility portfolio below historical cost. Utilities operate in an environment of federal, state and local regulations, and they may disproportionately affect an individual utility. The company's exposure to regulatory risk is mitigated due to its diversity of holdings. At December 31, 2011 and 2010, the company held 87 and 68 separate stocks, respectively.

As part of the Company's investment strategy, put and call options are sold on various stocks the Company is willing to buy or sell. The premiums received are deferred until such time as they are exercised or expire. In accordance with FASB ASC 815 "Derivatives and Hedging," these options are marked to market for each reporting period using readily available market quotes, and this fair value adjustment is recorded as a gain or loss in the Statement of Operations.

Upon exercise, the value of the premium will adjust the basis of the underlying security bought or sold. Options that expire are recorded as income in the period they expire .

### **December 31, 2011**

The following is summary information on the Securities Portfolio held by Daxor Corporation during the year ended and as at December 31, 2011:

Description	Percent of Portfolio Cost	Market Value	Cost	Unrealized Gains	Unrealized Losses	Dividends and Interest
Utilities-Common Stock	54.19	% \$44,833,096	\$19,760,641	\$26,865,355	\$(1,792,900)	\$1,985,626
Non-Utilities Common	41.50	% 9,092,509	15,131,376	63,567	(6,102,434)	33,627
Total Common Stock	95.69	% 53,925,605	34,892,017	26,928,922	(7,895,334)	2,019,253
Utilities-Preferred Stock	0.69	% 514,621	250,498	264,123	—	23,618
Non-Utilities-Preferred	3.62	% 1,364,138	1,321,120	129,652	(86,634 )	117,860
Total Preferred Stock	4.31	% 1,878,759	1,571,618	393,775	(86,634 )	141,478
Total Portfolio	100.00	% \$55,804,364	\$36,463,635	\$27,322,697	\$(7,981,968)	\$2,160,731

During the year ended December 31, 2011, the Company received \$68,834 of dividends on stocks that were not in the Securities Portfolio at December 31, 2011. The Company also received \$1,141 in money market dividends. The Company also recorded \$7,028 of non-cash dividend income which was the fair market value of a distribution received in 2011.

#### Summary of Put and Call Options at December 31, 2011

Description	Market Value	Proceeds Received	Unrealized Gains	Unrealized Losses
Puts	\$6,895,535	\$6,502,208	\$1,514,395	\$(1,907,722)
Calls	\$207,913	\$452,213	\$285,758	\$(41,458 )
Total Puts and Calls	\$7,103,448	\$6,954,421	\$1,800,153	\$(1,949,180)

December 31, 2010

The following is summary information on the Securities Portfolio held by Daxor Corporation during the year ended and as at December 31, 2010:

Description	Percent of Portfolio Cost	Market Value	Cost	Unrealized Gains	Unrealized Losses	Dividends and Interest
Utilities-Common Stock	65.88	% \$43,121,134	\$20,401,564	\$23,010,788	\$(291,218)	\$2,000,665
Non-Utilities Common	28.87	% 8,687,583	8,940,180	33,252	(285,849)	21,317
Total Common Stock	94.75	% 51,808,717	29,341,744	23,044,040	(577,067)	2,021,982
Utilities-Preferred Stock	0.87	% 469,148	270,497	199,462	(811)	26,523
Non-Utilities-Preferred	4.38	% 1,598,206	1,355,718	254,570	(12,082)	117,861
Total Preferred Stock	5.25	% 2,067,354	1,626,215	454,032	(12,893)	144,384
Total Portfolio	100.00	% \$53,876,071	\$30,967,959	\$23,498,072	\$(589,960)	\$2,166,366

During the year ended December 31, 2010, the Company received \$ 59,774 of dividends on stocks that were not in the Securities Portfolio at December 31, 2010 and was charged \$1,784 for dividends on short positions. The Company also received \$1,842 in money market dividends.

## Summary of Put and Call Options at December 31, 2010

Description	Market Value	Proceeds Received	Unrealized Gains	Unrealized Losses
Puts	\$2,764,234	\$8,116,480	\$5,426,402	\$(74,156)
Calls	\$1,565,835	\$1,780,147	\$792,892	\$(578,580)
Total Puts and Calls	\$4,330,069	\$9,896,627	\$6,219,294	\$(652,736)

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

The Securities and Exchange Commission's rule related to market risk disclosure requires that we describe and quantify our potential losses from market risk sensitive instruments attributable to reasonably possible market changes. Market risk sensitive instruments include all financial or commodity instruments and other financial instruments that are sensitive to future changes in interest rates, currency exchange rates, commodity prices or other market factors.

The Company maintains an investment portfolio primarily consisting of electric utility companies which are publicly traded common and preferred stock. These are categorized as available-for-sale securities.

In addition to receiving income from dividends, the Company also has an investment policy of selling puts on stocks that it is willing to own. Such options usually have a maturity of less than 1 year. The Company will also sell covered calls on securities within its investment portfolio. Covered calls involve stocks, which usually do not exceed 15% of the value of the company's portfolio and have never exceeded 15% of the company's portfolio value.

The Company will, at times, sell naked or uncovered calls, as well as, engage in short sales as part of a strategy to mitigate risk. Such short sales are usually less than 15% of the company's portfolio value.

Puts, calls and short sales, collectively referred to as short positions, are all marked to market for each reporting period and any gain or loss is recognized through the Statement of Operations and labeled as "Mark to market of short positions".

The Company's investment strategy is reviewed at least once a year, and more frequently as needed, at board meetings. The Company's investing policy permits investment in non-electric utilities for up to 20% of the corporate portfolio value. This percentage may be temporarily increased to 30% if deemed necessary by management.

At December 31, 2011, 96.63% of the market value of the Company's available for sale securities is made up of common stock. There is a risk that any of these stocks could be sold as the result of an involuntary tender offer and that the security could not be replaced with an investment offering a similar yield.



At December 31, 2011, the Company's investment portfolio consisted of 87 separate stocks. The top five holdings as of this date in the investment portfolio were the Common Stock of Entergy, Exelon, First Energy, Bank of America and National Grid. These five holdings comprised 46.5% of the value of the investment portfolio. Entergy, Exelon, First Energy and National Grid accounted for 49.6% of the dividend income for the year ended December 31, 2011.

The Company's portfolio value is exposed to fluctuations in the general value of electric utilities. An increase of interest rates could affect the company in two ways; one would be to put downward pressure on the valuation of utility stocks as well as increase the company's cost of borrowing.

Because of the size of the unrealized gains in the company's portfolio, the Company does not anticipate any changes which could reduce the value of the Company's utility portfolio below historical cost. Electric utilities operate in an environment of federal, state and local regulations, and they may disproportionately affect an individual utility. The Company's exposure to regulatory risk is mitigated due to the diversity of holdings consisting of 87 separate common and preferred stocks.

The Company is not exposed to any foreign currency risk or commodity price risk through its holdings of equity securities and put and call options.

The Company is not exposed to any interest rate risk since it does not have any long term debt other than a fixed rate mortgage securing real property in Oak Ridge, Tennessee.

#### Daxor Corporation

#### Summary of Available for Sale Securities

As at December 31, 2011

Type of Security	Total Fair Market Value	Total Cost	Total Net Unrealized Gain
Common Stock	\$53,925,605	\$34,892,017	\$19,033,588
Preferred Stock	1,878,759	1,571,618	307,141
Total Portfolio	\$55,804,364	\$36,463,635	\$19,340,729

#### Summary of Proceeds Received and Market Valuation at 12/31/11

#### Put and Call Options

<b>Total Proceeds Received on open positions at 01/01/11</b>	Sale of Options from 01/01/11-12/31/11	Expirations and Assignments of Options from 01/01/11-12/31/11	Proceeds Received on open positions at 12/31/11	Market Value at 12/31/11	Unrealized Loss at 12/31/11
\$ 9,896,627	\$ 14,318,728	\$ 17,260,934	\$6,954,421	\$7,103,448	\$ 149,027

Daxor Corporation

Summary of Unrealized Losses on Available for Sale Securities

As at December 31, 2011

	Less Than Twelve Months		Twelve Months or Greater		Total	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Marketable Equity Securities	\$6,834,546	\$3,680,525	\$3,566,012	\$4,301,443	\$10,400,558	\$7,981,968

Daxor Corporation

Summary of Unrealized Gains on Available for Sale Securities

As at December 31, 2011

	Less Than Twelve Months		Twelve Months or Greater		Total	
	Fair Value	Unrealized Gains	Fair Value	Unrealized Gains	Fair Value	Unrealized Gains
Marketable Equity Securities	\$237,324	\$27,697	\$45,166,482	\$27,295,000	\$45,403,806	\$27,322,697

## Daxor Corporation

## Summary of Available for Sale Securities

As at December 31, 2010

Type of Security	Total Fair Market Value	Total Cost	Total Net Unrealized Gain
Common Stock	\$51,808,717	\$29,341,744	\$22,466,973
Preferred Stock	2,067,354	1,626,215	441,139
Total Portfolio	\$53,876,071	\$30,967,959	\$22,908,112

## Summary of Proceeds Received and Market Valuation at 12/31/10

## Put and Call Options

<b>Total Proceeds Received on open positions at 01/01/10</b>	Sale of Options from 01/01/10-12/31/10	Expirations and Assignments of Options from 01/01/10-12/31/10	Proceeds Received on open positions at 12/31/10	Market Value at 12/31/10	Unrealized Gain at 12/31/10
\$9,605,476	\$ 18,623,868	\$ 18,332,717	\$9,896,627	\$4,330,069	\$5,566,558

## Daxor Corporation

## Summary of Unrealized Losses on Available for Sale Securities

As at December 31, 2010

	Less Than Twelve Months Fair Value	Unrealized Loss	Twelve Months or Greater Fair Value	Unrealized Loss	Total Fair Value	Unrealized Loss
Marketable Equity Securities	\$8,263,313	\$ 74,480	\$2,216,443	\$ 515,480	\$10,479,756	\$ 589,960

## Daxor Corporation

Summary of Unrealized Gains on Available for Sale Securities

As at December 31, 2010

	Less Than Twelve Months		Twelve Months or Greater		Total	
	Fair Value	Unrealized Gains	Fair Value	Unrealized Gains	Fair Value	Unrealized Gains
Marketable Equity Securities	\$2,423,702	\$ 384,011	\$40,972,613	\$ 23,114,061	\$43,396,315	\$23,498,072

**Item 8. Financial Statements and Supplementary Data.**

**Index to Consolidated Financial Statements**

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Stockholders and Board of Directors of Daxor Corporation

We have audited the accompanying consolidated balance sheets of Daxor Corporation and subsidiary (the "Company") as of December 31, 2011 and 2010, and the related consolidated statements of operations, stockholders' equity and comprehensive income (loss), and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Daxor Corporation and subsidiary as of December 31, 2011 and 2010, and the consolidated results of its operations and its cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

/s/ Rotenberg Meril Solomon Bertiger & Guttilla, P.C.  
Saddle Brook, NJ

March 28, 2012

**DAXOR CORPORATION AND SUBSIDIARY**  
**CONSOLIDATED FINANCIAL STATEMENTS**

**DAXOR CORPORATION AND SUBSIDIARY**  
**CONSOLIDATED BALANCE SHEETS**

	December 31, 2011	December 31, 2010
<b>ASSETS</b>		
<b>CURRENT ASSETS</b>		
Cash and cash equivalents	\$59,625	\$57,741
Receivable from broker	23,078,775	32,382,439
Available-for-sale securities, at fair value	55,804,364	53,876,071
Accounts receivable, net of reserve of \$130,402 in 2011 and \$125,402 in 2010	219,684	178,820
Inventory	301,534	363,634
Income tax refund receivable	2,013,031	—
Prepaid expenses and other current assets	209,339	130,560
<b>Total Current Assets</b>	<b>81,686,352</b>	<b>86,989,265</b>
Property and equipment, net	4,001,351	4,168,992
Other assets	37,158	37,158
<b>Total Assets</b>	<b>\$85,724,861</b>	<b>\$91,195,415</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
<b>CURRENT LIABILITIES</b>		
Accounts payable and accrued liabilities	\$525,168	\$436,542
Loans payable	13,751,008	4,638,197
Income taxes payable	87,093	2,986,800
Mortgage payable, current portion	58,054	46,798
Puts and calls, at fair value	7,103,448	4,330,069
Securities borrowed, at fair value	23,136,820	22,406,036
Deferred revenue	38,671	51,920
Deferred income taxes	4,564,054	9,003,946
<b>Total Current Liabilities</b>	<b>49,264,316</b>	<b>43,900,308</b>



## LONG TERM LIABILITIES

Mortgage payable, less current portion	243,954	300,063
Total Liabilities	49,508,270	44,200,371

## COMMITMENTS AND CONTINGENCIES

## STOCKHOLDERS' EQUITY

Common stock, \$.01 par value Authorized - 10,000,000 shares Issued - 5,316,530 shares		
Outstanding – 4,202,351 and 4,226,137 shares, respectively	53,165	53,165
Additional paid in capital	10,684,752	10,675,228
Accumulated other comprehensive income	12,572,514	14,890,272
Retained earnings	24,740,252	32,980,341
Less: cost of common stock held in treasury, at cost, 1,114,179 shares in 2011 and 1,090,413 in 2010	(11,834,092)	(11,603,962)
Total Stockholders' Equity	36,216,591	46,995,044
Total Liabilities and Stockholders' Equity	\$85,724,861	\$91,195,415

See accompanying notes to consolidated financial statements

**DAXOR CORPORATION AND SUBSIDIARY**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
**FOR THE YEARS ENDED DECEMBER 31**

	2011	2010
REVENUES:		
Operating revenues - equipment sales and related services	\$ 1,125,249	\$ 1,242,264
Operating revenues - cryobanking and related services	321,096	336,993
Total Revenues	1,446,345	1,579,257
Costs of Sales:		
Costs of sales-equipment sales and related services	616,063	691,786
Costs of sales-cryobanking and related services	36,448	35,864
Total Costs of Sales	652,511	727,650
Gross Profit	793,834	851,607
OPERATING EXPENSES:		
Research and development expenses:		
Research and development-equipment sales and related services	2,508,657	2,826,068
Research and development-cryobanking and related services	197,295	215,572
Total Research and Development Expenses	2,705,952	3,041,640
Selling, General and Administrative Expenses:		
Selling, general, and administrative- equipment sales and related services	3,219,204	2,750,626
Selling, general and administrative- cryobanking and related services	655,092	718,452
Total Selling, General and Administrative Expenses	3,874,296	3,469,078
Total Operating Expenses	6,580,248	6,510,718
Loss from Operations	(5,786,414 )	(5,659,111 )

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Other income (expenses):

Dividend income-investment portfolio	2,237,734	2,226,198
Realized gains on sale of securities, net	33,189	13,509,318
Mark to market of short positions	(8,501,859 )	(1,526,064 )
Other revenues	12,374	12,166
Interest expense, net of interest income of \$6,425 and \$1,944	(168,923 )	(61,676 )
Administrative expenses relating to portfolio investments	(153,816 )	(150,675 )
Total Other (expense) income, net	(6,541,301 )	14,009,267
(Loss) Income before income taxes	(12,327,715)	8,350,156
(Benefit ) provision for income taxes	(5,142,076 )	3,381,892
Net (Loss) Income	\$(7,185,639 )	\$4,968,264
Weighted average number of shares outstanding – basic and diluted	4,219,654	4,237,216
Net (loss) income per common equivalent share –basic and diluted	\$(1.70 )	\$1.17
Dividends paid per common share	\$0.25	\$1.00

See accompanying notes to consolidated financial statements

**DAXOR CORPORATION AND SUBSIDIARY****STATEMENTS OF STOCKHOLDERS' EQUITY AND COMPREHENSIVE INCOME**

	Common Stock Number of Shares Outstanding	Common Stock Amount	Additional Paid in Capital	Accumulated Other Comprehensive Income	Retained Earnings	Treasury Stock	Total	Comprehen Income
Balances, December 31, 2009	4,250,318	\$53,165	\$10,675,228	\$16,016,375	\$32,241,597	\$(11,361,028)	\$47,625,337	
Change in unrealized gain on securities, net of \$606,363 deferred taxes				(1,126,103 )			(1,126,103 )	\$(1,126,103)
Net income					4,968,264		4,968,264	4,968,264
Common Stock Dividends					(4,229,520 )		(4,229,520 )	
Purchase of treasury stock	(24,181 )					(242,934 )	(242,934 )	
Comprehensive Income								\$3,842,161
Balances, December 31, 2010	4,226,137	\$53,165	\$10,675,228	\$14,890,272	\$32,980,341	\$(11,603,962)	\$46,995,044	

	Common Stock Number of Shares Outstanding	Common Stock Amount	Additional Paid in Capital	Accumulated Other Comprehensive Income	Retained Earnings	Treasury Stock	Total	Comprehen Income
Balances, December 31, 2010	4,226,137	\$53,165	\$10,675,228	\$14,890,272	\$32,980,341	\$(11,603,962)	\$46,995,044	

Change in unrealized gain on securities, net of \$1,249,624 deferred taxes			(2,317,758 )			(2,317,758 )	\$(2,317,758 )
Option Based Compensation Expense		9,731				9,731	
Net loss				(7,185,639 )		(7,185,639 )	(7,185,639 )
Common Stock Dividends				(1,054,450 )		(1,054,450 )	
Purchase of treasury stock	(23,786 )	(207 )			(230,130 )	(230,337 )	
Comprehensive Loss							\$(9,503,397 )
Balances, December 31, 2011	4,202,351	\$53,165	\$10,684,752	\$12,572,514	\$24,740,252	\$(11,834,092)	\$36,216,591

**DAXOR CORPORATION AND SUBSIDIARY**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
**FOR THE YEARS ENDED DECEMBER 31**

	2011	2010
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Net (loss) income	\$(7,185,639 )	\$4,968,264
Adjustments to reconcile net income to net cash used in operating activities:		
Depreciation & amortization	290,791	296,554
Deferred income taxes	(3,190,269 )	(1,017,042 )
Provision for bad debts	5,000	32,981
Gain on sale of fixed assets	—	(52,533 )
Loss on disposal of fixed assets	—	19,835
Stock dividend income received on investments	(7,028 )	—
Stock based compensation associated with employee stock option plans	9,731	—
Gains on sale of investments, net	(33,189 )	(13,509,318)
Marked to market adjustments on options and shorts	8,501,859	1,526,064
Change in operating assets and operating liabilities:		
(Increase ) decrease in accounts receivable	(45,864 )	28,814
(Increase) in prepaid expenses & other current assets	(78,779 )	(26,129 )
(Increase) in Income Tax Refund Receivable	(2,013,031 )	—
Decrease in inventory	62,100	90,773
Increase (decrease) in accounts payable and accrued liabilities	88,626	(97,089 )
(Decrease) increase in income taxes payable	(2,899,707 )	2,043,725
(Decrease) increase in deferred income	(13,249 )	5,018
Net cash used in operating activities	(6,508,648 )	(5,690,083 )
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Purchase of property and equipment	(123,150 )	(324,710 )
Proceeds from sale of fixed assets	-	65,000
Increase in receivable from broker	(812,134 )	(11,699,512)
Increase in securities borrowed	730,784	11,634,757
Purchases of put and call options	(8,961,293 )	(419,080 )
Sale of put and call options	14,318,728	18,623,868
Purchase of investments	(25,722,529)	(28,856,997)
Sales of investments	9,181,156	20,378,599
Net cash (used in) provided by investing activities	(11,388,438)	9,401,925
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>		
Proceeds from margin loan payable	44,633,031	41,462,399
Repayment of margin loan payable	(25,404,421)	(40,877,703)
Dividends paid	(1,054,450 )	(4,229,520 )
Repayment of mortgage	(44,853 )	(43,431 )

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Purchase of treasury stock	(230,337 )	(242,934 )
Net cash provided by(used in) financing activities	17,898,970	(3,931,189 )
Net increase (decrease) in cash and cash equivalents	1,884	(219,347 )
Cash and cash equivalents at beginning of year	57,741	277,088
Cash and cash equivalents at end of year	\$59,625	\$57,741

Supplemental Disclosures of Cash Flow Information:

Cash paid during the year for:

Interest	\$175,348	\$63,916
Income taxes	\$3,002,828	\$2,424,813

See accompanying notes to consolidated financial statements

## **DAXOR CORPORATION AND SUBSIDIARY**

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

#### **(1) BUSINESS AND SIGNIFICANT ACCOUNTING POLICIES**

##### **Business**

Daxor Corporation is a medical device manufacturing company that offers additional biotech services, such as cryobanking, through its wholly-owned subsidiary, Scientific Medical Systems Corp. The main focus of Daxor Corporation has been the development and marketing of an instrument that rapidly and accurately measures human blood volume. This instrument is used in conjunction with a single use diagnostic injection and collection kit that the Company also sells to its customers.

As further discussed in Note 12, the Company was found to be an investment company as defined by the Investment Company Act of 1940 by an Administrative Law Judge of the SEC. The Company plans to file a Form N-8A (Notification of Registration Filed Pursuant to Section 8(a) of the Investment Company Act of 1940) shortly after our Form 10-K for the year ended December 31, 2011 is filed. We have 90 days from when the N-8A is filed to file our Form N-2 which is the Registration Statement. The Company plans to file the N-2 as soon as possible after the N-8A is filed and to begin reporting as an Investment Company effective January 1, 2012.

##### **Significant Accounting Policies**

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

The consolidated financial statements include the accounts of Daxor Corporation and Scientific Medical Systems Corp, a wholly-owned subsidiary (together, the "Company"). All significant intercompany transactions and balances have been eliminated in consolidation.

##### **Use of Estimates**



The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

### **Reclassifications**

Reclassifications occurred to certain prior year amounts in order to conform to the current year classifications. The reclassifications have no effect on the reported net income.

### **Segment Information**

The Company has two operating segments: Equipment Sales and Related Services, and Cryobanking and Related Services.

The Equipment Sales and Related Services segment comprises the Blood Volume Analyzer equipment and related activity. This includes equipment sales, equipment rentals, equipment delivery fees, BVA-100 kit sales and service contract revenues.

The Cryobanking and Related Services segment is comprised of activity relating to the storage of blood and semen, and related laboratory services and handling fees.

Although not deemed an operating segment, the Company reports a third business segment; Investment activity. This segment reports the activity of the Company's Investment Portfolio. This includes all earnings, gains and losses, and expenses relating to these investments.

### **Cash and Cash Equivalents**

The Company considers all highly liquid investments and debt instruments with an original maturity of 90 days or less to be cash equivalents.



## **Fair Value of Financial Instruments**

The carrying amounts of financial instruments, including cash and cash equivalents, accounts receivable and payable, accrued liabilities, deferred option premiums and loans payable approximate fair value because of their short maturities. The carrying amount of the mortgage payable is estimated to approximate fair value as the mortgage carries a market rate of interest.

## **Fair Value Measurements**

The Company accounts for its investments under the provision of FASB ASC 820, "Fair Value Measurements and Disclosures" ("ASC 820"). ASC 820 defines fair value, establishes a framework for measuring fair value under GAAP and enhances disclosures about fair value measurements. Fair value is defined under ASC 820 as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. ASC 820 establishes a fair value hierarchy which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The standard describes three levels of inputs that may be used to measure fair values which are discussed below.

Level 1 - Quoted prices in active markets for identical assets or liabilities.

Level 2 - Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Level 2 assets include corporate-owned key person life insurance policies.

Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Level 3 assets and liabilities include financial instruments whose value is determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant management judgment or estimation. This category includes auction rate securities where independent pricing information was not able to be obtained.

The Company's marketable securities are valued using Level 1 observable inputs utilizing quoted market prices in active markets. These marketable securities are summarized in footnote 2, Fair Value Measurements.

### Puts and Calls at Fair Value

As part of the company's investment strategy, put and call options are sold on various stocks the company is willing to buy or sell. The premiums received are deferred until such time as they are exercised or expire. In accordance with FASB ASC 815, "Derivatives and Hedging" ("ASC 815"), these options are marked to market for each reporting period using readily available market quotes, and this fair value adjustment is recorded as a gain or loss in the Statement of Operations.

Upon exercise, the value of the premium will adjust the basis of the underlying security bought or sold. Options that expire are recorded as income in the period they expire.

### Receivable from Broker

The Receivable from Brokers includes cash proceeds from the sales of securities and dividends. These proceeds are invested in dividend bearing money market accounts. The restricted cash is held by the brokers to satisfy margin requirements. The securities loaned are shares loaned to UBS to cover short positions held by other customers of the broker. UBS pays the Company interest for the loan of these securities. The restricted cash is held by the brokers to satisfy margin requirements.

The following table summarizes Receivable from Broker at December 31, 2011 and 2010:

Description	2011	2010
Restricted Cash	23,040,664	22,266,641
Money Market Accounts	\$—	\$10,115,798
Securities Loaned	38,111	—
Total Receivable from Broker	\$23,078,775	\$32,382,439

### 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 FASB ASC 320, "Investments - Debt and Equity Securities" ("ASC 320"). 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.

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

- The Company's investment goals are capital preservation, maintaining returns on capital with a
1. high degree of safety and generating income from dividends and option sales to help offset operating losses.
  2. In order to achieve these goals, the Company maintains a

diversified securities portfolio comprised primarily of electric utility common and preferred 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 may have net short positions in common stock up to 15% of the value of the portfolio. The Company's net short position may temporarily rise to 15% 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 a minimum of 80% of its portfolio in electric utilities. The Board of Directors has authorized this minimum to be temporarily lowered to 70% when Company management deems it to be necessary. Investments in utilities are primarily in electric companies. Investments in non-utility stocks will generally not exceed 20% of the value of the portfolio.

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

Limited use of options to increase  
4. 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 may be called away, which the company may have preferred to retain. Therefore, a limitation of 20% is placed on the amount of stock on which options can be written. The amount of the portfolio on which options are actually written is usually between 3-10% of the portfolio. The historical



turnover of  
the portfolio  
is such that  
the average  
holding  
period is in  
excess of  
five 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 normally 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 call, 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, then 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 net short stock positions usually account for less than 10% of the assets of the company.

In the event of a merger, the Company will elect to receive shares in the new company if this is an option. If 5. the proposed merger is a cash only offer, the Company will receive cash and be forced to sell the stock.

### **Securities borrowed at fair value**

When a call option that has been sold short is exercised, a short position is created in the related common stock. The recorded cost of these short positions is the amount received on the sale of the stock plus the proceeds received from the underlying call option. These positions are shown on the Balance Sheet as “Securities borrowed at fair value” and the carrying value is reduced or increased at the end of each quarter by the mark to market adjustment which is recorded in accordance with ASC 320.

### **Accounts Receivable**

Accounts receivable are reviewed by the Company at the end of each reporting period to determine the collectability based upon the aging of the balances and the history of the customer.

### **Inventory**

Inventory is stated at the lower of cost or market, using the first-in, first-out method (FIFO), and consists primarily of raw materials.

### **Prepaid Expenses and Other Current Assets**

Prepaid expenses and other current assets generally consist of prepayments for future services and corporate capital base/personal holding taxes. Prepayments are expensed when the services are received or as the prepaid capital base/personal holding taxes are offset by the related tax liability. All prepaid expenses and taxes are expensed within one year of the Balance Sheet date and are thus classified as Current Assets.

### **Property and Equipment**

Property and equipment is stated at cost. These assets are depreciated under the straight-line method, over their estimated useful lives, which range from 5 to 39 years.

Amounts spent to repair or maintain these assets arising out of the normal course of business are expensed in the period incurred. The cost of betterments and additions are capitalized and depreciated over the life of the asset. The cost of assets disposed of or determined to be non-revenue producing, together with the related accumulated depreciation applicable thereto, are eliminated from the accounts, and any gain or loss is recognized.

In accordance with FASB ASC 360, "Accounting for the Impairment or Disposal of Long-Lived Assets", management reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Currently, management does not believe there is any impairment of any long-lived assets.

### **Revenue Recognition**

The Company recognizes operational revenues from several sources. The first source is the sale of equipment, the Blood Volume Analyzer, to customers. The second source is the sale of single use tracer doses supplied as Volumex kits 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, and associated laboratory tests.

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 revenue generated by a direct sale is recognized in the period in which the equipment is shipped. The revenues generated by a monthly rental are recognized commencing in the period in which the equipment is shipped. 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 in the period in which the equipment is shipped. 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 doses are shipped.

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, which is usually offered in one-year increments. These service contracts are recorded by the Company as deferred revenue and are amortized into income in the period in which they apply.

As at December 31, 2011 and December 31, 2010, deferred revenue pertaining to the kit sales and historical service contracts was \$26,375 and \$45,122, respectively. Deferred revenue related to the storage fees was \$12,296 and \$6,798, respectively. The total deferred revenues were \$38,671 and \$51,920 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 on a quarterly basis. The Company will only recognize revenue for those storage fees that are earned in the current reporting period, and will defer the remaining revenues to the period in which they are earned.

## **Income Taxes**

The Company accounts for income taxes under the provisions of FASB ASC 740, "Income Taxes." This pronouncement requires recognition of deferred tax assets and liabilities for the estimated future tax consequences of events attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates in effect for the year in which the differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of changes in tax rates is recognized in the statement of operations in the period in which the enactment rate changes. Deferred tax assets and liabilities are reduced through the establishment of a valuation allowance at such time as, based on available evidence, it is more likely than not that the deferred tax assets will not be realized.

The Company accounts for uncertainties in income taxes under the provisions of FASB ASC 740-10-05, "Accounting for Uncertainties in Income Taxes" The ASC clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements. The ASC prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The ASC provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosure and transition.

## **Comprehensive Income**

The Company reports components of comprehensive income under the requirements of FASB ASC 220, "Comprehensive Income." This statement establishes rules for the reporting of comprehensive income and requires certain transactions to be presented as separate components of stockholders' equity. The Company currently reports the unrealized holding gains and losses on available-for-sale securities, net of deferred taxes, as accumulated other comprehensive income.

### **Warranties and Indemnification Obligations**

The Company recognizes warranty and indemnification obligations under FASB ASC 450, "Contingencies." The pronouncement requires 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.

When a Blood Volume Analyzer 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 unit. All major components of the equipment are purchased and warranted by the original third party manufacturers. After the one year period expires, customers may purchase a service contract through the Company, which is usually offered in one-year increments. To date, the Company has not experienced any major mechanical failures on any equipment sold. In addition, the majority of the potential liability would revert to the original manufacturer. Due to this history, a liability has not been recorded with respect to product or warranty liability.



## **Research and Development**

Costs associated with the development of new products are charged to operations as incurred. Research and development costs for the years ended December 31, 2011 and 2010 were \$2,705,952 and \$3,041,640. These amounts have been calculated according to the criteria specified in FASB ASC 730, "Research and Development."

## **Earnings Per Share**

The Company computes earnings per share in accordance with FASB ASC 260, "Earnings per Share." Basic earnings per common share is computed by dividing income or loss available to common stockholders by the weighted average number of common shares outstanding for the period. Diluted earnings per common share are based on the average number of common shares outstanding during each period, adjusted for the effects of outstanding stock options.

Certain stock options were not included in the computation of earnings per share due to their anti-dilutive effect. The number of anti-dilutive options totaled 42,800 and 53,800 for the years ended December 31, 2011 and December 31, 2010, respectively.

## **Leased Employees**

We have a contract with ADP Total Source to provide certain professional employment services such as health insurance to our employees at rates that we would not qualify for otherwise, as well as, a retirement plan and payroll services to our personnel. Pursuant to this contract, our personnel are employees of, and paid by, ADP Total Source as part of an employee leasing arrangement. We lease the services of these employees from ADP, and reimburse ADP for the costs of compensation and benefits. All of the employees referred to in the Annual Report are full time employees. For purposes of our Annual Report, we consider employees of ADP covered by this contract to be employees of the Company.

The Company records these payments using the same classifications for which the reimbursement is made (i.e. wage reimbursements are recorded as wage expense).

## **Stock Based Compensation**

The Company records compensation expense associated with stock options and other forms of equity compensation in accordance with FASB ASC 718, "Compensation – Stock Compensation." Under the fair value recognition provision of FASB ASC Topic 718, stock-based compensation cost is estimated at the grant date based on the fair value of the award. The Company estimates the fair value of stock options granted using the Black-Scholes-Merton option pricing model.

### **Recent Accounting Pronouncements**

On January 1, 2011, the Company adopted Accounting Statement Update (ASU) 2009-13, "Revenue Recognition (Topic 605): Multiple-Deliverable Revenue Arrangements," which eliminates the residual method of allocation, and instead requires companies to use the relative selling price method when allocating revenue in a multiple deliverable arrangement. When applying the relative selling price method, the selling price for each deliverable shall be determined using vendor specific objective evidence of selling price, if it exists, otherwise using third-party evidence of selling price. If neither vendor specific objective evidence nor third-party evidence of selling price exists for a deliverable, companies shall use their best estimate of the selling price for that deliverable when applying the relative selling price method. The Company has elected to adopt this guidance prospectively for all revenue arrangements entered into or materially modified after the date of adoption. The adoption of the provisions of ASU 2009-13 did not have a material effect on the financial position, results of operations or cash flows of the Company.

On January 1, 2011, the Company adopted ASU 2010-06, "Improving Disclosures about Fair Value Measurements," to require additional disclosures related to activity within Level 3 of the fair value hierarchy. The adoption of ASU 2010-06 did not have a a material effect on the financial position, results of operations or cash flows of the Company.

In April 2011, the FASB issued Accounting Standards Update 2010-04 (ASU 2011-04), Fair Value Measurement (Topic 820): Amendments to achieve common fair value measurement and disclosure requirements in U.S. GAAP and IFRS. The amendments in this Update result in common fair value measurement and disclosure requirements in U.S. GAAP and IFRSs. Consequently, the amendments change the wording used to describe many of the requirements in U.S. GAAP for measuring fair value and for disclosing information about fair value measurements. For many of the requirements, the Board does not intend for the amendments in this Update to result in a change in the application of the requirements in Topic 820. The amendments in this Update should be applied prospectively and are effective for fiscal years, and interim periods within those years, beginning on or after December 15, 2011. Early application is not permitted. The Company does not expect the provisions of ASU 2011-04 to have a material effect on the financial position, results of operations or cash flows of the Company.

In June 2011, the FASB issued Accounting Standards Update 2010-05 (ASU 2011-05), Comprehensive Income (Topic 220): Presentation of Comprehensive Income. The amendments require that all nonowner changes in stockholders' equity be presented either in a single continuous statement of comprehensive income or in two separate but consecutive statements. In the two-statement approach, the first statement should present total net income and its components followed consecutively by a second statement that should present total other comprehensive income, the components of other comprehensive income, and the total of comprehensive income. The amendments in this Update should be applied retrospectively and are effective for fiscal years, and interim periods within those years, beginning on or after December 15, 2011. Early adoption is permitted, because compliance with the amendments is already permitted. The Company does not expect the provisions of ASU 2011-05 to have a material effect on the financial position, results of operations or cash flows of the Company.

Management does not believe that any other recently issued, but not yet effective, accounting standard if currently adopted would have a material effect on the accompanying financial statements.

## (2) AVAILABLE FOR SALE SECURITIES

The Company uses the historical cost method in the determination of its realized and unrealized gains and losses. The following tables summarize the Company's investments and short positions:

### Summary of Available for Sale Securities at December 31, 2011

Type of Security	Market Value	Cost Basis	Unrealized Gains	Unrealized Losses
Equity	\$55,804,364	\$36,463,635	\$27,322,697	\$(7,981,968)

### Summary of Put and Call Options at December 31, 2011

Description	Market Value	Proceeds Received	Unrealized Gains	Unrealized Losses
Puts	\$6,895,535	\$6,502,208	\$1,514,395	\$(1,907,722)
Calls	\$207,913	\$452,213	\$285,758	\$(41,458)
Total Puts and Calls	\$7,103,448	\$6,954,421	\$1,800,153	\$(1,949,180)

### Summary of Securities Borrowed at Fair Value at December 31, 2011

Type of Security	Market Value	Proceeds Received	Unrealized Gains	Unrealized Losses
Equity	\$23,136,820	\$16,845,833	\$ 288	\$(6,291,275)

Daxor Corporation

Summary of Unrealized Losses on Available for Sale Securities

As at December 31, 2011

	Less Than Twelve Months		Twelve Months or Greater		Total	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Marketable Equity Securities	\$6,834,546	\$3,680,525	\$3,566,012	\$4,301,443	\$10,400,558	\$7,981,968

## Daxor Corporation

## Summary of Unrealized Gains on Available for Sale Securities

As at December 31, 2011

	Less Than Twelve Months		Twelve Months or Greater		Total	
	Fair Value	Unrealized Gains	Fair Value	Unrealized Gains	Fair Value	Unrealized Gains
Marketable Equity Securities	\$237,324	\$ 27,697	\$45,166,482	\$27,295,000	\$45,403,806	\$27,322,697

## Summary of Available for Sale Securities at December 31, 2010

Type of Security	Market Value	Cost Basis	Unrealized Gains	Unrealized Losses
Equity	\$53,876,071	\$30,967,959	\$23,498,072	\$(589,960)

## Summary of Put and Call Options at December 31, 2010

Description	Market Value	Proceeds Received	Unrealized Gains	Unrealized Losses
Puts	\$2,764,234	\$8,116,480	\$5,426,402	\$(74,156)
Calls	\$1,565,835	\$1,780,147	\$792,892	\$(578,580)
Total Puts and Calls	\$4,330,069	\$9,896,627	\$6,219,294	\$(652,736)

## Summary of Securities Borrowed at Fair Value at December 31, 2010

Type of Security	Market Value	Proceeds Received	Unrealized Gains	Unrealized Losses
Equity	\$22,406,036	\$19,287,024	\$ 13,310	\$(3,132,322)

## Daxor Corporation

## Summary of Unrealized Losses on Available for Sale Securities

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As at December 31, 2010

	Less Than Twelve Months		Twelve Months or Greater		Total	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Marketable Equity Securities	\$8,263,313	\$ 74,480	\$2,216,443	\$ 515,480	\$10,479,756	\$ 589,960

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Daxor Corporation

Summary of Unrealized Gains on Available for Sale Securities

As at December 31, 2010

	Less Than Twelve Months		Twelve Months or Greater		Total	
	Fair Value	Unrealized Gains	Fair Value	Unrealized Gains	Fair Value	Unrealized Gains
Marketable Equity Securities	\$2,423,702	\$384,011	\$40,972,613	\$23,114,061	\$43,396,315	\$23,498,072

At December 31, 2011 and December 31, 2010, available for sale securities consist mostly of preferred and common stocks of utility companies.

Our investment policy calls for a minimum of 80% of the value of our portfolio of Available for Sale Securities to be maintained in utility stocks. Operating under this policy, Management's investment strategy is to purchase utility stocks which it considers to be undervalued relative to the market in anticipation of an increase in the market price.

It is possible that the market value of a stock may go below our cost after we purchase it even though we considered the stock to be undervalued relative to the market at the time we purchased it. When that occurs, we follow the provisions of *SEC Staff Accounting Bulletin: Codification of Staff Accounting Bulletins, Topic 5-M ("SAB 5-M"); Miscellaneous Accounting, Other Than Temporary Investments in Debt and Equity Securities* in determining whether an investment is other than temporarily impaired. The factors we review and/or consider include the following:

The extent to which the market value has been less than cost.

An evaluation of the financial condition of an issuer including a review of their profit and loss statements for the most recent completed fiscal year and the preceding two years.

The examination of the general market outlook of the issuer. This could include but is not limited to the issuer having a unique product or technology which would appear likely to have a positive impact on future earnings.

A review of the general market conditions.

Our intent and ability to retain the investment for a period of time sufficient to allow for the anticipated recovery in market value.

Specific adverse conditions related to the financial health of, and business outlook for, the issuer.

Changes in technology in the industry and its affect on the issuer

Changes in the issuer's credit rating .

### **Unrealized Losses on Available for Sale Securities**

At December 31, 2011, 82.1% or \$6,550,065 of the total unrealized losses of \$7,981,968 was comprised of the following three securities: \$4,078,970 for Bank of America, \$872,787 for Citigroup Inc. and \$1,598,308 for USEC.

#### **Bank of America**

At December 31, 2011, Daxor owned 612,095 shares of Bank of America with a cost basis of \$12.22 per share and a market value of \$5.56 per share. On March 14, 2012, the market value was \$8.84 per share which is \$3.38 or 28% lower than our cost basis of \$12.22 per share. As of December 31, 2011, the book value of the Company was \$20.09 per share which is substantially more than the current market price and the cost basis of the shares owned by Daxor.

Revenue, net of interest expense for the year ended December 31, 2011 decreased to \$93.4 billion from \$110.2 billion during the year ended December 31, 2010.

On January 19, 2012, Bank of America reported net income of \$1.4 billion for the year ended December 31, 2011 versus a net loss of \$2.2 billion for the same period in 2010.



In order to be “well capitalized” under federal bank regulatory agency definitions, a bank holding company must have a Tier 1 Capital Ratio of at least 6%, a Total Capital Ratio of at least 10%, and a Leverage ratio of at least 3% not to be subject to a Federal Reserve Board directive to maintain higher capital levels. At December 31, 2011, the Tier 1 Capital Ratio was 12.40%, the Total Capital Ratio was 16.75% and the leverage ratio was 7.53%. Bank of America is considered “well capitalized” under the federal regulatory agency definitions at December 31, 2011.

After considering the available positive and negative evidence in addition to the ability of Daxor to hold the stock until the market price exceeds our cost as it did at March 31, 2011, management has determined that an impairment charge is not necessary at December 31, 2011 on Bank of America.

### Citigroup

At December 31, 2011, Daxor owned 48,940 shares of Citigroup with a cost basis of \$44.14 per share and a market value of \$26.31. On March 14, 2012, the market value was \$35.21 per share which is \$8.93 or 20% lower than our cost basis of \$44.14 per share. During the first quarter of 2009, the stock was at \$10.00 per share and as of March 5, 2012, was trading at \$33.68 per share. As of December 31, 2011, the book value of the Company was \$60.70 which is substantially more than the current market price and the shares owned by Daxor.

Citigroup reported net income of \$11.0 billion for the year ended December 31, 2011 versus net income of \$10.6 billion for the year ended December 31, 2010. Revenue was \$78.3 billion during the current year versus \$86.6 billion for the same period in 2010.

Citigroup has increased headcount to 266,000 at December 31, 2011 from 260,000 at December 31, 2010. This is still less than the peak level of 375,000 from 2007. Total Operating Expenses were 8% higher during the year ended December 31, 2011 as compared to the same period in 2010.

During 2009, Citigroup repaid \$20 billion of TARP (Troubled Asset Relief Program) trust preferred securities and exited a loss sharing agreement. As a result of these transactions, effective in 2010, Citigroup is no longer deemed to be a beneficiary of “exceptional financial assistance” under TARP.

In order to be “well capitalized” under federal bank regulatory agency definitions, a bank holding company must have a Tier 1 Capital Ratio of at least 6%, a Total Capital Ratio of at least 10% , and a Leverage ratio of at least 3%, and not be subject to a Federal Reserve Board directive to maintain higher capital levels. At December 31, 2011, the Tier 1 Capital Ratio was 13.6%, Total Capital Ratio was 17.0% and the Leverage Ratio was 7.2%. Citigroup is considered

“well capitalized” under the federal regulatory agency definitions at December 31, 2011 and all of these percentages have improved since December 31, 2010.

The operating environment for Citigroup continues to be difficult but the stock price has mostly been trending upward since the first quarter of 2010. Citigroup has now recorded a profit for eight consecutive quarters versus a loss for the year ended December 31, 2009. Citigroup is no longer deemed to be a beneficiary of “exceptional financial assistance” under TARP and is considered to be “well capitalized” under the federal regulatory agency definitions at December 31, 2011.

After considering the available positive and negative evidence in addition to the ability of Daxor to hold the stock until the market price exceeds our cost, management has determined that an impairment charge is not necessary at December 31, 2011 on Citigroup.

#### USEC

At December 31, 2011, Daxor owned 444,100 shares of USEC with a cost basis of \$4.74 per share and a market value of \$1.14 per share. On March 14, 2012 the market value of USEC was \$1.27 per share which is \$3.47 or 73% less than our cost basis of \$4.74 per share.

The stock price has decreased by 79% from January 1, 2011 through March 14, 2012, going from \$5.99 per share to \$1.27 per share. As of December 31, 2012, the Book Value of the Company was approximately \$5.78 per share. This is substantially more than the current market price and the cost basis of the shares owned by Daxor.

USEC Inc., together with its subsidiaries, supplies low enriched uranium (LEU) to commercial nuclear power plants in the United States and internationally. It also performs contract work for the U.S. Department of Energy (DOE) and DOE contractors at the Paducah and Portsmouth gaseous diffusion plants. USEC Inc.’s contract work includes support services and the maintenance of Portsmouth gaseous diffusion plant in a state of cold shutdown. In addition, the company provides nuclear energy solutions and services, including the design, fabrication, and implementation of spent nuclear fuel technologies; nuclear materials transportation and storage systems; and nuclear fuel cycle and energy consulting services.

USEC reported a net loss of \$540.7 million for the year ended December 31, 2011, versus net income of \$7.5 million for the same period in 2010. Revenue for the current year was \$1.67 billion which is an 18% decrease from 2010. The Gross Profit Margin was 5.0% during the year ended December 31, 2011 versus 7.8% for the year ended December 31, 2011. In spite of having a net loss, USEC had positive cash flow from operating activities of \$56.3 million during the current year.

USEC expensed \$136.7 million of capitalized work-in-progress cost related to damaged centrifuges as well as earlier machines that were determined to no longer be compatible with the commercial plant design. The Company also recorded a full valuation allowance for the net deferred tax assets of \$369.1 million due to cumulative losses incurred in recent years and the substantial uncertainty of generating future taxable income that would lead to realization of the net deferred tax assets. The charge and the valuation allowance did not affect the company's cash flow from operations.

The market price of USEC has declined by approximately 70% since a tsunami caused an accident at a nuclear plant in Fukushima, Japan in March of 2011. One year after the accident, the total number of reactors in operation and development in the world has not changed. This means that the long term demand for uranium has not diminished since last year, even though short-term demand may have been affected by the minor decrease in reactors currently operating.

After considering the available positive and negative evidence in addition to the ability of Daxor to hold the stock until the market price exceeds our cost, management has determined that an impairment charge is not necessary at December 31, 2011 on USEC.

#### Daxor Corporation

#### Summary of Unrealized Losses on Bank of America, Citigroup and USEC

As of December 31, 2011

Security	Total Cost	Less Than Twelve Months		Twelve Months or Greater		Total	
		Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Bank of America	\$7,482,218	\$1,482,296	\$1,513,806	\$1,920,952	\$2,565,164	\$3,403,248	\$4,078,970
Citigroup	2,160,398	828,765	299,530	458,846	573,257	1,287,611	872,787
USEC	2,104,582	249,660	682,330	256,614	915,978	506,274	1,598,308
Total	\$11,747,198	\$2,560,721	\$2,495,666	\$2,636,412	\$4,054,399	\$5,197,133	\$6,550,065

## (3) VALUATION AND QUALIFYING ACCOUNTS

The allowance for doubtful accounts for the years ended December 31, 2011 and December 31, 2010 is as follows:

Classifications	Balance at Beginning of Year	Charged to Costs and Expenses	Deductions From Reserves	Balance at End of Year
Year ended December 31, 2011				
Allowance for Doubtful Accounts	\$ 125,402	\$ 5,000	\$ —	\$ 130,402
Year ended December 31, 2010				
Allowance for Doubtful Accounts	\$ 92,421	\$ 33,744	\$ 763	\$ 125,402

The Company has reviewed its inventory valuation and does not believe a reserve for slow moving or obsolete inventory is required as of December 31, 2011 and December 31, 2010.

**(4) PROPERTY AND EQUIPMENT**

Property and equipment as at December 31, 2011 and 2010, respectively, consists of:

	2011	2010
Machinery and Equipment	\$ 1,977,092	\$ 1,943,707
BVA Equipment on trial	680,000	595,000
Land and Land Improvements	196,991	196,991
Buildings	598,422	598,422
Furniture and fixtures	369,204	369,204
Construction in progress	—	1,870,435
Building Improvements	2,175,862	300,662
Leasehold improvements	310,903	310,903
	6,308,474	6,185,324
Accumulated depreciation	(2,307,123)	(2,016,332)
Property and equipment, net	\$ 4,001,351	\$ 4,168,992

For the years ended December 31, 2011 and 2010, depreciation expense for the above listed assets was \$290,791 and \$296,554.

**(5) LOANS AND MORTGAGE PAYABLE****LOANS PAYABLE**

Any short term margin debt due to brokers is secured by the Company's marketable securities and totaled \$13,751,008 at December 31, 2011 and \$4,638,197 at December 31, 2010.

Interest expense on short term margin debt was \$72,877 for the year ended December 31, 2011 and \$16,049 for the year ended December 31, 2010.

**SHORT-TERM BORROWINGS**

Years Ended December 31, 2011 and 2010:

Column A	Column B	Column C	Column D	Column E	Column F
		Weighted average interest rate at end of the period	Maximum amount outstanding during this period	Average amount outstanding during the period	Weighted average interest rates during the period
Category of aggregate short-term borrowings	Balance at the end of the period				
2011					
Brokers	\$13,751,008	1.13 %	\$13,751,008	\$6,933,105	1.05 %

Column A	Column B	Column C	Column D	Column E	Column F
		Weighted average interest rate at end of the period	Maximum amount outstanding during this period	Average amount outstanding during the period	Weighted average interest rates during the period
Category of aggregate short-term borrowings	Balance at the end of the period				
2010					
Brokers	\$4,638,197	1.11 %	\$4,638,197	\$1,926,188	0.83 %

The average borrowings were determined on the basis of the amounts outstanding at each month-end. The weighted interest rate during the year was computed by dividing actual interest expense in each year by average short-term borrowings in such year.

MORTGAGE PAYABLE

Daxor financed the purchase of the land and two buildings in Oak Ridge, Tennessee with a \$500,000 mortgage, with the first five years fixed at 7.49%. There was a balloon payment of \$301,972 for the remaining principal and interest on the mortgage due on January 2, 2012.

On July 19, 2011, the Company signed a new five year mortgage agreement for the remaining principal balance of \$319,927 plus interest. As of December 31, 2011, the remaining principal balance was \$302,008. The interest rate is fixed at 5.75% and the first payment was made on September 2, 2011 and the last payment is due August 2, 2016.

The future payments of principal on the mortgage for the next five years are as follows:

12/31/12	12/31/13	12/31/14	12/31/15	12/31/16
\$ 58,054	61,530	65,163	69,010	48,251

At December 31, 2011 and 2010, the remaining principal due on the mortgage is \$302,008 and \$346,861, respectively.

(6) SECURITIES BORROWED AT FAIR VALUE

At December 31, 2011 and 2010, the Company maintained short positions in certain marketable securities. The liability for short sales of securities is included in "Securities borrowed, at fair value" in the accompanying balance sheets. The cost basis of these positions or proceeds received for these short sales were \$16,845,833 and \$19,287,024 at December 31, 2011 and 2010, respectively, and had respective market values of \$23,136,820 and \$22,406,036 resulting in mark to market adjustments of (\$6,290,987) and (\$3,119,012) at December 31, 2011 and 2010.

(7) PUTS AND CALLS OPTIONS AT FAIR VALUE

At December 31, 2011 and 2010, the Company had open positions of put and call options on various stocks the company is willing to buy or sell.

The following summarizes the Company's Put and Call Options as of December 31, 2011 and December 31, 2010.

Put and Call Options	Selling price	Fairvalue	Mark to Market Adjustment
December 31, 2011	\$6,954,421	\$7,103,448	\$(149,027)
December 31, 2010	\$9,896,627	\$4,330,069	\$5,566,558

As part of the company's investment strategy, put and call options are sold on various stocks the company is willing to buy or sell. The premiums received are deferred until such time as they are exercised or expire. In accordance with ASC 815 these options are marked to market for each reporting period using readily available market quotes, and this fair value adjustment is recorded as a gain or loss in the Statement of Operations.

Upon exercise, the value of the premium will adjust the basis of the underlying security bought or sold. Options that expire are recorded as income in the period they expire.

For the year ended December 31, 2011, the Company recorded a loss of \$5,715,585 from marking put and call options to market. For the year ended December 31, 2010, the Company recorded a gain of \$210,205 from marking put and call options to market.

All proceeds of the put and call options which are equity contracts are shown net of the mark to market adjustment in the current liability section of the balance sheet as Put and call options, at fair value.



## (8) STOCK OPTIONS

In June 2004, the Company created the 2004 Stock Option Plan in an effort to provide incentive to employees, officers, agents, consultants, and independent contractors through proprietary interest. The Board of Directors shall act as the Plan Administrator, and may issue these options at its discretion. The maximum number of shares that may be issued under this Plan is 200,000 or 5% of the Company's outstanding shares, whichever is greater. Prior to June 2004, the Company issued options to various employees under the previous Stock Option Plan that was also administered by the Board of Directors. All issuances have varying vesting and expiration timelines. As at December 31, 2011 and December 31, 2010, 42,800 and 53,800 outstanding options were exercisable, respectively.

At December 31, 2011, the Company has one non-qualified stock-based compensation plan, the 2004 Stock Option Plan. This Non-Qualified Plan allows for the issuance of a maximum of 200,000 shares of common stock or 5% of the outstanding balance of shares of the Company on the date of grant, whichever is greater. Under the provisions of the Option Plan, the exercise price of any stock options issued is a minimum of 110% of the closing market price of the Company's stock on the grant date of the option.

At December 31, 2011, there was \$5,839 unvested stock-based compensation expense to recognize. Total share-based compensation expense recognized in the Statement of Operations aggregated \$9,731 for the year ended December 31, 2011 and \$0 for the year ended December 31, 2010. The aggregate intrinsic value was calculated based on the positive difference between the closing market price of the Company's common stock and the exercise price of the underlying options.

To calculate the option-based compensation, the Company used the Black-Scholes option-pricing model. The Company's determination of fair value of option-based awards on the date of grant using the Black-Scholes model is affected by the Company's stock price as well as assumptions regarding a number of subjective variables. These variables include, but are not limited to, the Company's expected stock price volatility over the term of the awards, risk-free interest rate, and the expected life of the options. The risk-free interest rate is based on a treasury instrument whose term is consistent with the expected life of the stock options. The expected volatility, holding period, and forfeitures of options are based on historical experience.

In 2011, there were a total of 9,000 stock options issued with an exercise price of \$11.91. In 2010, no stock options were issued under the 2004 Stock Option Plan.

Of the options that were issued in 2011, 5,000 were issued to members of the Board of Directors and 4,000 were issued to various employees.

The details of employee option activity for the years ended December 31, 2011 and 2010 are as follows:

	Number of Shares	Weighted Average Exercise Price
Outstanding, December 31, 2009	67,300	\$ 16.35
Cancelled/Expired	(13,500)	\$ 22.16
Outstanding and Exercisable, December 31, 2010	53,800	\$ 14.89
Granted	9,000	11.91
Cancelled/Expired	(20,000)	\$ 17.80
Outstanding and Exercisable, December 31, 2011	42,800	\$ 12.91

The following table summarizes information concerning currently outstanding and exercisable options at December 31, 2011:

Range of Exercise Prices	Number Outstanding and Exercisable at December 31, 2011	Weighted Average Remaining Contractual Life at December 31, 2011	Weighted Average Exercise Price at December 31, 2011
Below - \$16.00	35,200	1.90 years	\$ 11.99
\$ 16.01 - \$18.00	5,000	0.37 years	\$ 16.10
\$ 18.01 - \$20.00	2,600	1.58 years	\$ 19.24
	42,800	1.70 years	\$ 12.91

## (9) PROVISION FOR INCOME TAXES

The provision for income taxes for the years ended December 31, 2011 and 2010 is comprised of the following:

	Year Ended December 31, 2011	Year Ended December 31, 2010
Federal:		
Regular	\$(2,068,031 )	\$3,412,174
Undistributed Personal Holding Company Tax	-	852,000
State Franchise Taxes	116,224	134,760
Total Current Income Tax (Benefit )Provision	(1,951,807)	4,398,934
Deferred Taxes	(3,190,269)	(1,017,042)
Total Tax (Benefit) Provision	\$(5,142,076)	\$3,381,892

The current federal income tax benefit for 2011 is comprised of estimated tax overpayments and the carry back of current year losses. The 2010 federal income tax is comprised of a regular tax and the personal holding company (PHC) income tax assessment.

Under Internal revenue code section 542 a company is defined as a PHC if it meets both an ownership test and an income test. The ownership test is met if a company has five or fewer shareholders that own more than 50% of the company, which is applicable to Daxor. The income test is met if PHC income items such as dividends, interest and rents exceed 60% of adjusted ordinary gross income. Adjusted ordinary income is defined as all items of income except capital gains. For the years ended December 31, 2011 and 2010, more than 60% of Daxor's adjusted gross income came from items defined as PHC income.

Determining the PHC tax liability requires computing Daxor's "undistributed PHC income" and taxing such PHC income at the statutory rate of 15%. Undistributed PHC income is current year taxable income of the Company, exclusive of the net operating loss carry forward deduction that is allowed for regular tax purposes. The Company incurred no liability for PHC for the year ended December 31, 2011 because there was no undistributed PHC income. Undistributed PHC income for the year ended December 31, 2010 was \$5,500,000.

The calculation does allow for certain deductions and the most significant of these deductions are long-term capital gains and dividends paid. In 2011 the Company had long term capital gains of \$1,015,022 and paid dividends of \$1,054,450. In 2010, the Company had minimal long-term capital gains and paid dividends of \$4,229,520.

In 2011 and 2010, the Company had short-term capital gains totaling \$3,545,000 and \$17,872,000, respectively. Short term capital gains are not a deduction for PHC tax purposes, and therefore the Company had undistributed PHC income in 2010 of \$5,500,000 that gave rise to the PHC tax liability. The Company had no PHC tax liability in 2011 due to the loss that was incurred.

The long and short term capital gains are shown on the Income Statement as part of "Realized gains on sales of securities, net".

The following is reconciliation between the federal statutory rate of 35% and the effective rate:

	2011	2011	2010	2010
Computed expected provision at the Statutory rates	\$(4,320,929)	35.0 %	\$2,915,690	35.0 %
Non-deductible items	(2,941 )	0.0 %	(35,029 )	-0.4 %
Under accrual of prior overpayments	(198,031 )	1.6 %	—	0.0 %
Undistributed PHC tax	—	0.0 %	852,000	10.2 %
Franchise tax, net of benefit	116,224	-0.9 %	134,760	1.6 %
Dividends Deduction	(782,808 )	6.3 %	(544,967 )	-6.5 %
Tax Bracket benefit	122,366	-1.0 %	(67,735 )	-0.8 %
Other	(75,957 )	0.6 %	127,173	1.5 %
	\$(5,142,076)	41.6 %	\$3,381,892	40.6 %

The Company is currently undergoing one audit. Certain allocation percentages used on the Daxor New York City Income Tax Returns for the years ended December 31, 2007, 2008 and 2009 are currently under audit by the New York City Department of Taxation and Finance. As the audit has not been completed, the Company cannot determine if New York City will assess additional tax, interest and penalties.

At December 31, 2011 and 2010, the Company had no material unrecognized tax benefits and no adjustments to liabilities or operations were required. The Company does not expect that its unrecognized tax benefits will materially increase within the next twelve months.

Interest and penalties related to income taxes are recorded as general and administrative expenses. The Company recognized a \$55,000 penalty related to the underpayment of quarterly estimated payments for its fiscal 2010 federal income tax return in 2010.

#### (10) DEFERRED INCOME TAXES

Deferred income taxes result from differences in the recognition of gains and losses on marketable securities, stock options and mark-to-market short positions as well as depreciation differences for tax and financial statement purposes.

The deferred tax expense or benefit that results from the net change in the unrealized gains on the marketable securities does not flow through the Statement of Operations due to the classification of the marketable securities as available-for-sale. Instead, the deferred tax expense or benefit is recorded in Accumulated Other Comprehensive Income in the Stockholders' Equity section of the Balance Sheet.

The deferred tax liability, computed at federal statutory rates of 35% in 2011 and 2010, is composed of the following items:

	2011	2010
Deferred Tax Liabilities (Assets):		
Fair value adjustment for available-for-sale securities	\$6,769,255	\$8,017,839
Mark to market short positions	(2,254,005)	856,641
Property and Equipment	147,938	168,941
Allowance for doubtful accounts	(51,202 )	(39,475)
Other	(47,932 )	-
	\$4,564,054	\$9,003,946

#### (11) STOCKHOLDERS EQUITY

##### Treasury Stock

The Company has a program in place which allows for the purchase of up to 250,000 shares of Daxor Common Stock each year. During the years ended December 31, 2011 and 2010, the Company purchased 23,766 and 24,181 shares of Daxor Common Stock, respectively. The total amount spent on these purchases was \$230,337 and \$242,934, respectively.

The stock is purchased as funds are available and if the stock is trading at a price which management feels is undervalued. This is usually when the market capitalization of the Company is less than the net value of its assets.

##### Dividends

For the year ended December 31, 2011, the Company paid total dividends of \$1,054,450 or \$0.25 per share. The \$0.25 per share was paid as follows: \$0.10 per share on June 16<sup>th</sup> and \$0.15 per share on November 30<sup>th</sup>.

For the year ended December 31, 2010, the Company paid total dividends of \$4,229,520 or \$1.00 per share. The \$1.00 per share was paid as follows: \$0.10 per share on June 16<sup>th</sup>, \$0.25 per share on September 30<sup>th</sup> and a special dividend of \$0.65 per share on December 30, 2010.

It is the policy of Company Management to pay dividends when there are available earnings.

## (12) CERTAIN CONCENTRATIONS AND CONTINGENCIES

Financial instruments which potentially subject the Company to concentrations of credit risk consist primarily of the common stock of marketable electric utilities. At December 31, 2011, stocks representing 99.32% of the market value of common stocks held by the Company were listed on the New York Stock Exchange (NYSE). The Company maintains its investments in three different brokerage accounts, two at UBS and one at TD Ameritrade. The limits of this insurance which is offered by the Securities Investor Protection Corporation (SIPC) is up to \$100,000 for the total amount of cash on deposit and up to \$500,000 for the total amount of securities held at UBS. UBS and TD Ameritrade both provide supplemental insurance up to the face value of the securities in excess of the SIPC limit of \$500,000.

These brokerage houses are well known in the industry and management does not believe that these securities bear any risk of loss over and above the basic risk that a security bears through the normal activity of the securities markets. However, as at December 31, 2011, the fair market value of securities in excess of the insured limits is \$2,533,400.

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.

In the Company's fiscal year ended December 31, 2011, the sale of Blood Volume Kits accounted for 67.0% of the Company's total consolidated operating revenue. There were four customers (hospitals) that accounted for 63.7% of the Company's revenue from the sale of Blood Volume Kits.

Management believes that the loss of any one of these customers would have an adverse effect on the Company's consolidated business for a short period of time. All four of these hospitals have purchased their BVA-100 equipment. Management believes that when more hospitals purchase equipment, they will continue to purchase 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 previous filings, 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.

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. There is no guarantee that the APC Task Force will be successful in their efforts to persuade the CMS to amend their current policy limiting the reimbursement of diagnostic radiopharmaceuticals for outpatient diagnostic services. This change in Medicare's reimbursement policy was still in effect at December 31, 2011.

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.

From time to time, the Company is the subject of legal proceedings arising in the ordinary course of business. The Company does not believe that any proceedings currently pending or threatened will have a material adverse effect on its business or results of operations.

In 2005 and 2007, the Company and Dr. Joseph Feldschuh, its President and Chief Executive Officer, respectively, received Wells Notices from the Securities and Exchange Commission ("SEC") requesting their comments on the SEC Staff's view that the Company was in violation of Section 7(a) of the Investment Company Act in that it was operating as an unregistered investment company. The Company and Dr. Feldschuh responded to those requests when made.

In November 2009, the staff of the Northeast Regional Office of the SEC contacted the Company and invited both the Company and Dr. Feldschuh to make a new Wells submission based upon more recent operations and results. The Company and Dr. Feldschuh responded to the staff's invitation on December 20, 2009.



The Company disclosed in its Form 10-Q for September 30, 2010, Form 10-K for December 31, 2010 and Form 10-Q's for March 31, 2011, June 30, 2011 and September 30, 2011 that the SEC instituted administrative proceedings pursuant to the Investment Company Act of 1940 on September 17, 2010. The New York City staff of the Enforcement Division of the SEC claimed that Daxor is primarily an investment company and not primarily an operating company.

The Company has disclosed in previous public filings that it is dependent upon earnings from its investment portfolio to fund operations and that a single individual, Dr. Joseph Feldschuh, makes all investment decisions.

The administrative proceeding took place from March 7, 2011 through March 9, 2011 in New York City. The Company feels strongly that the extensive documentation of its history of operations presented at the administrative proceeding demonstrated that it is primarily an operating medical instrumentation and biotechnology company and not primarily an investment company.

On August 31, 2011, an Administrative Law Judge of the SEC issued his decision finding Daxor to be an Investment Company as defined by the Investment Company Act of 1940. A major factor in the decision was his opinion that we are in the business of investing and more than 40% of our assets are comprised of investment securities.

On October 26, 2011, the Company filed a petition for review of the decision and requested that it be withdrawn on November 22, 2011. On February 10, 2012, the SEC notified the Company that the request to withdraw the petition for review and notice of finality had been approved.

The Company plans to file a Form N-8A (Notification of Registration Filed Pursuant to Section 8(a) of the Investment Company Act of 1940) shortly after our Form 10-K for the year ended December 31, 2011 is filed. We have 90 days from when the N-8A is filed to file our Form N-2 which is the Registration Statement. The Company plans to file the N-2 as soon as possible after the N-8A is filed and to begin reporting as an Investment Company effective January 1, 2012.

The management of the Company believes the additional disclosures that will be necessary when Daxor reports as an Investment Company will not materially affect investment policies and practices currently in place.

(13) RELATED PARTY TRANSACTIONS

The Company subleases a 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 the years ended December 31, 2011 and 2010 was \$12,374 and \$12,166, respectively, and was classified as other income in the statement of operations.

Jonathan Feldschuh is the co-inventor of the BVA-100 Blood Volume Analyzer and is the son of Dr. Joseph Feldschuh. In 2011 and 2010 he provided specialized consulting services with respect to the blood volume analyzer for which he received a salary each year of \$18,720 plus benefits. He is expected to provide a limited amount of consultative help in the filing of the additional patents in 2012.

(14) COMMITMENTS

(A) Operating Leases

The Company leases office and laboratory space in New York City. The lease agreement for the New York City facility is a non-cancelable lease, subject to annual increases based on the Consumer Price Index, and will expire on December 31, 2015.

Future minimum rental payments under the non-cancelable operating lease, exclusive of future cost of living and tax escalation increases, are as follows:

2012	325,680
2013	325,680
2014	325,680
2015	325,680
Total	\$1,302,720

Rent expense for all non-cancelable operating leases was \$348,788 and \$344,336 for the years ended December 31, 2011 and 2010, respectively.



## (15) SEGMENT REPORTING

The Company has two operating segments: the sale of blood volume analysis equipment and related services, and cryobanking services which encompasses blood and semen storage and related services. In addition, the Company reports an additional segment, Investment Activity, although it is not deemed to be an operating segment.

The following tables summarize the results of each segment described above for the years ended December 31, 2011 and December 31, 2010.

December 31, 2011

	Equipment Sales and Related Services	Cryobanking and Related Services	Investment Activity	Total
Revenues	\$1,125,249	\$ 321,096	\$—	\$1,446,345
Expenses				
Cost of Sales	616,063	36,448	—	652,511
Research and Development	2,508,657	197,295	—	2,705,952
Selling, general and administrative expenses	3,219,204	655,092	—	3,874,296
Total Costs and Expenses	6,343,924	888,835	—	7,232,759
Operating Loss	(5,218,675)	(567,739 )	—	(5,786,414 )
Investment income, net				
Dividends	—	—	2,237,734	2,237,734
Gain on sale of securities, net	—	—	33,189	33,189
Mark to market of short positions	—	—	(8,501,859 )	(8,501,859 )
Administrative expenses relating to portfolio investments	—	—	(153,816 )	(153,816 )
Total investment loss, net	—	—	(6,384,752)	(6,384,752)
Interest expense, net of interest income of \$6,425	(32,552 )	—	(136,371 )	(168,923 )
Other income	12,374	—	—	12,374
Loss before income taxes	(5,238,853)	(567,739 )	(6,521,123)	(12,327,715)
Income tax expense (benefit)	115,754	470	(5,258,300)	(5,142,076)
Net loss	\$(5,354,607)	\$(568,209 )	\$(1,262,823)	\$(7,185,639)

Total Assets	\$6,710,535	\$ 131,187	\$78,883,139	\$85,724,861
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December 31, 2010

	Equipment Sales and Related Services	Cryobanking and Related Services	Investment Activity	Total
Revenues	\$1,242,264	\$ 336,993	\$—	\$1,579,257
Expenses				
Cost of Sales	691,786	35,864	—	727,650
Research and Development	2,826,068	215,572	—	3,041,640
Selling, general and administrative expenses	2,750,626	718,452	—	3,469,078
Total Costs and Expenses	6,268,480	969,888	—	7,238,368
Operating Loss	(5,026,216)	(632,895 )	—	(5,659,111 )
Investment income, net				
Dividends	—	—	2,226,198	2,226,198
Gain on sale of securities, net	—	—	13,509,318	13,509,318
Mark to market of short positions	—	—	(1,526,064 )	(1,526,064 )
Administrative expenses relating to portfolio investments	—	—	(150,675 )	(150,675 )
Total investment income, net	—	—	14,058,777	14,058,777
Interest expense, net of interest income of \$1,944	(27,759 )	296	(34,213 )	(61,676 )
Other income	12,166	—	—	12,166
Income (loss) before income taxes	(5,041,809)	(632,599 )	14,024,564	8,350,156
Income tax expense	134,760	—	3,247,132	3,381,892
Net income (loss)	\$(5,176,569)	\$(632,599 )	\$10,777,432	\$4,968,264
Total Assets	\$4,773,411	\$ 163,494	\$86,258,510	\$91,195,415

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

None.

**Evaluation of Disclosure Controls and Procedures**

Item 9A Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures:

We maintain “disclosure controls and procedures,” as such term is defined in Rule 13a-15(e) and Rule 15d-15(e) under the Securities Exchange Act of 1934 (the “Exchange Act”), that are designed to ensure that information required to be disclosed in reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms, and that such information is collected and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

In designing and evaluating our disclosure controls and procedures, management recognized that no matter how well conceived and operated, disclosure controls and procedures can provide only reasonable, not absolute, assurance that the objectives of the disclosure controls and procedures are met. Our disclosure controls and procedures have been designed, and management believes that they meet, reasonable assurance standards. Based on their evaluation as of the end of the period covered by this Annual Report on Form 10-K, the Chief Executive Officer and the Chief Financial Officer have concluded that, subject to the limitations noted above, our disclosure controls and procedures were effective.

(b) Management’s Report on Internal Control Over Financial Reporting

The management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control system was designed to provide reasonable assurance to our management and board of directors regarding the preparation and fair presentation of published financial statements. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2011. In making this assessment, we used the criteria set forth in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our assessment, we believe that, as of December 31, 2011, the company's internal control over financial reporting was effective based on those criteria. This annual report does not include an attestation report of the Company's registered public accounting firm pursuant to temporary rules of the Securities and Exchange Commission that permit the Company to provide only management's report in this annual report

(c) Changes in Internal Control Over Financial Reporting

During the quarter ended December 31, 2011, there were no changes in our internal control over financial reporting (as defined in Rule 13a-15(J) under the Exchange Act) that have materially affected, or are reasonably likely to affect, our internal control over financial reporting.



## **PART III**

### **Item 10. Directors, Executive Officers and Corporate Governance.**

The information required by item 10 is incorporated by reference to our proxy statement for our 2012 Annual Meeting of Shareholders, which will be filed with the Securities and Exchange Commission within 120 days after the close of our 2011 year end.

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

The information required by item 11 is incorporated by reference to our proxy statement for our 2012 Annual Meeting of Shareholders, which will be filed with the Securities and Exchange Commission within 120 days after the close of our 2011 year end.

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

The information required by item 12 is incorporated by reference to our proxy statement for our 2012 Annual Meeting of Shareholders, which will be filed with the Securities and Exchange Commission within 120 days after the close of our 2011 year end.

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

There are no relationships or related transactions beyond those which have been disclosed in the 10-K. The remaining information required by item 13 is incorporated by reference to our proxy statement for our 2012 Annual Meeting of Shareholders, which will be filed with the Securities and Exchange Commission within 120 days after the close of our 2011 year end.

### **Item 14. Principal Accounting Fees and Services.**

The information required by item 14 is incorporated by reference to our proxy statement for our 2011 Annual Meeting of Shareholders, which will be filed with the Securities and Exchange Commission within 120 days after the close of our 2010 year end.

## **PART IV**

### **Item 15. Exhibits and Financial Statement Schedules .**

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Exhibit Index

- 3.2 Bylaws filed as an exhibit to Daxor's annual report on Form 10-K for the year ended December 31, 2009.
- 4.1 Specimen Stock Certificate filed as an exhibit to Daxor's annual report on Form 10-K for the year ended December 31, 2009
- 10.1 Agreement of lease dated as of December 19, 2002 filed as an exhibit to Daxor's annual report on Form 10-K for the year ended December 31, 2009
- 21.1 \*List of Subsidiaries
- 23.1\* Consent of Rotenberg Meril Solomon Bertiger & Guttilla, P.C.
- 31.1\* Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- 31.2\* Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- 32.1\* Certification of Chief Executive Officer pursuant to 18 U.S.C Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
- 32.2\* Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

\* Filed herewith.

**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities and Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereto duly authorized.

**DAXOR CORPORATION**

by: /s/ Joseph Feldschuh  
Joseph Feldschuh, M.D  
President and Chief Executive Officer  
Chairman of the Board of Directors  
Principal Executive Officer

*Dated: March 28, 2012*

Pursuant to the requirements of the Securities and Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Joseph Feldschuh Joseph Feldschuh, M.D.	President and Chief Executive Officer Chairman of the Board of Directors Principal Executive Officer	March 28,2012
/s/ David Frankel David Frankel	Chief Financial Officer Principal Financial and Accounting Officer	March 28, 2012
/s/ Robert Willens Robert Willens	Director	March 28, 2012
/s/ James Lombard James Lombard	Director	March 28, 2012
/s/ Martin Wolpoff Martin Wolpoff	Director	March 28, 2012
/s/ Mario Biaggi	Director	March 28, 2012

Mario Biaggi, ESQ

/s/ Bernhard Saxe  
Bernhard Saxe, ESQ

Director

March 28, 2012

/s/ Philip N. Hudson  
Philip N. Hudson

Director

March 28, 2012

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