DAXOR CORP Form N-CSR September 04, 2012

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

FORM N-CSR

CERTIFIED SHAREHOLDER REPORT OF REGISTERED MANAGEMENT

INVESTMENT COMPANIES

INVESTMENT COMPANY ACT FILE NUMBER 811-22684

DAXOR CORPORATION

(Exact name of registrant as specified in charter)

350 Fifth Avenue

Suite 7120

New York, NY 10118

(Address of principal executive offices) (Zip code)

Joseph Feldschuh, MD

350 Fifth Avenue

Suite 7120

New York, NY 10118

(Name and address of agent for service)

REGISTRANT'S TELEPHONE NUMBER, INCLUDING AREA CODE: 1-212-330-8500

DATE OF FISCAL YEAR END: DECEMBER 31, 2012

DATE OF REPORTING PERIOD: JUNE 30, 2012

Item 1. Report to Shareholders

Daxor Corporation

Financial Statements

For the Period Ended

June 30, 2012

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<u>ITEM_1</u>

Daxor Corporation

August 28, 2012

Dear Fellow Shareholder:

We have attached a report of our portfolio holdings and investment activity for the period ended June 30, 2012. Please review this information carefully.

We also have operating businesses which are described as follows:

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 raioisotope 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 coplications. Daxor's BVA-100 Blood Volume Analyzer system uses a Volumex° 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 chomated 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.

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:

Shevde K, Pagala M, Tyagaraj C et al. Preoperative Blood Volume Deficit Influences Blood Transfusion

- 1. 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.

Dworkin HJ, Premo M, Dees S. Comparison of Red Cell and Whole Blood Volume as Performed Using Both

- 11. 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. 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. <u>Mayuga KA</u>, <u>Butters KB</u>, <u>Fouad-Tarazi F</u>. Early versus late postural tachycardia: a re-evaluation of a syndrome. <u>Clin Auton Res</u>. 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.
- Noumi B, Teruya S, Salomon S, Helmke S, Maurer MS. Blood Volume Measurements in Patients with Heart 18. Failure and a Preserved Ejection Fraction: Implications for Diagnosing Anemia. *Congest Heart Fail*. 2011; 17:14-18.

Yu M, Pei K, Moran S et al. A Prospective Randomized Trial Using Blood Volume Analysis in Addition to

19. 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, <u>Dam HQ</u>, <u>Soltis D</u>, <u>Sagar VV</u>. Blood volume analysis: a new technique and new clinical interest reinvigorate a classic study. <u>J Nucl Med Technol</u>. 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:

Feldschuh J. (1990). Blood Volume Measurements in Hypertensive Disease. In Hypertension: Pathophysiology,

- 1. *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:

2006 Heart Failure Society of America Poster Presentation - Columbia Presbyterian College of Surgeons and

- 1. 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?
- 2008 Society of Critical Care Medicine Poster Presentation The Queen's Medical Center, Honolulu, HI Right 5. Ventricular End Diastolic Volume (RVEDVI) and Brain Natriuretic Peptide (BNP) May Not Reflect Volume
- Status in the Critically III Patient.
 2008 Society of Critical Care Medicine Poster Presentation The Oueen's Medical Center, Honolulu, HI Stroke
- 2008 Society of Childra' Care Medicine Poster Presentation The Queen's Medical Center, Honolulu, III Strok Volume Variation as a Marker of Intravascular Volume Compared to Blood Volume Measurement 2008 American Society of Nephrology Poster Presentation – NYU School of Medicine, New York, NY and
- 7. 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
- 2009 National Kidney Foundation Poster Presentation NYU School of Medicine, New York, NY and Christiana 9. Care Health System, Newark, DE – Peripheral Blood Hematocrit is a Poor Surrogate for Red Blood Cell Volume in
- Care Health System, Newark, DE Peripheral Blood Hematocrit is a Poor Surrogate for Red Blood Cell Volume in Patients with Volume Excess or Depletion
 2010 Society of Nuclear Medicine Poster Presentation – Christiana Care Health System, Newark, DE – "Normalized
- 10. Hematocrit" from Blood Volume Analysis Offers Enhanced Accuracy Over Peripheral Hematocrit in Assessment of Red Blood Cell Volume

2010 Society of Critical Care Medicine Poster Presentation – The Queen's Medical Center, Honolulu, HI – A

- 11. 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
- 15. 2010 Society of Critical Care Medicine Poster Presentation The Queen's Medical Center, Honolulu, HI A 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 III 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
- 21. 2011 Society of Critical Care Medicine Poster Presentation The Queen's Medical Center, Honolulu, HI A 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.

The March, 2011 issue of the medical journal *Trauma* published an article by Dr. Martin Schreiber, et al., from Oregon Health and Science University (Blood Volume analysis Can Distinguish True Anemia From Hemodilution in Critically III Patients, *Trauma*, Volume 70, Number 3, March2011). The study concluded that "Use of blood volume analysis in critically ill patients may help distinguish true anemia from hemodilution, potentially preventing unnecessary interventions." The authors specifically recommended the use of the Daxor BVA-100 Blood Volume Analyzer to determine the true blood volume status of critically ill patients.

The 2011 paper on a study by Dr. Mihae Yu, et al. (A Prospective Randomized Trial Using Blood Volume Analysis in Addition to Pulmonary Artery Catheter, Compared with Pulmonary Artery Catheter Alone, to Guide Shock Resuscitation in Critically Ill Surgical Patients, *Shock*, Vol, 35, No. 3, pp. 220-228, 2011) of 100 patients, compared the results of patients who were treated on the basis of blood volume measurement and compared to patients treated on the basis of pulmonary artery catheterization (PAC) alone. Results showed there was a remarkable 24% death rage in patients treated without the blood volume information vs. an 8% death rate in patients treated utilizing the blood volume analyzer and PAC. This is a particularly powerful study demonstrating the benefits of treating critically ill patients with blood volume derangements on the basis of actual direct blood volume measurement.

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.

Dr. Donald Margouleff, the Director of Nuclear Medicine at Daxor, has attempted to contact representatives of the manufacturer in order to discuss this matter.

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 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 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-tranfusion, and pre- and post-surgical complications. Many risks from donor blood, such as the risks of infectious disease transmission, can be avoided by utilizing autologous (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.

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 TM (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 ® and Epogen ® manufactured by Amgen) to stimulate rapid red cell replacement; (c) if the patient is suitable for blood donation, remove one unit of blood and process for freezing of both red cells and plasma. Frozen blood requires special processing with a sterile cryopreservative agent to prevent destruction of the red cells during freezing; (d) treat the patient with epoietin alfa where appropriate to stimulate more rapid replacement of red cells; (e) repeat blood donation to provide enough blood availability at the time of surgery so the patient will not need to receive any blood but their own; and (f) quantify the amount of blood donated, where time permits, so that patients will have no more than a 20% red cell deficit at the end of the post operative period. At the present time, elderly 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 and North Shore Medical Center. Cooley Dickinson Hospital, is located in Northampton, MA.and has also agreed to participate in the program.

Idant Semen (Sperm) Banking

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

The Company also provides cryostorage 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.

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 Margouleff, 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 2011 it exhibited at 20 national 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.

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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.

<u>Level 2</u> – 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 where normovolemic, or slightly hypovolemic. After 2 years, 55% of the hypervolemic patients died or required urgen 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 heir 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 overcoming 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 stary. 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 66 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 June 30, 2012.

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.

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 June 30, 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.

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 autologus 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) 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.

Medtronic

In our Annual Report filed on Form 10-K for the year ended December 31, 2011, we mentioned ongoing discussions with representatives of Medtronic Corporation. Medtronic is the manufacturer of Optivol. OptiVol Fluid Status Monitoring is an exclusive Medtronic feature that allows clinicians to monitor heart failure in patients with an implantable cardioverter defibrillator (ICD) or cardiac resynchronization therapy device. We made one erroneous comment which we now wish to correct.

We cited a study called the FAST Study, of which Dr. Dirk J. van Veldhuisen was the senior author. The correct name for the study is "Intrathoracic Impedance Monitoring, Audible Patient Alerts, and Outcome in Patients with Heart Failure", *Circulation*. 2011;124:00-00. According to the authors the study was "terminated prematurely because of slow enrollment although a post hoc futility analysis indicated that a positive result would have been unlikely". That study, using the OptiVol, concluded that "Use of an implantable diagnostic tool to measure intrathoracic impedance with an audible patient alert did not improve outcome and increased heart failure hospitalizations and outpatient visits in heart failure patients".

It was our contention that the instrument which measures bio-impedance, a form of electric conductivity in the body, could be very useful in rating heart failure if the instrument were calibrated for the patient's blood volume rather than some empirical formula. We still believe that the instrument calibrated to the patient's blood volume has significant potential for measuring subtle changes on a daily basis in patients who have heart failure. Previous published studies from Columbia Presbyterian Medical Center have documented that the guidelines of the American Heart Association/American College of Cardiology, which emphasize that the goal of treatment is to restore the patient to a normal blood volume are valid.

At the present time the Medtronic officials have informed us they are not interested in conducting a study utilizing the blood volume analyzer for calibration of their instrument. We may, however, conduct an independent study of the potential benefits of this instrument if it is calibrated. Interested parties can read the published studies on line.

Cordially Yours,

Joseph Feldschuh, MD

President

Daxor Corporation Schedule of Investments June 30, 2012 (Unaudited)

	Shares	Market Value
COMMON STOCKS - 162.06%		
Automobile Manufacturing- 0.34% General Motors Company (a) General Motors Liq. Co. (a) Banking - 19.14%	5,700 100	\$112,404 1,225 \$113,629
Diversified Banks – 18.15% Bank of America Corp. Citigroup, Inc. Goldman Sachs Group	588,095 28,460 5,000	\$4,810,617 780,089 479,300 \$6,070,006
Foreign Money Center Bank-0.79% UBS AG	22,500	\$263,475
Regional Banks - 0.20% First Niagara Financial Group, Inc. Popular, Inc. (a)	5,000 1,700	\$38,250 28,237 \$66,487
Total Banking		\$6,399,968
Bio Technology-0.17% Mannkind Corp. (a)	25,000	\$57,250
Broadcasting & Cable Television-0.72% Netflix, Inc. (a)	3,500	\$239,698
Chemical Manuafacturing-1.36% USEC, Inc. (a)	460,500	\$455,895
Communication Services-0.66% Clearwire Corp. (a) Frontier Communications Corp. Research in Motion Ltd. (a)	5,000 12,500 22,500	\$5,600 47,875 166,275 \$219,750
Consumer Products and Services-0.18% NutriSystem, Inc. (a) PHH Corp.(a)	5,000 79	\$57,800 1,381

		\$59,181
Diversified Computer Systems-2.00% Hewlett Packard	33,200	\$667,652
Investment Services-0.62% Morgan Stanley United States Natural Gas Fund, LLP	7,900 4,687	\$115,261 90,412 \$205,673
Iron and Steel-0.13% AK Steel Holding Corp.	7,500	\$44,025

Daxor Corporation Schedule of Investments (Continued) June 30, 2012 (Unaudited)

	Shares	Market Value
COMMON STOCKS-162.06%		
Newspaper Publishing-0.02% New York Times Company	1,000	\$7,800
Oil & Gas Operations-0.41% Exco Resources, Inc. Williams Companies, Inc. WPX Energy Inc. (a)	12,500 1,200 400	\$94,875 34,584 6,472 \$135,931
Real Estate-0.29% KB Home	10,000	\$98,000
Regional Airlines-0.08% JetBlue Airways Corporation (a)	4,800	\$25,440
Semi-Conductors-0.60% Advanced Micro Devices, Inc. (a) First Solar, Inc. (a)	5,000 11,400	\$28,650 171,684 \$200,334
Utilities-135.15% Electric Utilities-132.87% Ameren Corp. American Electric Power Co. Inc. Avista Corp. Calpine Corp. (a) Centerpoint Energy, Inc. CH Energy Group, Inc. CH Energy Group, Inc. CMS DTE Energy Co. Duke Energy Corp. Dynegy Inc. (a) Edison International Entergy Corp. Exelon Corp. Firstenergy Corp. Great Plains Energy Inc. Hawaiian Electric Industries, Inc. National Grid PLC Shares National Grid PLC ADR NISOURCE Inc. Northeast Utilities	4,000 22,600 14,396 1,328 5,000 39,400 41,500 47,000 28,597 5,000 7,000 125,145 131,674 98,286 21,000 58,200 62,951 30,392 44,000 41,320	\$134,160 901,740 384,373 21,925 103,350 2,588,186 975,250 2,788,510 1,256,811 2,925 323,400 8,496,094 4,953,576 4,834,688 449,610 1,659,864 3,335,773 321,556 1,089,000 1,603,629

NRG Energy, Inc. (a) NV Energy, Inc.	35,500 1,500	616,280 26,370
Pepco Holdings Inc.	2,201	43,074
PG & E Corp.	7,000	316,890
Pinnacle West Capital Corp.	31,002	1,604,043
PNM Resources, Inc.	78,750	1,538,775
Teco Energy, Inc. (a)	2,000	36,120
UIL Holdings Corp.	22,332	800,826
UNITIL Corp.	52,900	1,401,850
Westar Energy, Inc.	42,941	1,286,083
XCEL Energy, Inc.	19,050	541,211
		\$44,435,942

Daxor Corporation Schedule of Investments (Continued) June 30, 2012 (Unaudited)

	Shares	Market Value
COMMON STOCKS – 162.06% Natural Gas Utilities-2.28%		
Integrys Energy Group, Inc. Southwest Gas Corp. Spectra Energy Corp.	4,500 1,000 15,925	\$255,915 43,650 462,781 \$762,346
Total Utilities		\$45,198,288
Waste Management-0.19%		
Veolia Environment SA ADR	5,000	\$63,100
Total Common Stock (Cost \$32,466,542)-162.06%		\$54,191,613
Preferred Stocks-5.96% Diversified Banks-4.72%		
Bank of America Corp., 8.20 % Callable	1,000	\$25,850
Bank of America Corp., 6.204% Series D	1,000	24,480
Bank of America Corp., 7.25% Series J Div Perp	6,000	152,040
Bank of America Corp., 7.250% Series L	700	682,499
Bank of America Corp., 8.625% Preferred Callable	2,000	51,860
Barclays Bank PLC ADR, 8.125% Series 5 Callable	2,500	63,450 20,700
Citigroup, 6.35% Callable Due 03/15/67 Deutsche Bank Contingent Capital Trust III Preferred, Div 7.60%	1,200 10,000	29,700 256,900
Goldman Sachs Group, 6.20% Series B Callable	1,000	230,900
JP Morgan Chase & Co., 8.625% Series J callable	1,000	40,695
US Bancorp, 7.875% Callable	2,000	53,540
Wells Fargo Capital XII, 7.875% Callable Due 03/15/68	2,000	51,780
Wells Fargo Company, 8.00 % Series J Non-Cumulative	4,000	120,800
	.,	\$1,578,544
Electric Utilities-1.16%	400	
Duquesne Light Co. Preferred, 3.75% Callable	400	\$16,400
Pacific Gas & Electric, 5% Series D	1,000	25,250
Pacific Gas & Electric, 5% Series E	1,100	27,896
Pacific Gas & Electric, 6% Series A	4,200	128,058
Southern California Edison, 4.32% Callable	5,500 2,500	128,150
Southern California Edison, 4.78% Callable	2,300	64,100 \$389,854
Life Insurance-0.08%		
MetLife Inc., Series B	1,000	\$25,800

Total Preferred Stock (Cost \$1,468,826)-5.96%	\$1,994,198
Total Investment in Securities (Cost \$33,935,368) -168.02%	\$56,185,811
Investment in Operating Division (9.79%)	\$3,274,958
Other Assets (9.50%)	\$3,176,748
Total Assets-187.31% Total Liabilities – (87.31%) Net Assets-100.00%	\$62,637,517 (29,196,862) \$33,440,655

Schedule of Investments (Continued)

June 30, 2012 (Unaudited)

At June 30, 2012, the net unrealized appreciation for investment in securities based on cost for federal income tax purposes of \$14,462,788 was as follows:

Aggregate gross unrealized appreciation for all investments for which there was an excess of value over cost, net of tax effect	^f \$18,182,463
Aggregate gross unrealized depreciation for all investments for which there was an excess of cost over	(3,719,675)
value, net of tax effect	(3,71),075)
Net unrealized appreciation, net of tax effect	\$14,462,788

⁽a)Non-income producing security

Portfolio Analysis

As of June 30, 2012

	Percentage of Net Assets
Common Stock	-
Automobile Manufacturing	0.34%
Banking	19.14%
Bio Technology	0.17%
Broadcasting & Cable Television	0.72%
Chemical Manufacturing	1.36%
Communication Services	0.66%
Consumer Products and Services	0.18%
Diversified Computer Services	2.00%
Investment Services	0.62%
Iron and Steel	0.13%
Newspaper Publishing	0.02%
Oil & Gas Operations	0.41%
Real Estate	0.29%
Regional Airlines	0.08%
Semi-Conductors	0.60%
Electric Utilities	135.15%
Waste Management	0.19%

Total Common Stock	162.06%
Preferred Stock	
Diversified Banks	4.72%
Electric Utilities	1.16%
Life Insurance	0.08%
Total Preferred Stock	5.96%
Total Investment in Securities	168.02%

Schedule of Investments (Continued)

June 30, 2012 (Unaudited)

	Number
	of Shares Value of
	in Short Short
Name of Issuer	Position Position at
	at 06/30/12
	06/30/12
Securities Sold Short- (72.62%)	
Apple, Inc.	(15,500) \$(9,052,000)
Coach, Inc.	(15,000) (877,200)
Gap, Inc.	(5,000) (136,800)
General Electric Co.	(2,500) (52,100)
General Motors Company	(2,500) (49,300)
Intuitive Surgical, Inc.	(18,000) (9,968,220)
Ralph Lauren Corporation	(3,000) (420,180)
Pool Corp.	(5,000) (202,300)
Simon Property Group Inc.	(20,000) (3,113,200)
Starbucks Corporation	(5,000) (266,600)
Toll Brothers Inc.	(5,000) (148,650)
Total Securities Sold Short (72.62%)	\$(24,286,550)
Receivable from Broker (70.84%)	23,692,825
Securities Sold Short, net of receivable from broker (1.78%)	\$(593,725)

The accompanying notes are an integral part of these financial statements.

Summary of Options

As at June 30, 2012

DESCRIPTION	NUMBER OF UNITS	STRIKE PRICE	EXPIRATION DATE	FAIR MARKET VALUE
Open Options Written-(14.55%)				
Call Options Written- (1.51%)				
Advanced Micro Devices, Inc.	(50)		07/20/2012	\$(75)
AK Steel Holding Corp.	(25)		09/21/2012	(125)
AK Steel Holding Corp.	(50)		09/21/2012	(650)
Apple, Inc.	(10)		08/17/2012	(38,487)
Bank of America Corp.	(200)		01/18/2013	(824)
Bank of America Corp.	(125)		01/18/2013	(760)
Bank of America Corp.	(150)	12.50	01/18/2013	(1,802)
Bank of America Corp.	(50)	11.00	01/18/2013	(1,250)
Bank of America Corp.	(50)	10.00	01/18/2013	(2,200)
Bank of America Corp.	(175)	12.00	12/21/2012	(1,841)
Bank of America Corp.	(300)	11.00	12/21/2012	(12,099)
Bank of America Corp.	(50)	9.00	12/21/2012	(5,350)
Bank of America Corp.	(150)	8.00	12/21/2012	(5,118)
Bank of America Corp.	(200)	12.00	11/16/2012	(2,607)
Bank of America Corp.	(100)	11.00	11/16/2012	(9,500)
Bank of America Corp.	(100)	10.00	11/16/2012	(714)
Bank of America Corp.	(350)	9.00	11/16/2012	(9,336)
Bank of America Corp.	(150)	8.00	11/16/2012	(7,800)
Bank of America Corp.	(150)	10.00	10/19/2012	(6,295)
Bank of America Corp.	(100)	9.00	10/19/2012	(8,624)
Bank of America Corp.	(100)	8.00	10/19/2012	(1,822)
Bank of America Corp.	(200)	10.00	09/21/2012	(2,346)
Bank of America Corp.	(265)	9.00	09/21/2012	(8,218)
Bank of America Corp.	(150)	8.00	09/21/2012	(11,100)
Bank of America Corp.	(50)	12.00	08/17/2012	(50)
Bank of America Corp.	(150)	11.00	08/17/2012	(300)
Bank of America Corp.	(400)	10.00	08/17/2012	(1,988)
Bank of America Corp.	(425)	9.00	08/17/2012	(7,463)
Bank of America Corp.	(350)	8.00	08/17/2012	(20,650)
Bank of America Corp.	(50)	- 00	08/17/2012	(6,550)
Bank of America Corp.	(50)	14.00	07/20/2012	(50)
Bank of America Corp.	(50)	13.00	07/20/2012	(100)
Bank of America Corp.	(50)	12.00	07/20/2012	(50)
Bank of America Corp.	(100)	11.00	07/20/2012	(58)
Bank of America Corp.	(100)	10.00	07/20/2012	(179)

Bank of America Corp.	(200)	9.00	07/20/2012	(1,336)
Bank of America Corp.	(250)	8.00	07/20/2012	(10,625)
Citigroup, Inc.	(50)	40.00	08/17/2012	(250)
Citigroup, Inc.	(267)	2.00	09/21/2012	(978)
Clearwire Corp.	(50)	20.00	09/21/2012	(250)
Exco Resources, Inc.	(125)	10.00	09/21/2012	(2,802)
First Solar, Inc.	(50)	25.00	12/21/2012	(3,088)
First Solar, Inc.	(50)	50.00	09/21/2012	(22)
First Solar, Inc.	(50)	25.00	09/21/2012	(1,062)
First Solar, Inc.	(50)	20.00	09/21/2012	(3,457)
First Solar, Inc.	(50)	20.00	08/17/2012	(2,065)
First Solar, Inc.	(50)	20.00	07/20/2012	(300)
Frontier Communications Corp.	(75)	6.00	08/17/2012	(1,125)
General Motors Company	(7)	24.00	09/21/2012	(139)
Goldman Sachs Group	(50)	110.00	07/20/2012	(450)
Green MTN Coffee	(50)	30.00	07/20/2012	(400)
Hewlett Packard Co.	(100)	25.00	08/17/2012	(400)
Hewlett Packard Co.	(25)	24.00	07/20/2012	(64)

Summary of Options (Continued)

As at June 30, 2012(Unaudited)

UNITS PRICE LATINATION DATE MARKE	
Call Options Written- (1.51%)	
Hewlett Packard Co. (50) 23.00 07/20/2012 \$(150)
Intuitive Surgical, Inc. (5) 490.00 07/20/2012 (33,10)	
Intuitive Surgical, Inc. (5) 480.00 07/20/2012 (37,73)	
Intuitive Surgical, Inc. (5) 470.00 07/20/2012 (42,45)	
Intuitive Surgical, Inc. (5) 460.00 07/20/2012 (47,25)	-
Intuitive Surgical, Inc. (5) 450.00 07/20/2012 (52,10)	
JetBlue Airways Corporation (48) 5.00 07/20/2012 (1,920	
KB Homes (100) 10.00 07/20/2012 (3,800))
Mannkind Corp. (50) 2.50 11/16/2012 (1,550)
Mannkind Corp. (200) 3.00 08/17/2012 (1,800)
Morgan Stanley $(5) 17.00 08/17/2012 (112)$)
Morgan Stanley (75) 20.00 $07/20/2012$ (40))
Netflix, Inc. (40) 125.00 09/21/2012 (493)
Netflix, Inc. (35) 120.00 09/21/2012 (529))
Netflix, Inc. (50) 100.00 09/21/2012 (2,900)
Netflix, Inc. (50) 90.00 09/21/2012 (7,000)
New York Times Company (10) 7.00 07/20/2012 (825)
NRG Energy, Inc. (65) 20.00 09/21/2012 (1,138))
NRG Energy, Inc. (145) 18.00 09/21/2012 (10,15)))
NRG Energy, Inc. (84) 17.00 07/20/2012 (6,300)
NutriSystem, Inc. (50) 14.00 09/21/2012 (500)
Popular, Inc. (121) 35.00 07/20/2012 (123))
Popular, Inc. (49) 2.00 07/20/2012 (52))
Research In Motion, Ltd. (50) 20.00 09/21/2012 (90)
Research In Motion, Ltd. (50) 18.00 09/21/2012 (95)
Research In Motion, Ltd. (50) 14.00 09/21/2012 (150)
Research In Motion, Ltd. (50) 14.00 08/17/2012 (100)
Research In Motion, Ltd. (50) 14.00 07/20/2012 (50)
St. Joe Co. (100) 25.00 01/18/2013 (5,000	Ś
St. Joe Co. (100) 22.00 01/18/2013 (4,000	ý
St. Joe Co. (100) 20.00 01/18/2013 (4,300)
St. Joe Co. (50) 21.00 12/21/2012 (1,500))
St. Joe Co. (100) 20.00 $12/21/2012$ (3,750))
St. Joe Co. (50) 19.00 $09/21/2012$ $(1,250)$)
St. Joe Co. (100) 13.00 $07/20/2012$ $(1,200)$ (1,00)18.00 $07/20/2012$ $(2,000)$)
UBS AG (225) 13.00 09/21/2012 (6,819)
United States Natural Gas $(223 -)$ $15.00 - 05/21/2012$ $(0,01)$ $(1,467)$)
United States Natural Gas $(21 -)$ $25.00 - 10/17/2012$ $(1,40)$ United States Natural Gas $(26 -)$ $30.00 - 07/20/2012$ $(3 -)$)

USEC, Inc. USEC, Inc.	(125) (300) (200) (150) (100) (200) (100) (100) (100) (100) (100) (400) (52))))))))	$7.00 \\ 5.00 \\ 3.50 \\ 2.00 \\ 1.50 \\ 2.00 \\ 1.50 \\ 1.00 \\ 2.50 \\ 2.00 \\ 1.50 \\ 1.00 \\ 2.50 \\ 2.00 \\ 1.50 \\ $	01/18/2013 01/18/2013 01/18/2013 01/18/2013 01/18/2013 10/19/2012 10/19/2012 10/19/2012 07/20/2012 07/20/2012	(625) (1,500) (1,000) (962) (1,000) (792) (750) (1,750) (500) (2,000) (2,000) (622) (750) (1,750) (500) (2,000) (792)	
-))))))
Veolia Environment SA ADR Total Call Options Written	(50))	15.00	10/19/2012	(2,027 (2,125 \$(504,113))))

Summary of Options

As at June 30, 2012

DESCRIPTION	NUMBER OF UNITS	STRIKE PRICE	EXPIRATION DATE	FAIR MARKET VALUE
Put Options Written- (13.04%)	(10	500.00	00/17/0010	¢ (2,420)
Apple, Inc.) 500.00	08/17/2012	\$ (3,430)
Apple, Inc.) 490.00	08/17/2012	(1,293)
Apple, Inc.) 480.00	08/17/2012	(5,013)
Apple, Inc.) 470.00	08/17/2012	(1,572)
Apple, Inc.) 460.00	08/17/2012	(1,247)
Apple, Inc.) 450.00	08/17/2012	(991)
Apple, Inc.) 500.00	07/20/2012	(435)
Apple, Inc.) 460.00	07/20/2012	(70)
Apple, Inc.) 450.00	07/20/2012	(94)
Apple, Inc.) 440.00	07/20/2012	(21)
Apple, Inc.) 430.00	07/20/2012	(8)
Apple, Inc.	(10) 420.00	07/20/2012	(3)
Apple, Inc.	(10) 410.00	07/20/2012	(1)
Alcoa Inc	(50) 8.00	07/20/2012	(450)
Ameren Corp.	(50) 22.50	01/18/2013	(754)
Ameren Corp.	(50) 22.50	09/21/2012	(0)
American Electric Power Co. Inc.	(75) 30.00	01/18/2013	(2,220)
American Electric Power Co. Inc.	(50) 31.00	08/17/2012	(250)
AES Corporation	(50) 10.00	08/17/2012	(1,000)
AK Steel Holding Corp.	(50) 7.00	09/21/2012	(7,527)
Abercrombie & Fitch Co.	(50) 30.00	01/18/2013	(14,836)
Abercrombie & Fitch Co.) 40.00	08/17/2012	(32,750)
Abercrombie & Fitch Co.) 35.00	08/17/2012	(15,250)
American Express Company) 20.00	01/18/2013	(317)
AstraZeneca PLC		40.00	01/18/2013	(5,900)
Bank of America Corp.) 7.50	01/18/2013	(11,714)
Bank of America Corp.) 5.00	01/18/2013	(4,574)
Bank of America Corp.) 4.00	01/18/2013	(700)
Bank of America Corp.) 3.00	01/18/2013	(350)
Bank of America Corp.	(50) 2.50	01/18/2013	(300)
Bank of America Corp.) 13.00	12/21/2012	(6,790)
Bank of America Corp.) 12.00	12/21/2012	(39,250)
Bank of America Corp.) 11.00	12/21/2012	(52,763)
Bank of America Corp.	(2.5.0) 10.00	12/21/2012	(52,705)
Bank of America Corp.	(100) 9.00	12/21/2012	(14,400)
· · · · · · · · · · · · · · · · · · ·		0.00		(14,400) (15,400)
Bank of America Corp.			12/21/2012	
Bank of America Corp.) 7.00	12/21/2012	(6,500)
Bank of America Corp.	(50) 6.00	12/21/2012	(1,500)

 Bank of America Corp.
 (50
)
 5.00
 12/21/2012
 (900
)

 Bank of America Corp.
 (50
)
 5.00
 12/21/2012
 (900
)