BSD MEDICAL CORP
Form 10-K
November 14, 2008

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Fiscal Year Ended August 31, 2008

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

For the Transition Period From _____ to _____

Commission File Number: 001-32526

BSD MEDICAL CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	75-1590407
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
2188 West 2200 South, Salt Lake City, Utah (Address of principal executive office)	84119 (Zip Code)

Registrant's telephone number, including area code: (801) 972-5555

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on which Registered
Common Stock, Par Value $0.001	The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
Yes [ ] No[X]

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.
Yes [ ] No[X]

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes [X] No[ ]

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

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

Large accelerated filer [ ]	Accelerated filer [X]
Non-accelerated filer [ ] (Do not check if a smaller reporting company)	Smaller reporting company [X]

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act.) Yes [ ] No[X]

The aggregate market value of the common stock held by non-affiliates of the registrant as of February 29, 2008 was approximately $60,252,000.

As of November 10, 2008, the registrant had 21,819,342 shares of its common stock, par value $.001, outstanding.

Documents Incorporated by Reference: Portions of the definitive Proxy Statement to be delivered to shareholders in connection with the 2009 Annual Meeting of Shareholders, which is expected to be held February 4, 2009, are incorporated by reference into Part III hereof.

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FORM 10-K

For the Year Ended August 31, 2008

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PART I

ITEM 1. BUSINESS

Overview

BSD Medical Corporation develops, manufactures, markets and services medical systems that deliver precision-focused radio frequency (RF) or microwave energy into diseased sites of the body, heating them to specified temperatures as required by a variety of medical therapies. Our business objectives are to commercialize our products developed for the treatment of cancer and to further expand our developments to treat other diseases and medical conditions. Our product line for cancer therapy has been created to offer hospitals and clinics a complete solution for thermal treatment of cancer as provided through microwave/RF systems. We consider our operations to comprise one business segment.

While our primary developments to date have been cancer treatment systems, we also pioneered the use of microwave thermal therapy for the treatment of symptoms associated with enlarged prostate, and we are responsible for much of the technology that has successfully created a substantial new medical industry addressing the needs of men's health. In accordance with our strategic plan, we subsequently sold our interest in TherMatrx, Inc., the company established to commercialize our technology to treat enlarged prostate symptoms, to provide substantial funding that we can utilize for commercializing our systems used in the treatment of cancer and in achieving other business objectives.

In spite of the advances in cancer treatment technology, nearly 40% of cancer patients continue to die from the disease in the United States. Commercialization of our systems used to treat cancer is our most immediate business objective. Our BSD-2000 and BSD-500 cancer treatment systems are used to treat cancer with heat while boosting the effectiveness of radiation through a number of biological mechanisms. Our MicroThermX-100 Microwave Ablation System is used to ablate soft tissue with heat alone. Current and targeted cancer treatment sites for our systems include cancers of the prostate, breast, head, neck, bladder, cervix, colon/rectum, esophagus, liver, brain, bone, stomach and lung. Our cancer treatment systems have been used to treat thousands of patients throughout the world, and have received much notoriety, including the Frost & Sullivan "Technology Innovation of the Year Award" for cancer therapy devices awarded for the development of the BSD-2000.

Our BSD-2000 systems are used to non-invasively treat cancers located deeper in the body, and are designed to be companions to the estimated 7,500 linear accelerators used to treat cancer through radiation and in combination with chemotherapy treatments. Our BSD-500 systems treat cancers on or near the body surface and those that can be approached through body orifices such as the throat, the rectum, etc., or through interstitial treatment in combination with interstitial radiation (brachytherapy). BSD-500 systems can be used as companions to our BSD-2000 systems and the estimated 2,500 brachytherapy systems installed.

Based on our management team's knowledge of the market, we believe that the fully saturated potential market for these developed cancer therapy systems is in excess of $5 billion. We also project an after-market opportunity based on service agreements that equates to approximately 15% of the purchase price of our systems per year. We believe that the replacement cycle for our systems, based on advances in software, hardware and other components, will average 5-7 years. Our financial model in the higher production environment of established commercial sales is to achieve a 60% gross margin on systems and an 80% gross margin on service agreements and disposable applicators used with our MicroThermX-100 system.

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We have received United States Food and Drug Administration, or FDA, approval to market our commercial version of the BSD-500, and in March 2006, we completed a submission for FDA approval to sell the BSD-2000 in the United States. In August 2007, we successfully concluded a pre-approval and quality system inspection by the FDA. In December 2007, we received a letter from the FDA denying our application for pre-market approval of the BSD 2000 and providing guidance regarding amendments needed to make the BSD-2000 submission approvable. We have subsequently met with the FDA to clarify its requirements and are currently seeking to satisfy these requirements. In April 2008, we submitted a 510(k) premarket notification to the FDA for the MicroThermX-100 system, and in September 2008 we received FDA clearance to market the MicroThermX-100 thermal ablation system in the United States. We have designed our cancer therapy systems such that together they are capable of providing treatment for most solid tumors located virtually anywhere in the body.

Although we have not entered these markets, we also believe that our technology has application for a number of other medical purposes in addition to cancer.

On April 22, 2008 we changed the listing of our stock from the American Stock Exchange (AMEX) to the NASDAQ Stock Market (NASDAQ), and our stock now trades under the NASDAQ symbol “BSDM.”

The Sale of TherMatrx

One of our important contributions to the advancement of medical therapy has been our pioneering work in developing a new treatment for conditions associated with enlargement of the prostate that afflicts most men as they age. As the prostate enlarges it constricts urine flow. The condition is known medically as benign prostatic hyperplasia or BPH. We developed a technology that allows men to be treated for BPH through an outpatient procedure as an alternative to surgery or a lengthy regimen of medication.

We determined early in our planning that we would treat our development of BPH therapy as a spin-off business with the intent of providing funding for our primary business objectives. As a result, we introduced the opportunity to investment groups and subsequently on October 31, 1997 entered into an agreement with investors Oracle Strategic Partners, L. P. and Charles Manker. Together we established a new company, TherMatrx, Inc. TherMatrx received capital from these investors to conduct clinical trials, and after obtaining FDA approval in July 2001, the funding to commercialize the development. We were compensated for providing manufacturing, regulatory and engineering support to assure the success of the new company.

On July 15, 2004, TherMatrx, Inc. was sold to American Medical Systems Holdings, Inc. (AMS). Our part of the total proceeds from this sale was approximately 25%. A portion of the payout from the sale was based on contingency payments. By the close of fiscal 2006, we had concluded the receipt of contingency payments from the TherMatrx sale; the payout to us, including contingency payments, being approximately $33.5 million. In April 2007, the Company received an additional $202,223 in proceeds from the sale of TherMatrx.

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Our Contributions to Cancer Therapy

Despite the massive attention given to cancer prevention and treatment, the American Cancer Society estimates that 1,437,180 new cancer cases will be diagnosed and that 565,650 Americans will die from cancer during 2008. In the United States the chance of developing cancer during a person's lifetime is one in two for men and one in three for women. Cancer develops when abnormal cells in a part of the body begin to grow out of control and spread to other parts of the body.

Our cancer treatment systems have been developed to both kill cancer directly with heat and to increase the effectiveness of the primary cancer treatment used with it. The primary cancer therapies currently used include:

- Radiation therapy, which is treatment with high-energy rays to kill or shrink cancer cells. The radiation may come from outside of the body (external radiation) or from radioactive materials placed directly in a tumor (internal or implant radiation, sometimes called brachytherapy).

- Chemotherapy, which is treatment with drugs to destroy cancer cells.

- Surgery, which is the resection, or removal, of a tumor or organ of the body.

Some cancers, such as certain cancers of the liver, prostate, bone metastases and even lung cancer, can be killed using heat alone. For these treatments we have developed the MicroThermX-100 thermal ablation system that is used to ablate soft tissues at high temperatures as a stand-alone therapy.

The treatment of many cancers is generally prescribed with one or more of the primary cancer therapies noted above. Because cancer remains a leading cause of death, these three cancer therapies are still grossly inadequate, and an enormous need for better treatment is obvious. We have engineered systems designed to increase the effectiveness of these cancer treatments through the use of precision-focused RF/microwave energy to selectively heat cancer, creating "hyperthermia" in cancerous tumors. Hyperthermia is an emerging cancer therapy that both kills cancer cells directly and has been shown to be a potent additive treatment in making certain of the major existing cancer therapies more effective for some cancers.

Hyperthermia therapy has been shown to substantially improve the results from cancer treatments for a variety of tumors. Completed randomized clinical trials in which the effectiveness of radiation therapy combined with hyperthermia therapy was compared with the results of radiation therapy alone in cancer treatment produced the following results: For melanoma, after two years, local control (local regression or disappearance of the tumor) was 28% for the control group of patients who received radiation therapy alone versus 46% local control for the patients who received both hyperthermia and radiation therapy. For recurrent breast cancer, the complete response rate (complete disappearance of the tumor) increased from 38% for those receiving radiation therapy alone to 60% for those patients who received both hyperthermia and radiation therapy. For glioblastoma (brain cancer), the two-year survival rate for patients who received radiation therapy alone was 15%, compared to 31% survival rate two years after treatment for those who received both hyperthermia and radiation therapy. For advanced cervical cancer, the complete response rate (disappearance of the tumor) rose from 57% for patients who received radiation treatments alone to 83% for patients receiving both hyperthermia and radiation therapy. The cervical cancer data was based on the condition of patients three years after treatment.

Cancerous tumors are uncontrolled growths of mutated cells that require more energy to survive than do cells of normal tissue. As cancer cells grow rapidly, they tend to outstrip their blood supply, leaving them oxygen-starved, since there is not enough blood to carry sufficient oxygen to these cells. Oxygen-starved cancer cells are resistant to radiation therapy because the destructive power of radiation therapy depends heavily on tearing apart the oxygen molecules located in cancer cells. When oxygen molecules are torn apart, they form oxygen radicals that can attack

cancer cell DNA. Blood depletion also makes cancer resistant to chemotherapy, where blood transport is required to deliver the drug into the tumor. Our hyperthermia therapy systems precisely deliver microwave energy to elevate the temperature of tumors, usually between 40°C and 45°C (104°F to 113°F). The elevated temperatures draw blood to the tumor as the body's natural response to the stimulus of heat. The increased blood supply to the tumor improves delivery of drugs to tumors in chemotherapy. It also delivers more oxygen to the tumor, increasing the effectiveness of radiation therapy.

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While sensitizing tumors for more effective treatment from radiation and/or chemotherapy, hyperthermia also destroys cancer cells directly through damage to the plasma membrane, the cytoskeleton and the cell nucleus, and by disrupting the stability of cellular proteins. Tumors with poor blood supply systems lack the natural cooling capacity provided by efficient blood flow in normal tissues, making them selectively susceptible to the cancer-destructive effects of hyperthermia therapy.

Hyperthermia has other therapeutic uses. It can be used to shrink tumors prior to surgery, potentially making resection easier or even possible. Research has shown hyperthermia to be an activator for gene therapies by speeding gene production (heat mediated gene therapy). Hyperthermia may play a role in the development of new anti-tumor vaccines that are based on the production of heat shock proteins. Research has shown hyperthermia to be an angiogenesis inhibitor, which means it helps prevent cancer from inducing growth of new blood vessels to expand its blood supply. Hyperthermia could also become a follow-up therapy for other angiogenesis inhibitors, used in the final destruction of cancer cells depleted of blood by angiogenesis inhibitor therapy. Hyperthermia has been shown to improve a patient's quality of life. Even in situations where there is no hope for survival, hyperthermia may provide benefits through alleviation of such effects of cancer as bleeding, pain and infection.

Since the founding of the Company, we have been heavily involved in developing technological advances to expand the use of hyperthermia therapy for the treatment of cancer. Our efforts have included joint work with many notable cancer research centers in the United States and Europe. In past years, funding for our research efforts has been provided by such sources as the National Institutes of Health in the United States and major European government agencies. In recent years, we have focused our efforts in perfecting the technology required to precisely deliver deep, non-invasive hyperthermia therapy for the treatment of pelvic and other deep cancers and to demonstrate effective use of deep hyperthermia through clinical trials. We believe that our BSD-2000 system has emerged from this development effort as the world's most advanced system for hyperthermia therapy.

We have developed various technologies for heating cancerous tumors, depending on their location in the body. Through our developments, cancers such as melanomas or recurrent breast cancer located near the surface of the body can be treated with superficial cancer treatment applicators and systems. Cancers that can be accessed through natural body orifices, or that are accessible through catheters inserted into the tumor as part of invasive radiation techniques (such as used to treat prostate cancer or head and neck cancer) can be treated with tiny, inserted antennae that we have developed to deliver focused microwave energy into the cancerous tissue. We have also developed systems to non-invasively treat cancers located deep in the body by focusing electromagnetic energy on the cancer through a cylindrical applicator that surrounds the body. This cylindrical applicator contains an array of multiple antennae that focus radio frequency energy, and therefore heat, on the tumor. Temperature levels for treatments are monitored through small temperature sensors, and some of our systems can be interfaced with magnetic resonance imaging, or MRI, so that the treatment in progress can be observed, and temperatures can be monitored through images colorized to depict gradation of temperature levels (thermography).

Our BSD-500 is used to treat cancers located near the surface of the body, or areas that can be accessed using inserted antennae. The BSD-500 comes in several versions, depending on the customer requirements. The BSD-2000 is used to non-invasively treat deep cancers. This system also comes in several versions, including models with three dimensional, or 3D, steering of electromagnetic energy, as well as the ability to be integrated with MRI.

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The BSD-500 has received FDA approval. In addition, the system has gone through an extensive revision, and has obtained two major FDA supplements to this approval that have been necessary to allow its commercial introduction.

The BSD-2000 does not currently have FDA approval except as an investigational device; however, the phase III clinical trial that we have used to apply for the FDA approval has been concluded and published in a major journal. Formal submission for FDA approval of the BSD-2000 was made in March 2006. We sought and obtained regulatory approval for the sale of the BSD-2000 in the People's Republic of China during 2005.

The MicroThermX-100 thermal ablation system received FDA marketing clearance in September 2008.

Most of our sales of cancer therapy systems over recent past periods have been to cancer research institutions for use in conducting clinical trials with our equipment. As a company, we are now in the early stages of marketing the new commercial version of the BSD-500 and the MicroThermX-100. Obtaining FDA approval for the BSD-2000 would greatly contribute to our sales efforts by providing the additional technology required for the treatment of solid tumors located virtually anywhere in the body.

Our Products and Services

We have developed the technology and products required to approach thermal ablation and hyperthermia cancer therapy through multiple techniques, which collectively allow cancer to be treated virtually anywhere in the body:

- Thermal ablation ablates soft tissues at high temperatures through focused microwave energy.

- Superficial hyperthermia non-invasively treats cancerous tumors located within a few centimeters of the surface of the body, such as melanoma and recurrent breast cancer.

- Internal or interstitial hyperthermia treats tumors in combination with internal radiation therapy by inserting tiny microwave antennae that deliver hyperthermic microwave energy to tumors through the same catheters used to deliver radioactive materials, or "seeds," to tumors for radiation therapy. This technique can be employed in treating prostate cancer, breast cancer, head and neck cancer and a variety of other cancer sites.

- Deep hyperthermia non-invasively treats tumors located deep within the body, including many problematic cancer sites located in the pelvis, abdomen and chest areas.

MicroThermX-100. Our MicroThermX-100 Microwave Ablation System has been developed to ablate soft tissue percutaneously, laparoscopically or surgically. The MicroThermX-100 utilizes precision-guided microwave energy to ablate soft tissue. The MicroThermX-100 includes a computer driven control system, temperature sensors and a disposable applicator. The advanced features and capabilities of the MicroThermX-100 were made possible by our years of research, design and development in the discipline of thermal medicine technology, supported by leading research centers throughout the world (see reference to these in the section for the BSD-2000). Disposable applicators for the MicroThermX-100 are especially designed according to the method by which they will be used in treatment, whether by surgeons or interventional radiologists.

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BSD-500 Systems. Our BSD-500 systems are used to deliver either superficial or interstitial hyperthermia therapy or both. There are four configurations of the BSD-500. The BSD-500i-4 and BSD-500i-8 provide interstitial hyperthermia treatment using four or eight channel generators, respectively. Each channel can control three interstitial applicators. The BSD-500c-4 and BSD-500c-8 provide both superficial and interstitial hyperthermia treatments using four or eight channel generators. These systems include a touch screen display monitor by which the operator controls the hyperthermia treatment, computer equipment and software that controls the delivery of microwave energy to the tumor, and a generator that creates the needed microwave energy for the treatment. Additionally, the systems include a variety of applicators, depending on each system configuration. Non-invasive superficial applicators are used for superficial hyperthermia treatments. For interstitial hyperthermia treatments, the system may include up to 24 tiny microwave heat-delivering antennae that are inserted into catheters used in the standard practice for internal radiation therapy (called brachytherapy).

We have received FDA approval through FDA supplements for implementation of a new operating system and other commercial upgrades, allowing us to commercially introduce this new family of four systems. Our primary FDA approval (described as a pre-market approval, or PMA, the standard FDA approval required to market Class III medical devices in the United States) for the BSD-500 family of systems is applicable to the marketing of all four configurations of the BSD-500 in the United States. We have also certified the BSD-500 systems for the CE Mark, which is required for export into some European countries.

BSD-2000. The BSD-2000 family of products includes the BSD-2000, the BSD-2000/3D and the BSD-2000/3D/MR. These systems non-invasively deliver hyperthermic microwave energy to cancerous tumors, including those located deep within the body. These systems include a computer and software that control the delivery of microwave energy to the tumor, a microwave energy amplifier that boosts the microwave power, and a special applicator that delivers the microwave energy to the patient lying in a prone position on a specially designed support table. The BSD-2000 systems are able to direct, focus and deliver microwave energy deep within the body by precisely “steering” the energy to the tumor from a cylindrical array of antennae. The basic BSD-2000 has eight microwave antennae enabling this electronic steering of energy within the patient’s body. The BSD-2000/3D has 24 microwave antennae enabling additional electronic steering along the long axis of the body. The 3D steering is particularly useful when implemented with a magnetic resonance system that is capable of non-invasive 3D imaging showing the heated regions, thus permitting the 3D steering to more accurately target the energy to the tumor site.

The BSD-2000 systems have not yet received pre-market approval from the FDA for commercial marketing in the United States, but the BSD-2000 has obtained an investigational device exemption, or IDE, for sale in the United States for research purposes only. We have also certified the BSD-2000 family for the CE Mark required for export into certain European countries and have obtained regulatory approval for the sale of the BSD-2000 in the People’s Republic of China. We are engaged in the extensive process of supporting the review of an FDA submission requesting a PMA for the BSD-2000 based on clinical data we have already obtained. While we believe that this data has great merit and is worthy of submission, due to the inherent uncertainties of the FDA approval process there can be no assurance that FDA approval will be obtained through our submissions.

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Development of the BSD-2000, the BSD-2000/3D and the BSD-2000/3D/MR has required substantial effort involving the cooperative work of such American research institutions as Duke University, Northwestern University, University of Southern California, Stanford University, University of Utah and University of Washington St. Louis. Contributing European research institutions include Daniel den Hoed Cancer Center of the Academisch Ziekenhuis (Rotterdam, Netherlands), Haukeland University Hospital (Bergen, Norway), Dusseldorf University Medical School, Tübingen University Medical School, Essen University Hospital, Charité Medical School of Humboldt University (Berlin), Luebeck University Medical School, Munich University Medical School Grosshadern, Interne Klinik Argirov of the Munich Comprehensive Cancer Center, University of Erlangen (all of Germany), University of Verona Medical Center (Italy), Graz University Medical School (Austria) and Kantonsspital Aarau (Switzerland).

BSD-2000/3D. Through research funded by the National Cancer Institute in the United States and supportive efforts by other domestic and international research institutions, we enhanced the BSD-2000 to create the new BSD-2000/3D. The BSD-2000/3D adds three-dimensional steering of deep focused energy, as opposed to the two-dimensional steering of energy available in the BSD-2000, delivering even more precise heating of the tumor. As part of our international collaborative research efforts, sophisticated treatment planning software for the BSD-2000/3D has also been developed.

We have not yet submitted to the FDA a pre-market approval application for the BSD-2000/3D. However, we have obtained the CE Mark necessary to export the BSD-2000/3D to certain European countries and other countries requiring CE Mark certification.

BSD-2000/3D/MR. As a further enhancement of the BSD-2000/3D, we have added to it the option of concurrent magnetic resonance imaging, or MRI, used for monitoring the delivery of deep hyperthermia therapy. Using sophisticated microwave filtering and imaging software, the BSD-2000/3D/MR allows an MRI system to be interfaced with and operate simultaneously with a BSD-2000/3D. The development of MRI treatment monitoring is a significant breakthrough in the development of hyperthermic oncology primarily because it allows non-invasive “on-line” review of hyperthermic treatment progress.

We installed and tested the first BSD-2000/3D/MR system at a leading German oncological research institution, the Clinic of Medical Oncology of the Klinikum Großhadern Medical School of Ludwigs-Maximilians-Universität München, in Munich, Germany. We have since installed BSD-2000/3D/MR systems at multiple other locations.

As is the case for the BSD-2000/3D, we have not yet submitted to the FDA a pre-market approval application for the BSD-2000/3D/MR. We can, however, market the BSD-2000/3D/MR in Europe as we have CE Mark approval for the BSD-2000/3D provided we interface the system with an MRI system that also is approved in Europe.

Sales, Marketing and Distribution

Our target market includes clinics, hospitals and institutes in which cancer is treated, whether in the Unites States or international markets.

In September 2004, we entered into an agreement with Dalian Orientech Co. LTD to assist us in obtaining regulatory approval for the sale of the BSD-2000 in the People’s Republic of China, and thereafter to act as our distributor for the sale of the BSD-2000 in that country. We subsequently obtained Chinese regulatory approval during 2005, allowing the distributor to begin to market in that country, opening the way for BSD-2000 systems to be sold and installed in hospitals in China.

In August 2006, we engaged Richter7 as a public relations agency. Richter7 has broad experience in the medical and healthcare industry. They have worked with companies such as Medtronic, Ultradent, Myriad Genetics, Siemens, Stryker/Howmedica and others to build awareness and recognition of new products in the marketplace.

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Anticipating an expanding need for present and future sales and marketing, especially with the potential FDA approval for the BSD-2000 and the MicroThermX-100, we hired Brian Ferrand, a seasoned Vice President of Sales, in September 2005, and maintain a sales, marketing and marketing support organization of ten people. The primary mission of this group is to provide sales and pre-market preparation for our systems.

Medizin Technik is our exclusive distributor of hyperthermia systems in Germany, Austria and Switzerland and to certain medical institutions in Belgium and the Netherlands. Medizin Technik is required to use best efforts to sell our product within its territory. Due to the limited number of systems that are sold through this relationship, we do not have pre-negotiated price terms with Medizin Technik. If Medizin Technik identifies a potential customer, it will negotiate the price of a hyperthermia system with us, purchase the system, and resell the system to the customer on terms it negotiates with the customer. Our distributorship agreement with Medizin Technik runs from year-to-year and may be terminated by either party by providing written notice to the other party before December 31 and automatically terminates upon the occurrence of certain events, including the retirement or death of Dr. Sennewald. Dr. Sennewald is a director and significant shareholder of BSD and of Medizin Technik.

Our sales and marketing strategy involves three main components:

- promoting acceptance by the scientific community and cancer-treating healthcare professionals of hyperthermia therapy;

- disseminating information about and marketing our hyperthermia therapy systems to the scientific community, cancer-treating healthcare professionals, cancer patients and the general public; and

- working to continuously improve third-party reimbursement for medical services performed with our products.

We disseminate information about our company and our hyperthermia therapy systems by encouraging articles about hyperthermia therapy to be published in scientific journals, periodicals and other publications, and promoting dissemination of BSD information through television, radio and other media outlets. We post information about our products on our web site, www.BSDMedical.com, and our materials are also posted on many other sites. Information posted on our website is not deemed to be part of this Annual Report. We have developed promotional materials for our products, including product brochures, patient brochures and newsletters. We also participate actively in trade shows and scientific symposia, make public presentations delivered by our scientific staff and by scientists and researchers using our systems, and we actively participate in a variety of medical associations. We are co-sponsors of the annual international BSD Users' Conference in Europe and are sponsors of the Society of Thermal Medicine and the American Society of Therapeutic Radiation and Oncology (ASTRO) in the United States.

Third-Party Reimbursement

We view obtaining adequate third-party reimbursement arrangements as essential to achieving commercial acceptance of our hyperthermia therapy products. Our products are purchased primarily by clinics, hospitals and other medical institutions that bill various third-party payors, such as Medicare, Medicaid, other government programs and private insurance plans, for the health care services provided to their patients using our products. Additionally, managed care organizations and insurance companies directly pay for services provided to their patients. The Center for Medicare and Medicaid Services, or CMS, has established 23 billing codes that allow for third-party reimbursement and can be used for or in combination with the delivery of hyperthermia therapy, depending on the circumstances of the treatment. Appropriate codes apply to billing for superficial and interstitial hyperthermia delivered using our BSD-500 systems when used in combination with radiation therapy. Codes also have been established for providing deep hyperthermia therapy. Billing codes are available for both institutions and physicians.

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In November 1995, HCFA, the predecessor agency to CMS, authorized Medicare reimbursement for all investigational therapies and devices for which underlying questions of safety and effectiveness of that device type have been resolved, based on categorization by the FDA. Our BSD-2000 system, which has been given IDE status by the FDA, has been placed in this category by the FDA, and thus may be reimbursed by Medicare.

Medical reimbursement rates are unpredictable, and we cannot project the extent to which our business may be affected by future legislative and regulatory developments. There can be no assurance that future health care legislation or regulation will not have a material adverse effect on BSD's business, financial condition and results of operations, or that reimbursement, existing or in the future, will be adequate for all customers.

Competition

Competition in the medical products industry is intense. We believe that established product lines and cancer therapies, FDA approvals, know-how and reputation in the industry are key competitive factors. Currently, only a few companies besides BSD have received FDA approval to manufacture and sell hyperthermia therapy systems within the United States, including U.S. Labthermics and Celsion Corporation. Celsion has been principally involved with clinical trials related to thermotherapy, hyperthermia and related fields, however Celsion has announced the transformation of its company from a medical device company to a biopharmaceutical, solely focused on the development of drugs for the treatment of cancer. Labthermics produces ultrasound-based systems, which compete with our microwave hyperthermia systems, however Labthermics is not currently active in the sale of products in our industry. Several other companies have received IDEs in the United States or other international clearance for certain experimental hyperthermia systems designed to treat both malignant and benign diseases. Additionally, other companies, particularly established companies that currently manufacture and sell other cancer therapy systems, could potentially become competitors (in that they are also engaged in cancer treatment businesses), and they have significantly greater resources than we do.

Competitors in the thermal ablation market include RadioTherapeutics, a division of Boston Scientific Corporation, Covidian, Ltd., Angiodynamics, Inc. and Microsulis Medical Ltd.

Product Service

We generally provide a 12-month warranty and record a liability for the warranty following installation on all cancer treatment systems and a 90-day limited warranty on individual components. We install and service the hyperthermia systems we sell to domestic customers. In addition, we or our consultants provide technical and clinical training to our customers. Subsequent to the applicable warranty period, we offer our domestic customers full or limited service contracts.

Generally, our distributors install and service systems sold to foreign customers and are responsible for managing their own warranty programs for their customers, including labor and travel expenses. We provide warranties for the replacement and/or repair of parts for 12 months for systems sold internationally through distributors and for 90 days for individual components. Spare parts are generally purchased by the distributors and stored at the distributors' maintenance facilities to allow prompt repair. Distributor service personnel are usually trained at customer sites and at our facilities in Salt Lake City, Utah.

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Production

We manufacture and test our systems and products at our facilities in Salt Lake City, Utah. Our manufacturing facility is ISO 13485:2003 certified and follows FDA quality systems regulations. Some equipment components we purchase from suppliers are customized to our specifications. Key factors in our manufacturing process are assembly and testing. We purchase component parts and other materials from a variety of suppliers. We do not depend on a single supplier for any item, and believe we can acquire materials and parts from multiple sources on a timely basis.

Product Liability Exposure

The manufacturing and marketing of medical devices involves an inherent risk of product liability. Because our products are intended to be used in hospitals on patients who may be physiologically unstable and severely ill, we are exposed to potential product liability claims. We presently carry product liability insurance with coverage limits of $3 million. However, we cannot assure that our product liability insurance will provide adequate coverage against potential claims that might be made against us. No product liability claims are presently pending against us; however, we cannot assume that product liability claims will not be filed in the future or that such claims will not exceed our coverage limits.

Government Regulation

The medical devices that we have developed and are developing are subject to extensive and rigorous regulation by numerous governmental authorities, principally by the United States Food and Drug Administration, or FDA, and comparable foreign agencies. Pursuant to the Federal Food, Drug and Cosmetic Act, as amended, the FDA regulates and must approve the clinical testing, manufacture, labeling, distribution, and promotion of medical devices in the United States.

Although our MicroThermX-100 system has received FDA marketing clearance as a 510(k) submission, most of our hyperthermia treatment systems, including the BSD-500 and the BSD-2000 and related products, have required or require pre-market approval from the FDA instead of the simpler 510(k) approval. Pre-market approval requires that we demonstrate that the medical device is safe and effective. To do this, we conduct either laboratory and/or clinical testing. The FDA will grant approval of the product if it determines there is reasonable assurance that the medical device is safe and effective. FDA approval must be obtained before commercial distribution of the product. We intend to continue to make improvements in and to our existing products. Significant product changes must be submitted to the FDA under investigational device exemptions, or IDEs, or under pre-market approval supplements. As described in the section entitled “Our Products and Services” above, we have obtained a PMA for our BSD-500 systems and IDE status for our BSD-2000 system. A PMA submission was made to the FDA for the BSD-2000 in March 2006.

Foreign countries, in which our products are or may be sold, have regulatory requirements that can vary widely from country to country. Sales into the European Union, or EU, require compliance with the Medical Devices Directive, or MDD, and require us to obtain the necessary certifications to have a CE Mark affixed to our products. We have obtained necessary ISO certification of our quality, development, and manufacturing processes, and we have successfully completed the CE Mark testing and Annex II audit. This allows us to certify our own products and to affix the CE Mark label on them. However, we must maintain compliance with all current and future directives and requirements to maintain ISO certification and to continue to affix the CE Mark, and there can be no assurance that we will continue to maintain compliance with regulatory requirements imposed on us.

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After we receive FDA approval to distribute a medical device, we continue to have ongoing responsibilities under the Federal Food, Drug, and Cosmetic Act and FDA regulations. The FDA reviews design and manufacturing practices, labeling, record-keeping, and required reporting of adverse experiences. All medical devices must be manufactured in accordance with regulations specified in the FDA Quality System regulations, or QSR, and in compliance with the ISO and other applicable standards. In complying with these regulations, we must continue to expend time, money and effort in the areas of design control, production, and quality control to ensure full compliance. The FDA's mandatory Medical Device Reporting regulation requires us to provide information to the FDA on death or serious injuries alleged to have been associated with the use of our products, as well as information on product malfunctions that would likely cause or contribute to a death or serious injury if the malfunctions were to recur. In Europe, the MDD vigilance system regulations require that we, through a representative in Europe, provide information to authorities on death or serious injuries alleged to have been associated with the use of our products, as well as information on product malfunctions that would likely cause or contribute to a death or serious injury if the malfunctions were to recur. If the FDA were to assert that we are not in compliance with applicable laws or regulations, or that any of our medical devices are ineffective or pose an unreasonable risk to patient health, the FDA could seize our medical devices, ban such medical devices, or order a recall, repair, replacement or refund of such devices, and require us to notify health care professionals and others that the devices present unreasonable risk of substantial harm to the public. The FDA may also impose operating restrictions, restrain certain violations of law, and assess civil or criminal penalties against us. The FDA can also recommend prosecution to the Department of Justice. Certain regulations are subject to administrative interpretation and we cannot assure that future interpretations made by the FDA or other regulatory bodies, with possible retroactive effect, will not adversely affect us.

International sales of medical devices are subject to FDA export requirements. We have obtained export approvals for all countries into which we have delivered products. This includes countries in Western Europe and much of Eastern Europe and many Asian countries.

International sales are subject to the regulatory and safety requirements of the country into which the sale occurs. There can be no assurance that all of the necessary approvals will be granted on a timely basis or at all. Delays in receipt of or failure to receive such approvals would have a material adverse effect on our financial condition and results of operations.

In addition to FDA regulations, certain U.S. health care laws apply when a claim for reimbursement for one of our medical devices is submitted to Medicare, Medicaid, or other federal health care programs. For instance, federal law prohibits the filing of false or improper claims for federal payments. In addition, federal law prohibits the payment of anything of value for the purpose of inducing referrals of business reimbursable under a federal health care program. Other federal laws prohibit physicians from making referrals for certain services and items payable under certain federal programs if the physician has a financial relationship with the entity providing the service or item.

All of these laws are subject to evolving interpretations. If the federal government were to conclude that we are not in compliance with any of these health care laws, we could be subject to substantial criminal and civil penalties, and could be excluded from participation as a supplier to beneficiaries in federal health care programs.

The Federal Communications Commission, or FCC, regulates the frequencies of microwave and radio frequency emissions from medical and other types of equipment to prevent interference with commercial and governmental communications networks. The BSD-500 fixed frequency systems and applicators emit 915 MHz, which is approved by the FCC for medical applications. Accordingly, these systems do not require shielding to prevent interference with communications. Our BSD-2000 deep hyperthermia variable-frequency generators and applicators require electromagnetic shielding.

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Patents, Licenses, and Other Rights

Because of the substantial length of time and expense associated with bringing new products through development and regulatory approval to the marketplace, the medical device industry places considerable importance on obtaining patent and trade secret protection for new technologies, products and processes. Our policy is to file patent applications to protect significant technology, inventions and product improvements. We currently own two patents in the United States and six patents outside the United States related to certain components or technology of our hyperthermia systems. In addition, five initial patents were assigned to TherMatrx, for which we obtained a license, four subsequent patents were obtained and assigned to BSD and we obtained one patent license from the National Institutes of Health and one from Duke University. Seven new U.S. patent applications are pending. We believe that our patents represent the early pioneering and dominant patents in this field.

In July 1979, we entered into an exclusive worldwide license for a unique temperature probe called the Bowman Probe. The license will remain in effect as long as the technology does not become publicly known as a result of actions taken by the licensor. We pay royalties based upon our sales of the Bowman Probe. The license agreement was amended and renewed in August 2000 and is currently in effect.

We also acquired on December 13, 2001 a patent license from the National Institutes of Health (NIH) for the U.S. Patent 5,284,114. This patent is for the integration of magnetic resonance with hyperthermia systems, including our BSD-2000/3D/MR system, and is based on a patent obtained by NIH in early research of the concept. The license agreement requires an annual payment of $1,000, plus $4,000 per licensed product sold in the U.S., and $1,000 per licensed product manufactured in the U.S. and sold outside the U.S. There is also to be a single payment of $10,000 upon PMA or 510(k) FDA approval.

On July 31, 2007, BSD obtained an exclusive sub-license to a patent owned by Duke University using phased array technology for the treatment of primary breast cancer on terms that included hyperthermia equipment upgrades and payment of some prior patent costs. This technology and patent is expected to enhance future developments with the current BSD phased array hyperthermia systems.

On July 1, 2001, we acquired the rights to all FDA approvals and the rights to manufacture all cancer products formerly owned by Clini-Therm Corp. These products are related to the hyperthermia therapy delivered by our BSD-500 systems, the exclusive patent obtained from UCSF, and our enhancements to such systems involve incorporating some of the Clini-Therm rights we acquired into such systems. This involved only a one-time cash payment with no continuing costs.

We cannot assure that the patents presently issued to us will be of significant value to us in the future or will be held valid upon judicial review. Successful litigation against these patents by a competitor would have a material adverse effect upon our business, financial condition and results of operations. We believe that we possess significant proprietary know-how in our hardware and software capabilities. However, we cannot assure that others will not develop, acquire or patent technologies similar to ours or that such secrecy will not be breached.

Research and Development

Research and development expenses for fiscal years 2008 and 2007 were $1,737,924 and $1,875,147. Research and development expenses in fiscal 2008 related to the following:

- updating of our commercial version of the BSD-2000 with complete modernization of the computer system, applicators and patient supports and development of commercial configuration of BSD-2000 3D/MR
- completion and delivery of the Sigma 40/MR Phased Array for the BSD-2000/3D/MR
- completion and delivery of the Sigma 30/MR Phased Array for the BSD-2000/3D/MR
- completion and delivery of the 8 Spiral Array for the BSD-500
- completion and delivery of the 24 Spiral Array for the BSD-500
- completion and delivery of the 3 Spiral Array for the BSD-500
- completion and delivery of the 5 Spiral Array for the BSD-500
- addition of the Sigma Ellipse phased array applicator to the standard system configuration of the BSD-2000
- completion of new design of the BSD-2000 patient support system for commercialization
- enhancements to the BSD-500 and 2000 systems including language translations to German and Chinese
- incorporating new development regulations in design process
- completion of the MicroThermX-100 microwave ablation system
- designing a new primary breast phased array applicator
- working with General Electric in design of new BSD-2000/3D/MR at Duke University
- development of new microwave ablation disposable applicators and technical research to evaluate the various treatment sites and diseases suitable for the application of the MicroThermX-100
- R&D projects not publically disclosed

Technological changes play an important part in the advancement of our industry. We intend to continue to devote substantial sums to research and development. Research and development efforts inherently involve costs, risks and uncertainties that could aversely affect our projections, outlook and operating results.

Seasonality

Our operations are generally not subject to seasonal fluctuations.

Company History

BSD was originally incorporated under the laws of the State of Utah on March 17, 1978. In July 1986, BSD was reincorporated in Delaware.

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Segment Information and Sales Concentrations

We consider our operations to comprise one business segment. All of our operating assets are located in the United States.

A significant portion of our revenues are derived from sales to Medizin-Technik GmbH located in Munich, Germany, which is a significant distributor of our products in Europe and which is owned by Dr. Gerhard W. Sennewald, one of our directors and a significant stockholder. For fiscal year 2008 we had sales of $2,809,132, or 55% of our total sales, from the sale of systems and various component parts sold to Medizin-Technik, as compared to sales of $1,385,332, or 49% of our total sales, in fiscal 2007. Management believes the terms of the transactions with Medizin-Technik were arms length and fair to the Company.

A significant portion of our revenues are derived from sales to foreign customers. During the years ended August 31, 2008, 2007 and 2006, total export sales totaled $2,812,796, $1,787,363 and $2,413,807, or 55%, 63% and 83% of total sales, respectively. During fiscal years 2008 and 2007, export sales to Switzerland were approximately 53% and 44% of total sales, respectively. During fiscal year 2006, export sales to China, Switzerland and Poland were approximately 45%, 21% and 10% of total sales, respectively.

Backlog

As of August 31, 2008, the Company had a sales backlog of $1,045,020, including an order from a related party of $442,500.

Employees

As of August 31, 2008, we had 47 employees; 41 of whom were full-time employees. None of our employees are covered by a collective bargaining agreement. We consider our relations with our employees to be satisfactory. We depend upon a limited number of key management, manufacturing, and technical personnel. Our future success will depend in part on our ability to retain these highly qualified employees.

Available Information

We file annual, quarterly and current reports, and other reports and documents with the Securities and Exchange Commission (the "SEC"). The public may read and copy any materials we file with the SEC at the SEC's Public Reference Room, 100 F Street, N.E., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The address of that website is http://www.sec.gov.

The Company's Internet address is http://www.bsdmc.com. We make available on or through our investor link on our website, free of charge, our Annual Reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to those reports as soon as reasonably practicable after this material is electronically filed or furnished to the SEC. We also make available, on our website, the charter of the Audit Committee of our Board of Directors and our Code of Ethics. Information contained on our website is not deemed to be a part of this Annual Report.

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ITEM 1A. RISK FACTORS

Our future operating results are highly uncertain. Before deciding to invest in BSD Medical or to maintain or increase your investment, you should carefully consider the risks described below, in addition to the other information contained in this annual report on Form 10-K. If any of these risks actually occur, our business, financial condition or results of operations could be seriously harmed. In that event, the market price for our common stock could decline and you may lose all or part of your investment. Although the Company has attempted to list the factors of which it is currently aware that may have an impact on its operations, there may be other factors of which the Company is currently unaware or to which it does not assign sufficient significance, and the following list should not be considered comprehensive.

We have a history of significant operating losses and such losses may continue in the future.

Since our inception in 1978, our expenses have substantially exceeded our revenue, resulting in continuing losses and an accumulated deficit of $5,289,252 at August 31, 2008. In fiscal 2006, we recorded net income of $9,249,496 which eliminated the accumulated deficit and resulted in positive retained earnings of $498,042 as of August 31, 2006. In fiscal years 2008 and 2007, however, we recorded net losses of $2,439,099 and $3,348,195, respectively, which increased our accumulated deficit to $5,289,252.

Our net profit for the fiscal year ended August 31, 2006 was primarily due to the sale of our ownership in TherMatrx, to American Medical Systems Holdings, Inc., or AMS. All revenues from this sale have now been received with no significant future revenues expected. We may continue to incur operating losses in the future as we continue to incur costs to develop our products, protect our intellectual property and expand our sales and marketing activities. To become profitable we will need to increase significantly the revenues we receive from sales of our hyperthermia therapy products to sustain and increase our profitability on a quarterly or annual basis. We have been unable to do this in the past and we may be unable to do so in the future, and therefore may never achieve profitability.

Due to recent turmoil in global capital markets, we are currently exposed to fluctuations in the market value of our investments, and impairment of our investments could harm our results of operations and decrease funds available for our operations.

We believe that our current cash and cash equivalents, investments, income tax refunds receivable, and expected cash provided from operating activities will be sufficient to fund our operations for the next twelve months. If the global credit market continues to deteriorate, our investment portfolio may be negatively impacted, and we could determine some of our investments have experienced other-than-temporary declines in fair value, which could adversely impact our financial results and decrease the amount of the investments available to fund our operations. If we cannot replace this source of cash with cost cutting or cash provided by our operations, we would need to obtain additional financing. Due to recent turmoil in global financial markets, we cannot be certain that any financing will be available when needed or will be available on terms acceptable to us.

Our hyperthermia therapy products may not achieve market acceptance which could limit our future revenue and ability to achieve profitability.

To date, hyperthermia therapy has not gained wide acceptance by cancer-treating physicians. We believe this is due in part to the lingering impression created by the inability of early hyperthermia therapy technologies to focus and control heat directed at specific tissue locations and conclusions drawn in early scientific studies that hyperthermia was only marginally effective. Additionally, market acceptance depends upon physicians and hospitals obtaining adequate reimbursement rates from third-party payors to make our products commercially viable, and we believe that reimbursement rates have not been adequate to stimulate strong interest in adopting hyperthermia as a new cancer

therapy. If our sales and marketing efforts to promote hyperthermia therapy acceptance in the medical community fail, or our efforts to improve third-party reimbursement rates for hyperthermia therapy are not successful, then our future revenue from sales of our products may be limited, and we may never be able to obtain profitable recurring operations.

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Sales of our product could be significantly reduced if government, private health insurers and other third-party payors do not provide sufficient coverage or reimbursement.

Our success in selling our products will depend in large part on the extent to which reimbursement for the costs of our products and related treatments are available from government health agencies, private health insurers and other third-party payers. Despite the existence of general reimbursement policies, local medical review policies may differ for public and private insurance payers, which may cause payment to be refused for some hyperthermia treatments. Private payers also may refuse to pay for hyperthermia treatments.

Medical reimbursement rates are unpredictable and we cannot predict the extent to which our business may be affected by future legislative and regulatory developments. Future health care legislation or regulation may limit our business or impose additional delays and costs on our business and third-party reimbursement may not be adequate to cover our costs associated with producing and selling our products.

Cancer therapy is subject to rapid technological change and therapies that are more effective than ours could render our technology obsolete.

The treatment of cancer is currently subject to extensive research and development. Many cancer therapies are being researched and our products may be rendered obsolete by existing therapies and as a result of therapy innovations by others. If our products are rendered obsolete, our revenue will decline, we may never achieve profitability, and we may not be able to continue in business.

Some of the medical institutions to which we have sold in the past have not been able to pay for their equipment, and some of our sales have therefore become substantial bad debts, a risk that could continue into the future.

A limited number of our customers have been developing clinics, and these customers have been particularly vulnerable to financial difficulties that can cause them to be unable to pay for equipment that they have purchased. If we choose to accept higher risk sales opportunities to clinics in the future, we will be subject to these customer credit risks that could lower future net sales due to bad-debt write offs, resulting in losses in future periods and potentially lowering the value of our stock. While we attempt to provide for foreseeable doubtful accounts, we cannot assure that this provision will always be adequate to cover our credit risks.

Increasing sales of our hyperthermia systems depends on our ability to successfully expand our sales distribution channels; we have had failures with the productivity of new channels of distribution in the past. Expanding our channels of distribution will also significantly increase our sales expenses, which could negatively impact our financial performance.

We believe that the success of our efforts to increase sales of our hyperthermia systems in the future depends on our ability to successfully expand our sales distribution channels. Historically, we have sometimes failed in establishing successful new sales channels.

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We anticipate that the success of our multi-year plan for selling hyperthermia systems will require expanding our sales and marketing organization through a combination of direct sales people, distributors and internal and external marketing expertise. However, as we pursue our marketing plan, there can be no assurance that we will be successful in securing reliable channels of distribution to meet our plan through expanded sales. Recruiting and training new distribution channels can take time and considerable expense. We project that sales and marketing expenses will increase substantially in the future as compared to past years. This added expense could have an adverse effect on our future financial performance that is greater than any potential increases in sales.

In addition, there can be no assurance that our channels of distribution that have been successful in the past will be successful in the future. We have derived a significant portion of our revenue from sales in Europe and in China. Sales in Europe were made through our distributor Medizin-Technik, GmbH, which also purchases equipment components and parts from us. Medizin-Technik is controlled by Dr. Sennewald, one of our directors. The loss or ineffectiveness of either Medizin-Technik or our Chinese distributor as a distributor and significant customer could result in lower revenue.

We are subject to government regulations that can delay our ability to sell our products and cause us to incur substantial expenses.

Our research and development efforts, pre-clinical tests and clinical trials, and the manufacturing, marketing, distribution and labeling of our products are subject to extensive regulation by the FDA and comparable international agencies. The process of obtaining FDA and other required regulatory approvals is lengthy and expensive and our financial resources are limited.

We have not yet received pre-market approval for our BSD-2000 or its related products. Obtaining this pre-market approval from the FDA is necessary for us to commercially market this system in the United States. Obtaining approvals is a lengthy and expensive process. We may not be able to obtain these approvals on a timely basis, if at all, and such failure could harm our business prospects substantially. Further, even if we are able to obtain the approvals we seek from the FDA, the approvals granted might include significant limitations on the indicated uses for which the products may be marketed, which restrictions could negatively impact our business.

After a product is approved for commercial distribution by the FDA, we have ongoing responsibilities under the Federal Food, Drug, and Cosmetic Act and FDA regulations, including regulation of our manufacturing facilities and processes, labeling and record-keeping, and reporting of adverse experiences and other information. Failure to comply with these ongoing requirements could result in the FDA imposing operating restrictions on us, enjoining or restraining certain violations, or imposing civil or criminal penalties on us.

All of these laws are subject to evolving interpretations. If the federal government were to conclude that we are not in compliance with any of these health care laws, we could be subject to substantial criminal and civil penalties, and could be excluded from participation as a supplier to beneficiaries in federal health care programs.

We depend on adequate protection of our patent and other intellectual property rights to stay competitive.

We rely on patents, trade secrets, trademarks, copyrights, know-how, license agreements and contractual provisions to establish and protect our intellectual property rights. Our success will substantially depend on our ability to protect our intellectual property rights and maintain rights granted to us through license agreements. Our intellectual property rights may only afford us limited protection and may not adequately protect our rights or remedies to gain or keep any advantages we may have over our competitors, which could reduce our ability to be competitive and generate sales and profitability.

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In the past, we have participated in substantial litigation regarding our patent and other intellectual property rights in the medical device industry. We have previously filed lawsuits for patent infringement against three of our competitors and subsequently settled all three of those lawsuits. Additional litigation against other parties may be necessary in the future to enforce our intellectual property rights, to protect our patents and trade secrets, and to determine the validity and scope of our proprietary rights. This litigation may require more financial resources than are available to us. We cannot guarantee that we will be able to successfully protect our rights in litigation. Failure to successfully protect our rights in litigation could reduce our ability to be competitive and generate sales and profitability.

A product liability settlement could exceed our ability to pay.

The manufacturing and marketing of medical devices involves an inherent risk of product liability. Because our products are intended to be used in hospitals on patients who may be physiologically unstable and severely ill, we are exposed to potential product liability claims. We presently carry product liability insurance with coverage limits of $3 million. Our product liability insurance does not cover intended injury, injury or damage resulting from the intoxication of any person, payment of workers' compensation benefits, injury of our own employee, injury or damage due to war, damage to property that we own, damage to our work, loss of use of property, patent infringements, pollution claims, interest payments, depreciation of property, or injury or damage resulting from asbestos inhalation. We are responsible to pay the first $10,000 resulting from any claim up to a maximum of $50,000 in one year. We cannot assure that our product liability insurance will provide adequate coverage against potential claims that might be made against us. If we were to be subject to a claim in excess of our coverage or to a claim not covered by our insurance and the claim succeeded, we would be required to pay the claim from our limited resources, which would reduce our limited capital resources and liquidity and reduce capital we could otherwise use to obtain approvals for and market our products. In addition, liability or alleged liability could harm our business by diverting the attention and resources of our management and by damaging our reputation.

We are dependent upon key personnel, some of whom would be difficult to replace.

Our success will be largely dependent upon the efforts of Paul F. Turner, our Chairman of the Board, Senior Vice President, and Chief Technology Officer, Hyrum A. Mead, our President, and Dixie T. Sells, our Vice President of Regulatory Affairs, and other key employees. We do not maintain key-person insurance on any of these employees. Our future success also will depend in large part upon our ability to identify, attract and retain other highly qualified managerial, technical and sales and marketing personnel. Competition for these individuals is intense. The loss of the services of any of our key personnel, the inability to identify, attract or retain qualified personnel in the future or delays in hiring qualified personnel could make it more difficult for us to manage our business and meet key objectives such as the sale of our products and the introduction of new products.

The market for our stock is limited and our stock price may be volatile.

The market for our common stock has been limited due to low trading volume and the small number of brokerage firms acting as market makers. Because of the limitations of our market and volatility of the market price of our stock, investors may face difficulties in selling shares at attractive prices when they want to. The average daily trading volume for our stock has varied significantly from week to week and from month to month, and the trading volume often varies widely from day to day. The following factors could impact the market for our stock and cause further volatility in our stock price:

- announcements of new technological innovations;
- FDA and other regulatory developments;
- changes in third-party reimbursements;
- developments concerning proprietary rights;
- third parties receiving FDA approval for competing products; and
- market conditions generally for medical and technology stocks.

Our directors and executive officers own a sufficient number of shares of our capital stock to control our company, which could discourage or prevent a takeover, even if an acquisition would be beneficial to our stockholders.

Our directors and executive officers own approximately 43% of our outstanding voting power. Accordingly, these stockholders, individually and as a group, may be able to influence the outcome of stockholder votes involving the election of directors, the adoption or amendment of provisions in our certificate of incorporation and bylaws and the approval of certain mergers or other similar transactions, such as a sale of substantially all of our assets. Such control by existing stockholders could have the effect of delaying, deferring or preventing a change in control of our company.

Anti-takeover provisions in our certificate of incorporation may have a possible negative effect on our stock price.

Certain provisions of our certificate of incorporation and bylaws may make it more difficult for a third party to acquire, or discourage a third party from attempting to acquire, control of us. We have in place several anti-takeover measures that could discourage or prevent a takeover, even if an acquisition would be beneficial to our stockholders. The increased difficulties faced by a third party who wishes to acquire us could adversely affect our stock price.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our office, production and research facilities are located in Salt Lake City, Utah. The complete headquarters and production facility occupies approximately 20,000 square feet. When our lease on this building expired in November of 2007, we exercised our option to purchase the building for a purchase price of $1,200,000. The building is currently in good condition, is adequate for our needs, is suitable for all company functions and provides room for future expansion. We believe that we carry adequate insurance on the property.

ITEM 3. LEGAL PROCEEDINGS

There are no material legal proceedings, to our knowledge, pending against or being taken by BSD Medical Corporation.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

None.

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PART II

ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

On July 9, 2005, the American Stock Exchange (AMEX) approved the listing for BSD Medical Corporation and the shares began trading on that day under the symbol “BSM”. On April 22, 2008, the shares began trading on the Nasdaq Stock Market under the symbol “BSDM”. The following table sets forth the high and low sales prices, as provided by AMEX and NASDAQ for the quarters in fiscal year 2007 and 2008. The amounts reflect inter-dealer prices, without retail mark-up, markdown or commission, and may not represent actual transactions.

Quarter Ended:	High	Low
November 30, 2006	$5.90	$4.45
February 28, 2007	9.25	5.00
May 31, 2007	9.00	5.75
August 31, 2007	8.72	4.60
November 30, 2007	7.11	4.89
February 29, 2008	6.35	4.30
May 31, 2008	7.50	4.57
August 31, 2008	8.20	5.00

As of August 31, 2008, there were approximately 491 holders of record of our common stock. We have not paid any cash dividends on our common stock since our inception, and we currently plan to retain our future earnings, if any, to fund the growth of our business.

On November 7, 2008, the last reported sales price of our common stock on the Nasdaq Stock Market was $ 4.92 per share.

Repurchases of Equity Securities

None.

Recent Sales of Unregistered Securities

Following is a summary of sales of unregistered securities for the fiscal year ended August 31, 2008. The Company issued 4,616 shares of its common stock on September 1, 2007 and 5,898 shares of its common stock on March 4, 2008 to members of the Board of Directors pursuant to the Company’s Amended and Restated 1998 Directors Stock Plan. All securities were issued as restricted common shares pursuant to Section 4(2) of the Securities Act of 1933, as amended, and/or the rules promulgated pursuant to Section 4(2). These shares are generally subject to Rule 144 of the Securities and Exchange Commission. Generally, Rule 144 requires shareholders to hold the shares for a minimum of six months before sale. In addition, officers, directors and more than 10% shareholders are further restricted in their ability to sell such shares. There have been no underwriters of these securities and no commissions or underwriting discounts have been paid.

	Consideration or Nature of Service Performed	Shares Issued	Value Received
Members of Board of Directors	Board Services	10,514	$ 61,195

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Performance Graph

The following graph shows a comparison of the five-year cumulative total return for the Company's common stock, the S&P 500 Index, and the S&P Health Care Equipment Index, assuming an investment of $100 on August 31, 2003. The cumulative return of the Company was computed by dividing the difference between the price of the Company's common stock at the end and the beginning of the measurement period (August 31, 2003 to August 31, 2008) by the price of the Company's common stock at the beginning of the measurement period.

ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data as of and for each of the fiscal years in the five year period ended August 31, 2008 were derived from the Company's financial statements audited by Tanner LC, independent registered public accountants. The data set forth below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Item 7 of this Form 10-K and the financial statements and notes thereto included in Item 8 of this Form 10-K. See also the discussion in "The Sale of TherMatrx" included in Item 1, "Business", of this Form 10-K.

	Years Ended August 31,				
	2008	2007	2006	2005	2004
Results of Operations Data:					
Revenues	$ 5,143,140	$ 2,834,386	$ 2,898,402	$ 2,021,104	$ 1,630,648
Loss from operations	(4,252,344)	(6,384,540)	(5,099,151)	(2,293,696)	(1,290,618)
Net income (loss)	(2,439,099)	(3,348,195)	9,249,496	3,321,692	8,412,961
Income (loss) per common share - diluted	$ (0.11)	$ (0.16)	$ 0.42	$ 0.15	$ 0.41
Dividends per common share	$ -	$ -	$ -	$ -	$ -
Balance Sheet Data:					
Total Assets	$ 21,486,898	$ 24,341,640	$ 28,309,868	$ 15,599,943	$ 11,741,047
Long-term debt	-	-	-	-	-
Stockholders' equity	20,155,860	23,183,788	25,624,001	14,977,667	11,119,778

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ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Overview

This Management's Discussion and Analysis of Financial Condition and Results of Operations and other parts of this annual report on Form 10-K contain forward-looking statements that involve risks and uncertainties. Forward-looking statements can also be identified by words such as "anticipates," "expects," "believes," "plans," "predicts," and similar terms. Forward-looking statements are not guarantees of future performance and our actual results may differ significantly from the results discussed in the forward-looking statements. Factors that might cause such differences include, but are not limited to, those discussed in the subsection entitled "Forward-Looking Statements" below and the Item 1A "Risk Factors" above. The following discussion should be read in conjunction with our financial statements and notes thereto included in this annual report on Form 10-K. All information presented herein is based on our fiscal year ended August 31, 2008. We assume no obligation to revise or update any forward-looking statements for any reason, except as required by law.

BSD Medical Corporation develops, manufactures, markets and services medical systems that deliver precision-focused radio frequency (RF) or microwave energy into diseased sites of the body, heating them to specified temperatures as required by a variety of medical therapies. Our business objectives are to commercialize our products developed for the treatment of cancer and to further expand our developments to treat other diseases and medical conditions. Our product line for cancer therapy has been created to offer hospitals and clinics a complete solution for thermal treatment for cancer as provided through microwave/RF systems.

On July 15, 2004, TherMatrx, Inc. was sold to American Medical Systems Holdings, Inc. (AMS). Our part of the total proceeds from this sale was approximately 25%. A portion of the payout from the sale was based on contingency payments. By the close of fiscal year 2006, the Company had received a total payout, including contingency payments, of approximately $33.5 million. In April 2007, the Company received an additional $202,223 in proceeds from the sale of TherMatrx.

Our accumulated deficit since inception increased to $5,289,252 as of August 31, 2008 due to net losses for fiscal years 2008 and 2007, as compared to net income for fiscal 2006 of $9,249,496. The primary reason for the net income in fiscal 2006 was the income generated from the sale of our ownership in TherMatrx.

We recognize revenue from the sale of cancer treatment systems, the sale of parts and accessories related to the cancer treatment systems, providing manufacturing services, training, and service support contracts. Product sales were $4,631,713, $2,520,818 and $2,706,214 for the years ended August 31, 2008, 2007 and 2006, respectively. Service and other revenues were $511,427, $313,568 and $192,188 for the years ended August 31, 2008, 2007 and 2006, respectively.

We derived $2,809,132, or approximately 55%, of our total revenue in fiscal 2008 from sales to related parties, as compared to $1,385,332, or 49% from sales to related parties in fiscal 2007. All of the related party revenue was for the sale of the BSD-2000 and BSD-500 systems and related component parts and services sold to Medizin-Technik GmbH. Dr. Gerhard Sennewald, one of our directors, is a stockholder, executive officer and a director of Medizin-Technik GmbH.

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In fiscal 2008, we derived $2,334,008, or approximately 45%, of our total revenue as compared to $1,449,054, or 51%, in fiscal 2007 from non-related party sales. Our fiscal 2008 non-related party revenue consisted of sales of our BSD-500 systems and other products of $2,218,700, consumable devices of $16,247, service contracts of $56,968, and consulting and other revenue of $42,093. Our fiscal 2007 non-related party revenue consisted of sales of our BSD-500 systems of $1,347,887, consumable devices of $22,970, service contracts of $41,338, billable labor of $550 and consulting and other revenue of $36,309.

Cost of sales for the years ended August 31, 2008 and 2007 included raw material and labor costs. Research and development expenses include expenditures for new product development and development of enhancements to existing products.

As of August 31, 2008, the Company had a sales backlog of $1,045,020, including an order from a related party of $442,500.

Critical Accounting Policies

The following is a discussion of our critical accounting policies and estimates that management believes are material to an understanding of our results of operations and which involve the exercise of judgment or estimates by management.

Revenue Recognition. Revenue from the sale of cancer treatment systems is recognized when a purchase order has been received, the system has been shipped, the selling price is fixed or determinable, and collection is reasonably assured. Most system sales are F.O.B. shipping point; therefore, shipment is deemed to have occurred when the product is delivered to the transportation carrier. Most system sales do not include installation. If installation is included as part of the contract, revenue is not recognized until installation has occurred, or until any remaining installation obligation is deemed to be perfunctory. Some sales of cancer treatment systems may include training as part of the sale. In such cases, the portion of the revenue related to the training, calculated based on the amount charged for training on a stand-alone basis, is deferred and recognized when the training has been provided. The sales of our cancer treatment systems do not require specific customer acceptance provisions and do not include the right of return, except in cases where the product does not function as warranted by us. We provide a reserve allowance for estimated returns. To date, returns have not been significant.

Revenue from manufacturing services is recorded when an agreement with the customer exists for such services, the services have been provided, and collection is reasonably assured. Revenue from training services is recorded when an agreement with the customer exists for such training, the training services have been provided, and collection is reasonably assured. Revenue from service support contracts is recognized on a straight-line basis over the term of the contract.

Our revenue recognition policy is the same for sales to both related parties and non-related parties. We provide the same products and services under the same terms to non-related parties as to related parties. Sales to distributors are recognized in the same manner as sales to end-user customers. Deferred revenue and customer deposits payable include amounts from service contracts as well as cash received for the sales of products, which have not been shipped.

Inventory Reserves. We periodically review our inventory levels and usage, paying particular attention to slower-moving items. If projected sales do not materialize or if our hyperthermia systems do not receive increased market acceptance, we may be required to increase the reserve for inventory impairment in future periods.

Product Warranty. We provide product warranties on our BSD-500 and BSD-2000 systems. These warranties vary from contract to contract, but generally consist of parts and labor warranties for one year from the date of

installation. To date, expenses resulting from such warranties have not been material. We record a warranty expense at the time of each sale. This reserve is estimated based on prior history of service expense associated with similar units sold in the past.

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Allowance for Doubtful Accounts. We maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to make required payments. This allowance is a significant estimate and is regularly evaluated by us for adequacy by taking into consideration factors such as past experience, credit quality of the customer base, age of the receivable balances, both individually and in the aggregate, and current economic conditions that may affect a customer's ability to pay. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required.

Stock-based Compensation – We account for stock-based compensation in accordance with SFAS No. 123(R), which requires us to measure the compensation cost of stock options and other stock-based awards to employees and directors at fair value at the grant date and recognize compensation expense over the requisite service period for awards expected to vest. The grant date fair value of stock options is computed using the Black-Scholes valuation model, which model utilizes inputs that are subject to change over time, including the volatility of the market price of our common stock, risk free interest rates, requisite service periods and assumptions made by us regarding the assumed life and vesting of stock options and stock-based awards. As new options or stock-based awards are granted, additional non-cash compensation expense will be recorded by us.

Income Taxes – We account for income taxes using the asset and liability method. Under the asset and liability method, deferred tax assets and liabilities are recognized for the future consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

We maintain valuation allowances where it is more likely than not that all or a portion of a deferred tax asset will not be realized. Changes in valuation allowances are included in our income tax provision in the period of change. In determining whether a valuation allowance is warranted, we evaluate factors such as prior earnings history, expected future earnings and our ability to carry-back reversing items within two years to offset income taxes previously paid.

To the extent that we have the ability to carry-back current period taxable losses within two years to offset income taxes previously paid, we record an income tax receivable and a current income tax benefit.

Results of Operations: Comparison of Fiscal Years ended August 31, 2008 and 2007

Revenues – Total revenues for fiscal 2008 were $5,143,140 compared to $2,834,386 for fiscal 2007, an increase of $2,308,754, or 81%. Our revenues can fluctuate significantly from period to period because our sales, to date, have been based upon a relatively small number of systems, the sales price of each being substantial enough to greatly impact revenue levels in the periods in which they occur. Sales of a few systems can cause a large change in our revenues from period to period.

Related Party Sales – We earned $2,809,132, or approximately 55%, of our revenues in the year ended August 31, 2008 from sales to related parties as compared to $1,385,332 or approximately 49%, in the year ended August 31, 2007. These sales for the years ended August 31, 2008 and 2007 were to Medizin-Technik and increased in fiscal year 2008 due to an increased number of systems sold. The sales consisted of product sales of $2,623,013, probes of $38,550 and other revenues of $147,569 in fiscal year 2008, and product sales of $1,172,930, probes of $47,902 and other revenues of $164,500 in fiscal year 2007. Sales to Medizin-Technik may fluctuate significantly from period to period because our sales, to date, have been based upon a relatively small number of systems, the sales price of each being substantial enough to greatly impact revenue levels in the periods in which they occur. Sales of a few systems can cause a large change in our revenue from period to period.

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Non-Related Party Sales – In the year ended August 31, 2008, we earned $2,334,008, or 45%, of our revenues from sales to unrelated parties, as compared to $1,449,054, or 51%, for the year ended August 31, 2007, with the increase due primarily to more systems sold in the current fiscal year. These sales for the year ended August 31, 2008 consisted of product sales of $2,218,700, service contracts of $56,968, probes of $16,247 and consulting and other revenue of $42,093. By comparison, these sales for the year ended August 31, 2007 consisted of product sales of $1,347,887, service contracts of $41,338, probes of $3,300 and consulting and other revenue of $56,529.

Cost of Sales – Cost of sales for fiscal 2008 was $2,084,249 compared to $1,581,562 for fiscal 2007, an increase of $502,687, or 32%. This increase resulted primarily from more product sales in fiscal 2008. Cost of sales as a percentage of sales will fluctuate from period to period depending on the mix of sales for the period. Cost of sales to related parties in fiscal 2008 increased to $1,128,029 from $815,522 in fiscal 2007 primarily due to the increase in related party product sales. During fiscal 2008 and 2007, all of the related party cost of sales were attributable to sales to Medizin-Technik.

Gross Profit – Gross profit for the year ended August 31, 2008 was $3,058,891 or 59% of total sales, as compared to $1,252,824 or 44% of total sales for the year ended August 31, 2007. The increase in gross profit in fiscal year 2008 primarily resulted from the increase in product sales, for which our gross profit is higher than our other sources of revenue. In addition, as sales volume increases, we believe we will more fully absorb our fixed overhead costs, thus increasing our gross profit percentage. The gross margin percentage will fluctuate from period to period depending on the mix of revenues reported for the period.

Research and Development Expenses – Research and development expenses were $1,737,924 for the year ended August 31, 2008, as compared to $1,875,147, for the year ended August 31, 2007, a decrease of $137,223, or approximately 7%. See the discussion under “Research and Development” in Item 1, “Business” of this Annual Report.

Selling General and Administrative Expenses – Selling, general and administrative expenses remained fairly constant, decreasing to $5,573,311 in the year ended August 31, 2008, from $5,762,217 for the year ended August 31, 2007, a decrease of $188,906, or approximately 3%. We anticipate that our selling, general and administrative expenses will continue at this level, at least in the short term.

Interest and Investment Income – Interest and investment income decreased to $1,046,313 for the year ended August 31, 2008, as compared to $1,133,125 for the year ended August 31, 2007, due to lower average levels of cash and investments and lower rates of return realized in the current fiscal year.

Gain on Sale of Equity Interest – Other income for fiscal 2007 included $202,223 of additional proceeds received from the sale of our equity interest in TherMatrx. During fiscal 2008, we did not receive any proceeds from the sale of this equity interest.

Net Income (Loss) – During the year ended August 31, 2008 we had a net loss of $2,439,099, after recording a tax benefit of $961,000, as compared to a net loss of $3,348,195, after recording a tax benefit of $1,865,000, in the year ended August 31, 2007. The decrease in the net loss in the current fiscal year is due primarily to the increase in total revenues as discussed above.

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Results of Operations: Comparison of Fiscal Years ended August 31, 2007 and 2006

Revenues – Total revenues for fiscal 2007 were $2,834,386 compared to $2,898,402 for fiscal 2006, a decrease of $64,016, or 2%. Our revenues can fluctuate significantly from period to period because our sales, to date, have been based upon a relatively small number of systems, the sales price of each being substantial enough to greatly impact revenue levels in the periods in which they occur. Sales of a few systems can cause a large change in our revenues from period to period.

Related Party Sales – We earned $1,385,332, or approximately 49%, of our revenues in the year ended August 31, 2007 from sales to related parties as compared to $689,086 or approximately 24%, in the year ended August 31, 2006. These sales for the year ended August 31, 2007 were to Medizin-Technik and consisted of product sales of $1,172,930, probes of $47,902 and other revenues of $164,500. All of the related party revenues in the year ended August 31, 2006 was from sales of systems and component parts. Sales to Medizin-Technik may fluctuate significantly from period to period because our sales, to date, have been based upon a relatively small number of systems, the sales price of each being substantial enough to greatly impact revenue levels in the periods in which they occur. Sales of a few systems can cause a large change in our revenue from period to period.

Non-Related Party Sales – In the year ended August 31, 2007, we earned $1,449,054, or 51%, of our revenues from sales to unrelated parties, as compared to $2,209,316, or 76%, for the year ended August 31, 2006. These sales for the year ended August 31, 2007 consisted of product sales of $1,347,887, service contracts of $41,338, probes of $3,300 and consulting and other revenue of $56,529. By comparison, these sales for the year ended August 31, 2006 consisted of product sales of $1,902,175, sales of consumable devices of $126,896, service contracts of $18,245, and consulting and other revenue of $162,000.

Cost of Sales – Cost of sales for fiscal 2007 was $1,581,562 compared to $1,716,640 for fiscal 2006, a decrease of $135,078 or 8%. This decrease resulted primarily from lower sales in fiscal 2007. Cost of sales as a percentage of sales will fluctuate from period to period depending on the mix of sales for the period. Cost of sales to related parties in fiscal 2007 increased to $815,522 from $317,214 in fiscal 2006 primarily due to the increase in related party sales. During fiscal 2007 and 2006, all of the related party cost of sales were attributable to sales to Medizin-Technik.

Gross Profit – Gross profit for the year ended August 31, 2007 was $1,252,824 or 44% of total sales, as compared to $1,181,762 or 41% of total sales for the year ended August 31, 2006. As sales volume increases, we believe we will more fully absorb our fixed overhead costs, thus increasing our gross profit percentage. The gross margin percentage will also fluctuate from period to period depending on the mix of revenues reported for the period.

Research and Development Expenses – Research and development expenses were $1,875,147 for the year ended August 31, 2007, as compared to $1,251,956, for the year ended August 31, 2006, an increase of $623,191, or approximately 50%. Research and development expenses in the year ended August 31, 2007 increased due to expanded activities related to the following:

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- Update of our commercial version of the BSD-2000 with complete modernization of the computer system, including addition of the Sigma Ellipse phased array applicator.

- Support for field implementation of a complete new design of the BSD-2000 patient support system, enhancements to the BSD 500 and 2000 systems including language translations of the operating manuals to German and Chinese and development of various spiral array applicator systems to compliment the BSD-500.

- PMA filing for the BSD-2000 system, and development of the first model of the MicroThermX-100 microwave ablation system.

- Development of new microwave ablation disposable applicators.

- Technical research to evaluate the various treatment sites and diseases suitable for the application of the MicroThermX-100.

Selling General and Administrative Expenses – Selling, general and administrative expenses increased to $5,762,217 in the year ended August 31, 2007, from $5,028,957 for the year ended August 31, 2006, an increase of $733,260 or approximately 15%. This increase was primarily due to a non-cash stock-based compensation expense of $832,224 related to issuance of stock options.

Interest and Investment Income – Interest and investment income decreased to $1,133,125 for the year ended August 31, 2007, as compared to $1,301,341 for the year ended August 31, 2006, due to lower average levels of cash and investments in the year ended August 31, 2007.

Gain on Sale of Equity Interest – Other income for fiscal 2007 included $202,223 of additional proceeds received from the sale of our equity interest in TherMatrx. During fiscal 2006, we recognized a gain on sale of our equity interest in TherMatrx of $18,016,272.

Net Income (Loss) – During the year ended August 31, 2007 we had a net loss of $3,348,195, after recording a tax benefit of $1,865,000, as compared to an after tax net income of $9,249,496 in the year ended August 31, 2006. The net income in the previous fiscal year was attributed primarily to the gain on sale of our investment in TherMatrx.

Fluctuation in Operating Results.

Our results of operations have fluctuated in the past and may fluctuate in the future from year to year as well as from quarter to quarter. Revenue may fluctuate as a result of factors relating to the demand for thermotherapy systems and component parts supplied by us to TherMatrx, market acceptance of our BSD hyperthermia systems, changes in the medical capital equipment market, changes in order mix and product order configurations, competition, regulatory developments and other matters. Operating expenses may fluctuate as a result of the timing of sales and marketing activities, research and development and clinical trial expenses, and general and administrative expenses associated with our potential growth. For these and other reasons described elsewhere, our results of operations for a particular period may not be indicative of operating results for any other period.

Liquidity and Capital Resources

Since inception through August 31, 2008, we have generated an accumulated deficit of $5,289,252. We have historically financed our operations through cash from operations, research grants, licensing of technological assets, issuance of common stock and sale of investments in spinoff operations. As of August 31, 2008, we had cash, cash equivalents and investments totaling $15,881,844 as compared to cash, cash equivalents and investments totaling

$19,506,658 as of August 31, 2007. The recorded value of our investments at August 31, 2008 has been reduced by an unrealized loss of $2,141,416.

During the year ended August 31, 2008, we used cash of $902,576 in operating activities, primarily as a result of our net loss of $2,439,099, decrease in income tax receivable of $521,717, decrease in inventories of $84,914, decrease in deferred tax assets of $244,000 and increase in customer deposits of $213,039, partially offset by an increase in receivables of $485,755. By comparison, net cash used in operating activities was $5,120,462 during the year ended August 31, 2007, which included an increase in income tax receivable of $1,752,492 and a reduction of income taxes payable of $1,500,000.

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Net cash provided by investing activities for the year ended August 31, 2008 was $1,722,206, resulting from the net sale of investments of $3,034,270, partially offset by the purchase of property and equipment of $1,291,098, which was primarily comprised of the acquisition of our office facility, and the purchase of a patent for $20,966. For the year ended August 31, 2007, net cash provided by investing activities was $3,128,201, resulting from the net sale of investments of $2,992,590, additional proceeds from the sale of investment in TherMatrx of $202,223, partially offset by the purchase of property and equipment of $66,612.

Net cash provided by financing activities consisted of proceeds from the sale of common stock through the exercise of stock options of $158,482 in the year ended August 31, 2008 and $229,707 for the year ended August 31, 2007.

We expect to incur additional expenses related to the commercial introduction of our systems, due to additional participation at trade shows, expenditures on publicity, additional travel, increased sales salaries and commissions and other related expenses. In addition, we anticipate that we will incur increased expenses related to seeking governmental and regulatory approvals for our products and continued expenses related to corporate governance and compliance with the Sarbanes-Oxley Act of 2002, during fiscal 2009.

We believe we can cover any cash requirements with cost cutting or available cash. If we cannot cover any such cash shortfall with cost cutting or available cash, we would need to obtain additional financing. Due to recent turmoil in global financial markets, we cannot be certain that any financing will be available when needed or will be available on terms acceptable to us. If we raise equity capital our stockholders will be diluted. Insufficient funds may require us to delay, scale back or eliminate some or all of our programs designed to facilitate the commercial introduction of our systems or entry into new markets.

As of August 31, 2008, we have no significant commitments for the purchase of property and equipment.

We believe that our current cash and cash equivalents, investments, income tax refunds receivable, and expected cash provided from operating activities will be sufficient to fund our operations for the next twelve months. If the global credit market continues to deteriorate, our investment portfolio may be impacted and we could determine some of our investments have experienced other-than-temporary declines in fair value, which could adversely impact our financial results and decrease the amount of the investments available to fund our operations.

The Company has no off balance sheet arrangements as of August 31, 2008.

Recent Accounting Pronouncements

On May 9, 2008, the FASB issued Statement of Financial Accounting Standards (“SFAS”) No. 162, The Hierarchy of Generally Accepted Accounting Principles. This statement is intended to improve financial reporting by identifying a consistent framework, or hierarchy, for selecting accounting principles to be used in preparing financial statements in conformity with U.S. generally accepted accounting principles (GAAP) for nongovernmental entities. The statement establishes that the GAAP hierarchy should be directed to entities because it is the entity (not its auditor) that is responsible for selecting accounting principles for financial statements that are presented in conformity with GAAP. This statement is effective 60 days following the SEC’s approval of the Public Company Accounting Oversight Board Auditing amendments to AU Section 411, The Meaning of Present Fairly in Conformity with Generally Accepted Accounting Principles. We do not believe the implementation of this statement will have a material impact on our financial statements.

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In March 2008, the FASB issued SFAS No. 161, Disclosures about Derivative Instruments and Hedging Activities. This statement changes the disclosure requirements for derivative instruments and hedging activities. Entities are required to provide enhanced disclosures about (a) how and why an entity uses derivative instruments, (b) how derivative instruments and related hedged items are accounted for under SFAS No. 133, Accounting for Derivative Instruments and Hedging Activities, and its related interpretations, and (c) how derivative instruments and related hedged items affect an entity's financial position, financial performance, and cash flows. This statement is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008, or our fiscal year beginning September 1, 2009, with early application encouraged. This statement encourages, but does not require, comparative disclosures for earlier periods at initial adoption. We currently are unable to determine what impact the future application of this pronouncement may have on our financial statements.

In December 2007, the FASB issued SFAS No. 141(R) (revised 2007), Business Combinations. This statement replaces SFAS No. 141, Business Combinations and applies to all transactions or other events in which an entity (the acquirer) obtains control of one or more businesses (the acquiree), including those sometimes referred to as "true mergers" or "mergers of equals" and combinations achieved without the transfer of consideration. This statement establishes principles and requirements for how the acquirer: a) recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, and any noncontrolling interest in the acquiree; b) recognizes and measures the goodwill acquired in the business combination or a gain from a bargain purchase; and c) determines what information to disclose to enable users of the financials statements to evaluate the nature and financial effects of the business combination. This statement will be effective for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2008, or our fiscal year beginning September 1, 2009. Earlier adoption is prohibited. We currently are unable to determine what impact the future application of this pronouncement may have on our financial statements.

In December 2007, the FASB issued SFAS 160, Noncontrolling Interests in Consolidated Financial Statements. This statement applies to all entities that prepare consolidated financial statements, except not-for-profit organizations, and amends Accounting Research Bulletin ("ARB") 51 to establish accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of a subsidiary. It also amends certain of ARB 51's consolidation procedures for consistency with the requirements of SFAS No. 141 (revised 2007). This statement will be effective for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2008, or our fiscal year beginning September 1, 2009. Earlier adoption is prohibited. We currently are unable to determine what impact the future application of this pronouncement may have on our financial statements.

In February 2007, the FASB issued SFAS No. 159, The Fair Value Option for Financial Assets and Financial Liabilities – Including an Amendment of FASB Statement No. 115. This statement permits entities to choose to measure many financial instruments and certain other items at fair value. Most of the provisions of SFAS No. 159 apply only to entities that elect the fair value option. However, the amendment to SFAS No. 115 Accounting for Certain Investments in Debt and Equity Securities applies to all entities with available-for-sale and trading securities. SFAS No. 159 is effective as of the beginning of an entity's first fiscal year that begins after November 15, 2007. We adopted SFAS No. 159 on September 1, 2008, with no material impact on our financial statements.

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In September 2006, the FASB issued SFAS No. 157, Fair Value Measurements. SFAS No. 157 defines fair value, establishes a framework for measuring fair value, and requires enhanced disclosures about fair value measurements. SFAS No. 157 requires companies to disclose the fair value of their financial instruments according to a fair value hierarchy as defined in the standard. Additionally, companies are required to provide enhanced disclosure regarding financial instruments in one of the categories, including a reconciliation of the beginning and ending balances separately for each major category of assets and liabilities. In February 2008, the FASB issued FASB Staff Position (FSP) No. FAS 157-2, which delays by one year the effective date of SFAS No. 157 for certain types of non-financial assets and non-financial liabilities. As a result, SFAS No. 157 will be effective for financial statements issued for fiscal years beginning after November 15, 2007 for financial assets and liabilities carried at fair value on a recurring basis, and for fiscal years beginning after November 15, 2008 for non-recurring non-financial assets and liabilities that are recognized or disclosed at fair value. In October 2008, the FASB issued FSP No. 157-3, Determining the Fair Value of a Financial Asset When the Market for That Asset is Not Active, or FSP 157-3. FSP 157-3 clarifies the application of SFAS 157 in a market that is not active and provides an example to illustrate key considerations in determining the fair value of a financial asset when the market for that financial asset is not active. FSP 157-3 was effective upon issuance, including prior periods for which financial statements have not been issued.

We adopted SFAS No. 157 for financial assets and liabilities carried at fair value on a recurring basis on September 1, 2008, with no material impact on our financial statements. We are currently unable to determine the impact on our financial statements of the application of SFAS No. 157 on September 1, 2009, for non-recurring non-financial assets and liabilities that are recognized or disclosed at fair value.

EITF No. 07-3, Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities, was issued in June 2007. The EITF reached a consensus that nonrefundable payments for goods and services that will be used or rendered for future research and development activities should be deferred and capitalized. Such amounts should be recognized as an expense as the related goods are delivered and the related services are performed. Entities should continue to evaluate whether they expect the goods to be delivered or services to be rendered. If the entity does not expect the goods to be delivered or services to be rendered, the capitalized advance payment should be charged to expense. This pronouncement is effective for financial statements issued for fiscal years beginning after December 15, 2007. We adopted EITF No. 07-3 on September 1, 2008, with no material impact our financial statements.

FORWARD-LOOKING STATEMENTS

With the exception of historical facts, the statements contained in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business” are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, which reflect our current expectations and beliefs regarding our future results of operations, performance and achievements. These statements are subject to risks and uncertainties and are based upon assumptions and beliefs that may or may not materialize. These forward-looking statements include, but are not limited to, statements concerning:

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- our belief about the market opportunities for our products;
- our anticipated financial performance and business plan;
- our expectations regarding the commercialization of the BSD-2000, BSD 500 and MicroThermX-100 systems;
- our expectations to further expand our developments to treat other diseases and medical conditions;
- our expectations that in a higher production environment of established commercial sales we could achieve a 60% gross margin on system sales and an 80% gross margin on service agreements and disposable applicators used with our MicroThermX-100 system;
- our belief concerning the market potential for developed cancer therapy systems;
- our expectations related to the after-market opportunity for service agreements;
- our expectations related to the replacement cycle for our systems;
- our expectations that we will incur increased expenses related to seeking governmental and regulatory approvals for our products;
- our expectations and efforts regarding FDA approvals relating to the BSD-2000 system;
- our belief that our technology has application for additional approaches to treating cancer and for other medical purposes;
- our expectations related to the amount of expenses we will incur for the commercial introduction of the BSD-2000 and MicroThermX-100 systems;
- our expectation that we will incur increased expenses related to our corporate governance and compliance with the Sarbanes-Oxley Act of 2002;
- our expectation that our selling, general and administrative expenses will continue at similar levels at least in the short term;
- our belief that as sales volume increases, we will more fully absorb our fixed overhead costs;
- our belief that we can cover any cash shortfall with cost cutting or available cash; and
- our belief that our current working capital, investments and cash from operations will be sufficient to finance our operations through working capital and capital resources needs for the next twelve months.

We wish to caution readers that the forward-looking statements and our operating results are subject to various risks and uncertainties that could cause our actual results and outcomes to differ materially from those discussed or anticipated, including the factors set forth in Item 1A – “Risk Factors” and our other filings with the Securities and Exchange Commission. We also wish to advise readers not to place any undue reliance on the forward-looking

statements contained in this report, which reflect our beliefs and expectations only as of the date of this report. We assume no obligation to update or revise these forward-looking statements to reflect new events or circumstances or any changes in our beliefs or expectations, other than as required by law.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

A significant portion of the Company's cash equivalents and short-term investments bear variable interest rates that are adjusted to market conditions. Changes in financial market conditions and in market rates will affect interest and investment income earned and potentially the market value of the principal of these instruments. The Company does not utilize derivative instruments to offset the exposure to interest rate changes. Significant changes in interest rates may have a material impact on the Company's results of operations.

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The Company does have significant sales to foreign customers and is therefore subject to the effects of changes in foreign currency exchange rates may have on demand for its products and services. The Company does not utilize derivative instruments to offset the exposure to changes in foreign currency exchange rates. To minimize foreign exchange risk, the Company's export sales are transacted in United States dollars.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The Financial Statements of the Company called for by this item are contained in a separate section of this report. See "Index to Financial Statements" on Page F-1.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURES

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

The Company intends to maintain disclosure controls and procedures designed to provide reasonable assurance that information required to be disclosed in reports filed under the Securities Exchange Act of 1934 (the "Act") is recorded, processed, summarized and reported within the specified time periods and accumulated and communicated to management, including its Chief Executive Officer (Principal Executive Officer) and Chief Financial Officer (Principal Accounting Officer), as appropriate, to allow timely decisions regarding required disclosure.

Management, under the supervision and with the participation of its Chief Executive Officer (Principal Executive Officer) and Chief Financial Officer (Principal Accounting Officer), evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) or 15d-15(e) promulgated under the Act), as of August 31, 2008. Based on that evaluation, management concluded that our disclosure controls and procedures were effective as of August 31, 2008.

Attached as exhibits to this Annual Report on Form 10-K are certifications of the Company's Chief Executive Officer (Principal Executive Officer) and Chief Financial Officer (Principal Accounting Officer), which are required in accordance with Rule 13a-14 of the Act. This Disclosure Controls and Procedures section includes information concerning management's evaluation of disclosure controls and procedures referred to in those certifications and, as such, should be read in conjunction with the certifications of the Company's Chief Executive Officer (Principal Executive Officer) and Chief Financial Officer (Principal Accounting Officer).

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Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting of the Company. Management's intent is to design this system to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States of America.

The Company's internal control over financial reporting includes those policies and procedures that:

1. pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;

2. provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and

3. provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

A material weakness is a significant deficiency, or combination of significant deficiencies, in internal controls over financial reporting such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. Management performed an assessment of the effectiveness of the Company's internal control over financial reporting as of August 31, 2008, utilizing the criteria described in the "Internal Control — Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). The objective of this assessment was to determine whether the Company's internal control over financial reporting was effective as of such date. In its assessment of the effectiveness of internal control over financial reporting as of August 31, 2008, management concluded that our internal control over financial reporting is effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms.

Management's assessment of the effectiveness of the Company's internal control over financial reporting has been audited by Tanner LC, an independent registered public accounting firm, as stated in their report which is included herein.

Changes in Internal Control Over Financial Reporting

There have been no changes in the Company's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

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Limitations on the Effectiveness of Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls or our internal controls will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with associated policies or procedures. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information required by this item is incorporated by reference from the information in the Company's definitive Proxy Statement to be filed for the 2009 Annual Meeting of Stockholders.

ITEM 11. EXECUTIVE COMPENSATION

Information required by this item is incorporated by reference from the information in the Company's definitive Proxy Statement to be filed for the 2009 Annual Meeting of Stockholders.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information required by this item is incorporated by reference from the information in the Company's definitive Proxy Statement to be filed for the 2009 Annual Meeting of Stockholders.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item is incorporated by reference from the information in the Company's definitive Proxy Statement to be filed for the 2009 Annual Meeting of Stockholders.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information required by this item is incorporated by reference from the information in the Company's definitive Proxy Statement to be filed for the 2009 Annual Meeting of Stockholders.

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PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1) Financial Statements

The Index to Financial Statements on page F-1 is incorporated herein by reference as the list of financial statements required as part of this report.

(2) Financial Statement Schedules

Financial statement schedules have been omitted because they are not required or are not applicable, or because the required information is shown in the financial statements or notes thereto.

(3) Exhibits

The following exhibits are incorporated herein by reference as indicated:

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation. Incorporated by reference to Exhibit 3.1 of the BSD Medical Corporation Annual Report Form 10-KSB, filed December 1, 2003.
3.2	By-Laws. Incorporated by reference to Exhibit 3.2 of the BSD Medical Corporation Registration Statement on Form S-1, filed October 16, 1986.
3.3	Amendment to Bylaws. Incorporated by reference to Exhibit 3.1 of Current Report on Form 8-K filed January 4, 2008.
4.1	Specimen Common Stock Certificate. Incorporated by reference to Exhibit 4 of the BSD Medical Corporation Registration Statement on Form S-1, filed October 16, 1986.
4.2	Emerson Securities Purchase Agreement. Incorporated by reference to Exhibit 4.1 of the BSD Medical Corporation Annual Report on Form 10-KSB, filed December 1, 2003.
10.1	Transfer of Trade Secrets Agreement dated December 7, 1979, among BSD Medical Corporation, Vitek, Incorporated and Ronald R. Bowman. Incorporated by reference to Exhibit 10.6 of the BSD Medical Corporation Registration Statement on Form S-1, filed October 16, 1986.
10.2	Second Addendum to Exclusive Transfer of Trade Secrets Agreement dated April 2, 1987. Incorporated by reference to Exhibit 10 of the BSD Medical Corporation Annual Report on Form 10-K, filed April 8, 1988.
10.3	License Agreement between BSD Medical Corporation and EDAP Technomed, Inc., dated July 3, 1996. Incorporated by reference to Exhibit 10 of Current Report on Form 8-K, filed August 7, 1996.
10.4	Stock Purchase Agreement dated October 31, 1997, by and among TherMatrx, Inc., BSD Medical Corporation, Oracle Strategic Partners, L.P. and Charles Manker. Incorporated by reference to Exhibit 10.6 of the BSD Medical Corporation Annual Report on Form 10-KSB filed December 10, 1998.
10.5*	BSD Medical Corporation 1998 Director Stock Plan. Incorporated by reference to Exhibit A of the BSD Medical Corporation Schedule 14A, filed July 27, 1998.
10.6*	BSD Medical Corporation 1998 Stock Incentive Plan. Incorporated by reference to Exhibit B of the BSD Medical Corporation Schedule 14B, filed July 27, 1998.
10.7*	BSD Medical Corporation Form of Employee Stock Option Grant
10.8*	BSD Medical Corporation Form of Director Stock Option Grant
10.9*	Employment Agreement dated August 10, 1999 between BSD Medical Corporation and Hyrum A. Mead. Incorporated by reference to Exhibit 10.7 to BSD Medical Corporation's Registration Statement on Form SB-2 filed January 27, 2004.

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10.10*	Employment Agreement dated November 2, 2008 between BSD Medical Corporation and Paul F. Turner. Incorporated by reference to Exhibit 10.8 to BSD Medical Corporation's Registration Statement on Form SB-2 filed January 27, 2004.
21.1	Subsidiary List. Incorporated by reference to Exhibit 21.1 of the BSD Medical Corporation Annual Report on Form 10-KSB filed December 1, 2003.
23.1	Consent of Independent Registered Public Accounting Firm
31.1	Certification of Chief Executive Officer of BSD pursuant to Rule 13a-14.
31.2	Certification of Chief Financial Officer of BSD pursuant to Rule 13a-14.
32.1	Certification of Chief Executive Officer attached pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes Oxley Act of 2002.
32.2	Certification of the Chief Financial Officer of BSD pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

* Exhibits marked with an asterisk (*) are management contracts or compensatory plans or arrangements.

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SIGNATURES

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

BSD MEDICAL CORPORATION

Date: November 14, 2008

By: /s/ Hyrum A. Mead
Hyrum A. Mead
President and Member of the Board of Directors
(principal executive officer)

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

Date: November 14, 2008

By: /s/ Paul F. Turner
Paul F. Turner
Chairman of the Board, Senior Vice President and
Chief Technology Officer

Date: November 14, 2008

By: /s/ Hyrum A. Mead
Hyrum A. Mead
President and Member of the Board of Directors
(principal executive officer)

Date: November 14, 2008

By: /s/ Dennis P. Gauger
Dennis P. Gauger
Chief Financial Officer (principal financial and
accounting officer)

Date: November 14, 2008

By: /s/ Gerhard W. Sennewald
Dr. Gerhard W. Sennewald
Member of the Board of Directors

Date: November 14, 2008

By: /s/ Steven G. Stewart
Steven G. Stewart
Member of the Board of Directors

Date: November 14, 2008

By: /s/ Michael Nobel
Dr. Michael Nobel
Member of the Board of Directors

Date: November 14, 2008

By: /s/ Douglas P. Boyd
Dr. Douglas P. Boyd
Member of the Board of Directors

Date: November 14, 2008

By: /s/ Timothy C. McQuay
Timothy C. McQuay
Member of the Board of Directors

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BSD MEDICAL CORPORATION
Index to Financial Statements

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON INTERNAL CONTROL OVER FINANCIAL REPORTING

To the Board of Directors and Stockholders
of BSD Medical Corporation

We have audited the internal control of BSD Medical Corporation (the Company) over financial reporting as of August 31, 2008 and 2007, based on criteria established in Internal Control--Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of August 31, 2008 and 2007, based on the COSO criteria.

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We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the balance sheets of the Company as of August 31, 2008 and 2007, and the related statements of operations, stockholders' equity, and cash flows for each of the years in the three-year period ended August 31, 2008, and our report dated November 14, 2008 expressed an unqualified opinion thereon.

/s/ TANNER LC

Salt Lake City, Utah
November 14, 2008

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
of BSD Medical Corporation

We have audited the accompanying balance sheets of BSD Medical Corporation as of August 31, 2008 and 2007, and the related statements of operations, stockholders' equity and cash flows for each of the years in the three-year period ended August 31, 2008. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of BSD Medical Corporation as of August 31, 2008 and 2007, and the results of its operations and its cash flows for each of the years in the three-year period ended August 31, 2008, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of BSD Medical Corporation's internal control over financial reporting as of August 31, 2008, based on criteria established in Internal Control–Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated November 14, 2008 expressed an unqualified opinion thereon.

/s/ TANNER LC

Salt Lake City, Utah
November 14, 2008

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BSD MEDICAL CORPORATION
Balance Sheets

ASSETS	August 31, 2008	2007
Current assets:		
Cash and cash equivalents	$ 1,394,652	$ 416,540
Investments	14,487,192	19,090,118
Accounts receivable, net of allowance for doubtful accounts of $20,000	439,739	203,267
Related party trade accounts receivable	737,483	488,200
Income tax receivable	1,409,996	1,759,995
Inventories, net	1,425,153	1,510,067
Other current assets	113,829	127,003
Deferred tax asset	-	387,000
Total current assets	20,008,044	23,982,190
Property and equipment, net	1,441,524	271,077
Patents, net	37,330	19,373
Deferred tax asset	-	69,000
	$ 21,486,898	$ 24,341,640
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 221,605	$ 235,676
Accrued liabilities	585,777	633,090
Customer deposits	427,677	214,638
Deferred revenue – current portion	41,885	26,115
Total current liabilities	1,276,944	1,109,519
Deferred revenue – net of current portion	54,094	48,333
Total liabilities	1,331,038	1,157,852
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $.001 par value; 10,000,000 shares authorized, no shares issued and outstanding	-	-
Common stock; $.001 par value, 40,000,000 shares authorized, 21,388,958 and 21,297,446 shares issued, respectively	21,389	21,298
Additional paid-in capital	27,565,373	26,373,637
Treasury stock, 24,331 shares at cost	(234)	(234)
Other comprehensive loss	(2,141,416)	(360,760)
Accumulated deficit	(5,289,252)	(2,850,153)
Total stockholders' equity	20,155,860	23,183,788

	$ 21,486,898	$ 24,341,640

See accompanying notes to financial statements

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BSD MEDICAL CORPORATION
Statements of Operations

	Years Ended August 31,		
	2008	2007	2006
Revenues:			
Sales	$ 2,334,008	$ 1,449,054	$ 2,209,316
Sales to related parties	2,809,132	1,385,332	689,086
Total revenues	5,143,140	2,834,386	2,898,402
Operating costs and expenses:			
Cost of sales	956,220	766,040	1,399,426
Cost of related party sales	1,128,029	815,522	317,214
Research and development	1,737,924	1,875,147	1,251,956
Selling, general and administrative	5,573,311	5,762,217	5,028,957
Total operating costs and expenses	9,395,484	9,218,926	7,997,553
Loss from operations	(4,252,344)	(6,384,540)	(5,099,151)
Other income (expense):			
Interest and investment income	1,046,313	1,133,125	1,301,341
Other	(194,068)	(164,003)	240,034
Gain on sale of equity interest	-	202,223	18,016,272
Total other income (expense)	852,245	1,171,345	19,557,647
Income (loss) before income taxes	(3,400,099)	(5,213,195)	14,458,496
Income tax (provision) benefit	961,000	1,865,000	(5,209,000)
Net income (loss)	$ (2,439,099)	$ (3,348,195)	$ 9,249,496
Income (loss) per common share:			
Basic	$ (0.11)	$ (0.16)	$ 0.45
Diluted	$ (0.11)	$ (0.16)	$ 0.42
Weighted average number of shares outstanding:			
Basic	21,339,000	21,125,000	20,766,000
Diluted	21,339,000	21,125,000	22,174,000

See accompanying notes to financial statements

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BSD MEDICAL CORPORATION
Statements of Stockholders' Equity
Years Ended August 31, 2008, 2007 and 2006

	Common Stock		Additional Paid-in	Deferred	Treasury Stock		Other Comprehensive	Retained Earnings (Accumulated	
	Shares	Amount	Capital	Compensation	Shares	Amount	Income (Loss)	Deficit)	Total
Balance, August 31, 2005	20,365,070	$ 20,365	$ 23,706,101	$ (34,050)	24,331	$ (234)	$ 36,939	$ (8,751,454)	$ 14,977,66
Common stock issued for:									
Cash	644,991	645	423,691	-	-	-	-	-	424,33
Services	13,607	14	48,457	-	-	-	-	-	48,47
Income tax benefit from exercise of stock options	-	-	972,282	-	-	-	-	-	972,28
Amortization of deferred compensation	-	-	-	88,050	-	-	-	-	88,05
Decrease in other comprehensive income	-	-	-	-	-	-	(136,301)	-	(136,30
Deferred compensation	-	-	301,700	(301,700)	-	-	-	-	
Net income	-	-	-	-	-	-	-	9,249,496	9,249,49
Balance, August 31, 2006	21,023,668	21,024	25,452,231	(247,700)	24,331	(234)	(99,362)	498,042	25,624,00
Close out deferred compensation	-	-	(247,700)	247,700	-	-	-	-	
Common stock issued for:									
Cash	195,933	196	229,511	-	-	-	-	-	229,70
Services	10,288	10	59,990	-	-	-	-	-	60,00
Cashless option exercises	67,557	68	(68)	-	-	-	-	-	
Stock-based compensation	-	-	832,224	-	-	-	-	-	832,22
Income tax benefit from exercise of stock options	-	-	47,449	-	-	-	-	-	47,44

Increase in other comprehensive loss, net of income tax benefit	-	-	-	-	-	-	(261,398)	-	(261,39
Net loss	-	-	-	-	-	-	-	(3,348,195)	(3,348,19
Balance, August 31, 2007	21,297,446	21,298	26,373,637	-	24,331	(234)	(360,760)	(2,850,153)	23,183,78
Common stock issued for:									
Cash	56,499	56	158,426	-	-	-	-	-	158,48
Services	10,514	11	61,184	-	-	-	-	-	61.19
Cashless option exercises	24,499	24	(24)	-	-	-	-	-	
Stock-based compensation	-	-	800,432	-	-	-	-	-	800,43
Income tax benefit from exercise of stock options	-	-	171,718	-	-	-	-	-	171,71
Increase in other comprehensive loss, net of income tax benefit	-	-	-	-	-	-	(1,780,656)	-	(1,780,65
Net loss	-	-	-	-	-	-	-	(2,439,099)	(2,439,09
Balance, August 31, 2008	21,388,958	$ 21,389	$ 27,565,373	$ -	24,331	$ (234)	$ (2,141,416)	$ (5,289,252)	$ 20,155,86

See accompanying notes to financial statements

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BSD MEDICAL CORPORATION
Statements of Cash Flows

	Years Ended August 31,		
	2008	2007	2006
Cash flows from operating activities:			
Net income (loss)	$ (2,439,099)	$ (3,348,195)	$ 9,249,496
Adjustments to reconcile net income (loss) to net cash used in operating activities:			
Depreciation and amortization	120,216	97,849	86,860
Loss (gain) on disposition of property	3,444	2,597	-
Stock issued for services	61,195	60,000	48,471
Stock-based compensation	800,432	832,224	-
Provision for doubtful accounts	-	-	(22,500)
Gain on sale of equity interest	-	(202,223)	(18,016,272)
Amortization of deferred compensation	-	-	88,050
Decrease (increase) in:			
Receivables	(485,755)	894,376	(922,163)
Note receivable	-	-	(137,500)
Income tax receivable	521,717	(1,752,492)	-
Inventories	84,914	(143,803)	(231,911)
Deferred tax asset	244,000	(66,000)	(74,000)
Other current assets	13,174	(6,726)	12,464
Increase (decrease) in:			
Accounts payable	(14,071)	(129,720)	252,583
Accrued liabilities	(47,313)	187,977	296,737
Customer deposits	213,039	114,638	-
Income taxes payable	-	(1,500,000)	2,271,469
Deferred revenue	-	(160,964)	228,084
Deferred tax liability	21,531	-	(13,000)
Net cash used in operating activities	(902,576)	(5,120,462)	(6,883,132)
Cash flows from investing activities:			
Sale (purchase) of investments	3,034,270	2,992,590	(10,073,884)
Purchase of property and equipment	(1,291,098)	(66,612)	(213,172)
Purchase of patents	(20,966)	-	-
Proceeds from sale equity interest	-	202,223	18,016,272
Net cash provided by investing activities	1,722,206	3,128,201	7,729,216
Cash flows from financing activities:			
Proceeds from the sale of common stock	158,482	229,707	424,336
	978,112	(1,762,554)	1,270,420

Net increase (decrease) in cash and cash equivalents			
Cash and cash equivalents, beginning of year	416,540	2,179,094	908,674
Cash and cash equivalents, end of year	$ 1,394,652	$ 416,540	$ 2,179,094

See accompanying notes to financial statements

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BSD MEDICAL CORPORATION
Notes to Financial Statements

Note 1: Organization and Significant Accounting Policies

Organization – BSD Medical Corporation (the Company) was incorporated in the State of Delaware on July 3, 1986. The Company develops, produces, markets, and services systems used for the treatment of cancer and other diseases. These systems are sold worldwide. The Company's operations are considered to comprise one business segment.

Cash and Cash Equivalents – Cash and cash equivalents consist of cash and investments with original maturities to the Company of three months or less.

Investments – Investments with scheduled maturities greater than three months, but not greater than one year, are recorded as short-term investments. Management classified these investments at August 31, 2008 and 2007 as available-for sale. The short-term investments are recorded at fair value, with net unrealized gains and losses reported as other comprehensive income in the statements of stockholders' equity, net of income taxes. Realized gains and losses are included in the statements of income.

Trade Accounts Receivable – Trade accounts receivable are carried at original invoice amount less an estimate made for doubtful receivables based on a review of all outstanding amounts on a monthly basis. Management estimates an allowance for doubtful accounts by identifying troubled accounts and by using historical experience applied to an aging of accounts. Trade accounts receivable are written off when deemed uncollectible. Recoveries of trade receivables previously written off are recorded when received. Interest is not charged on trade receivables that are outstanding beyond their due date.

Inventories – Parts and supplies inventories are stated at the lower of cost or market. Cost is determined using the average cost method. Work-in-process and finished goods are stated at the lower of the accumulated manufacturing costs or market. Provisions, when required, are made to reduce excess and obsolete inventories to their estimated net realizable value. The provision was $40,000 at August 31, 2008 and 2007.

Property and Equipment – Property and equipment are stated at cost less accumulated depreciation. Depreciation is determined using the straight-line method over the following estimated useful lives of the assets.

Equipment	2 – 5 years
Furniture and fixtures	5 years
Building improvements	15 years
Building	40 years

Expenditures for maintenance and repairs are expensed when incurred and betterments are capitalized. Gains and losses on sales of property and equipment are reflected in operations.

Maintenance and repairs are charged to costs and expenses as incurred. The cost and accumulated depreciation of property and equipment sold or otherwise retired are removed from the accounts and any related gain or loss on disposition is reflected in net income or loss for the period.

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Patents – Patents are carried at cost and are being amortized over 17 years.

Warranty Reserve – The Company provides limited warranties to its customers for products sold. Estimated future warranty obligations are accrued each period. As of August 31, 2008 and 2007, the accrued warranty reserve was $22,640 and $30,614, respectively. During the fiscal years ended August 31, 2008, 2007, and 2006, total warranty expense was $68,470, $38,519 and $24,763, respectively.

Income Taxes – The Company accounts for income taxes using the asset and liability method. Under the asset and liability method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

Income Per Common Share – The computation of basic income (loss) per common share is based on the weighted average number of shares outstanding during each year.

The computation of diluted earnings per common share is based on the weighted average number of shares outstanding during the year, plus the common stock equivalents that would arise from the exercise of stock options and warrants outstanding, using the treasury stock method and the average market price per share during the year. Common stock equivalents are not included in the diluted loss per share calculation when their effect is anti-dilutive. Options to purchase 2,182,629, 1,795,853 and 1,809,051 shares of common stock at prices ranging from $0.37 to $6.50, $0.37 to $5.76, and $0.37 to $5.76 per share were outstanding at August 31, 2008, 2007 and 2006, respectively.

The shares used in the computation of the Company's basic and diluted earnings per share are reconciled as follows:

	Years Ended August 31,		
	2008	2007	2006
Weighted average number of shares outstanding – basic	21,339,000	21,125,000	20,766,000
Dilutive effect of stock options	-	-	1,408,000
Weighted average number of shares outstanding, assuming dilution	21,339,000	21,125,000	22,174,000

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Stock-Based Compensation - Effective September 1, 2006, the Company adopted the fair value recognition provisions of Statement of Financial Accounting Standards (SFAS) No. 123(R), Share Based Payments, using the modified prospective application method. Under this transition method, the Company recorded compensation expense on a straight-line basis of $800,432 and $832,224 for the years ended August 31, 2008 and 2007, respectively for: (a) the vesting of options granted prior to September 1, 2006 (based on the grant-date fair value estimated using the Black-Scholes option-pricing model and previously presented in the pro-forma footnote disclosures), and (b) stock-based awards granted subsequent to August 31, 2006 (based on the grant-date fair value estimated using the Black-Scholes option pricing model). In accordance with the modified prospective application method, results for the year ended August 31, 2006 have not been restated.

Prior to the fiscal year ended August 31, 2007, the Company accounted for stock options granted to employees under the recognition and measurement principles of APB Opinion No. 25, Accounting for Stock Issued to Employees, and related Interpretations, and adopted the disclosure-only provisions of SFAS No. 123, Accounting for Stock-Based Compensation. Accordingly, compensation costs are recognized in the financial statements for the year ended August 31, 2006 for options granted with an exercise price less than the market value of the underlying common stock on the date of grant. During the year ended August 31, 2006, the Company recognized $88,050 related to stock options granted to employees with an exercise price less than the market value of the underlying common stock. Had the Company's options been determined based on the fair value method, the results of operations for the year ended August 31, 2006 would have been reduced to the pro forma amounts indicated below:

Net income as reported	$	9,249,496
Add: Stock-based employee compensation expense included in reported net income, net of related tax effects		88,050
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects		(749,586)
Net income – pro forma	$	8,587,960
Earnings per share:		
Basic – as reported	$	0.45
Basic – pro forma	$	0.41
Diluted – as reported	$	0.42
Diluted – pro forma	$	0.39

Revenue Recognition – The Company recognizes revenue from the sale of cancer treatment systems, the sale of parts and accessories related to the cancer treatment systems, providing manufacturing services, providing training, and service support contracts. Product sales were $4,841,713, $2,520,818 and $2,706,214 for the years ended August 31, 2008, 2007and 2006, respectively. Service and other revenues were $301,427, $313,568 and $192,188 for the years ended August 31, 2008, 2007 and 2006, respectively.

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Revenue from the sale of cancer treatment systems is recognized when a purchase order has been received, the system has been shipped, the selling price is fixed or determinable, and collection is reasonably assured. Most system sales are F.O.B. shipping point, therefore shipment is deemed to have occurred when the product is delivered to the transportation carrier. Most system sales do not include installation. If installation is included as part of the contract, revenue is not recognized until installation has occurred, or until any remaining installation obligation is deemed to be perfunctory. Some sales of cancer treatment systems may include training as part of the sale. In such cases, the portion of the revenue related to the training, calculated based on the amount charged for training on a stand-alone basis, is deferred and recognized when the training has been provided. The sales of the Company's cancer treatment systems do not require specific customer acceptance provisions and do not include the right of return except in cases where the product does not function as guaranteed by the Company. The Company provides a reserve allowance for estimated returns. To date, returns have not been significant.

Revenue from manufacturing services is recorded when an agreement with the customer exists for such services, the services have been provided, and collection is reasonably assured.

Revenue from training services is recorded when an agreement with the customer exists for such training, the training services have been provided, and collection is reasonably assured.

Revenue from service support contracts is recognized on a straight-line basis over the term of the contract, which approximates recognizing it as it is earned.

The Company's revenue recognition policy is the same for sales to both related parties and non-related parties. The Company provides the same products and services under the same terms for non-related parties as with related parties.

Sales to distributors are recognized in the same manner as sales to end-user customers.

Deferred revenue and customer deposits payable include amounts from service contracts as well as cash received for the sales of products, which have not been shipped.

Concentration of Credit Risk – Financial instruments that potentially subject the Company to concentration of credit risk consists primarily of trade receivables. In the normal course of business, the Company provides credit terms to its customers. Accordingly, the Company performs ongoing credit evaluations of its customers and maintains allowances for possible losses.

The Company has cash in the bank and short-term investments that exceed federally insured limits. The Company has not experienced any losses in such accounts.

Advertising and Promotion – Advertising and promotion costs, which are principally included in sales expenses, are expensed as incurred. Advertising and promotion expense was approximately $206,493, $331,000 and $758,000 for the years ended August 31, 2008, 2007 and 2006, respectively.

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

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Comprehensive Income (Loss) – Comprehensive income (loss) consists of net income and net unrealized gains and losses from the Company's investments classified as available-for sale, which is reported on the accompanying statements of stockholders' equity as a component of other comprehensive income. Comprehensive loss for the years ended August 31, 2008 and 2007 was $4,219,755 and $3,609,593, respectively. Comprehensive income for the year ended August 31, 2006 was $9,113,195.

Reclassifications – Certain amounts in the prior years have been reclassified to conform with the current year presentation.

Note 2: Detail of Certain Balance Sheet Accounts

Details of certain balance sheet accounts are as follows:

Accounts receivable:	August 31, 2008	2007
Trade receivables – non-related party	$ 407,528	$ 113,493
Other receivables	8,305	6,638
Accrued interest receivable	43,906	103,136
Allowance for doubtful accounts	(20,000)	(20,000)
	$ 439,739	$ 203,267

Inventories:	August 31, 2008	2007
Parts and supplies	$ 802,956	$ 835,498
Work-in-process	608,391	610,846
Finished goods	53,806	103,723
Reserve for obsolete inventory	(40,000)	(40,000)
	$ 1,425,153	$ 1,510,067

Accrued liabilities:	August 31, 2008	2007
Accrued vacation	$ 301,413	$ 260,229
Accrued taxes payable	14,994	46,842
Accrued bonuses	161,000	115,000
Other accrued liabilities	108,370	211,019
	$ 585,777	$ 633,090

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Note 3: Investments

As of August 31, 2008 and 2007, investments consisted primarily of a managed portfolio of mutual funds, and were all considered available-for-sale securities. As of August 31, 2008, investments had a cost, determined on a specific identification method, of $16,628,608, fair value of $14,487,192 and unrealized losses of $2,141,416. As of August 31, 2007, investments had a cost of $19,662,878, fair value of $19,090,118 and unrealized losses of $572,760. Realized losses on investments were $181,107 for the year ended August 31, 2008, with total sales proceeds of $4,688,760. No realized gains or losses on investments were recorded in the years ended August 31, 2007 and 2006.

Note 4: Property and Equipment

Property and equipment consists of the following:

	August 31,	
	2008	2007
Equipment	$ 1,048,061	$ 962,162
Furniture and fixtures	298,576	298,576
Leasehold improvements	17,420	17,420
Building	956,000	-
Land	244,000	-
	2,564,057	1,278,158
Less accumulated depreciation	(1,122,533)	(1,007,081)
	$ 1,441,524	$ 271,077

Depreciation expense for the years ended August 31, 2008, 2007 and 2006 totaled $117,207, $95,971 and $84,982, respectively.

Note 5: Patents

The Company has four patents recorded net of accumulated amortization. The patents are being amortized on a straight-line basis over their estimated useful life with an amortization period of 17 years. Amortization expense was $3,009, $1,878 and $1,878 for the years ended August 31, 2008, 2007, and 2006, respectively. For each of the next five years, amortization expense relating to the patents is expected to be $3,111 per year.

Note 6: Operating Lease

When the lease on the Company’s office, production and research facilities expired in November 2007, the Company exercised its option to purchase the building and land for a total purchase price of $1,200,000.

Prior to the exercise of the purchase option, rent expense on this operating lease for the years ended August 31, 2008, 2007 and 2006 amounted to $20,699, $93,032, and $89,393, respectively.

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Note 7: Deferred Revenue

The Company has entered into certain service contracts for which it has received payment in advance. The Company is recognizing these service revenues over the life of the service agreements.

As of August 31, 2008 and 2007, the Company had $95,979 and $74,448 of deferred revenue, respectively.

Note 8: Major Customers and Foreign Sales

The Company had the following customer revenue concentrations:

	Years Ended August 31,		
	2008	2007	2006
Customer A	54.62%	48.88%	23.77%
Customer B	*	*	45.48%
Customer C	*	*	10.38%

*Sales to customers were less than 10%.

Export sales were $2,812,796, $1,787,363 and $2,413,807 in fiscal years 2008, 2007 and 2006, respectively.

During fiscal years 2008 and 2007, export sales to Switzerland were approximately 53% and 44% of total sales, respectively. During fiscal year 2006, export sales to China, Switzerland and Poland were approximately 45%, 21% and 10% of total sales, respectively.

Note 9: Income Taxes

The components of the income tax (provision) benefit are as follows:

	Years Ended August 31,		
	2008	2007	2006
Current:			
Federal	$ 1,088,000	$ 1,653,000	$ (4,606,000)
State	41,000	146,000	(690,000)
	1,129,000	1,799,000	(5,296,000)
Deferred:			
Federal	(168,000)	66,000	87,000
	$ 961,000	$ 1,865,000	$ (5,209,000)

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The income tax (provision) benefit differs from the amount computed at federal statutory rates as follows:

	Years Ended August 31,		
	2008	2007	2006
Income tax (provision) benefit at federal statutory rate	$ 1,156,000	$ 1,772,000	$ (5,393,000)
Stock-based compensation	(176,000)	(233,000)	-
State income taxes, net of federal benefit	288,000	96,000	-
Research and development credit	160,000	160,000	190,000
Valuation allowance	(518,000)	-	-
Other	51,000	70,000	(6,000)
	$ 961,000	$ 1,865,000	$ (5,209,000)

Deferred tax assets (liabilities) are comprised of the following:

	August 31,	
	2008	2007
Current Asset:		
Accruals and reserves	$ 145,000	$ 129,000
Deferred revenue	36,000	28,000
Inventories	15,000	18,000
State net operating loss carryforward	252,000	-
Unrealized loss on investments	792,000	212,000
Valuation allowance	(1,240,000)	-
	$ -	$ 387,000
Long-Term Asset:		
Deferred compensation	$ 120,000	$ 112,000
Depreciation and amortization	(50,000)	(43,000)
Valuation allowance	(70,000)	-
	$ -	$ 69,000

The Financial Accounting Standards Board (FASB) has issued Financial Interpretation No. 48, Accounting for Uncertainty in Income Taxes – An Interpretation of FASB Statement No. 109 (FIN 48). FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements in accordance with FASB Statement No. 109, Accounting for Income Taxes. Fin 48 requires a company to determine whether it is more likely than not that a tax position will be sustained upon examination based upon the technical merits of the position. If the more-likely-than-not threshold is met, a company must measure the tax position to determine the amount to recognize

in the financial statements. As a result of the implementation of FIN 48, the Company performed a review of its material tax positions in accordance with recognition and measurement standards established by FIN 48.

At the adoption date of September 1, 2007, the Company had no unrecognized tax benefit which would affect the effective tax rate if recognized. There has been no significant change in the unrecognized tax benefit during the year ended August 31, 2008.

The Company classifies interest and penalties arising from the underpayment of income taxes in the statements of operations in other income (expense). As of August 31, 2008, the Company had no accrued interest or penalties related to uncertain tax positions.

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The Company files income tax returns in the U.S. federal jurisdiction and various state jurisdictions. U.S. federal income tax returns from the year ended August 31, 2006 through the year ended August 31, 2008 are subject to examination.

The ultimate realization of the deferred tax assets is dependent, in part, upon the tax laws in effect, the Company's future earnings, and other events. As of August 31, 2008, the Company recorded a valuation allowance of $1,240,000 against current deferred tax assets and a valuation allowance of $70,000 against net long-term deferred tax assets. The increase in the valuation allowance for the year ended August 31, 2008 relates primarily to our operating losses. The general valuation allowance has been established under the provisions of SFAS No. 109, Accounting for Income Taxes, which requires that a valuation allowance be established when it is more likely than not that the net deferred tax assets will not be realized.

Note 10: Stock-Based Compensation

The Company's Amended and Restated 1998 Stock Incentive Plan authorizes the granting of incentive stock options to certain key employees and non-employees who provide services to the Company. The Plan, as amended, provides for the granting of options for an aggregate of 3,427,300 shares. The options vest subject to management's discretion.

The Company's Amended and Restated 1998 Directors Stock Plan provides an annual retainer of $30,000 to each non-employee director with the exception of the Audit Committee Chairman who is to receive $35,000. The annual compensation plan calls for payment to be made twice a year with each payment consisting of $15,000 in cash and $15,000 in common stock, with the exception of the Audit Committee Chairman who is to receive $20,000 in cash and $15,000 in common stock with the number of shares issued calculated by dividing the unpaid compensation by a daily average of the preceding twenty day closing price of the Company's common stock. The Plan also grants each non-employee outside director 30,000 options each year at an exercise price equal to the fair market value of the common stock at the date the option is granted. The Plan allows for an aggregate of 1,500,000 shares to be granted. The options vest according to a set schedule over a five-year period and expire upon the director's termination, or after ten years from the date of grant.

The Company accounts for stock-based compensation in accordance with SFAS No. 123(R), Share Based Payments. Under the fair value recognition provisions of this statement, stock-based compensation cost is measured at the grant date based on the value of the award granted using the Black-Scholes option pricing model, and recognized over the period in which the award vests. The stock-based compensation expense for the year ended August 31, 2008 has been allocated to the various categories of operating costs and expenses in a manner similar to the allocation of payroll expense as follows: