BSD MEDICAL CORP
Form 424B3
July 29, 2004

Filed Pursuant to Rule 424(b)(3)
Registration No. 333-112240

2,162,580 Shares
BSD MEDICAL CORPORATION

Common Stock

This prospectus relates to the public offering, which is not being underwritten, of a total of 2,162,580 shares of the common stock of BSD Medical Corporation by the selling stockholders described herein. The price at which the selling stockholders may sell the shares will be determined by the prevailing market price for the shares or in negotiated transactions. We will not receive any of the proceeds from the sale of these shares.

Our common stock is quoted on the OTC Bulletin Board under the symbol "BSDM." On July 19, 2004, the last reported sale price for our common stock on the OTC Bulletin Board was $1.75 per share.

You should carefully consider the risk factors beginning on page 3 of this prospectus before purchasing any of the common stock offered by this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities, or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is July 27, 2004.

TABLE OF CONTENTS

You should rely only on information contained in this prospectus. We have not authorized any person to make a statement that differs from what is in this prospectus. If any person does make a statement that differs from what is in this prospectus, you should not rely on it. This prospectus is not an offer to sell, nor is it seeking an offer to buy, these securities in any state in which the offer or sale is not permitted. The information in this prospectus is complete and accurate as of its date, but the information may change after that date.

In this prospectus, the terms "BSD" "company," "we," "us," and "our" refer to BSD Medical Corporation.

PROSPECTUS SUMMARY

The following summary should be read in conjunction with, and is qualified in its entirety by, the more detailed information and financial statements appearing elsewhere in this prospectus.

Company Overview

BSD Medical Corporation develops, manufactures, markets and services hyperthermia microwave systems used to treat cancer, the second leading cause of death in the United States according to the National Cancer Society. Our treatment systems are designed to precisely deliver microwave energy to elevate the temperature of cancerous tumors, directly killing cancerous cells and enhancing the effectiveness of certain other cancer therapies.

The focus of our cancer therapy business is to develop and commercialize systems that provide hyperthermia treatment for cancerous tumors

that occur anywhere in the body. To accomplish this, we have developed systems capable of treating both superficial tumors, or tumors near the body's surface, and deep tumors. These systems consist of two families of products: the BSD-500 and the BSD-2000.

In October 2003, we announced that we had received FDA approval for a new operating system, allowing us to commercially introduce in the United States a new family of four systems, including the BSD-500i-4, BSD-500c-4, BSD-500i-8 and BSD-500c-8. These new systems enable us to treat cancers near the surface of the body using heat created from focused microwave energy, known as superficial hyperthermia, and also to treat cancers deeper in the body or in natural orifices like the esophagus using microwave antennae, known as interstitial hyperthermia. In addition to treating melanoma, recurring breast cancer and other cancers requiring superficial hyperthermia therapy, these new systems are used as companions to interstitial radiation systems, called brachytherapy systems, that treat cancer with radioactive seeds. We believe that over 1,500 brachytherapy systems have been installed, providing a target customer base for our systems. We have also obtained the CE Mark certification required to export these systems to Europe. The new BSD-500 systems are compact, portable and ergonomically engineered for use in a demanding hospital environment.

Our BSD-2000 family of systems employs an array of microwave antennae used to focus on and treat tumors located deep in the body. The BSD-2000 system has not been submitted for FDA pre-market approval, or PMA. Accordingly, we do not have authority to distribute the BSD-2000 system for sale in the United States, except as an investigational device. The phase III clinical trial through which we intend to seek a PMA for this system has already been completed, and we are underway in developing the commercial version of the BSD-2000 that we intend to use as the basis of the FDA submission.

In planning for the anticipated pre-market approval of the BSD-2000, including the commercial upgrades required before market introduction, we estimated that it would be faster to obtain FDA approvals for the commercial upgrades if those approvals are received while the BSD-2000 was classified by the FDA as an investigational device. Three independent investigational device approvals are required to complete these commercial upgrades. First, a new commercial amplifier system for the BSD-2000 has been submitted and approved by the FDA under an investigational device status. Second, we recently received FDA investigational device approval for a new commercial patient treatment applicator. Third, we have submitted an application for investigational device approval of new commercial software for the BSD-2000. The software submission was completed in May 2004. The FDA has 30 days to respond once a submission has been made for investigational device approval. Further work and delays can then follow. All of these investigational device upgrades are an integral part of the BSD-2000 system and will not therefore be submitted individually for pre-market approval.

Once the anticipated investigational device upgrade approvals have been obtained, it becomes considerably more difficult to estimate the time frame until a potential pre-market approval can be obtained for the BSD-2000. The timing of a FDA decision depends on the workload of the FDA and the extent of the review process required. While the response time for submissions can vary greatly, the average response time between submission and pre-market approval was 364 days in fiscal year 2003 as reported by the FDA.

In July 2004, American Medical Systems Holdings, Inc., or AMS, acquired TherMatrx, Inc. for $40 million in cash plus future payments contingent upon the combined entity's future sales of TherMatrx's DOT systems. The sale includes all of our TherMatrx shares. We received an initial cash payment, after the

withholding of escrow funds and the payment of other initial obligations, of approximately $8,975,000 in connection with the closing. Our approximate 30% ownership of TherMatrx was reduced to approximately 25% because of the exercise of outstanding options to acquire common stock of TherMatrx at the closing. We may also receive future contingent payments. Contingent payments to TherMatrx shareholders will be four times quarterly sales of TherMatrx's DOT systems during the six quarters beginning July 5, 2004 and ending December 31, 2005. We will receive quarterly contingent payments when the accumulated value of four times quarterly sales has exceeded the initial $40 million payment to TherMatrx shareholders. The contingent payments are also subject to certain set-off rights in favor of AMS. The aggregate maximum amount of the initial payment and any contingent payments is $250 million. While the contingent payments are not guaranteed and are subject to the future sales of TherMatrx products, we have offered the following projections. If the sale of TherMatrx products were to remain flat at the recent sales rates, the total payment for our TherMatrx shares would be about $30 million, including the initial payment of approximately $8,975,000. Since the sale of TherMatrx products has been increasing in the current year over previous years, we have projected a continued growth trend during the earn-out period. If that growth trend were realized, the projected total payment for our TherMatrx shares would be about $40 million, including the initial payment of approximately $8,975,000. However, any future payments are not guaranteed and are subject to uncertainties, and we may not receive any contingent payments in addition to the initial $8,975,000, which is the only amount guaranteed. We expect to use the payments from the sale of our TherMatrx shares, including any contingent payments, for general corporate purposes including the sales and marketing effort for our FDA approved cancer therapy products, supporting the FDA application for our cancer therapy products under investigational status, and the development of future products used in medical therapy.

Our principal sources of revenue include the sale of our BSD-500 and BSD-2000 series hyperthermia systems and the sale of thermotherapy systems, component parts and contract manufacturing services to TherMatrx. During the nine months ended May 31, 2004, total sales of $1,541,397 consisted of $881,738, or 57%, from the sale of a two BSD-2000 systems and miscellaneous equipment to a related party; $471,724, or 31%, from the sale of three BSD-500 systems to non-related parties; $99,503, or 6%, from the sale of thermotherapy systems, component products and contract services to TherMatrx; and $88,432, or 6%, for service contracts, billable labor, and other miscellaneous items to non-related parties. During the fiscal year ended August 31, 2003, total sales of $2,572,682 consisted of $1,391,443, or 54%, from the sale of thermotherapy systems, component products and contract service to TherMatrx; $63,500, or 2% from royalties paid to us by TherMatrx; $516,142, or 20%, from the sale of a BSD-2000 systems and various component parts to a related party; $203,386, or 8%, from the sale of two BSD-500 systems to non-related parties; $123,211, or 5%, for service contracts, billable labor, and other miscellaneous items to non-related parties; and $275,000, or 11%, from royalties paid by non-related parties.

Our principal executive offices are located at 2188 West 2200 South, Salt Lake City, Utah 84101, and our telephone number is (801) 972-5555.

The Offering

The selling stockholders identified in this prospectus are selling up to 2,162,580 shares of our common stock, which they acquired from us in private placements on November 28, 2003 and December 10, 2003 or will be issued upon the exercise of warrants issued to a broker-dealer in connection with the private placements. We will not receive any proceeds from the sale of the shares by the selling stockholders.

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 prospectus. 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.

We have a history of significant 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 $21,077,431 at May 31, 2004. In fiscal 2003, we recorded a net loss of $570,285. Our net loss was primarily due to a write-off of a significant receivable of approximately $300,000 to bad debt expense, an increase to inventory reserve of $90,000 and lower overall sales. For the nine months ended May 31, 2004, we recorded a net loss of $591,324. 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 may be unable to do so, and therefore may never achieve profitability.

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 yet to gain 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 payers 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 sustain profitable operations.

While a substantial portion of our revenue in recent periods has been derived from TherMatrx, we expect revenue from this customer to decline in the current and future periods.

For the year ended August 31, 2003, TherMatrx accounted for $1,454,943, or approximately 57% of our net sales and was our largest customer. We manufacture, assemble and test TherMatrx's TMx-2000 system, and also supply equipment components and provide consulting services to TherMatrx. During the nine months ended May 31, 2004 our sales to TherMatrx declined to $99,503, a decrease of $816,410 from the nine months ended May 31, 2003. We anticipate revenue from TherMatrx to be substantially less in the fourth quarter of fiscal 2004 than it was in the fourth quarter of fiscal 2003. In addition, we currently expect revenue from TherMatrx to be significantly less in fiscal 2004 than it

was in fiscal 2003. With the sale of our TherMatrx shares to AMS, we believe product sales to TherMatrx may decrease to zero in future fiscal years. TherMatrx is under no contractual obligation to obtain from us products or manufacturing, assembling, testing and other services. TherMatrx now purchases most of its products from other sources. This projected decline in sales to TherMatrx will lead to a substantial decline in our revenue if we are unsuccessful in our efforts to generate an offsetting increase in sales of our hyperthermia cancer treatment systems.

We may not receive any contingent payments or significantly less in contingent payment than we have projected from the sale of TherMatrx.

In connection with the closing of the sale of TherMatrx to AMS, we received an initial payment of approximately $8,975,000 and the right to receive contingent payments based on the future sales of TherMatrx's DOT systems over the next 18 months. We may not receive any contingent payments. Any future payments are not guaranteed and are subject to uncertainties, and we cannot be sure that we will receive any contingent payments in addition to the initial $8,975,000, which is the only amount guaranteed. Some of the factors that could cause us not to receive contingent payments, or to materially reduce contingent payments paid to us below our projections include, without limitation, the inability of AMS to successfully market and sell the DOT system at levels that we have assumed, the inability of AMS to pay the contingent payment obligation, the acquisition of AMS by another company that considers the DOT system to be a lower priority in its marketing efforts, the inability of AMS to obtain products to support the demand for DOT sales, a reported injury in which a patient claims harm from treatment by a DOT system, product recalls that could harm the ability to sell DOT products, failure of physicians to continue to endorse DOT products, or a reduction in the reimbursement amount paid by Medicare, Medicaid, and private insurance payors for DOT treatments.

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.

Some 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. For example, in the fourth quarter of fiscal 2003 we had a particularly high write off of over $300,000 resulting from the default of a customer under contract. 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 your stock. While we attempt to provide for foreseeable doubtful accounts, we cannot assure you 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. In May 2002, we entered into an agreement with Nucletron B.V. under which Nucletron became our exclusive sales agent in most of the world for our BSD-500i interstitial hyperthermia therapy system. We sold only one BSD-500i through Nucletron. We believe our relationship

with Nucletron was unsuccessful. Our sales agreement with Nucletron was terminated in March 2004.

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 most of our revenue from sales in Europe through our distributor Medizin-Technik, GmbH, which also purchases equipment components and parts from us. Medizin-Technik sold none of our hyperthermia therapy systems in Europe in fiscal 2003 and has sold two of our hyperthermia therapy systems in fiscal 2004. The loss or ineffectiveness of Medizin-Technik 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 systems. Obtaining these pre-market approvals from the FDA are necessary for us to commercially market these systems in the United States. 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 may 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.

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 payors. Despite the existence of general

reimbursement policies, local medical review policies may differ for public and private insurance payors, which may cause payment to be refused for some hyperthermia treatments. Private payors may refuse reimbursement 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.

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.

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 $1 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 you 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.

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 46% 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.

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 and Senior Vice President, 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.

Because our common stock is traded on the OTC Bulletin Board, your ability to sell your shares in the secondary trading market may be limited.

Our common stock currently is traded on the over-the-counter market on the OTC Bulletin Board. Consequently, the liquidity of our common stock is impaired, not only in the number of shares that are bought and sold, but also through delays in the timing of transactions and lack of coverage by security analysts and the news media. As a result, prices for shares of our common stock may be lower than might otherwise prevail if our common stock were quoted on the Nasdaq Stock Market or traded on a national securities exchange, like the New York Stock Exchange or the American Stock Exchange.

Because our common stock is a "penny stock," you may have difficulty selling our shares in the secondary trading market.

Federal regulations under the Securities Exchange Act of 1934 regulate the trading of so-called "penny stocks," which are generally defined as any security not listed on a national securities exchange or Nasdaq, priced at less than $5.00 per share and offered by an issuer with limited net tangible assets and revenues. Since our common stock currently trades on the OTC Bulletin Board

at less than $5.00 per share, our common stock is a "penny stock" and may not be traded unless a disclosure schedule explaining the penny stock market and the risks associated therewith is delivered to a potential purchaser prior to any trade.

In addition, because our common stock is not listed on Nasdaq or any national securities exchange and currently trades at less than $5.00 per share, trading in our common stock is subject to Rule 15g-9 under the Exchange Act. Under this rule, broker-dealers must take certain steps prior to selling a "penny stock," which steps include:

- obtaining financial and investment information from the investor;
- obtaining a written suitability questionnaire and purchase agreement signed by the investor; and
- providing the investor a written identification of the shares being offered and the quantity of the shares.

If these penny stock rules are not followed by the broker-dealer, the investor has no obligation to purchase the shares. The application of these comprehensive rules will make it more difficult for broker-dealers to sell our common stock and our stockholders, therefore, may have difficulty in selling their shares in the secondary trading market.

Sales of a substantial number of shares of our common stock in the public market, including the shares offered under this prospectus, could lower our stock price and impair our ability to raise funds in new stock offerings.

Future sales of a substantial number of shares of our common stock in the public market, including the shares offered under this prospectus, or the perception that such sales could occur, could adversely affect the prevailing market price of our common stock and could make it more difficult for us to raise additional capital through the sale of equity securities. This prospectus relates to the sale or distribution of up to 2,162,580 shares of common stock by the selling stockholders. The shares subject to this prospectus represent approximately 11% of our issued and outstanding common stock as of June 30, 2004. We filed this registration statement pursuant to an agreement with the holders of the common stock and warrants purchased in our November and December 2003 private placements. We are required under this agreement to use our reasonable best efforts to cause this registration statement to remain effective until the earlier of (1) the sale of all the shares of our common stock covered by this registration statement; or (2) such time as the selling stockholders named in this registration statement become eligible to resell the shares of our common stock pursuant to Rule 144(k) under the Securities Act.

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. For example, on February 4, 2004 there were zero shares of our stock traded and the closing price remained at $1.35 per share (the closing price for the prior trading day). Only eight trading days later, following a news release involving an FDA approval, there were 175,082

shares of our stock traded at a closing price of $1.57. Over the four month period beginning November 2003 and ending at the February 2004 stock market close, the average daily trading volume for our stock was 26,014 shares. In November 2003, however, the average daily volume was 46,728 shares or 80% above the four month daily average. Conversely, in December 2003 the average daily volume was 14,298 shares or 45% below the four month daily average. The average daily trading volume was over three times greater in November 2003 than it was in December 2003. 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.

If we sell shares of our common stock at a per share price of less than $1.10 to raise additional capital, we will have to issue additional shares to the investors in our November and December private placement, which will dilute our other stockholders' ownership.

To execute our business plan, and in particular to market our recently FDA approved products, we may need to raise additional capital. We agreed with the investors in our November and December private placement transactions that we would issue them additional shares of our common stock if we sold shares of common stock within one year of their investment at a per share price of less than the price they paid, which was $1.10 per share. The anti-dilution protection provided to these investors, commonly referred to as ratchet anti-dilution, would require us to issue to these investors additional shares equal to the difference between the number of shares that they would have been issued if the per share price they paid equaled the lowest price at which we issued shares to raise capital within one year of their investment, regardless of the number that we issue, and the number of shares they were issued. If this anti-dilution protection were triggered, the investors would not be required to pay any additional consideration for the additional shares issued to them, and our other stockholders' ownership would be diluted by the issuance. Because of the significant dilution that could occur if this anti-dilution protection were triggered, we may choose to not raise additional capital if we cannot raise it at a per share price that would avoid triggering the anti-dilution protection. This could delay the execution of our business plan.

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.

USE OF PROCEEDS

The shares of common stock offered by this prospectus will be sold by the selling stockholders, and the selling stockholders will receive all of the proceeds from sales of such shares. We will not receive any proceeds from the sale of the shares offered by this prospectus.

BUSINESS

Overview

We develop, manufacture, market and service hyperthermia microwave systems used to treat cancer, the second leading cause of death in the United States according to the National Cancer Society. Our treatment systems are designed to precisely deliver microwave energy to elevate the temperature of cancerous tumors, directly killing cancerous cells and enhancing the effectiveness of certain other cancer therapies.

The focus of our cancer therapy business is to develop and commercialize systems that can provide hyperthermia treatment for cancerous tumors that occur anywhere in the body. To accomplish this, we have developed systems capable of treating both superficial tumors, or tumors near the body's surface, and deep tumors. These systems consist of two families of products: the BSD-500 and the BSD-2000.

In October 2003, we announced that we had received FDA approval for a new operating system, allowing us to launch the commercial market introduction in the United States of a new family of four systems, including the BSD-500i-4, BSD-500c-4, BSD-500i-8 and BSD-500c-8. These new systems enable us to treat cancers near the surface of the body using heat created with focused microwave energy, known as superficial hyperthermia, and also to treat cancers deeper in the body or in natural orifices like the esophagus using microwave antennae, known as interstitial hyperthermia. In addition to treating melanoma, recurring breast cancer and other cancers requiring superficial hyperthermia therapy, these new systems are used as companions to interstitial radiation systems, called brachytherapy systems, that treat cancer with radioactive seeds. We believe that over 1,500 brachytherapy systems have been installed, providing a target customer base for our systems. We have also obtained the CE Mark certification required to export these systems to Europe. The new BSD-500 systems are compact, portable and ergonomically engineered for use in a demanding hospital environment.

Our BSD-2000 family of systems employs an array of microwave antennae used to focus on and treat tumors located deep in the body. The BSD-2000 system has not been submitted for FDA pre-market approval, or PMA. Accordingly, we do not have authority to distribute the BSD-2000 system for sale in the United States, except as an investigational device. The phase III clinical trial through which we intend to seek a PMA for this system has already been completed, and we are underway in developing the commercial version of the BSD-2000 that we intend to use as the basis of the FDA submission.

In July 2004, American Medical Systems Holdings, Inc., or AMS, acquired TherMatrx, Inc. for $40 million in cash plus future payments contingent upon the combined entity's future sales of TherMatrx's DOT systems. The sale includes all of our TherMatrx shares. We received an initial cash payment, after the withholding of escrow funds and the payment of other initial obligations, of approximately $8,975,000 in connection with the closing. Our approximate 30% ownership of TherMatrx was reduced to approximately 25% because of the exercise of outstanding options to acquire common stock of TherMatrx at the closing. We may also receive future contingent payments. Contingent payments to TherMatrx

shareholders will be four times quarterly sales of TherMatrx's DOT systems during the six quarters beginning July 5, 2004 and ending December 31, 2005. We will receive quarterly contingent payments when the accumulated value of four times quarterly sales has exceeded the initial $40 million payment to TherMatrx shareholders. The contingent payments are also subject to certain set-off rights in favor of AMS. The aggregate maximum amount of the initial payment and any contingent payments is $250 million. While the contingent payments are not guaranteed and are subject to the future sales of TherMatrx products, we have offered the following projections. If the sale of TherMatrx products were to remain flat at the recent sales rates, the total payment for our TherMatrx shares would be about $30 million, including the initial payment of approximately $8,975,000. Since the sale of TherMatrx products has been increasing in the current year over previous years, we have projected a continued growth trend during the earn-out period. If that growth trend were realized, the projected total payment for our TherMatrx shares would be about $40 million, including the initial payment of approximately $8,975,000. However, any future payments are not guaranteed and are subject to uncertainties, and we

may not receive any contingent payments in addition to the initial $8,975,000, which is the only amount guaranteed. We expect to use the payments from the sale of our TherMatrx shares, including any contingent payments, for general corporate purposes including the sales and marketing effort for our FDA approved cancer therapy products, supporting the FDA application for our cancer therapy products under investigational status, and the development of future products used in medical therapy.

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

Cancer and Hyperthermia Therapy

Despite the massive attention given to cancer prevention and treatment, the American Cancer Society estimates that 1,334,100 new cancer cases were diagnosed and that 556,500 Americans died from cancer during 2003 (up from 555,500 cancer deaths in 2002). Exceeded only by heart disease, cancer, as a group of diseases, remains the second leading cause of death in the United States. 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.

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.

Because cancer remains a significant cause of death, these three cancer therapies are still grossly inadequate, and an enormous need for better treatment is obvious. 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.

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 and destroy 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(degree)C and 45(degree)C. 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.

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. While temperatures between 40(degree)C and 45(degree)C are used to kill cancer cells in combination with radiation and chemotherapy, higher temperature treatments, called "thermal therapy" or "thermotherapy," are used when treatment of cancer is accomplished by heat alone.

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 1978, 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 deep hyperthermia therapy.

In the opening address at the April 21, 2001 annual meeting of the North American Hyperthermic Society (sponsored by the Radiologial Society of North America), P. K. Sneed, M.D. of the University of California at San Francisco summarized the results of completed randomized clinical trials in which the effectiveness of radiation therapy combined with hyperthermia therapy were compared with the results of radiation therapy alone in cancer treatment. The summary of the report on these trials was that 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.

Our Products and Services

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

- 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.

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).

In October 2003, we announced that we had received FDA approval for a new operating system, allowing us to commercially introduce this new family of six systems. Our 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 six 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. Obtaining FDA approval and CE Mark for the new BSD-500 operating systems were major milestones for us.

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 generator, an 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 an array of cylindrical 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. We are engaged in the extensive and time consuming process of preparing 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.

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, Tubingen University Medical School, Essen University Hospital, Charite 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 the tumor. As part of our international collaborative research efforts, sophisticated treatment planning software for the BSD-2000/3D has also been developed.

As previously noted, 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 of 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 Gro(beta)hadern Medical School of Ludwigs-Maximilians-Universitat Munchen, in Munich, Germany. We installed a second BSD-2000/3D/MR system at the Department of Radiology of Charite University Medical School of Humboldt University in Berlin, Germany, as part of a collaborative effort with Siemens Medical Systems. The funding for purchase and development of these systems was provided by the German government and public foundation funds.

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 and only need to ensure that we interface the system with an MRI system that also is approved in Europe.

Other Products and Services. In addition to our hyperthermia therapy systems, we manufacture for, and supply treatment systems and related equipment components to, other medical device companies, as described below.

TherMatrx, Inc. We manufacture, assemble and test for TherMatrx its FDA-approved TMx-2000 thermotherapy system that treats benign prostatic hyperplasia, or BPH, a condition associated with an enlarged prostate that commonly affects men over age 50. We also supply TherMatrx with equipment components used for its TMx-2000 system, including probes, applicators and temperature components. We also have provided regulatory compliance and other consulting services to TherMatrx.

In November 1997, we entered into an agreement with Oracle Strategic Partners and Charles Manker to form TherMatrx as a jointly-owned private company. In return for an equity interest in TherMatrx, we transferred to TherMatrx four patents related to the thermal treatment of BPH. As described more fully elsewhere in this prospectus, in July 2004, AMS acquired TherMatrx, including all of our TherMatrx shares.

TherMatrx's TMx-2000 system is a non-surgical, catheter-based therapy that has been shown to provide safe and effective relief from BPH symptoms. The treatment can be performed in a clinic or physician's office. The therapy avoids the side effects and complications of surgery. TherMatrx obtained FDA approval to begin marketing its products in July of 2001 and began marketing the TMx-2000 shortly after receiving FDA approval.

In manufacturing, assembling and testing the TMx-2000 system and supplying equipment components and providing consulting services to TherMatrx, TherMatrx has been our largest customer. For the year ended August 31, 2003, TherMatrx accounted for $1,454,943, or approximately 57% of our revenue. Our product sales to TherMatrx dropped significantly during the first nine months of fiscal 2004 compared to first nine months of fiscal 2003 because of TherMatrx's existing excess inventory. TherMatrx is under no contractual obligation to obtain from us products or manufacturing, assembling, testing or other services, and is free to obtain such products and services from another source at any time. We believe TherMatrx purchases the majority of its products from other sources. With the sale of our TherMatrx shares to AMS, we believe product sales to TherMatrx may decrease to zero in future fiscal years.

Medizin-Technik GmbH. Additionally, we supply equipment components to Medizin-Technik located in Munich, Germany, which is a significant distributor of our hyperthermia therapy systems in Europe. Medizin-Technik purchases equipment and components to service our hyperthermia therapy systems that it sells to its customers in Europe. The President and Chief Executive Officer of Medizin-Technik is Dr. Gerhard W. Sennewald, one of our directors and significant stockholders. Medizin-Technik was a significant customer for us in fiscal 2003 with sales of $517,979 or 20% of our revenue. Medizin-Technik has been a significant customer in prior years and we anticipate that it will be a significant customer for us in the future. The loss of Medizin-Technik as a distributor and significant customer would have a material adverse effect on our business. The distribution rights of Medizin-Technik have been in place since the early 1980s.

Sales, Marketing and Distribution

In the United States, our target market includes clinics, hospitals and institutes in which cancer is treated. In the international market we similarly target cancer treatment centers in clinics, hospitals and institutes.

In May 2002, we entered into an agreement with Nucletron B.V. under which Nucletron became our exclusive sales agent in most of the world for our BSD-500i interstitial hyperthermia therapy system. We sold only one BSD-500i through Nucletron. We have not felt that our relationship with Nucletron was successful, and our sales agreement with Nucletron was terminated in March 2004.

For our other products that deliver deep hyperthermia therapy, including the BSD-2000 and related products, we sell our equipment directly to end-users in the United States. We make international sales of these products through distributors located in various foreign countries.

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. We generally do not provide our distributors with rights of return, price protection, discounts, credits, or other special terms or sale incentives. However, we did provide Medizin Technik with an extra applicator at no additional charge as a sales incentive in connection with the sale of a BSD-2000 system in fiscal 2004. 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 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 as a viable and effective therapy for treating cancer, either in combination with other therapies or as a stand alone 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.bsdmc.com, and our materials are also posted on many other sites. 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.

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. Codes have been established for billing for superficial and interstitial hyperthermia delivered using our BSD-500 systems when used in combination with radiation therapy or chemotherapy. Codes also have been established for providing deep hyperthermia therapy. Billing codes are available for both institutions and physicians.

Effective November 1995, HCFA, the predecessor agency to CMS, authorized Medicare reimbursement for certain investigational devices and certain related services 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.

General hyperthermia reimbursement has been approved in the United

States, Germany, Holland, Switzerland and Japan. CMS has also provided billing codes for thermotherapy/thermal therapy treatment of BPH. These billing codes apply to TherMatrx's TMx-2000 system treatments of BPH.

Even though a new medical device may have been approved for commercial distribution, we may find limited demand for that product until reimbursement approval is obtained from governmental and commercial third party payors of health care. In addition, even after we receive reimbursement approval, or coverage, of a product, medical reimbursement rates are unpredictable. Both government and commercial third party payors of health care are seeking to limit the growth of health care costs. If clinics, hospitals, and other health care providers are not reimbursed adequately for our product, they may not purchase our product. We cannot project the extent to which our business may be affected by future legislative and regulatory developments, and private sector initiatives, to reduce health care costs. We cannot assure that future health care legislation or regulation will not have a material adverse effect on the coverage of our products, our business, financial condition and results of operations, or that reimbursement, existing or in the future, will be adequate to ensure that customers continue to purchase our products.

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 is principally involved with clinical trials related to thermotherapy, hyperthermia and related fields. Labthermics produces ultrasound-based systems which compete with our microwave hyperthermia systems. 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.

Product Service

We provide a 12-month 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.

Production

We manufacture and test our systems and products at our facilities in Salt Lake City, Utah. Our manufacturing facility is ISO 9001-1994 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 $1 million. However, we cannot assure you 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.

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, and we anticipate that our future systems will similarly require pre-market 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 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.

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.

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 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 for U.S. and some European installations and 433.92 MHz for some European installations, 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.

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 six patents in the United States and two patents outside the United States. Four additional patents were assigned to TherMatrx, for which we obtained a license, and one patent license was obtained by us from University of California San Francisco and another license was obtained by us from the National Institutes of Health. A European patent for the BSD-2000/3D system has been issued. We believe that our patents represent the early pioneering and dominant patents in this field. These patents along with the advanced product development and leadership in the field are key elements for our current and future market position.

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.

On October 21, 1999, we acquired from the University of California San Francisco (UCSF) the exclusive patent license (U.S. Patent 4,825,880) for small microwave antennae that can be inserted into cancerous tumors to destroy them from the inside. The innovative microwave antenna design enables the therapeutic heating length to be tailored to match the tumor size. This license requires payment of 2.5% of sales on licensed products sold and payment of patent maintenance fees and other annual payments of $4,000 to maintain the exclusive license. We remain current on these payments.

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 combination of magnetic resonance integrated 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 annual payment of $1,000, $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 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.

From time to time, we have had and may continue to have discussions with other companies, universities and private individuals concerning the possible granting of licenses covering technology and/or patents. There can be no assurance that such discussions will result in any agreements. In the past, we have granted non-exclusive practice licenses for a few selected patents to three companies. One of these companies is no longer in business.

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

During the fiscal years ended August 31, 2003, and August 31, 2002, we expended $676,867 and $603,137 respectively for research and development, representing 26% and 23% of total revenues. Research and development expenditures increased in fiscal 2003 due to costs associated with the development of the BSD-2000/3D/MR system, the continued enhancements of our BSD-500 systems and the development of new products not yet announced. 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 risks and uncertainties that could aversely affect our projections, outlook and operating results.

Employees

As of May 31, 2004, BSD had 24 employees; 22 of whom were full-time employees. None of our employees is 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.

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. We have leased the building for an annual rental expense of approximately $78,000. In November 2002, we renewed our lease for five years, which includes payments of approximately $82,000 per year for five years adjusted annually for increases in the cost of living based on the Consumer Price Index for Urban Consumers. We have an option to purchase the building for $1,000,000 upon 60 days notice for six years beginning December 1, 2002. Thereafter, the purchase price increases by $50,000 each year, and the option expires at the end of the tenth year. The building lease is accounted for as an operating lease for financial statement purposes. 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.

Legal Proceedings

There are no legal proceedings pending against or being taken by us.

MANAGEMENT

The following table sets forth certain information concerning our directors, executive officers and key employees. The directors have served in their respective capacities since their election and/or appointment and will serve until the next annual stockholders' meeting or until their successors are duly elected and qualified. The executive officers serve at the pleasure of the Board of Directors. There are no family relationships among any of our directors or officers.

Name	Age	Position
Paul F. Turner, MSEE*	56	Chairman of the Board, Senior Vice President, and Chief Technology Officer
Hyrum A. Mead, MBA*	56	President and Director
Gerhard W. Sennewald, Ph.D.	67	Director
J. Gordon Short, M.D.	72	Director
Michael Nobel, Ph.D.	63	Director
Dixie Toolson Sells	53	Vice President of Regulatory Affairs
Ray Lauritzen	53	Vice President of Field Service

---

*Executive officers of BSD.

Paul F. Turner, MSEE, has served as a director of BSD since 1994 and currently serves as Chairman of the Board of Directors. Mr. Turner also has served as the Senior Vice President and Chief Technology Officer of BSD since August 1999. From October 1995 to August 1999, Mr. Turner served as the Acting President of BSD. From 1986 to October 1995, Mr. Turner served in various capacities with BSD, including Staff Scientist, Senior Scientist, Vice President of Research, and Senior Vice President of Research. Mr. Turner has led the design of microwave treatment systems for tumors, including the development of external phased array antennae technology to focus radiated microwave energy deep into the central area of the body to treat deep tumors. He has also integrated this technology with magnetic resonance imaging to non-invasively monitor treatments within the patient's body.

Hyrum A. Mead, MBA, has served as President and a director of BSD since August 1999. Previously, he served five years as Vice President of Business Development at ZERO Enclosures, a leading manufacturer in the telecommunications, computer and aerospace enclosures industry and seven years as President of Electro Controls, a manufacturer of computer controlled power systems. Mr. Mead began his career in marketing with IBM where he was involved with the introduction of many new products.

Gerhard W. Sennewald, Ph.D., has served as a director of BSD since 1994. Dr. Sennewald has served as the President and Chief Executive Officer of

Medizin-Technik GmbH, of Munich, Germany, a firm which is engaged in the business of distributing hyperthermia equipment and diagnostic imaging equipment and services, from April 1985 to the present. In connection with his service to Medizin-Technik GmbH, Dr. Sennewald has been BSD's key European representative and distributor for 17 years and has been instrumental in obtaining the majority of BSD's foreign sales.

J. Gordon Short, M.D., has served as a director of BSD since 1994. From 1978 to 2000, Dr. Short served as President of Brevis Corporation, a privately-held medical products company that specializes in consumable specialty

supplies and in hand hygiene products, and from 1978 to the present, Dr. Short has served as the Vice President and Chairman of the Board of Brevis Corporation. From 1978 to 1982, Dr. Short served BSD as a Medical Director. In that capacity, he participated in the initial development and establishment of certain of BSD's products. He also previously served on BSD's Medical Advisory Board.

Michael Nobel, Ph.D., has served as a director of BSD since January 1998. From 1991 to the present, Dr. Nobel has served as the Executive Chairman of the MRAB Group, a privately-held company which provides diagnostic imaging services. From 1995 to the present, Dr. Nobel has served as the Chairman of the Board of the Nobel Family Society. From 1995 to the present, he also has served as Chairman of the American Non-Violence Project Inc., and has served as a consultant to UNESCO in Paris and the United Nations Social Affairs Division in Geneva. Dr. Nobel participated in the introduction of magnetic resonance imaging as European Vice President for Fonar Corp.

Dixie Toolson Sells has served as Vice President of Regulatory Affairs of BSD since December 1994. Ms. Sells served as Administrative Director of BSD from 1978 to 1984, as Director of Regulatory Affairs from 1984 to September 1987, and as Vice President of Regulatory Affairs from September 1987 to October 1993. She served as Director of Regulatory Affairs from October 1993 to December 1994. Ms. Sells has served as Vice President of Regulatory Affairs since 1994. She served as Corporate Secretary from 1994 to 2002. Ms. Sells also serves on the Board of Directors of the Intermountain Biomedical Association.

Ray Lauritzen served as Field Service Manager of BSD from 1982 to January 1988 and has served as Vice President of Field Service Operations from January 1988 to the present.

Audit Committee

We have established an audit committee, which consists of Mr. Sennewald, Mr. Short and Mr. Nobel. The audit committee is responsible for reviewing and monitoring our financial statements and internal accounting procedures, recommending the selection of independent auditors by our board, evaluating the scope of the annual audit, reviewing audit results, consulting with management and our independent auditor prior to presentation of financial statements to stockholders and, as appropriate, initiating inquiries into aspects of our internal accounting controls and financial affairs. We currently do not have an audit committee financial expert because of our relatively small size and our limited resources to attract such an expert.

EXECUTIVE COMPENSATION

The following table sets forth certain information regarding all compensation earned by Paul Turner, our Senior Vice President and Chief Technology Officer, and Hyrum Mead, our President, for services rendered to us

during fiscal 2003, 2002 and 2001. No other executive officer received total salary and bonus compensation in excess of $100,000 for the fiscal year ended August 31, 2003.

Summary Compensation Table

Name and Principal Position	Year	Annual Compensation		Com
		Salary ($)	Bonus ($)	
				Opt
Paul Turner, Chairman of the Board, Senior Vice President, Chief Technology Officer	2003	$145,000	$400	
	2002	$145,000	$400	
	2001	$145,000	$400	
Hyrum A. Mead, President, Director	2003	$125,000	$400	
	2002	$125,000	$30,000	
	2001	$125,000	$400	

(1) Represents options to purchase shares of TherMatrx common stock we owned on the date of grant. These options were granted by us in July 2002 and were exercised in the fourth quarter of fiscal 2002 at an exercise price per share of $0.001. We recognized a compensation expense related to these TherMatrx options computed using a value of $4.00 per share. The $4.00 per share value is based solely on the price per share for common stock sold by TherMatrx to existing TherMatrx stockholders in December 2001.

The following table summarizes the exercise of stock options during fiscal 2003 by Messrs. Turner and Mead, and the fiscal year-end value of unexercised stock options held by each of them. None of these executive officers exercised stock options during fiscal 2003.

AGGREGATED OPTION EXERCISES IN LAST FISCAL YEAR
AND FISCAL YEAR-END OPTION VALUES

Name and Position	Number of Securities Underlying Unexercised Options at FY-end (#)		Value of Unexercised In-the-Money Options at FY-end ($) (1)	
	Exercisable	Unexercisable	Exercisable	Unexercisable
Hyrum A. Mead, President	200,000	120,000	$33,600	$16,800
Paul F. Turner, Sr. VP and	180,953	0	$124,858	0

Chief
Technology
Officer

(1) Value based on the difference between the fair market value of one share of our common stock at August 31, 2003, $0.79, and the exercise price of the options ranging from $0.10 to $0.81 per share. Options are in-the-money if the market price of the shares exceeds the option exercise price.

Compensation of Directors

We provide annual compensation in the amount of $12,000 to each non-employee director. Of this amount, $4,000 is to be paid in cash and the balance is to be paid in the form of restricted shares of our common stock under our 1998 Director Stock Option Plan. In addition to the annual compensation to directors, each non-employee director will receive an annual option to purchase 25,000 restricted shares of our common stock at a purchase price of 85% of the fair market value at the date the option is granted. The options vest ratably over 5 years and expire in 10 years.

Paul F. Turner and Hyrum A. Mead are the only members of the Board of Directors who are employed by us. Messrs. Turner and Mead do not receive any separate compensation for services performed as directors.

Employment Contracts

We entered into an employment agreement with Mr. Mead dated August 10, 1999. This agreement provides that Mr. Mead shall receive an annual base salary of $125,000, which shall be reviewed annually by the Board of Directors. The agreement provides that if Mr. Mead is involuntarily terminated, Mr. Mead will receive severance compensation for a period of six months, including an extension of all benefits and perquisites. The severance amount shall include six months of salary at the highest rate paid to Mr. Mead prior to termination and an additional amount equal to all bonuses received by Mr. Mead during the 12-month period preceding termination (excluding any signing bonus received during such period). The agreement also requires us to vest any options granted to Mr. Mead for the purchase of our common stock, allowing a 90-day period for Mr. Mead to exercise those options. Mr. Mead's agreement includes a non-competition covenant prohibiting him from competing with us for one year following his termination.

We entered into an employment agreement with Mr. Turner dated November 2, 1988. The agreement provides that Mr. Turner's salary will be based upon a reasonable mutual agreement. The agreement provides that if Mr. Turner's employment is involuntarily terminated, he will receive severance pay for a one-year period, which pay includes an extension of all of his rights, privileges and benefits as an employee (including medical insurance). The one year severance pay shall be equal to Mr. Turner's regular salary for the 12-month period immediately prior to the termination. The agreement also requires us to pay Mr. Turner for any accrued, unused vacation at the time of termination. We are also obligated to pay Mr. Turner $1,000 (or the equivalent value in stock options) for each newly issued patent obtained by us as a result of Mr. Turner's efforts (Mr. Turner receives only $500 if multiple inventors are involved). Mr. Turner's agreement includes a non-competition covenant prohibiting him from competing with us for one year following his termination. We may continue the non-competition period for up to four additional years by notifying Mr. Turner in writing and by continuing the severance payments for the

additional years during which the non-competition period is extended.

SELLING STOCKHOLDERS

The following table sets forth the number of shares of our common stock beneficially owned by the selling stockholders as of June 30, 2004, based on the selling stockholders' representations regarding their ownership. The percentages shown in the table are based on 19,913,651 shares of common stock outstanding on that date. We cannot estimate the number of shares that will be held by the selling stockholders after completion of this offering because the selling stockholders may sell all or some of the shares and because there currently are no agreements, arrangements or understandings with respect to the sale of any of the shares. The term "selling stockholder" or "selling stockholders" includes the stockholders listed below and their transferees, assignees, pledgees, donees or other successors. Each selling stockholder reserves the right to accept or reject, in whole or in part, any proposed sale of shares. Each selling stockholder also may offer and sell less than the number of shares indicated. No selling stockholder is making any representation that any shares covered by this prospectus will or will not be offered for sale. Except as indicated in this section, we are not aware of any material relationship between us and a selling stockholder within the past three years other than as a result of a selling stockholder's beneficial ownership of our common stock.

Unless otherwise indicated in the table below, the shares being offered in this prospectus were issued to seven accredited investors pursuant to that certain Securities Purchase Agreement dated as of November 28, 2003, and as amended on December 10, 2003 (the "Purchase Agreement"), between us and these investors. In accordance with the terms and conditions of the Purchase Agreement, we issued an aggregate of 2,059,600 shares of common stock. We also issued a three-year, immediately exercisable warrant to purchase up to 102,980 shares of common stock at an exercise price of $1.80 per share (the "Warrant") to a broker-dealer in connection with the Purchase Agreement. The shares to be issued upon exercise of the Warrant are also being offered in this prospectus.

Selling Stockholder	Number of Shares of Common Stock Beneficially Owned Before the Offering	Shares of common Stock Being Offered in the Offering	Number of Share of Common Stoc Beneficially Owned After th Offering
JMG Capital Partners, L.P (1)	455,000	455,000	--
JMG Triton Offshore Fund, Ltd (2)	455,000	455,000	--
J. Steven Emerson IRA R/O II (3)	1,127,787	910,000	217,787
Emerson Partners, Ltd. (4)	135,000	135,000	--
High Tide, LLC (5)	45,500	45,500	--
Kenneth R. Malkes	13,600	13,600	--
The Runnels Family Trust (6)	105,500	105,500	--
T.R. Winston & Company, LLC (7)	42,980	42,980	--

---

* Represents beneficial ownership of less than 1.0% of the outstanding shares of common stock.

(1) JMG Capital Partners, L.P. ("JMG Partners") is a California limited partnership. Its general partner is JMG Capital Management, LLC (the "Manager"), a Delaware limited liability company and an investment adviser registered with the Securities and Exchange Commission. The Manager has voting and dispositive power over JMG Partners' investments, including these shares. The equity interests of the Manager are owned by JMG Capital Management, Inc., ("JMG Capital") a Delaware corporation, and Asset Alliance Holding Corp., a Delaware corporation. Jonathan M. Glaser is the Executive Officer and Director of JMG Capital and has sole investment discretion over JMG Partners' portfolio holdings.

(2) JMG Triton Offshore Fund, Ltd. (the "Fund") is an international business company under the laws of the British Virgin Islands. The Fund's investment manager is Pacific Assets Management LLC, a Delaware limited liability company (the "Manager"). The Manager is an investment adviser registered with the Securities and Exchange Commission and has voting and dispositive power over the Fund's investments, including these shares. The equity interests of the Manager are owned by Pacific Capital Management, Inc., a Delaware company ("Pacific") and Asset Alliance Holding Corp., a Delaware company. The equity interests of Pacific are owned by Messrs. Roger Richter, Jonathan M. Glaser and Daniel A. David. Messrs. Glaser and Richter have sole investment discretion over the Fund's portfolio holdings.

(3) J. Stevens Emerson, the sole beneficiary of J. Steven Emerson IRA R/O II, has voting and investment control over these shares.

(4) J. Stevens Emerson, a manager of Emerson Partners, Ltd., has voting and investment control over these shares.

(5) G. Tyler Runnels, manager of High Tide, LLC ("High Tide"), has voting and investment control over these shares. High Tide, an affiliate of T.R. Winston & Company, LLC, has represented to us that the shares held by it were purchased in the ordinary course of business, and that at the time of issuance it did not have any agreements or understandings, directly or indirectly, with any person to distribute the shares.

(6) The shares being offered in this prospectus include 60,000 shares issuable upon exercise of warrants. These warrants were issued to The Runnels Family Trust ("Runnels Trust") at the direction of T.R. Winston & Company, LLC ("TR Winston") in connection with placement services relating to the Purchase Agreement provided by TR Winston, and we agreed to register for resale the shares issuable upon exercise of the warrants. With respect to the remaining 45,500 shares, the Runnels Trust has represented to us that shares were purchased in the ordinary course of business, and that at the time of issuance it did not have any agreements or understandings, directly or indirectly, with any person to distribute the shares. G. Tyler Runnels, trustee of the Runnels Trust, has voting and investment control over these shares.

(7) The shares being offered in this prospectus include 42,980 shares issuable upon exercise of warrants. These warrants were issued to T.R. Winston & Company, LLC ("TR Winston") in connection with placement services relating to the Purchase Agreement, and we agreed to register for resale the shares issuable upon exercise of the warrants. G. Tyler Runnels, Chairman, and John W. Galuchie, Jr., President of TR Winston, have voting and investment control over these shares. TR Winston is a registered broker-dealer and all of the securities issued to it were issued as compensation for placement services.

We have agreed to prepare and file any amendments and supplements to the registration statement relating to these shares as may be necessary to keep the registration statement effective until such time as all of the shares covered by this prospectus have been sold or until all of such shares may be sold without registration or restriction pursuant to Rule 144(k) under the Securities Act.

This prospectus also covers any additional shares of our common stock which become issuable in connection with the shares being registered by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the receipt of consideration which results in an increase in the number of our outstanding shares of common stock.

PLAN OF DISTRIBUTION

We have registered the 2,162,580 shares of our common stock offered in this prospectus on behalf of the selling stockholders. We will pay all expenses of this registration, other than fees and expenses, if any, of counsel or other advisors to the selling stockholders. The selling stockholders are responsible for paying any commissions, discounts, or other brokerage fees incurred in connection with their sale of any of the shares.

The shares of common stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market prices, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected at various times in one or more of the following transactions, or in other kinds of transactions:

- in the over-the-counter market;
- in private transactions and transactions otherwise than on exchanges or systems or in the over-the-counter market;
- in connection with short sales of the shares;
- by pledge to secure debt and other obligations;
- through the writing of options, whether the options are listed on an options exchange or otherwise;
- in connection with the writing of non-traded and exchange-traded call options, in hedge transactions and in settlement of other transactions in standardized or over-the-counter options; or
- through a combination of any of the above transactions.

The selling stockholder and its successors, including its transferees, pledgees or donees or their successors, may sell the common stock directly to purchasers or through underwriters, broker-dealers or agents, who may receive compensation in the form of discounts, concessions or commissions from the selling stockholder or the purchasers. These discounts, concessions or commissions as to any particular underwriter, broker-dealer or agent may be in excess of those customary in the types of transactions involved.

We have agreed to indemnify the selling stockholders, and each director, officer or controlling person of each selling stockholder within the meaning of Section 15 of the Securities Act of 1933 against all losses, claims, damages, liabilities and expenses, (or action in respect thereof) including any of the foregoing incurred in settlement of any litigation, commenced or threatened, arising out of or based on (i) any untrue statement or alleged

untrue statement of a material fact contained in, or information incorporated by reference into, any registration statement or prospectus (or any amendment or supplement thereto) or any preliminary prospectus prepared in connection with the registration contemplated by the Purchase Agreement, (ii) any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, (iii) any failure by us to fulfill and perform any agreement, covenant or undertaking pursuant to the Purchase Agreement, or (iv) any failure or breach of our representations and warranties as set forth in the Purchase Agreement.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance on Rule 144 under the Securities Act of 1933, if they meet the criteria and conform to the requirements of that rule.

The selling stockholders and any broker-dealers or agents that participate with the selling stockholders in the sale of shares may be "underwriters" within the meaning of the Securities Act of 1933. Any commissions received by broker-dealers or agents on the sales and any profit on the resale of shares purchased by broker-dealers or agents may be deemed to be underwriting commissions or discounts under the Securities Act of 1933.

Under the rules of the SEC, any person engaged in the distribution of our common stock may not simultaneously buy, bid for or attempt to induce any other person to buy or bid for our common stock in the open market for a period of two business days prior to the beginning of the distribution. The rules and regulations under the Securities Exchange Act of 1934 may also limit the timing of purchases and sales of shares of our common stock by the selling stockholders. We have notified the selling stockholders they should not begin any distribution of common stock unless they have stopped purchasing and bidding for common stock in the open market as provided in applicable securities regulations, including Regulation M promulgated under the Securities Exchange Act of 1934.

We have informed the selling stockholders that the anti-manipulation provisions of Regulation M may apply to the sales of their shares. We have advised the selling stockholders of the requirement for delivery of this prospectus in connection with any sale of the common stock.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Management's Discussion and Analysis of Financial Condition and Results of Operations and other parts of this prospectus 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 subsections entitled "Forward-Looking Statements and Factors That May Affect Future Results and Financial Condition" below and the subsection entitled "Risk Factors" above. The following discussion should be read in conjunction with our consolidated financial statements and notes thereto included in this prospectus. All information presented herein is based on our fiscal year ended August 31, 2003 and the nine months ended May 31, 2004. We assume no obligation to revise or update any forward-looking statements for any reason, except as required by law.

General

We develop, manufacture and market microwave systems used in the treatment of cancer. Our microwave systems are used in cancer treating therapies that elevate the temperature of tumors or other targeted tissue to conditions classified as either hyperthermia or thermal therapy, also called thermotherapy, through precisely delivered microwave energy.

Since our inception, we have been engaged in the development and improvement of technology that can better accomplish cancer treatment through hyperthermia therapy. From our predecessor hyperthermia systems, our current BSD-500 and BSD-2000 hyperthermia systems have emerged. We have also developed enhancements to our BSD-2000 system including the BSD-2000/3D that is designed to allow three dimensional steering of deep focused energy and heat to targeted tumors and tissue and the BSD-2000/3D/MR that includes an interface for magnetic resonance imaging. Our hyperthermia systems are sold with supporting software and may also be sold with support services.

Since inception, we have generated substantial operating losses and at August 31, 2003, had an accumulated deficit of $20,486,107. We recorded net loss for fiscal 2003 of $570,285.

We recognize revenue from the sale of cancer treatment systems, the sale of parts and accessories related to the cancer treatment systems, the sale of software license rights, providing manufacturing services, training, and service support contracts. Product sales were $1,956,270 and $1,866,192 for the years ended August 31, 2003 and 2002, respectively. Service revenue was $212,181 and $716,240 for the years ended August 31, 2003 and 2002, respectively

We derived $1,907,585, or 74% of our revenue in fiscal 2003 from sales to related parties. Approximately $1,391,443 of such related party revenue was from manufacturing, assembling and testing thermotherapy systems for TherMatrx and selling probes, applicators and temperature sensors and other components and contract services to TherMatrx. We also realized $63,500 of royalty revenue from TherMatrx, which is included in other revenue. The remaining related party revenue of approximately $516,142 was for one BSD-2000 system and component parts sold to Medizin-Technik GmbH. Dr. Gerhard Sennewald, one of our directors, is a stockholder, executive officer and a director of Medizin-Technik GmbH.

In fiscal 2003, we derived $326,597, or 13% of our revenue from sales to unrelated parties. These revenues consisted of the sale of two BSD 500 systems for $203,386, billable labor of $20,863, service contracts of $65,731, and sales of consumable devices used with our hyperthermia systems of $36,617. During the fiscal year ended August 31, 2003, we also recognized revenue of $275,000 for royalties in arrears that were collected from a legal settlement. Such royalties were owing pursuant to a 1996 agreement in which we granted a license to use our patented technology related to benign prostatic hyperplasia, or BPH. This payment from the licensee was for settlement in full of all royalty obligations on the part of the licensee and such royalties will not continue in future periods.

Cost of sales for the year ended August 31, 2003, included raw material and labor costs. Research and development expenses include expenditures for new product development and development of enhancements to existing products.

As described more fully elsewhere in this prospectus, in July 2004, AMS acquired TherMatrx, including all of our TherMatrx shares. Having sold our TherMatrx shares, any future product sales to TherMatrx are uncertain and could decrease to zero in future fiscal periods. While TherMatrx may purchase products

from us in the future, we have not included any TherMatrx sales in our business

planning. It has never been our intent to focus our business on contract manufacturing. We historically provided manufacturing services to TherMatrx to help it develop its business.

We project that in fiscal year 2004 the significant decline of TherMatrx sales will create a significant decline in our total revenue as compared to fiscal 2003, and that we will incur a greater loss in fiscal 2004 than in 2003.

We intend to use the cash generated from the sale of our TherMatrx shares to aggressively pursue our business plan and diversify our revenue base away from related party revenue. Our plan includes increasing support for sales and marketing of our FDA approved products and the pursuit of pre-marketing approval for the BSD-2000 in an effort to complete our objective of providing treatment for solid tumors located throughout the body. Our plan also anticipates the development of new products that provide heat therapies relating to cancer and other health concerns. We intend to pursue compatible technologies other than those developed within our company to further strengthen our product offering and the markets that we can address. In the future, we expect to spend substantially more on sales and marketing, including the development of new channels of distribution, sales partnerships, regulatory efforts to increase our offering of FDA approved products, and on new technology, developed both outside our company and internally. These actions are intended to boost our sales to levels anticipated in our forward business plan. Because our plan requires an investment in our business as described above, we anticipate that we will incur substantial losses until our sales rise significantly above past levels.

Critical Accounting Policies and Estimates

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 guaranteed by BSD. 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, which approximates recognizing it as it is earned.

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 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.

Inventory Reserves. As of May 31, 2004, we had recorded a reserve for potential inventory impairment of $140,000. During fiscal 2003, due to the level of usage of certain inventory items, we estimated that such items on hand potentially exceeded the estimated near-term usage. As a result, we determined to increase the inventory reserve by $90,000 in the fourth quarter of fiscal 2003. This estimate is determined based on our forecasted sales and related inventory usage to fill such sales orders as well as evaluation of technological enhancements that may render inventory items obsolete in the near-term. We periodically review our inventory levels and usage, paying particular attention to slower-moving items. If projected sales for fiscal 2004 do not materialize or if our hyperthermia systems do not receive increased market acceptance, we may be required to increase the reserve for inventory in future periods. We have projected a decrease in future orders placed with us for TherMatrx systems, but do not project a requirement for any inventory impairment based on this decline. In the past we have purchased inventory only after receiving orders for TherMatrx systems, and only in quantities sufficient to fulfill those orders. We have no inventory for TherMatrx systems that is currently at risk, whether or not future orders are placed with us for TherMatrx systems.

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 sale. 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.

Allowance for Doubtful Accounts. We provide our customers with payment terms that vary from contract to contract. We perform ongoing credit evaluations of our customers and maintain allowances for possible losses which, when realized, have been within the range of management's expectations with exception of the bad debt expense of approximately $300,000 recorded in fiscal 2003 as discussed below. Our allowance for doubtful accounts at August 31, 2003 was approximately $67,000, or approximately 14% of the total outstanding receivables. Bad debt expense for the fiscal year ended August 31, 2003 was approximately $300,000. This resulted from a sale of BSD-2000 that was recorded in fiscal year 2002 to a customer that was determined to be uncollectible in the fourth quarter of fiscal 2003. Allowance estimates are recorded on a customer-by-customer basis and are determined based on the age of the receivable, compliance with payment terms, and prior history with existing clients. To date, actual results have not differed materially from management's estimates, with the exception of the above-mentioned bad debt. The non-payment of a receivable related to the sale of a BSD-500 or BSD-2000 could have a material adverse impact on our results of operations. As of May 31, 2004, our allowance for doubtful accounts was approximately $82,000 or approximately 26% of total outstanding receivables.

Results of Operations

Nine Months Ended May 31, 2004 Compared to Nine Months Ended May 31, 2003

Revenue. Sales decreased from $1,982,827 in the nine months ended May 31, 2003, to $1,541,397 in the nine months ended May 31, 2004, a decrease of $441,430, or 22%, primarily due to a decrease in sales to our unconsolidated subsidiary, TherMatrx. Sales to Thermatrx declined from $915,913, or 46% of total revenue for the nine months ending May 31, 2004 to $99,503, or 6%, of total revenue, for the nine months ending May 31, 2004. At present we do not have any further orders for additional TherMatrx systems. TherMatrx is under no contractual obligation to purchase products from us or manufacturing, assembling, testing or other services. We believe TherMatrx has and will continue to develop alternative sources of such products and services. Consequently, we currently expect revenue from TherMatrx to be significantly less in fiscal 2004 than it was in fiscal 2003, and that sales to TherMatrx in future fiscal years could decrease to zero. We project that in fiscal year 2004,

the decline of TherMatrx sales will create a significant decline in our total revenue as compared to fiscal 2003, and that we will incur a greater loss in fiscal 2004 than in 2003. In future fiscal years we intend to increase revenue through our expanded sales effort for the BSD-500 and the BSD-2000, and we have not projected sales to TherMatrx in our business planning for future years.

Related Party Revenue. The remaining related party revenue of $881,738 in the May 31, 2004 period, representing 57% of total sales and 90% of total related party revenue, was for two BSD-2000 systems and component parts sold to Medizin-Technik GmbH. Dr. Gerhard Sennewald, one of our directors, is a stockholder, executive officer and a director of Medizin-Technik GmbH. Non-related party revenue consisted of $471,724 from the sale of three BSD-500 systems, $51,631 for service contracts, and $36,801 for miscellaneous items.

Gross Profit. Gross profit for the nine months ending May 31, 2004 was $698,290, or 45%, as compared to $1,261,776, or 64%, of total product sales for the nine months ending May 31, 2003. The decline in gross profit margin was primarily due to the cost of excess production employees resulting from the decrease in sales and due to a sales incentive we agreed to in connection with the sale of the BSD-2000 to Medizin-Technik. We agreed to provide an extra applicator at no additional charge as a sales incentive in connection with the sale of the BSD-2000. The cost of the additional applicator lowered the gross margin recognized on the sale. Also, we made an adjustment to inventory to reflect the lower of cost or market which resulted in an increase in cost of sales of approximately $48,000. In addition, we had sales of higher margin hyperthermia system products accompanied by production efficiencies obtained from a higher volume of hyperthermia system sales in the period ending May 31, 2003.

Selling, General and Administrative Expenses. Selling, general and administrative expenses were $803,947 for the nine months ended May 31, 2004, as compared to $743,614 in the nine months ended May 31, 2003, an increase of $60,333, or 8%, primarily due to increases in sales and marketing expense of approximately $55,753, offset by an increase in warranty costs of approximately $17,200 that was associated with a European sale, charges to bad debt expense of $14,577 and small increases in employee benefits and insurance, partially offset by a decrease in legal and consulting expense of approximately $69,000. This increase in selling, general and administrative also included penalties of $22,656 for delays in getting a registration statement on Form SB-2 declared effective by the SEC. In the nine months ended May 31, 2003, we paid significant legal fees associated with fiscal 2002 compliance with the Sarbanes-Oxley Act. Such costs were not repeated in the nine months ended May 31, 2004. Total costs and expenses for the nine months ended May 31, 2004 increased by $171,689, an

increase of 9%, primarily due an increase in cost of goods sold, an increase in selling, general and administrative expense partially offset by small decrease in research and development expense and the inventory adjustment of $48,000 to reflect the lower of cost or market.

Research and Development Expenses. Research and development expenses were $490,006 for the nine months ended May 31, 2004, as compared to $500,706 in the nine months ended May 31, 2003. Research and development expenses in the period ending May 31, 2004 related primarily to development work on our BSD-2000/3D/MR hyperthermia system and enhancements to our BSD-500 systems.-

Net Loss. Net loss for the period ending May 31, 2004 was $591,324 compared to a profit of $20,120 for the May 31, 2003 period. The increase in net loss was primarily due to decreased sales volume and higher cost of goods sold.

Fiscal Year Ended August 31, 2003 Compared to Fiscal Year Ended August 31, 2002

Revenue. Revenue for fiscal 2003 was $2,572,682 compared to $2,672,472 for fiscal 2002, a decrease of $99,790, or approximately 4%. The decrease in total revenue was primarily due to a decrease in sales during fiscal 2003 to TherMatrx of approximately $390,000 and a decrease in sales of products to non-related parties of approximately $474,000, offset by an increase in sales to Medizin-Technik of $442,000, and an increase in royalty revenue of $338,000. We expect sales to TherMatrx to decline significantly in fiscal 2004. We also expect royalty revenue to decline significantly as $275,000 of the total $338,000 in royalty revenue received during fiscal 2003 was related to a one-time settlement. Sales to Medizin-Technik may fluctuate significantly depending on Medizin-Technik's anticipated sales and ability to place orders in Europe. Our revenue can fluctuate significantly from period to period because we have historically sold relatively few BSD-2000 and BSD-500 systems and these systems are expensive. Sales of very few systems can cause a large change in the revenue from period to period as noted in the increase in sales to Medizin-Technik from 2002 to 2003 and the decrease in sales to non-related parties from 2002 to 2003. Product sales increased to approximately $1,956,000 in fiscal 2003 from approximately $1,866,000 in fiscal 2002, an increase of approximately $90,000, or 5%.

Related Party Revenue. We derived $1,907,585, or 74% of our revenue in fiscal 2003 from sales to related parties as compared to $1,854,714, or 69%, in fiscal 2002. Approximately $1,391,443 of such related party revenue in fiscal 2003 was from the sales of thermotherapy systems, component products and contract services to TherMatrx. We also received a royalty payment of $63,500 paid to us by Thermatrx that is included in other revenue. During fiscal 2002, sales to TherMatrx were approximately $1,781,000. This decline in sales to TherMatrx in fiscal 2003 was due to increased use of other suppliers in providing products and services. We believe that we provided approximately 38% of the inventory and related manufacturing services purchased by TherMatrx in fiscal 2003 as compared to approximately 55% in fiscal 2002. The remaining related party revenue of approximately $516,142 in fiscal 2003 was for one BSD-2000 system and various component parts sold to Medizin-Technik. During fiscal 2002, we had sales of approximately $74,000 to Medizin-Technik. The significant increase in sales to Medizin-Technik in fiscal 2003 was due to the sale of a BSD-2000 system in fiscal 2003. In 2002, Medizin-Technik did not purchase a complete system. Sales to Medizin-Technik may fluctuate significantly from period to period due to the high cost of a BSD-2000 or BSD-500 system. Sales increases of one or two systems can have a material effect on our revenue.

Non-related Party Revenue. In fiscal 2003, we derived approximately $601,597, or 23% of our total revenue as compared to approximately $817,758, or

31%, in fiscal 2002 from non-related party sales. Our fiscal 2003 non-related party revenue consisted of sales of two BSD-500 systems in fiscal 2003 for approximately $203,386. The balance of our non-related party revenue consisted of consumable devices of $36,617, billable labor of $20,863, service contracts of $65,731 and royalty revenue of $275,000. As noted above, we expect royalty revenue to decline significantly as the $275,000 in royalty revenue was related to a one-time settlement. During fiscal 2002, we sold two BSD-2000 systems and one BSD-500 system for a aggregate of approximately $630,000. The unit price at which these systems sold was lower than our normal unit price for new systems because they were refurbished. The two BSD-2000 systems sold in fiscal 2002 were purchased by research facilities in the United States. Because the BSD-2000 system can only be sold in the United States pursuant to an Investigational Device Exemption under FDA regulations, sales in the United States may only be made to customers using the system for research purposes.

Cost of Sales. Cost of sales for fiscal 2003 was $1,227,377 compared to $1,114,846 for fiscal 2002, an increase of $112,531, or approximately 10%. This increase resulted primarily from charges to cost of sales for obsolete inventory of $90,000. Cost of sales for fiscal 2003 to unrelated parties decreased to $94,619 from $302,431 primarily because of the decrease in sales to unrelated

customers. Cost of sales to related parties in fiscal 2003 increased to $1,042,758 from $812,415 in fiscal 2002 primarily due to the increase in related party sales and the change in product mix sold to related parties from $1,854,714 of systems, component products and services in fiscal 2002 to $1,907,585 of systems, component products and services in fiscal 2003. During fiscal 2003, approximately $748,000, or 74% of the related party cost of sales were attributable to sales to TherMatrx and approximately $295,000, or 26%, were attributable to Medizin-Technik. The products sold to TherMatrx generally require less cost per unit to manufacture than our BSD-2000 and BSD-500 systems.

Gross Profit. Gross profit for fiscal 2003 was $1,006,805 or 45% of total product sales and related service compared to $1,557,626, or 58%, of total product sales in fiscal 2002. The gross margin percentage on sales to TherMatrx decreased from 56% in 2002 to 39% in 2003.

During fiscal 2002 and the first half of fiscal 2003, we only provided labor in connection with the manufacture of the systems sold to TherMatrx. The parts and materials for such systems were purchased from suppliers by TherMatrx and assembled by us. During the second half of fiscal 2003, we began providing both the labor and materials for the systems sold to TherMatrx. While the total revenue recorded per system increased from approximately $5,000 per unit to $10,000 per unit, our total gross margin on the systems declined from approximately 38% to approximately 28%. During fiscal 2002, we sold 150 systems to TherMatrx, as compared to 87 in fiscal 2003. We sold 28 systems in the first half of fiscal 2003 and 59 in the last half of fiscal 2003. In addition, sales of our applicators, probes, and other component products to TherMatrx declined as TherMatrx purchased some of its inventory of such products from another supplier. These items have a higher gross margin than the systems we sold to TherMatrx.

Our gross margins for sales to Medizin-Technik improved from 55% in fiscal 2002 to 62% in fiscal 2003. This improvement was due to the sale of the BSD-2000 unit in fiscal 2003 while we did not sell any complete units to Medizin-Technik in fiscal 2002. The gross margins on the BSD-2000 and BSD-500 units are higher than the gross margin recognized on component parts, supplies, and contract services.

Our gross margins for sales to non-related parties improved from 63% in

2002 to 71% in fiscal 2003. This was primarily due to the higher margin that we received from the first sale of our new BSD-500 system.

Research and Development Expenses. Research and development expenses for fiscal 2003 were $676,867 compared to $603,137 for fiscal 2002, an increase of $73,730, or 12%. Research and development expenses in fiscal 2003 related primarily to development of a commercial version of the BSD-2000/3D/MR hyperthermia system and to our BSD-500 systems.

Inventory Impairment Expense. We recorded an inventory impairment charge in fiscal 2003 of $90,000 increasing our total inventory reserve at August 31, 2003 to $140,000. On at least an annual basis, we attempt to identify inventory items that have shown relatively no movement or very slow movement. Generally, if an item has shown little or no movement for over a year, it is examined for obsolescence. If it is determined that recoverability of the item is impaired, a reserve is established for that item. In addition, if we identify products that have become obsolete due to product upgrades or enhancements, a reserve is established for such products.

Selling, General and Administrative Expenses. Selling, general and administrative expenses for fiscal 2003 were $1,241,561 compared to $1,667,042 in fiscal 2002, a decrease of $425,481, or approximately 26%. This decrease was primarily due to decrease in compensation expense in fiscal 2003 as compared to fiscal 2002. This decrease was offset by increases in bad debt expense of approximately $257,000 and increases in legal fees of approximately $30,000, mainly resulting from legal assistance provided in our settlement of the royalty dispute discussed elsewhere herein.

34

During fiscal 2002, we issued to certain employees and board members options to purchase 179,300 common shares of TherMatrx, or approximately 7% of our interest in TherMatrx, at an exercise price of $.001 per share. In connection with the issuance of these options, we recorded $717,000 of compensation expense. This expense was computed based on the estimated fair value of the options. We conservatively estimated the fair value of the options to be $4.00 per option. This fair value was determined based on a December 2001 private offering of TherMatrx shares in which 525,321 shares of common stock were sold for $4.00 per share to existing TherMatrx stockholders who elected to purchase shares in the offering. For accounting purposes, because of the lack of other contemporaneous transaction data indicating the value of these shares in July 2002, and to record a conservative estimate of compensation expense, we recorded the value of each option at $4.00, resulting in $717,000 of compensation expense. Because all of the options were exercised prior to year-end, we also recorded a gain of $717,000 because the TherMatrx stock issued to settle the compensation liability had a book value of $0. The gain is reflected in the statement of operations as "Gain on transfer of equity interest in affiliate to related parties." The exercise of these options reduced our holdings in TherMatrx from 2,700,000 shares, or approximately 32%, to 2,520,700 shares, or approximately 30%.

We recorded a bad debt expense of $300,394 in fiscal 2002 as a result of a receivable write-off due to our inability to collect payment relating to the sale of a BSD-2000 system in fiscal 2002. The sale in fiscal 2002 was to a non-related party. At the time the sale was made, we were led to believe that the customer had secured payment for the system. After our efforts to collect the receivable failed, we determined to seek return of the system and write off the receivable. Accordingly, during the fourth quarter of fiscal 2003, we recorded a bad debt expense of $300,394. This bad debt expense was the net result of a receivable write-off of approximately $346,000 and the value of returned inventory of approximately $46,000. We believe this is an isolated case

and not indicative of a trend. Historically, our bad debt expense has been substantially lower than fiscal 2003 levels. Generally, we require a significant deposit on the sales of our BSD systems which reduces the likelihood of bad debt expense.

Other Income. Other income for fiscal 2003 was $2,838 compared to $722,198 in fiscal 2002, a decrease of $719,360. This decrease resulted almost entirely from a gain recognized in 2002 on transfer of equity interest in affiliate to related parties as noted above.

Net Loss. In fiscal 2003 we had a net loss of $570,285 as compared to net income in fiscal 2002 of $9,645. The net loss was primarily caused by an increase in bad debt expense of $300,394, an increase in inventory reserve of $90,000 and lower overall sales for fiscal 2003.

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, we have generated an accumulated deficit of $21,077,431 at May 31, 2004. We have historically financed our operations through cash from operations, licensing of technological assets and issuance of common stock.

We used $227,298 in cash from operating activities in fiscal 2003 compared to cash generated of $19,800 in fiscal 2002. This was a result of a significant uncollectible receivable of $300,000 that contributed to a net loss of $570,285 for fiscal 2003 compared to net income of $9,645 in 2002, and a reduction of accounts receivable of $9,614 as compared to $55,173 in fiscal 2002 offset by an increase in accounts payable of $217,447 compared to a reduction in accounts payable of $51,121 in fiscal 2002. Accrued expenses decreased by $133,066 primarily as a result of a decrease in customer deposits as orders were shipped. Our investing activities resulted in net cash used of $60,599 relating to the purchase of certain property and equipment. Cash provided by financing activities totaled $2,000 reflecting proceeds from the issuance of common stock in connection with the exercise of outstanding stock options.

On November 28, 2003, we completed the sale of an aggregate of 1,820,000 shares of our common stock to investors for cash consideration of $1.10 per share, or gross proceeds of $2,002,000. On December 10, 2003, we issued an additional 239,600 shares to investors at a price per share of $1.10 for gross proceeds of $263,560. The net proceeds from the transactions, after paying a commission to our placement agent, T.R. Winston & Company, LLC, and legal and other expenses related to the transaction, were approximately $2,079,000.

We used $763,736 in cash from operating activities during the period

ended May 31, 2004 compared to cash used of $186,273 in the period ending May 31, 2003. Cash flow from operating activities decreased in the nine months ending May 31, 2004 primarily because of lower sales volume compared to the prior year period.

At May 31, 2004, our working capital was $1,977,565 and our cash and cash equivalents totaled $1,469,711. We have no bank debt and no credit facility. Our contractual obligations and commercial commitments requiring capital resources include building rent of $82,000 per year for five years adjusted annually for increases in the cost of living based on the Consumer Price Index for Urban Consumers.

Our ability to fund our cash needs and grow our business depends on our ability to generate cash flow from operations and capital from financing activities. Our operating cash flow has fluctuated significantly in the past and may continue to do so in the future. We believe that our current working capital and anticipated cash flow from future operations will be sufficient to fund our anticipated operations for fiscal 2004. We have based this belief, however, on assumptions that may prove to be wrong.

We expect our revenue from sales of products to TherMatrx to decline substantially in the fourth quarter of fiscal 2004 compared to the fourth quarter of fiscal 2003. We also expect to incur additional expenses related to the commercial introduction of our BSD-500 systems, which will precede any revenue from the sale of such systems. Due to additional participation at trade shows, expenditures on publicity, additional travel, higher sales commissions and other related expenses, we project that our sales and marketing expenses will be approximately $250,000 higher in 2004 than in the prior year to support the commercial introduction of the BSD-500 systems. In addition, we anticipate that we will incur expenses of approximately $100,000 related to governmental and regulatory, including FDA, approvals during fiscal 2004 in excess of fiscal 2003. We are making these investments in sales and marketing and on government and regulatory activities to increase our revenue from sales of our BSD-500 system and, upon receipt of FDA approval, from the sale of our BSD-2000 system

in the United States. These increased marketing and regulatory expenses are an investment in generating offsetting revenue against the decline in TherMatrx sales that we have projected, and to provide future revenue growth over the long term. We have not projected any sales to TherMatrx in our business planning beyond fiscal 2004.

We are currently subject to the penalty provisions of the terms of the common stock issued in November and December 2003 and as such are required to pay these investors $1,500 per day until the registration statement, which this prospectus is a part, is declared effective. We cannot assure when this registration statement will be declared effective and our obligation to pay this penalty will cease. Our cash available for operations will decrease by the amount paid as penalties to these investors.

We believe any cash shortfall during fiscal 2004 that results from this decrease in revenues and increase in expenses can be covered through the cash raised in our November and December 2003 private placements and from the initial closing payment of approximately $8,975,000 from the sale of our TherMatrx shares. However, if our revenues from TherMatrx decrease more rapidly than we currently expect or revenues from the sale of our systems is lower than we currently expect or we are required to pay substantial amounts as penalties to certain investors, we will have to cut expenses or use more of our available cash than we anticipated. We believe we can cover any such cash shortfall 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. We cannot be certain that any financing will be available when needed or will be available on terms acceptable to us. 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.

FORWARD-LOOKING STATEMENTS

With the exception of historical facts, the statements contained in sections entitled "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:

- our anticipated financial performance and business plan;
- our expectations regarding the commercial introduction of the BSD-500 system;
- our expectations and efforts regarding receipt of FDA approvals relating to the BSD-2000 system;
- our technological developments to the BSD-500 and BSD-2000 systems;
- our development or acquisition of new technologies;
- our expectation that sales to TherMatrx will decline and the rate at which sales to TherMatrx decline;
- the amount of expenses we will incur for the commercial introduction of the BSD-500 system;
- the amount of expenses we will incur for governmental and regulatory, including FDA, approvals;
- our expectation that related party revenue will continue to be a significant portion of our total revenue;
- our belief that sales of BSD-500 and BSD-2000 systems will increase through our future sales and marketing efforts;

- our belief that our current working capital and cash from operations will be sufficient to fund our anticipated operations for fiscal 2004;
- our assumption that we will receive contingent payments from AMS in connection with the TherMatrx acquisition; and
- our anticipated use of proceeds from the AMS transaction.

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 the section entitled "Risk Factors" included elsewhere in this prospectus. We also wish to advise readers not to place any undue reliance on the forward-looking statements contained in this prospectus, which reflect our beliefs and expectations only as of the date of this prospectus. 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.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

TherMatrx, Inc. We manufacture, assemble and test for TherMatrx, Inc. its TMx-2000 thermotherapy system and supply TherMatrx with equipment components

used for its TMx-2000 system. We also have provided regulatory compliance and other consulting services to TherMatrx. TherMatrx has become our largest customer, and for the year ended August 31, 2003, TherMatrx accounted for $1,391,443, or approximately 54%, of our revenue. We also received a royalty payment of $63,500 from TherMatrx in fiscal 2003. During fiscal 2002, sales to TherMatrx were approximately $1,781,000. In the nine month period ending May 31, 2004, sales to TherMatrx were $99,503.

During 2002, we issued to certain employees and board members options to purchase 179,300 common shares of TherMatrx, or approximately 7% of our interest in TherMatrx, at an exercise price of $.001 per share. In connection with the issuance of these options, we recorded $717,000 of compensation expense. This expense was computed based on the estimated fair value of the options. We estimated the fair value of the options to be $4.00 per option. This fair value was determined based on a December 2001 private offering of TherMatrx shares in which 525,321 shares of common stock were sold for $4.00 per share to existing TherMatrx stockholders who elected to purchase shares in the offering. We issued options to the following officers and directors in the following amounts: Hyrum Mead, 45,000; Paul Turner, 45,000; Gerhard Sennewald, 30,000; J. Gordon Short, 10,000; Michael Nobel, 10,000; Dixie Sells, 2,450; and Ray Lauritzen, 2,600.

As described more fully elsewhere in this prospectus, in July 2004, AMS acquired TherMatrx, including all of our TherMatrx shares.

Medizin-Technik GmbH. Additionally, we supply equipment components to Medizin-Technik GmbH located in Munich, Germany, which is a significant distributor of our products in Europe. Medizin-Technik purchases equipment, which it installs, and components to service our hyperthermia therapy systems that it sells to its customers in Europe. We had revenue of approximately $516,142 in fiscal 2003 from the sale of one BSD-2000 system and various component parts sold to Medizin-Technik. During fiscal 2002, we had sales of approximately $74,000 to Medizin-Technik. Dr. Gerhard W. Sennewald, one of our directors and significant stockholders, is the President and Chief Executive Officer of Medizin-Technik and its sole stockholder.

MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

Our common stock trades publicly on the OTC Bulletin Board under the symbol "BSDM." The following table sets forth the high and low bid transactions, as provided by the OTC Bulletin Board, for the quarters in fiscal year 2002 and 2003. The amounts reflect inter-dealer prices, without retail mark-up, markdown or commission, and may not represent actual transactions.

	Bid	
Quarter Ended:	High	Low
November 30, 2001.....	.90	.90
February 28, 2002.....	1.16	1.10
May 31, 2002.....	1.00	.95
August 31, 2002.....	.66	.66
November 30, 2002.....	.42	.42
February 29, 2003.....	1.65	.60
May 31, 2003.....	.45	.45
August 31, 2003.....	.80	.78
November 30, 2003.....	1.45	1.45
February 29, 2004.....	1.18	1.52
May 31, 2004.....	1.69	1.16

As of May 31, 2004, there were approximately 593 holders of record of our common stock. We have not paid any cash dividends on our common stock since our inception and we have no intention of declaring any common stock dividends in the foreseeable future.

Equity Compensation Plan Information (as of the end of most recent fiscal year)

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Numbe Remaini Future Is Comp
Equity Compensation Plans Approved by Security Holders	1,275,303	$0.49	
Equity Compensation Plans not Approved by Security Holders	-	-	
Total	1,275,303	$0.49	

PRINCIPAL STOCKHOLDERS

The following table sets forth, as of June 30, 2004, the beneficial ownership of our outstanding common stock by:

- each person (including any group) known to us to own more than 5% of any class of our common stock,
- each of our executive officers,
- each of our directors, and
- all executive officers and directors as a group.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and includes voting or investment power with respect to securities. For purposes of calculating the percentages shown in the table, each person listed is deemed to beneficially own any shares issuable on the exercise of vested options and warrants held by that person that are exercisable within 60 days after June 30, 2004. Except as indicated by footnote, the persons named in the table have sole voting and investment power with respect to all shares of common stock shown beneficially owned by them. The inclusion of any shares as beneficially owned does not constitute an admission of beneficial ownership of those shares. The percentage calculation of beneficial ownership is based on 19,913,651 shares of common stock outstanding as of June 30, 2004. Except as otherwise noted, the address of each person listed on the following table is 2188 West 2200 South, Salt Lake City, Utah 84119.

Title of Class	Name of Beneficial Owner	Common Stock Shares
	Officers and Directors	
Common Stock	Dr. Gerhard W. Sennewald(1)	6,771,814
Common Stock	Paul F. Turner(2)	1,947,871
Common Stock	Hyrum A. Mead(3)	380,000
Common Stock	Dr. J. Gordon Short(4)	217,635
Common Stock	Dr. Michael Nobel(5)	154,718
	Holders of More Than 5%	
Common Stock	John E. Langdon(6)	1,295,010
	J. Steven Emerson(7)	1,262,787
Common Stock	All Executive Officers and Directors as a Group (5 persons)(8)	9,472,038

---

* Less than 1.0%.

(1) Includes 90,000 shares subject to options. Does not include 500,000 shares held by Dr. Sennewald's spouse, for which he disclaims beneficial ownership.

(2) Includes 180,953 shares subject to options.

(3) Includes 300,000 shares subject to options.

(4) Includes 110,000 shares subject to options.

(5) Includes 75,000 shares subject to options.

(6) Includes 351,862 shares owned directly by Mr. Langdon. The remaining shares are held in trusts for which Mr. Langdon is trustee. Does not include 50,000 shares held by Mr. Langdon's spouse, for which he disclaims beneficial ownership. Mr. Langdon's address is: 2501 Parkview Drive, Suite 500, Fort Worth, TX 76102.

(7) Mr. Emerson's address is: 1522 Ensley Avenue, Los Angeles, CA 90024.

(8) Includes 715,953 shares subject to options.

In July 2002, we issued to our employees and board members options to purchase 179,300 shares of TherMatrx at an exercise price of $0.001 per share. All options were immediately exercisable upon grant and were exercised in the fourth quarter of fiscal year 2002. The exercise of these options reduced our holdings in TherMatrx from 2,700,000 shares, or approximately 32%, to 2,520,700 shares, or approximately 30%.

DESCRIPTION OF SECURITIES

General

We are authorized to issue 40,000,000 shares of common stock, $0.001 par value, and 10,000,000 shares of undesignated preferred stock, $0.001 par value per share.

The following description of our capital stock is a summary. It is not complete and is subject to and qualified in its entirety by our Amended and Restated Certificate of Incorporation and Bylaws, a copy of each of which has been incorporated as an exhibit to the registration statement of which this prospectus forms a part.

Our Amended and Restated Certificate of Incorporation and Bylaws contain certain provisions that are intended to enhance the likelihood of continuity and stability in the composition of the board of directors, which may have the effect of delaying, deferring or preventing a future takeover or change in control of BSD unless such takeover or change in control is approved by our board of directors.

Common Stock

As of May 31, 2004, there were 19,913,651 shares of our common stock outstanding, which were held of record by 593 stockholders.

Holders of common stock are entitled to one vote per share on all matters to be voted upon by the stockholders. Holders of common stock do not have cumulative voting rights, and, therefore, holders of a majority of the shares voting for the election of directors can elect all of the directors. In such event, the holders of the remaining shares will not be able to elect any directors. Subject to preferences that may be applicable to any then-outstanding preferred stock, holders of common stock are entitled to receive such dividends as may be declared from time to time by our board of directors out of funds legally available therefore. We have never declared or paid cash dividends on our capital stock. We expect to retain future earnings, if any, for use in the operation and expansion of its business, and do not anticipate paying any cash dividends in the foreseeable future.

In the event of our liquidation, dissolution or winding up, holders of common stock are entitled to share ratably in all assets legally available for distribution after payment of all debts and other liabilities and subject to the prior rights of the holders of any preferred stock then outstanding. Holders of common stock have no preemptive or other subscription or conversion rights, and there are no redemption or sinking fund provisions applicable to the common stock.

Preferred Stock

As of May 31, 2004, there were no shares of preferred stock outstanding. Our Amended and Restated Certificate of Incorporation authorizes 10,000,000 shares of undesignated preferred stock. Our board of directors will

have the authority, without any further vote or action by our stockholders, to issue from time to time the preferred stock in one or more series and to fix the price, rights, preferences, privileges and restrictions thereof, including dividend rights, dividend rates, conversion rights, voting rights, terms of redemption, redemption prices, liquidation preferences and the number of shares constituting a series or the designation of such series. The issuance of preferred stock, while providing desirable flexibility in connection with possible acquisitions and other corporate purposes, could decrease the amount of earnings and assets available for distribution to holders of common stock or adversely affect the rights and powers, including voting rights, of the holders of common stock, and may have the effect of delaying, deferring or preventing a change in control without further action by the stockholders. We have no current plans to issue any shares of preferred stock.

Warrants and Options

As of June 30, 2004, warrants to purchase an aggregate of 102,980 shares of our common stock at a weighted average exercise price per share of $1.80 were issued and outstanding, and options to purchase an aggregate 1,089,550 shares of our common stock at a weighted average exercise price per share of $0.49 were issued and outstanding.

Antitakeover Effects of Provisions of Our Amended and Restated Certificate of Incorporation and Bylaws and Delaware Law

Certain provisions of our Amended and Restated Certificate of Incorporation and Bylaws could make the following more difficult:

- acquisition of us by means of a tender offer;
- acquisition of us by means of a proxy contest or otherwise; and
- the removal of our incumbent officers and directors.

These provisions, summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of increased protection resulting from our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging such proposals because we believe that the negotiation of such proposals could result in an improvement of their terms.

Stockholder Meetings. Our Amended and Restated Certificate of Incorporation provide that only the board of directors, the Chairman of the Board, the Chief Executive Officer or our President may call special meetings of stockholders. The provision may not be amended without the affirmative vote of holders of at least 66 2/3% of our outstanding voting stock.

Elimination of Stockholder Action By Written Consent. Our charter documents eliminate the right of stockholders to act by written consent without a meeting.

Elimination of Cumulative Voting. Our charter documents do not provide for cumulative voting in the election of directors.

Undesignated Preferred Stock. The ability to authorize undesignated preferred stock makes it possible for the board of directors to issue preferred stock with voting or other rights or preferences that could impede the success

of any attempt to change control of us. These and other provisions may have the effect of deferring hostile takeovers or delaying changes in control or management of us.

The provisions of Delaware law and our Amended and Restated Certificate of Incorporation and Bylaws could have the effect of discouraging others from attempting unsolicited takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored unsolicited takeover attempts. Such provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions, which stockholders may otherwise deem to be in their best interests.

LIMITATION OF LIABILITY AND INDEMNIFICATION

Section 145 of the Delaware General Corporation Law permits a corporation to include in its charter documents, and in agreements between the corporation and its directors and officers, provisions expanding the scope of indemnification beyond that specifically provided by the current law.

Article 8 of our Amended and Restated Certificate of Incorporation provides for the indemnification of directors to the fullest extent permissible under Delaware law.

Section 8 of our Bylaws provides for the indemnification of officers, directors and third parties acting on behalf of us if such person acted in good faith and in a manner reasonably believed to be in, and not opposed to, our best interest, and, with respect to any criminal action or proceeding, the indemnified party had no reason to believe his or her conduct was unlawful.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that, in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable.

LEGAL MATTERS

The validity under the Delaware General Corporation Law of the common stock to be sold by the selling stockholders has been passed on for us by Dorsey & Whitney LLP, Salt Lake City, Utah.

EXPERTS

Tanner + Co., independent certified public accountants, have audited our financial statements and schedule included in this prospectus for the year ended August 31, 2003, as set forth in their reports which are incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements and schedule are incorporated by reference in reliance on Tanner + Co.'s reports, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission. You may read and copy any document we file with the SEC at the SEC's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our SEC filings are also available to the public at the SEC's web site at http://www.sec.gov.

In addition, we maintain an Internet website at www.bsdmc.com. We do not intend that our website be a part of this prospectus.

We have filed a registration statement on Form SB-2 with the SEC for the common stock offered by the selling stockholders under this prospectus. This prospectus does not include all of the information contained in the registration statement. You should refer to the registration statement and its exhibits for additional information that is not contained in this prospectus. Whenever we make reference in this prospectus to any of our contracts, agreements or other documents, you should refer to the exhibits attached to this registration statement for copies of the actual contract, agreement or document.

PRO FORMA FINANCIAL INFORMATION

As disclosed above, in July 2004, American Medical Systems Holdings, Inc., or AMS, acquired TherMatrx, Inc. for $40 million in cash plus future payments contingent upon the combined entity's future sales of TherMatrx's DOT systems. The sale includes all of our TherMatrx shares, which represents approximately 25% of the shares of TherMartx. On July 16, 2004, we received an initial cash payment, after the withholding of escrow funds and the payment of other initial obligations, of approximately $8,975,000 million in connection with the closing. We may also receive future contingent payments. Contingent payments to TherMatrx former shareholders will be four times quarterly sales of TherMatrx's DOT systems during the six quarters beginning July 5, 2004 and ending December 31, 2005. We will receive quarterly contingent payments when the accumulated value of four times quarterly sales has exceeded the initial $40 million payment to TherMatrx shareholders. The contingent payments are also subject to certain set-off rights in favor of AMS. The aggregate maximum amount of the initial payment and any contingent payments to TherMatrx shareholders is $250 million.

The pro forma effect on the balance sheet as of May 31, 2004, assuming that the sale occurred on May 31, 2004, would result in an increase in cash of approximately $8,975,000 to reflect the cash received by BSD upon closing of the sale, a decrease in accrued expenses of $136,467 to reflect the removal of accrued losses in TherMatrx based on the equity method of accounting, and a decrease in the accumulated deficit of approximately $9,111,000 to reflect the gain on the sale of BSD's interest in TherMatrx and the removal of the accrued losses in TherMatrx based on the equity method of accounting. Pro forma statements of operations would not reflect any changes from historical statement of operations because no income or loss was recognized based on the equity method of accounting for the investment in TherMatrx.

BSD MEDICAL CORPORATION
Financial Statements
August 31, 2003 and 2002

Index to Financial Statements

REPORT OF INDEPENDENT
REGISTERD PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
of BSD Medical Corporation

We have audited the balance sheet of BSD Medical Corporation (the Company) as of August 31, 2003, and the related statements of operations, stockholders' equity, and cash flows for the years ended August 31, 2003 and 2002. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. 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, 2003, and the results of its operations and cash flows for the years ended August 31, 2003 and 2002 in conformity with accounting principles generally accepted in the United States of America.

/s/ TANNER + CO.

Salt Lake City, Utah
September 29, 2003, except for note 15, which is
Dated July 21, 2004

BSD MEDICAL CO
Bala

	May 31, 2004 (unaudited)	Augus 20
Assets		
Current assets:		
Cash and cash equivalents	$ 1,469,711	$
Receivables, net	3,591	
Related party receivables	224,600	
Inventories	777,596	
Other current assets	57,920	
Total current assets	2,533,418	
Property and equipment, net	120,144	
Patent, net of amortization of $6,452 and $5,043, respectively	25,476	
	$ 2,679,038	$
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 119,095	$
Accrued expenses	390,146	
Current portion of deferred revenue	46,612	

Total current liabilities	555,853
Deferred revenue	11,212
Total liabilities	567,065
Commitments and contingencies	-
Stockholders' equity:	
Preferred stock, $.001 par value; 10,000,000 authorized, no shares issued and outstanding	-
Common stock, $.001 par value; authorized 40,000,000 shares; issued and outstanding 19,937,982 and 17,839,633 shares, respectively	19,938
Additional paid-in capital	23,197,508
Deferred compensation	(27,808)
Accumulated deficit	(21,077,431)
Treasury stock, at cost	(234)
Total stockholders' equity	2,111,973
	$ 2,679,038

See accompanying notes to financial statements.

BSD MEDICAL CO
Statement of O

	Nine Months Ended May 31,		Years Ended Augus	
	2004 (unaudited)	2003 (unaudited)	2003	2
Revenues:				
Sales	$ 560,156	$ 297,508	$ 326,597	$
Sales to related parties	981,241	1,410,319	1,907,585	
Revenue from royalties in arrears	-	275,000	275,000	
Other revenue - related party	-	-	63,500	
	1,541,397	1,982,827	2,572,682	
Costs and expenses:				
Cost of sales	448,068	70,944	94,619	
Cost of sales to related parties	395,039	650,107	1,132,758	

Research and development	490,006	500,706	676,867	
Selling, general, and administrative	803,947	743,614	1,241,561	
	2,137,060	1,965,371	3,145,805	
Operating (loss) income	(595,663)	17,456	(573,123)	
Other income (expense):				
Gain on transfer of equity interest in affiliate to related parties	-	-	-	
Interest income	4,816		2,838	
Interest expense	(477)	-	-	
	4,339	2,664	2,838	
Net (loss) income before income taxes	(591,324)	20,120	(570,285)	
Income tax benefit (provision)	-	-	-	
Net (loss) income	$ (591,324)	$ 20,120	$ (570,285)	$
Income (loss) per common share - basic and diluted	$ (.03)	$ -	$ (0.03)	$
Weighted average shares - basic	19,246,000	17,793,000	17,805,000	1
Weighted average shares - diluted	19,246,000	17,793,000	17,805,000	1

See accompanying notes to financial statements.

BSD MEDICAL CO
Statement of Stockholder

Years Ended August
and Nine Months Ended May 31

	Common Stock		Additional Paid-in	Deferred Compen-		
	Shares	Amount	Capital	sation	Accumulated Deficit	S

Balance, September 1, 2001	17,602,619	$ 17,603	$ 20,969,196	$ (25,097)	$ (19,925,467)
Common stock issued for:					
Cash	109,633	110	34,492	-	-
Services	27,264	27	23,973	-	-
Options	16,812	17	(17)	-	-
Amortization of deferred compensation	-	-	-	8,636	-
Deferred compensation	-	-	9,813	(9,813)	-
Net income	-	-	-	-	9,645
Balance August 31, 2002	17,756,328	17,757	21,037,457	(26,274)	(19,915,822)
Common stock issued for:					
Cash	20,000	20	1,980	-	-
Services	38,106	38	23,962	-	-
Warrants	25,199	25	(25)	-	-
Amortization of deferred compensation	-	-	-	6,358	-
Deferred compensation	-	-	7,500	(7,500)	-
Net loss	-	-	-	-	(570,285)
Balance August 31, 2003	17,839,633	17,840	21,070,874	(27,416)	(20,486,107)
Common stock issued for:					
Cash, net of offering costs of $165,653 (unaudited)	2,059,600	2,059	2,097,848	-	-
Services (unaudited)	15,999	16	11,984	-	-
Options (unaudited)	22,750	23	8,552	-	-
Deferred compensation (unaudited)	-	-	8,250	(8,250)	-
Amortization of deferred compensation (unaudited)	-	-	-	7,858	-
Net loss (unaudited)	-	-	-	-	(591,324)
Balance May 31, 2004 (unaudited)	19,937,982	$ 19,938	$ 23,197,508	$ (27,808)	$ (21,077,431)

See accompanying notes to financial statements

BSD MEDICAL CO
Statement of C

	Nine Months Ended May 31,		Years Ended Aug
	2004 (unaudited)	2003 (unaudited)	2003
Cash flows from operating activities:			
Net (loss) income	$ (591,324)	$ 20,120	$ (570,285) $
Adjustments to reconcile net (loss) income to net cash (used in) provided by operating activities operating expense			
Provision for doubtful accounts	14,569	-	284,393
Provision for inventory write-off	-	-	90,000
Depreciation and amortization	33,597	36,454	48,678
Deferred gain on sale of building	-	(15,275)	(15,275)
Amortization of deferred compensation	7,858	6,358	6,358
Stock compensation expense	12,000	24,000	24,000
Compensation expense resulting from options granted to purchase TherMatrx shares	-	-	-
Gain on issuance of options of TherMatrx shares as settlement of compensation	-	-	-
Decrease (increase) in:			
Restricted certificate of deposit	-	-	-
Receivables	160,962	57,661	9,614
Inventories	24,877	(120,391)	(85,743)
Other current assets	(14,682)	(10,595)	(24,901)
Increase (decrease) in:			
Accounts payable	(160,973)	96,966	217,447
Accrued expenses	(224,324)	(216,300)	(133,066)
Deferred revenue	(26,296)	(65,271)	(78,518)
Net cash (used in) provided by operating activities	(763,736)	(186,273)	(227,298)
Cash flows from investing activities:			
Purchase of property and equipment	(11,038)	(59,765)	(60,599)
Purchase of patent license	-	-	-
Net cash used in investing activities	(11,038)	(59,765)	(60,599)
Cash flows from financing activities- proceeds from issuance of common stock	2,108,482	2,000	2,000
Increase (decrease) in cash and cash equivalents	1,333,708	(244,038)	(285,897)
Cash and cash equivalents, beginning of period	136,003	421,900	421,900

Cash and cash equivalents, end of period	$ 1,469,711	$ 177,862	$ 136,003	$

See accompanying notes to financial statements

BSD MEDICAL CORPORATION
Notes to Financial Statements

August 31, 2003 and 2002

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. In addition, the Company currently has an approximate 30% interest in TherMatrx, Inc. (TherMatrx) a corporate joint venture that is engaged in the manufacture and sale of medical equipment.

Unaudited Information

The Condensed Balance Sheet as of May 31, 2004, the Condensed Statements of Operations and the Condensed Statements of Cash Flow for the nine months ended May 31, 2004 and 2003, and the condensed statement of stockholders' equity for the nine months ended May 31, 2004, have been prepared by the Company without audit. In the opinion of management, all adjustments to the books and accounts (which include only normal recurring adjustments) necessary to present fairly the financial position, results of operations, and changes in financial position of the Company as of May 31, 2004 and for the nine months ended May 31, 2004 and 2003 have been made.

Certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted for the period ended May 31, 2004 and 2003. The results of operations for the period ended May 31 2004, are not necessarily indicative of the results to be expected for the full year.

Cash and Cash Equivalents

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

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.

BSD MEDICAL CORPORATION
Notes to Financial Statements
Continued

1. Organization and Significant Accounting Policies Continued

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

Investment in Joint Venture
The Company has an approximate 30% ownership in TherMatrx, a corporate joint venture that is engaged in the manufacture and sale of medical devices. The investment is accounted for on the equity method of accounting. Because the Company's percent share of accumulated losses in TherMatrx has exceeded its original investment no asset is recorded on the balance sheet. The Company has included in accrued liabilities $136,467 of potential obligations to TherMatrx, which it incurred in a prior year. No further obligations have been recognized as the Company has not guaranteed or otherwise committed to provide further financial funding.

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, 2003 the accrued warranty reserve was approximately $3,000. During the fiscal years ended August 31, 2003 and 2002 total warranty expense was $11,502 and $15,170, 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 (Loss) 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.

1. Organization and Significant Accounting Policies Continued

Income (Loss) Per Common Share - Continued
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 1,275,303 shares and 1,258,901 shares of common stock at prices ranging from $.10 to $1.76 per share were outstanding at August 31, 2003 and 2002, respectively. Options outstanding during the fiscal year ended August 31, 2003 were not included in the calculation of diluted earnings per share because their effect was anti-dilutive.

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

	May 31,		August 31,	
	2004 (unaudited)	2003 (unaudited)	2003	2002
Weighted average number of shares outstanding - basic	19,246,000	17,793,000	17,805,000	17,699,000
Dilutive effect of stock options	-	-	-	233,000
Weighted average number of shares outstanding, assuming dilution	19,246,000	17,793,000	17,805,000	17,932,000

BSD MEDICAL CORPORATION
Notes to Financial Statements
Continued

1. Organization and Significant Accounting Policies Continued

Stock-Based Compensation

The Company accounts 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 has adopted the disclosure-only provisions of Statement of Financial Accounting Standards (SFAS) No. 123, "Accounting for Stock-Based Compensation". Accordingly, no compensation cost has been recognized in the financial statements, as all options granted under those plans had an exercise price equal to or greater than the market value of the underlying common stock on the date of grant. Had the Company's options been determined based on the fair value method, the results of operations would have been reduced to the pro forma amounts indicated below:

	Nine Months Ended May 31,		Years Ended August 31,	
	2004 (unaudited)	2003 (unaudited)	2003	2002
Net income (loss) - as reported	$ (591,324)	$ 20,120	$(570,285)	$ 9,645
Deduct total stock based employee compensation expense determined under fair value based method for all awards, net of related tax effects	(25,000)	(63,113)	(123,770)	(126,225)
Net income (loss) - pro forma	$ (616,324)	$ (42,993)	(694,055)	(116,580)
Basic and diluted loss per share- as reported	$ (.03)	$ -	$ (.03)	$ -
Basic and diluted loss per share- pro forma	$ (.03)	$ (.01)	$ (.04)	$ -

The fair value of each option grant is estimated on the date of grant using the Black-Scholes option pricing model with the following assumptions:

	May 31,		August 31,	
	2004 (unaudited)	2003 (unaudited)	2003	2002
Expected dividend yield	$ -	$ -	$ -	$ -
Expected stock price volatility	83%	137%	122%	143%
Risk-free interest rate	5.5%	4.2%	4.3%	4.3%
Expected life of options	3 years	5 years	5 years	5 years

1. Organization and Significant Accounting Policies Continued

Stock-Based Compensation - Continued

The weighted average fair value of options granted during the years ended August 31, 2003 and 2002 were $.57 and $.73, respectively. The unaudited weighted average fair value of options granted during the nine months ended May 31, 2004 and 2003, were $1.01 and $.64, respectively.

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, the sale of software license rights, providing manufacturing services, providing training, and service support contracts. Product sales were $1,956,270 and $1,866,192 for the years ended August 31, 2003 and 2002, respectively. Service revenue was $277,912 and $806,280 for the years ended August 31, 2003 and 2002, respectively.

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 guaranteed by the Company. We provide a reserve allowance for estimated returns. To date, returns have not been significant.

---

1. Organization and Significant Accounting Policies Continued

Revenue Recognition - Continued
Revenue from the sale of software license rights is recognized when a valid purchase order has been received, the software license has been delivered to the customer, the selling price is fixed or determinable, and collection is reasonably assured. Delivery is deemed to have occurred if diskettes have been shipped, or if the software has been delivered electronically by email. To date, the sale of software license rights has not been material.

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.

Research and Development
Costs Research and development costs are expensed as incurred.

BSD MEDICAL CORPORATION
Notes to Financial Statements
Continued

---

1. Organization and Significant Accounting Policies Continued

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. During the year ended August 31, 2003, the Company wrote off a receivable of approximately $346,000. This receivable was recorded as a sale in fiscal year 2002 and resulted in a significant write-off in the fourth quarter of 2003.

The Company has cash in bank and short-term investments that, at times, may exceed federally insured limits. The Company has not experienced any losses in such accounts. The Company believes it is not exposed to any significant credit risk on cash and short-term investments.

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.

2. Detail of Certain Balance Sheet Accounts

Details of certain balance sheet accounts as of August 31, 2003, are as follows:

Receivables:	
Trade receivables	$ 471,093
Less allowance for doubtful accounts	(67,371)
	$ 403,722
Inventories:	
Parts and supplies	$ 385,825
Work-in-process	556,648
Reserve for obsolete inventory	(140,000)
	$ 802,473

F-12

BSD MEDICAL CORPORATION
Notes to Financial Statements
Continued

2. Detail of Certain Balance Sheet Accounts Continued

Accrued expenses:	
Customer deposits	$ 272,132
Accrued loss in equity affiliate	136,467
Accrued vacation	96,254
Accrued payroll and taxes	67,232
Other accrued expenses	42,385
	$ 614,470

3. Property and Equipment

Property and equipment as of August 31, 2003 consists of the following:

Equipment	$ 680,630
Furniture and fixtures	297,741
	978,371
Less accumulated depreciation	(837,077)
	$ 141,294

4. Deferred Gain and Operating Lease

During the year ended August 31, 1998, the Company entered into a sale-leaseback transaction on its building. The sale-leaseback resulted in a gain of $325,513 of which $307,000 was deferred and is being credited to income as rent expense adjustments over the term of the lease. The lease required monthly payments of $6,533 through November 2002. During the year ended August 31, 2003, the Company renewed its lease for five years, which includes payments of approximately $82,000 per year, adjusted annually for increases in the cost of living based on the Consumer Price Index for Urban Consumers.

F-13

BSD MEDICAL CORPORATION
Notes to Financial Statements
Continued

4. Deferred Gain and Operating Lease Continued

Future minimum payments at August 31, 2003, are as follows:

Years Ending August 31,	Amount
2004	$ 82,320
2005	82,320
2006	82,320
2007	82,320
2008	20,580
	$ 349,860

Annual rent expense on this operating lease for the years ended August 31, 2003 and 2002 amounted to approximately $67,000 and $17,000, net of sale-leaseback gain.

5. 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 follows:

Years Ending August 31,	Amount
2004	$ 43,220
2005	40,900
	84,120
Less current portion	(43,220)
Long-term deferred revenue	$ 40,900

6. Income Taxes

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

	Years Ended August 31,	
	2003	2002

Income tax benefit (expense) at statutory rate	$ 198,000	$ (3,000)
Expiration of net operating loss carryforwards	(19,000)	-
Change in valuation allowance	(179,000)	3,000
	$ -	$ -

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

Net operating loss carryforwards	$ 1,843,000
General business and AMT credit carryforwards	170,000
Accrued expenses and deposits	128,000
Deferred revenue	29,000
Inventory reserve	48,000
Allowance for bad debts and reserves	17,000
Depreciation	(21,000)
Deferred compensation expense	(9,000)
	2,205,000
Valuation allowance	(2,205,000)
	$ -

6. Income Taxes Continued

At August 31, 2003, the Company has net operating losses (NOL) as follows:

Expiration Date	NOL
2005	$ 1,270,000
2007	190,000
2008	99,000
2009	671,000
2010	170,000
2012	838,000
2016	153,000
2018	1,052,000
2019	731,000

	$ 5,174,000

At August 31, 2003, the Company has Research and Experimentation Tax Credits (RETC) and Alternative Minimum Tax Credits (AMTC) as follows:

Expiration Date	RETC	AMTC
2004	$ 41,000	$ -
2005	-	-
No expiration date	72,000	57,000
	$ 113,000	$ 57,000

The Company has experienced a greater than 50 percent change of ownership. Consequently, use of the Company's carryovers against future taxable income in any one year may be limited and those carryovers may expire unutilized due to limitations imposed by the change of ownership rules.

7. Stock Options and Warrants

Stock Options

The Company's 1987 Employee Stock Option Plan authorizes the granting of incentive options to certain key employees of the Company and nonqualified stock options to certain key employees, non-employee directors, or individuals who provide services to the Company. The Plan, as amended, provides for the granting of options for an aggregate of 950,000 shares. The options vest according to a set schedule over a five-year period and expire upon the employee's termination or after ten years from the date of grant.

The Company's 1998 Employee Stock Option Plan authorizes the granting of incentive stock options to certain key employees and non-employees who provide services to the Company. The Plan provides for the granting of options for an aggregate of 2,000,000 shares. The options vest subject to management's discretion.

The Company's 1998 Director Stock Plan authorizes an annual compensation of $12,000 to each non-employee director. The annual compensation may be satisfied by issuing 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 25,000 options each year at an exercise price of 85% of the fair market value of the common stock at the date the option is granted. The Plan allows for an aggregate of 1,000,000 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. For certain options issued under this plan, the Company has recorded as deferred compensation the excess of the market value of common stock at the date of grant over the exercise price.

7. Stock Options and Warrants Continued

A schedule of the options and warrants are as follows:

	Options	Warrants	Price Per Share
Outstanding at September 1, 2001	1,306,434	87,133	$ .10 to 3.00
Granted	75,000	-	.73
Exercised	(114,312)	(12,133)	.10 to .37
Forfeitures	(8,221)	(75,000)	.10 to 3.00
Outstanding at August 31, 2002	1,258,901	-	.10 to 1.76
Granted	75,000	-	.56
Exercised	(58,598)	-	.10 to .65
Forfeitures	-	-	
Outstanding at August 31, 2003	1,275,303	-	$ .10 to 1.76

The following table summarizes information about stock options and warrants outstanding at August 31, 2003:

	Options and Warrants Outstanding			Options and Warrants Exercisable	
Range of Exercise	Number	Weighted Average Remaining Contractual Life	Weighted Average Exercise	Number	Weighted Average Exercise

Prices	Outstanding	(Years)	Price	Exercisable	Price
$ .10-.25	430,703	2.41	$ .13	415,703	$ .12
.37-1.11	794,600	7.65	.61	427,780	.58
1.76	50,000	7.82	1.76	50,000	1.76
$ .10-1.76	1,275,303	5.23	$ .49	893,483	$ .43

8. Foreign Customer and Major Customer

During the years ended August 31, 2003 and 2002 the Company had sales of $1,391,443 and $1,844,500 (including $63,500 in royalty revenues), respectively, to TherMatrx, an unconsolidated affiliate of which it owns approximately 30%. During the years ended August 31, 2003 and 2002 the Company had sales to a European entity controlled by a significant stockholder and member of the Board of Directors of the Company of approximately $518,000 and $74,000, respectively. The Company also had a sale to an unrelated entity of approximately $344,000 or approximately 12.9% of total sales for the year ended August 31, 2002.

9. Related Party Transactions Not otherwise disclosed

At August 31, 2003, accrued expenses include approximately $272,132, due to an entity controlled by a significant stockholder and member of the Board of Directors and an unconsolidated affiliate. These amounts represent deposits to purchase product from the Company and will be recognized as revenue when all performance and delivery obligations have been met.

At August 31, 2003, accounts receivable includes approximately $38,225, due from an entity controlled by a significant stockholder and member of the Board of Directors. Accounts receivable also include $304,653 due from TherMatrx at August 31, 2003.

Unaudited Related Party Transactions
During the periods ended May 31, 2004 and 2003 the Company had sales to an unconsolidated affiliate and an entity controlled by a significant stockholder of $981,241 and $1,410,319, respectively. These related party transactions represent 63.66% and 71.13% of total revenue, respectively.

At May 31, 2004, accounts receivable include $224,600 due from an unconsolidated affiliate and an entity controlled by a significant stockholder.

10. Supplemental Cash Flow Information

Actual amounts paid for interest and income taxes are as follows:

	Years Ended August 31,	
	2003	2002
Interest expense	$ -	$ -
Income taxes	$ -	$ -

During the year ended August 31, 2002, the Company exchanged a restricted CD to a bank for accounts receivable of $73,604. The receivable exchanged was allowed for by $57,403 that was offset by $15,000 of accrued commissions payable related to the receivable.

10. Supplemental Cash Flow Information Continued

Unaudited Supplemental Cash Flow Information for the periods ended May 31, 2004 and 2003:

- The Company paid $477 for interest and no cash for income taxes during the period ended May 31, 2004 and no cash for interest and income taxes for the period ended May 31, 2003.
- The Company issued 75,000 options to purchase common stock for the periods ended May 31, 2004 and 2003, which resulted in an increase to deferred compensation of $8,250 and $7,500, respectively.

11. Significant Unconsolidated Affiliate

The Company has an approximate 30% interest in an unconsolidated affiliate (TherMatrx) at August 31, 2003. During the year ended August 31, 2002 the Company compensated certain employees and directors by issuing options to purchase 179,300 shares of TherMatrx, or approximately 2% of the Company's interest in TherMatrx at $.001 per share. This resulted in compensation expense of $717,000, which is included in general and administrative expenses in the statement of operations for the year ended August 31, 2002. The Company estimated the fair value of the options to be $4.00 per option. This fair value was determined based on a December 2001 private offering of TherMatrx shares in which 525,321 shares of common stock were sold for $4.00

per share to existing TherMatrx stockholders who elected to purchase shares in the offering. For accounting purposes, because of the lack of other contemporaneous transaction data indicating the value of these shares in July 2002, the Company recorded the value of each option at $4.00, thus resulting in $717,000 of compensation expense. Because the TherMatrx shares used to settle the compensation obligation had a book value of $0, such issuance of TherMatrx shares upon exercise of the options resulted in a gain of $717,000, which is reflected as gain on transfer of equity interest in affiliate in the statement of operations. All of the options had been exercised as of August 31, 2002.

11. Significant Unconsolidated Affiliate Continued

Summarized financial information for the significant unconsolidated affiliate of the Company, at September 30, 2003 and 2002 (the affiliate's fiscal year runs from October 1, through September 30) are as follows:

	2003	2002
Result for year:		
Gross revenue	$ 13,298,422	$ 7,714,313
Gross profit	$ 9,589,803	$ 4,484,253
Net income (loss)	$ 1,520,190	$ (1,875,003)
Year-end financial position		
Current assets	$ 6,313,746	$ 4,337,756
Non-current assets	$ 2,335,232	$ 2,549,626
Current liabilities	$ 1,913,453	$ 1,672,047
Non-current liabilities	$ 474,748	$ 474,748

12. Commitments and Contingencies

The Company has an employment agreement with the President of the Company. The agreement provides that the President's salary will be based upon a reasonable mutual agreement. Additionally, in the case of non-voluntary termination, the acting president will receive severance pay for a six-month period, which includes an extension of all employee rights, privileges, and benefits, including medical insurance. The six-month severance pay would be the salary at the highest rate paid to the president prior to such a non-voluntary termination. The agreement also requires the Company to pay the acting president for any accrued unused vacation and bonuses.

The Company has an exclusive worldwide license for a unique temperature probe. The license has no determinable life. The Company pays royalties based upon its sales of this probe. Royalties accrued as of August

31, 2003 and 2002, were $1,000. Royalty expense amounted to approximately $5,000 and $11,000 for the years ended August 31, 2003 and 2002, respectively.

---

13. Fair Value of Financial Instruments

None of the Company's financial instruments are held for trading purposes. The Company estimates that the fair value of all financial instruments at August 31, 2003 and 2002 does not differ materially from the aggregate carrying values of its financial instruments recorded in the accompanying balance sheet. The estimated fair value amounts have been determined by the Company using available market information and appropriate valuation methodologies. Considerable judgment is necessarily required in interpreting market data to develop the estimates of fair value, and, accordingly, the estimates are not necessarily indicative of the amounts that the Company could realize in a current market exchange.

14. Recent Accounting Pronounce-ments

In April 2002, the FASB issued SFAS No. 145, Rescission of SFAS Nos. 4, 44, and 64, Amendment of SFAS 13, and Technical Corrections as of April 2002 (SFAS 145). This standard rescinds SFAS No. 4, Reporting Gains and Losses from extinguishment of Debt, and an amendment of that Statement, SFAS No. 64, Extinguishments of Debt Made to Satisfy Sinking-Fund Requirements and excludes extraordinary item treatment for gains and losses associated with the extinguishment of debt that do not meet the APB Opinion No. 30, Reporting the Results of Operations -- Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions (APB 30) criteria. Any gain or loss on extinguishment of debt that was classified as an extraordinary item in prior periods presented that does not meet the criteria in APB 30 for classification as an extraordinary item shall be reclassified. SFAS 145 also amends SFAS 13, Accounting for Leases as well as other existing authoritative pronouncements to make various technical corrections, clarify meanings, or describe their applicability under changed conditions. Certain provisions of SFAS are effective for transactions occurring after May 15, 2002 while others are effective for fiscal years beginning after May 15, 2002. The adoption of SFAS No. 145 by the Company did not have a material impact on the Company's financial position or operations.

BSD MEDICAL CORPORATION
Notes to Financial Statements
Continued

---

14. Recent Accounting Pronouncements Continued

In June 2002, the FASB issued SFAS No. 146, Accounting for Costs Associated with Exit or Disposal Activities (SFAS 146). This standard addresses financial accounting and reporting for costs associated with exit or disposal activities and replaces Emerging Issues Task Force Issue No. 94-3, Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring) (EITF 94-3). SFAS 146 requires that a liability for costs associated with an exit or disposal activity be recognized when the liability is incurred. Under EITF 94-3, a liability for exit costs, as defined in EITF No. 94-3 were recognized at the date of an entity's commitment to an exit plan. The provisions of SFAS 146 are effective for exit or disposal activities that are initiated by the Company after December 31, 2002. The adoption of SFAS No. 146 by the Company did not have a material impact on the Company's financial position or operations.

In December 2002, the FASB issued SFAS No. 148 "Accounting for Stock-Based Compensation--Transition and Disclosure--an amendment of FASB Statement No. 123," which is effective for all fiscal years ending after December 15, 2002. SFAS No. 148 provides alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation under SFAS No. 123 from the intrinsic value based method of accounting prescribed by Accounting Principles Board Opinion No. 25. SFAS 148 also changes the disclosure requirements of SFAS 123, requiring a more prominent disclosure of the pro-forma effect of the fair value based method of accounting for stock-based compensation. The adoption of SFAS No. 148 by the Company did not have a material impact on the Company's financial position or operations.

BSD MEDICAL CORPORATION
Notes to Financial Statements
Continued

---

14. Recent Accounting Pronouncements Continued

In January 2003, the FASB issued Interpretation No. 46, "Consolidation of Variable Interest Entities" (FIN No. 46), which addresses consolidation by business enterprises of variable interest entities. FIN No. 46 clarifies the application of Accounting Research

Bulletin No. 51, "Consolidated Financial Statements", to certain entities in which equity investors do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. FIN No. 46 applies immediately to variable interest entities created after January 31, 2003, and to variable interest entities in which an enterprise obtains an interest after that date. It applies in the first fiscal year or interim period beginning after June 15, 2003, to variable interest entities in which an enterprise holds a variable interest that it acquired before February 1, 2003. The Company does not expect to identify any variable interest entities that must be consolidated. In the event a variable interest entity is identified, the Company does not expect the requirements of FIN No. 46 to have a material impact on its financial condition or results of operations.

In November 2002, the FASB issued Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others" (FIN No. 45). FIN No. 45 requires certain guarantees to be recorded at fair value, which is different from current practice to record a liability only when a loss is probable and reasonably estimable, as those terms are defined in FASB Statement No. 5, "Accounting for Contingencies". FIN No. 45 also requires the Company to make significant new disclosures about guarantees. The disclosure requirements of FIN No. 45 are effective for the Company in the first quarter of fiscal year 2003. FIN No. 45's initial recognition and initial measurement provisions are applicable on a prospective basis to guarantees issued or modified after December 31, 2002. The adoption of FIN No. 45 did not have a material impact on the Company's financial position, results of operations or cash flows.

---

14. Recent Accounting Pronouncements Continued

In April 2003, the FASB issued SFAS No. 149, "Amendment of Statement 133 on Derivative Instruments and Hedging Activities." SFAS No. 149 amends and clarifies financial accounting and reporting for derivative instruments, including certain derivative instruments embedded in other contracts (collectively referred to as derivatives) and for hedging activities under SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities". This Statement is effective for contracts entered into or modified after June 30, 2003, with certain exceptions, and for hedging relationships

designated after June 30, 2003, with certain exceptions, and for hedging relationships designated after June 30, 2003. Management is currently evaluating the effect that the adoption of SFAS No. 149 may have, but believes it will not have a material effect on its results of operations and financial position.

In May 2003, the FASB issued SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." This new statement changes the accounting for certain financial instruments that, under previous guidance, issuers could account for as equity or classifications between liabilities and equity in a section that has been known as "mezzanine capital." It requires that those certain instruments be classified as liabilities in balance sheets. Most of the guidance in SFAS 150 is effective for all financial instruments entered into or modified after May 31, 2003. Management anticipates that the adoption of SFAS No. 150 may have a material impact on the Company's consolidated financial statements if in the future the Company issues mandatorily redeemable preferred stock. Such mandatorily redeemable preferred stock, previously included as "mezzanine capital", would be included as a liability in accordance with SFAS 150.

---

15. Subsequent Event

On November 28, 2003, the Company completed the sale of an aggregate of 1,820,000 shares of common stock to three institutional investors. The shares of common stock were sold for cash consideration of $1.10 per share, or a total of $2,002,000, pursuant to the terms of the Securities Purchase Agreement entered into by and among the investors and the Company as of November 28, 2003. These shares were issued in a private placement transaction pursuant to Section 4(2) and Regulation D under the Securities Act of 1933, as amended. As provided in the Securities Purchase Agreement, the Company also agreed to cause a shelf registration statement covering the resale of these shares to be filed no later than 60 days after the closing of the private placement. The Company estimates that the net proceeds from the transaction, after paying a commission to the placement agent, T.R. Winston & Company, LLC, and legal other expenses related to the transaction, will be approximately $1,840,000. The Company has also agreed to issue to the placement agent a three-year warrant to purchase up to 91,000 shares at an exercise price per share of $1.80 as provided in the Securities Purchase Agreement.

On December 10, 2003 the Company sold 239,600 shares of common stock at $1.10 per share or a total of $263,560. The Company issued to the placement agent a three-year warrant to purchase up to 11,980 shares at an exercise price of $1.80.

On July 15, 2004, American Medical Systems Holdings, Inc., or AMS, acquired TherMatrx., Inc. for $40 million in cash plus future payments contingent upon the combined entity's future sales of TherMatrx's DOT systems. The sale includes all of the Company's TherMatrx shares. The Company received an initial cash payment, after the withholding of escrow funds and the payment of other initial obligations, of approximately $8,975,000 in connection with the closing. The Company may also receive future contingent payments. Contingent payments to TherMatrx shareholders will be four times quarterly sales of TherMatrx's DOT systems during the six quarters beginning July 5, 2004 and ending December 31, 2005. The Company will receive quarterly contingent payments when the accumulated value of four times quarterly sales has exceeded the initial $40 million payment to TherMatrx shareholders. The contingent payments are also subject to certain set-off rights in favor of AMS. The aggregate maximum amount of the initial payment and any contingent payments is $250 million.

BSD MEDICAL CORPORATION

2,162,580

SHARES OF COMMON STOCK

PROSPECTUS

July 27, 2004