

2013 SHAREHOLDERS' MEETING



BSD MEDICAL

*Delivering Thermal Energy
to Medicine*

BSD MEDICAL CORPORATION
2188 West 2200 South, Salt Lake City, Utah 84119

**NOTICE OF ANNUAL MEETING OF STOCKHOLDERS OF
BSD MEDICAL CORPORATION**

February 6, 2013

TO THE STOCKHOLDERS OF BSD MEDICAL CORPORATION:

The annual meeting of the stockholders (the "Annual Meeting") of BSD Medical Corporation (the "Company" or "BSD") will be held on February 6, 2013, at the Little America Hotel located at 500 South Main Street, Salt Lake City, Utah 84101. The Annual Meeting will convene at 9:00 a.m. Mountain Time, to consider and take action on the following proposals, which are more fully described in the Proxy Statement:

1. to elect seven members to the Board of Directors to serve until the next annual meeting or until their successors are duly elected and qualified;
2. to conduct an advisory vote on executive compensation;
3. to ratify the selection of Tanner LLC as the Company's independent registered public accountants for the fiscal year ending August 31, 2013; and
4. to transact such other business as may properly come before the Annual Meeting or any adjournment or postponement thereof.

Only owners of record of the Company's issued and outstanding common stock as of the close of business on December 14, 2012 (the "Record Date") will be entitled to notice of and to vote at the Annual Meeting. Each share of common stock is entitled to one vote.

The Company's Proxy Statement is attached hereto. Financial and other information concerning the Company is contained in the Company's Annual Report on Form 10-K for the fiscal year ended August 31, 2012, which accompanies this Proxy Statement.

THE ATTENDANCE AT AND/OR VOTE OF EACH STOCKHOLDER AT THE ANNUAL MEETING IS IMPORTANT, AND EACH STOCKHOLDER IS ENCOURAGED TO ATTEND. TO ASSURE THAT YOUR VOTE IS COUNTED, PLEASE COMPLETE, SIGN, DATE AND PROMPTLY MAIL THE ENCLOSED PROXY WHETHER OR NOT YOU PLAN TO ATTEND THE ANNUAL MEETING.

Important Notice Regarding the Availability of Proxy Materials for the Stockholders Meeting to be Held February 6, 2013:

The proxy statement and annual report to stockholders are available at <https://materials.proxyvote.com/055662>.

BSD MEDICAL CORPORATION
BY ORDER OF THE BOARD OF DIRECTORS

Salt Lake City, Utah, December 28, 2012

Dennis P. Gauger, Secretary

BSD MEDICAL CORPORATION
2188 West 2200 South, Salt Lake City, Utah 84119

PROXY STATEMENT
BSD MEDICAL CORPORATION
ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD ON FEBRUARY 6, 2013

This Proxy Statement is furnished in connection with the solicitation of proxies by and on behalf of the Board of Directors (the "Board of Directors" or the "Board") of BSD Medical Corporation, a Delaware corporation (the "Company" or "BSD"), for use at the annual meeting of the stockholders (the "Annual Meeting") to be held February 6, 2013 at the Little America Hotel located at 500 South Main Street, Salt Lake City, Utah 84101, at 9:00 a.m., Mountain Time. Directions to the annual meeting can be obtained by calling Michelle Cisneros at (801) 972-5555.

THIS PROXY STATEMENT, THE NOTICE OF ANNUAL MEETING OF STOCKHOLDERS AND FORM OF PROXY ARE FIRST BEING MAILED TO THE COMPANY'S STOCKHOLDERS ON OR ABOUT DECEMBER 28, 2012.

At the Annual Meeting, the stockholders of the Company will be asked to vote on three proposals. Proposal 1 is the annual election of seven directors to serve on the Company's Board of Directors. Proposal 2 is an advisory (non-binding) vote on executive compensation. Proposal 3 is the ratification of the selection of Tanner LLC as the Company's independent registered public accountants for the fiscal year ending August 31, 2013.

A proxy for use at the Annual Meeting is enclosed. If you execute and deliver a proxy by mailing a proxy card, or by voting via the internet or telephone, you have the right to revoke your proxy at any time before it is exercised by delivering to the Secretary of the Company an instrument revoking it or a duly executed proxy bearing a later date, or by attending the Annual Meeting and voting in person. Subject to revocation, the proxy holders will vote all shares represented by a properly executed proxy received in time for the Annual Meeting in accordance with the instructions on the proxy. If no instruction is specified with respect to a matter to be acted upon, the shares represented by the proxy will be voted **FOR** all nominees listed in Proposal 1, **FOR** approval of the compensation of the Company's Named Executive Officers and **FOR** the ratification of the selection of Tanner LLC as the Company's independent registered public accountants for the fiscal year ending August 31, 2013.

We will bear the expenses of preparing, assembling, printing and mailing this Proxy Statement and the materials used in the solicitation of proxies. Proxies will be solicited through the mail and may be solicited by our officers, directors and employees in person or by telephone. They will not receive additional compensation for this effort. We do not anticipate paying any compensation to any other party for the solicitation of proxies, but may reimburse brokerage firms and others for their reasonable expenses in forwarding solicitation material to beneficial owners.

RECORD DATE AND QUORUM REQUIREMENTS

December 14, 2012 has been fixed as the record date (the "Record Date") for the determination of stockholders entitled to notice of and to vote at the Annual Meeting. As of the Record Date, 29,753,191 shares of our common stock ("Common Stock") were issued and outstanding. Each outstanding share of common stock will be entitled to one vote on each matter submitted to a vote of the stockholders at the Annual Meeting.

The holders of one-third of the shares of the Common Stock outstanding on the Record Date, present in person or by proxy, will constitute a quorum for the transaction of business at the Annual Meeting and at any adjournment or postponement thereof. Any abstentions and broker non-votes will be deemed as present for purposes of determining a quorum at the Annual Meeting.

For Proposal 1, the seven individuals receiving the most votes will be elected to serve as directors of the Company. Abstentions and broker non-votes will not have the effect of being counted as voted in favor of or against the election of directors.

For proposal 2, a majority of the votes present in person or represented by proxy at the Annual Meeting is required to approve the proposal. Abstentions will have the same effect as votes against the proposal. Broker non-votes will have no effect on the vote for this proposal. We intend to carefully consider the voting results of this proposal. The final vote is advisory in nature and, therefore, not binding on us, our Board or the Compensation Committee of the Board.

For Proposal 3, a majority of the votes present in person or represented by proxy at the Annual Meeting is required to approve the proposal. Abstentions will have the same effect as votes against the proposal. Broker non-votes will have no effect on the vote for this proposal.

MAIL VOTING PROCEDURES

To vote by mail, you should complete, sign and date your proxy card and mail it in the pre-addressed postage-paid envelope that accompanies the delivery of the proxy card. A proxy card submitted by mail must be received by the time of the Annual Meeting in order for the shares to be voted.

TELEPHONE VOTING PROCEDURES

The telephone authorization procedure is designed to authenticate identity to allow you to vote your shares and confirm that your instructions have been properly recorded. Specific instructions to be followed are set forth on the enclosed proxy card. Telephone voting facilities for stockholders of record are available 24 hours a day and will close at 11:59 p.m. Eastern Time on February 5, 2013.

INTERNET VOTING PROCEDURES

The internet authorization procedure is designed to authenticate identity to allow you to vote your shares and confirm that your instructions have been properly recorded. Specific instructions to be followed are set forth on the enclosed proxy card. Internet voting facilities for stockholders of record are available 24 hours a day and will close at 11:59 p.m. Eastern Time on February 5, 2013.

PROPOSAL 1: ELECTION OF DIRECTORS

At the Annual Meeting, seven directors are to be elected to serve until the next annual meeting of stockholders or until a successor for such director is elected and qualified, or until the death, resignation, or removal of such director. It is intended that the proxies will be voted for the seven nominees named below for election to our Board of Directors unless authority to vote for any such nominee is withheld. Each of the nominees is currently a director of the Company. Each person nominated for election has agreed to serve if elected, and the Board of Directors has no reason to believe that any nominee will be unavailable or will decline to serve. In the event, however, that any nominee is unable or declines to serve as a director at the time of the Annual Meeting, the proxies will be voted for any nominee who is designated by the current Board of Directors to fill the vacancy. Unless otherwise instructed, the proxy holders will vote the proxies received by them **FOR** the nominees named below. The seven candidates receiving the highest number of affirmative votes of the shares entitled to vote at the Annual Meeting will be elected as directors.

DIRECTORS

The names of the nominees, their ages and their respective business backgrounds are set forth below as of August 31, 2012.

Name	Position(s) With the Company	Age	Director Since
Timothy C. McQuay	Independent Director and Chairman of the Board	61	2008
Harold R. Wolcott	President and Director	66	2009
Gerhard W. Sennewald, Ph.D.	Director	76	1994
Michael Nobel, Ph.D.	Independent Director	72	1998
Douglas P. Boyd, Ph.D.	Independent Director	71	2005
Steven G. Stewart	Independent Director and Financial Expert	64	2006
Dr. Damian E. Dupuy	Independent Director	50	2011

BUSINESS EXPERIENCE AND QUALIFICATIONS OF NOMINEES FOR ELECTION TO THE BOARD OF DIRECTORS

Timothy C. McQuay has served as a director of BSD since February 2008 and currently serves as Chairman of the Board of Directors. He is a Managing Director – Investment Banking with Noble Financial Capital Markets. Prior to joining Noble Financial Capital Markets in November 2011, Mr. McQuay was a Managing Director – Investment Banking with B Riley & Co. Prior to joining B Riley in September 2008, Mr. McQuay served for ten years as Managing Director – Investment Banking with A. G. Edwards & Sons, Inc., where he specialized in Healthcare, including medical technology, biotechnology and specialty pharmaceuticals. He currently serves as Chairman of the Board of Directors of Meade Instruments Corp., where he has been a director since 1997. He is also a member of the Board of Directors of Superior Industries International, Inc. Mr. McQuay holds an AB in Economics from Princeton University and an MBA from UCLA. Mr. McQuay's qualifications to serve on the Board include, among others, his extensive business and financial experience, his public company board and investment banking experience, his knowledge of the Company, and his service as a director of the Company since 2008.

Harold R. Wolcott has served as a director of BSD since April 2009. Mr. Wolcott also has served as President of BSD since April 2009. Mr. Wolcott has 44 years experience managing and growing newly-formed venture capital financed corporations as well as multi-million dollar medical device businesses with international operations. He has a wide range of experience in the areas of product research, product engineering, manufacturing and plant management, as well as expertise in all aspects of sales and marketing, acquisition/integration, and the sale of medical device businesses. Prior to joining the Company, Mr. Wolcott served from August 2006 until March 2009 as President and Chief Operating Officer, and later, as Director of Dimicron Inc., a development stage medical company utilizing synthetic diamond for orthopedic applications. From March 2001 until June 2005, Mr. Wolcott served as Chief Operating Officer and Director of Rubicon Medical, Inc., a company focusing on proprietary technology in embolic protection for interventional cardiology and interventional neurology. Mr. Wolcott's qualifications to serve on the Board include, among others, his extensive executive and operational management experience in the medical device business, his public company board experience, his knowledge of the Company, and his service as President and a director of the Company since April 2009.

Gerhard W. Sennewald, Ph.D., has served as a director of BSD since 1994. From April 1985 to the present, Dr. Sennewald has served as the President and Chief Executive Officer of Dr. Sennewald Medizintechnik GmbH, of Munich, Germany, a firm which is engaged in the business of distributing hyperthermia equipment and diagnostic imaging equipment and services. In connection with his service to Dr. Sennewald Medizintechnik GmbH, Dr. Sennewald has been BSD's key European representative and distributor for 18 years and has been instrumental in obtaining the majority of BSD's foreign hyperthermia sales. He also served on the Board of Directors of TherMatrx, Inc. Dr. Sennewald's qualifications to serve on the Board include, among others, his significant experience in the distribution and servicing of medical equipment, his extensive knowledge of the Company gained through his many years as a key distributor of the Company's hyperthermia products, and his public company experience as a director of the Company since 1994.

Michael Nobel, Ph.D., has served as a director of BSD since January 1998. Dr. Nobel participated in the introduction of magnetic resonance imaging as European Vice President of Fonar Corp. He is founder and trustee of the Nobel Sustainable Trust Foundation and chairman of Nobel Charitable Trust Foundation (Asia). From 1991 to 2007, Dr. Nobel served as the Executive Chairman of the MRAB Group, a company providing diagnostic imaging services to Sweden. From August 2005 until June 2008, Dr. Nobel served as a director of WorldSpace Corp. He has also been a consultant to Unesco in Paris and the United Nations Social Affairs Division in Geneva. Today, Dr. Nobel is chairman or board member of several international companies in medical diagnostics, treatment and information systems. He is a guest professor at the Tokyo Institute of Technology in Japan. Dr. Nobel's qualifications to serve on the Board include, among others, his extensive business and financial experience, his knowledge of the Company, and his public company experience as a director of the Company since 1998.

Douglas P. Boyd, Ph.D., has served as a director of BSD since 2005. From January 2007 to the present, Dr. Boyd has served as Chief Executive Officer of TeleSecurity Sciences, Inc., a privately-held company in the business of developing solutions for increasing the effectiveness and automation of airport explosives detection systems. From 1983 to 2005, Dr. Boyd was an adjunct professor of radiology at the University of California, San Francisco. From 1980 to 2004, Dr. Boyd served as Chairman of the Board and Chief Technology Officer of Imatron Inc., a public company that developed and manufactured ultrafast electron beam CT scanners for use in hospitals and clinics. He is internationally known as an expert in radiology and computed tomography ("CT") imaging systems, and has pioneered the development of fan-beam CT scanners, Xenon detector arrays and EBT scanners. Dr. Boyd has been awarded 19 U.S. patents. He has published more than 100 scientific papers and is a frequent speaker at universities and symposia. From April 2005 until December 2006, Dr. Boyd served as a director of XLR Medical Corp., a public company specializing in cancer therapy technology. Since 2010, Dr. Boyd has served as a director of Spectropath, Inc., a private company developing advanced imaging solutions for image guided cancer surgery. Dr. Boyd's qualifications to serve on the Board include, among others, his extensive business and financial experience, his knowledge of the Company, and his public company experience as a director of the Company since 2005.

Steven G. Stewart has served as a director of BSD since 2006. In December 2010, Mr. Stewart entered into an agreement to serve as the Director of Financial Affairs for Headwaters, Inc. (a New York Stock Exchange company) through 2013. From July 1998 through December 2010, he served in several management positions at Headwaters, including Director of Financial Affairs, Treasurer and as the Chief Financial Officer for approximately ten years. Prior to joining Headwaters, Mr. Stewart served as a business assurance partner for PricewaterhouseCoopers LLP (formerly Coopers & Lybrand LLP), and as an audit partner with Ernst & Young (formerly Arthur Young), including service as the Salt Lake City office Director of High Technology and Entrepreneurial Services. Mr. Stewart's qualifications to serve on the Board include, among others, his extensive business and financial experience, his experience as an executive finance officer of a public company, his knowledge of the Company, and his public company experience as a director of the Company since 2006.

Damian E. Dupuy, MD, was appointed a Director in April 2011. Dr. Dupuy has been a Professor of Diagnostic Imaging at the Warren Alpert Medical School of Brown University since 2005, and has served as Director, Tumor Ablation, at Rhode Island Hospital in Providence, RI since 2001. Dr. Dupuy, a fellow of the American College of Radiology, is a pioneer in the growing field of image guided tumor ablation, whereby various types of thermal devices destroy tumors by direct placement through the skin under image guidance. Dr. Dupuy is internationally known for his pioneering clinical work in treating cancer patients who suffer from tumors of the lung, liver, kidney, head and neck, pelvis, adrenal and skeleton. Dr. Dupuy has led two National Cancer Institute multi-center trials and currently is the Interventional Oncology Symposium Chair of the Radiological Society of North America. Dr. Dupuy, who is a graduate of the University of Massachusetts, Amherst, and the University of Massachusetts Medical School, has published widely on a variety of specialized medical issues and is the recipient of numerous post-graduate honors and awards, including an American College of Radiology Imaging Network Publications Merit Award in 2010. Dr. Dupuy's qualifications to serve on the Board include, among others, his extensive medical and business experience, his knowledge of the Company, and public company experience as a director of the Company since April 2011.

COMPOSITION OF THE BOARD OF DIRECTORS

Our Board of Directors currently consists of seven directors. Directors are elected at each annual meeting of stockholders to serve until the next annual meeting of stockholders or until their successors are duly elected and qualified. There are no family relationships among any of our directors, officers or key employees.

BOARD LEADERSHIP STRUCTURE

The Board does not have a policy regarding the separation of the roles of Chief Executive Officer and Chairman of the Board as the Board believes it is in the best interests of the Company to make that determination based upon the position and direction of the Company, and the membership of the Board. The Board has determined at this time that the Company's Chairman should be an Independent Director rather than the Chief Executive Officer.

CODE OF ETHICS

We have adopted a Code of Ethics that applies to all of our directors, officers and employees. Our Code of Ethics is available on our website (www.bsdmedical.com) on our corporate governance page of the investor section of our website. We intend to post amendments to or waivers from our Code of Ethics (to the extent applicable to our chief executive officer, principal financial officer, or principal accounting officer) on our website.

AFFIRMATIVE DETERMINATIONS REGARDING DIRECTOR INDEPENDENCE

The Board of Directors has determined each of the following directors to be an "independent director" as such term is defined in the NASDAQ Stock Market Listing Standards: Timothy C. McQuay, Michael Nobel, Douglas P. Boyd, Steven G. Stewart, and Damian E. Dupuy.

In this Proxy Statement, these five directors are referred to individually as an "Independent Director" and collectively as the "Independent Directors."

MEETINGS AND COMMITTEES OF THE BOARD OF DIRECTORS

During fiscal year 2012, the Board of Directors met four times and no director attended fewer than 75% of the meetings of the Board or any of the Board committees of which a director was a member. In addition, on several occasions during fiscal year 2012, the Board of Directors took action by unanimous written consents in lieu of board meetings. Although we do not have a formal policy regarding attendance by directors at our annual meeting, we encourage directors to attend and all but one director attended the last annual meeting.

The Board of Directors has formed an audit committee, a corporate governance and nominating committee and a compensation committee. Copies of the charters of our audit committee and our corporate governance and nominating committee are available on our website (www.bsdmedical.com) on our corporate governance page of the investor section of our website.

The Audit Committee. The Audit Committee, which held four meetings during fiscal year 2012, is responsible for reviewing and monitoring our financial statements and internal accounting procedures, recommending the selection of independent auditors by the 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. The Board of Directors has adopted a written audit committee charter.

The members of the Audit Committee are Messrs. Boyd, Stewart, Nobel and McQuay. Mr. Stewart is currently serving as the audit committee chairman and financial expert (Audit Committee Financial Expert). All members of the Audit Committee are Independent Directors.

The Corporate Governance and Nominating Committee. The Corporate Governance and Nominating Committee, which held one meeting during fiscal year 2012, is responsible for identifying qualified individuals to become Board members, determining the composition of the Board and its committees, monitoring and assessing Board effectiveness, and developing and implementing our corporate governance guidelines. Additionally, the Corporate Governance and Nominating Committee recommends director nominees to our Board of Directors for the Board's approval. The Board of Directors has adopted a written corporate governance and nominating committee charter.

The members of the Corporate Governance and Nominating Committee are Messrs. Boyd, Stewart, Nobel, McQuay and Dupuy. All members of the Corporate Governance and Nominating Committee are Independent Directors. Mr. McQuay is currently serving as the Corporate Governance and Nominating Committee chairman.

The Board of Directors does not have an express policy with regard to the consideration of any director candidates since the Board believes that its Corporate Governance and Nominating Committee can adequately evaluate nominees on a case-by-case basis. The Board has not previously received any recommendations for director candidates from stockholders, and has not adopted a formal process for considering director candidates who may be recommended by stockholders. However, the Company's policy is to give due consideration to any and all such candidates, and in evaluating director nominees, the Corporate Governance and Nominating Committee considers the appropriate size of the Board, the needs of the Company, the skills and experience of its directors, and a candidate's familiarity with our industry. Although the Company does not have a formal diversity policy relating to the identification and evaluation of nominees for director, the Corporate Governance and Nominating Committee considers many criteria in identifying and selecting nominees, and in the future may establish additional minimum criteria for nominees. A stockholder may submit a recommendation for director candidates to us at our corporate offices, to the attention of Harold R. Wolcott. We do not pay fees to any third parties to assist us in identifying potential nominees.

The Compensation Committee. The members of the Compensation Committee are Messrs. Boyd, Stewart, Nobel, McQuay and Dupuy. Mr. Boyd is currently serving as the Compensation Committee chairman. All members of the Compensation Committee are Independent Directors. Our Compensation Committee, which met one time during fiscal year 2012, does not currently have a charter. The Compensation Committee has responsibility for establishing and monitoring our executive compensation programs, and for making decisions regarding the compensation of our Named Executive Officers (as defined below). The agenda for meetings of the Compensation Committee is determined by the Chairman of the Compensation Committee. The Compensation Committee sets the compensation package of the Named Executive Officers and their annual bonus. For a further description of the Compensation Committee's role, and the use of a compensation consultant, see "Executive Compensation" below.

BOARD ROLE IN RISK OVERSIGHT

Our Board of Directors is responsible for overseeing the Company's management of risk. The Board strives to effectively oversee the Company's enterprise-wide risk management in a way that balances managing risks while enhancing the long-term value of the Company for the benefit of the stockholders. The Board of Directors understands that its focus on effective risk oversight is critical to setting the Company's tone and culture towards effective risk management. To administer its oversight function, the Board seeks to understand the Company's risk philosophy by having discussions with management to establish a mutual understanding of the Company's overall appetite for risk. Our Board of Directors maintains an active dialogue with management about existing risk management processes and how management identifies, assesses, and manages the Company's most significant risk exposures. Our Board expects frequent updates from management about the Company's most significant risks so as to enable it to evaluate whether management is responding appropriately.

Our Board relies on each of its committees to help oversee the risk management responsibilities relating to the functions performed by such committees. Our Audit Committee periodically discusses with management the Company's major financial risk exposures and the steps management has taken to monitor and control such exposures, including the Company's risk assessment and risk management policies. Our Compensation Committee helps the Board to identify the Company's exposure to any risks potentially created by our compensation programs and practices. Our Corporate Governance and Nominating Committee oversees risks relating to the Company's corporate compliance programs and assists the Board and management in promoting an organizational culture that encourages commitment to ethical conduct and a commitment to compliance with the law. Each of these committees is required to make regular reports of its actions and any recommendations to the Board, including recommendations to assist the Board with its overall risk oversight function.

DIRECTOR COMPENSATION 2012

Our Fourth Amended and Restated 1998 Director Stock Plan ("Director Stock Plan") provides an annual retainer ("Annual Retainer") in the amount of \$60,000 to each non-employee director other than the Audit Committee Financial Expert, who is to receive \$65,000. Of the Annual Retainer, \$30,000 is to be paid in cash to each such director, other than the Audit Committee Financial Expert, who is to receive \$35,000 in cash (the "Cash Payment"). The Cash Payment is payable in equal installments on May 1 and November 1 of each year in which each non-employee director continues to serve as a member of the Board. Each non-employee director is to receive the balance of the Annual Retainer in the form of shares of Common Stock (the "Common Stock Payment"). The portion of the annual retainer that is paid in common stock will be determined by reference to the fair market value of our Common Stock. The fair market value of the Common Stock will be determined by reference to the closing price, as reported by the NASDAQ Stock Market, of the Common Stock on May 1 of each year, the payment date of the Common Stock Payment.

DIRECTOR COMPENSATION TABLE

The table below summarizes the compensation paid by the Company to, or earned by, our non-employee directors for the year ended August 31, 2012.

<u>Name (1)</u>	<u>Fees Earned or Paid in Cash (\$)</u>	<u>Stock Awards \$(2)</u>	<u>Option Awards \$(3)</u>	<u>All Other Compensation</u>	<u>Total (\$)</u>
(a)	(b)	(c)	(d)	(g)	(h)
Douglas P. Boyd	30,000	30,000	—	—	60,000
Damian E. Dupuy	30,000	30,000	—	3,675(4)	63,675
Timothy C. McQuay	30,000	30,000	—	—	60,000
Michael Nobel	30,000	30,000	—	—	60,000
Gerhard W. Sennewald	30,000	30,000	—	—	60,000
Steven G. Stewart	35,000	30,000	—	—	65,000

- (1) Harold R. Wolcott served as a director in fiscal year 2012, but is omitted from the Director Compensation Table because of his status as a Named Executive Officer in fiscal year 2012. No additional remuneration was paid to Mr. Wolcott for his service as a director.
- (2) The amounts shown in column (c) reflect the value of the 15,228 fully vested shares of Common Stock issued to each of the non-employee directors during fiscal year 2012 in accordance with FASB Accounting Standards Codification (“ASC”) Topic 718.
- (3) There were no stock options granted to the non-employee directors during fiscal 2012. As of the end of fiscal year 2012, each non-employee director had outstanding options for the following number of shares of Common Stock: Douglas P. Boyd, 115,000 shares; Timothy C. McQuay 47,457 shares; Michael Nobel, 135,000 shares; Gerhard W. Sennewald, 90,000 shares; and Steven G. Stewart, 106,368 shares.
- (4) Since 2007, Dr. Dupuy has served as a consultant to the Company. During fiscal year 2012, fees totaling \$3,675 were paid to Dr. Dupuy by the Company under such consulting arrangement.

COMMUNICATIONS WITH DIRECTORS

We have not adopted a formal process for stockholder communications with the Board. Nevertheless, we have tried to ensure that the views of stockholders are heard by the Board or individual directors, as applicable, and that appropriate responses are provided to stockholders in a timely manner. We believe our responsiveness to stockholder communications to the Board has been good. A stockholder may submit any communication with directors to us at our corporate offices, to the attention of Harold R. Wolcott.

RECOMMENDATION OF THE BOARD OF DIRECTORS

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS OF THE COMPANY VOTE **FOR** THE ELECTION OF ALL THE DIRECTOR NOMINEES LISTED ABOVE.

PROPOSAL 2: ADVISORY VOTE ON EXECUTIVE COMPENSATION

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, or the Dodd-Frank Act, enables our stockholders to vote to approve, on an advisory (nonbinding) basis, the compensation of our named executive officers as disclosed in this Proxy Statement in accordance with the Securities and Exchange Commission's ("SEC" or "Commission") rules.

As described in detail under the heading "*Executive Compensation – Compensation Discussion and Analysis*," the overall objective of our executive compensation program is to help create long-term value for our shareholders by attracting and retaining talented executives, rewarding superior operating and financial performance, and aligning the long-term interests of our executives with those of our shareholders. Please read the "*Compensation Discussion and Analysis*" beginning on page 13 for additional details about our executive compensation programs, including information about the fiscal year 2012 compensation of our named executive officers.

We are asking our stockholders to indicate their support for our Named Executive Officer compensation as described in this Proxy Statement. This proposal, commonly known as a "say-on-pay" proposal, gives our stockholders the opportunity to express their views on our Named Executive Officers' compensation. Accordingly, we will ask our stockholders to vote "FOR" the following resolution at the Annual Meeting:

"RESOLVED, that the Company's stockholders approve, on an advisory basis, the compensation of the Named Executive Officers, as disclosed in the Company's Proxy Statement for the 2013 Annual Meeting of Stockholders pursuant to the compensation disclosure rules of the Securities and Exchange Commission, including the Compensation Discussion and Analysis, the 2012 Summary Compensation Table and the other related tables and disclosure."

The say-on-pay vote is advisory, and therefore not binding on the Company, the Compensation Committee or our Board of Directors. Our Board of Directors and our Compensation Committee value the opinions of our stockholders and to the extent there is any significant vote against the Named Executive Officer compensation as disclosed in this proxy statement, we will consider our stockholders' concerns and the Compensation Committee will evaluate whether any actions are necessary to address those concerns. We currently plan to hold our next say-on-pay vote at the annual meeting expected to be held on or about February 2015.

A majority of the votes present in person or represented by proxy at the Annual Meeting is required to approve Proposal 2. Abstentions will have the same effect as votes against the proposal. Broker non-votes will have no effect on the vote for this proposal. Proposal 2 is non-binding. If no voting instructions are given, the accompanying proxy will be voted **FOR** this Proposal 2.

RECOMMENDATION OF THE BOARD OF DIRECTORS

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS OF THE COMPANY VOTE **FOR** THE APPROVAL OF THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS, AS DISCLOSED IN THIS PROXY STATEMENT PURSUANT TO THE COMPENSATION DISCLOSURE RULES OF THE SECURITIES AND EXCHANGE COMMISSION.

PROPOSAL 3: RATIFICATION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTANTS

We are asking the stockholders to ratify the selection of Tanner LLC as the Company's independent registered public accountants for the fiscal year ending August 31, 2013. A majority of the votes present in person or represented by proxy at the Annual Meeting is required to ratify the selection of Tanner LLC. Abstentions will have the same effect as votes against the proposal. Broker non-votes will have no effect on the vote for this proposal.

In the event the stockholders fail to ratify the appointment, the Audit Committee will consider it as a direction to select other auditors for the subsequent year. Even if the selection is ratified, the Board or Audit Committee, in their discretion, may direct the appointment of a different independent registered public accounting firm at any time during the year we determine that such change would be in the best interest of the Company and its stockholders.

Tanner LLC audited the Company's financial statements for fiscal years ended August 31, 2012 and 2011. Its representatives will be present at the annual meeting, and will have the opportunity to make a statement if they desire to do so and will be available to respond to appropriate questions.

PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table presents fees for professional services rendered by Tanner LLC for the audit of our annual financial statements for the fiscal years ended August 31, 2012 and 2011, and fees billed for other services rendered by Tanner LLC during those periods.

	<u>2012</u>	<u>2011</u>
Audit Fees (1)	\$ 76,700	\$ 100,200
Audit Related Fees (2)	3,300	—
Tax Fees (3)	14,500	14,000
All Other Fees	—	—
Total	<u>\$ 94,500</u>	<u>\$ 114,200</u>

- (1) Audit Fees consist of fees billed for the audit of the Company's annual financial statements included in Form 10-K and services in connection with the Company's various statutory and regulatory filings. Audit fees also include fees related to the reviews of interim financial information included in Forms 10-Q.
- (2) Audit Related Fees consist of fees billed for consent procedures performed in conjunction with the Company filing a registration statement during the respective fiscal years.
- (3) Tax Fees consist of fees for the preparation of federal and state income tax returns.

PRE-APPROVAL POLICIES

The Audit Committee pre-approved all audit, audit-related and non-audit services performed by our independent auditors and subsequently reviewed the actual fees and expenses paid to Tanner LLC. The Audit Committee has determined that the fees paid to Tanner LLC for services are compatible with maintaining Tanner LLC's independence as our auditors.

AUDIT COMMITTEE REPORT

The Audit Committee has reviewed and discussed our audited financial statements with our management and has discussed with Tanner LLC the matters required to be discussed by Statements of Auditing Standards No. 114, *Communication with Those Charged with Governance*, as amended, as adopted by the Public Company Accounting Oversight Board in Rule 3200T.

The Audit Committee has received the written disclosures and the letter from Tanner LLC required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent registered public accountant's communications with the Audit Committee concerning independence, and has discussed with Tanner LLC its independence from us.

Based on its review, the Audit Committee recommended to the Board of Directors that the audited financial statements for our fiscal year ended August 31, 2012 be included in our Annual Report on Form 10-K for our fiscal year ended August 31, 2012, which was filed on November 14, 2012.

Submitted by:

Douglas P. Boyd
Steven G. Stewart
Michael Nobel
Timothy C. McQuay

Members of the Audit Committee

RECOMMENDATION OF THE BOARD OF DIRECTORS

THE BOARD OF DIRECTORS RECOMMENDS A VOTE **FOR** THE PROPOSAL TO RATIFY THE SELECTION OF TANNER LLC TO SERVE AS THE COMPANY'S INDEPENDENT REGISTERED PUBLIC ACCOUNTANTS FOR THE FISCAL YEAR ENDING AUGUST 31, 2013.

EXECUTIVE OFFICERS

The names of our executive officers, their ages, and their respective business backgrounds are set forth below as of August 31, 2012. For information regarding Harold R. Wolcott's background, please see his biographical description above under Proposal 1 regarding the election of directors. There are no family relationships among any of our directors, officers or key employees.

Name		Position
	ge	
Harold R. Wolcott	66	President and Director
Dennis P. Gauger, CPA	60	Departing Chief Financial Officer and Secretary
William S. Barth	62	Incoming Chief Financial Officer and Secretary

Dennis P. Gauger, CPA, has served as Chief Financial Officer since May 2007 and was appointed Secretary in November 2008. Mr. Gauger is a licensed Certified Public Accountant in Utah and Nevada, and served on a part-time basis prior to his full time employment on April 21, 2009. Mr. Gauger has served other publicly held companies as a part-time, contract chief financial officer, including the following: from April 2004 until November 2008, Mr. Gauger served as Chief Financial Officer for Cimatrix Incorporated, a publicly held software company (CMXX.OB – NASD OTC); from December 2006 until November 2008, Mr. Gauger served as Chief Financial Officer for Golden Phoenix Minerals, Inc., a publicly held mining company (GPXM.OB – NASD OTC); from January 2004 until January 2008, Mr. Gauger served as a director, Chief Financial Officer, and Secretary for Groen Brothers Aviation, Inc., a publicly held aviation company (GNBA — OTCBB); and from November 2001 until March 2007, Mr. Gauger served as a Chief Financial Officer for Nevada Chemicals, Inc., a chemical supply company to the gold mining industry (NCEM-NNM). Additionally, over the past ten years, he has served several public and private companies in a variety of industries as a part-time, contract financial executive, corporate troubleshooter and consultant. Previously, Mr. Gauger worked for Deloitte & Touche LLP, an international accounting and consulting firm, for 22 years, including 9 years as an accounting and auditing partner. He is a member of the American Institute of Certified Public Accountants and the Utah Association of Certified Public Accountants.

On November 28, 2012, we and Dennis P. Gauger entered into a written Separation Agreement and Release of All Claims pursuant to which Mr. Gauger resigned his position as the Chief Financial Officer, effective at the close of business on December 31, 2012. Mr. Gauger will continue to provide limited consulting services to us through June 30, 2013.

Our Board of Directors has appointed William S. Barth as our new Chief Financial Officer and Corporate Secretary. Mr. Barth commenced his employment with us on December 10, 2012, and will assume the duties of Chief Financial Officer and Corporate Secretary effective January 1, 2013, upon the departure of Mr. Gauger.

William S. Barth has an extensive history as chief financial officer for both publicly and privately held companies in the medical device and biotechnology industries. Since May 2011, he has served as an independent corporate financial and strategic planning consultant. From June 2008 to May 2011, he served as Sr. Vice President and Chief Financial Officer for Emphusion, LLC, a private-equity-owned Contract Research Organization (CRO) providing data management and bio-statistical analysis services for new drug and medical device development. From January 2001 through April 2008, Mr. Barth was VP of Finance and CFO for NWT Inc. /Tandem Labs (Tandem), a privately owned CRO, providing advanced bio-analytical services in support of new drug development. Mr. Barth was instrumental in the successful merger of Tandem with Laboratory Corporation of America in February 2008. During the 20 years prior to his experience with Tandem, he served as CFO for 6 medical device companies, two of which were publicly owned. During this time he played critical roles in completing several equity, debt and merger transactions. Mr. Barth began his career in finance while serving as a staff accountant with Deloitte & Touche, an international accounting and consulting firm.

SIGNIFICANT EMPLOYEES

In addition to the officers and directors identified above, we expect the following individuals to make significant contributions to our business:

Name	Age	Position
Dixie Toolson Sells	62	Vice President of Regulatory Affairs
Sam Maravich, Jr.	55	Vice President of Sales, Marketing and Business Development
Todd H. Turnlund	46	Vice President of Engineering
Paul F. Turner, MSEE	65	Chief Technology Officer

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. In October 1993, Ms. Sells resigned as Vice President of Regulatory Affairs, and she served as Director of Regulatory Affairs from October 1993 to December 1994. In December 1994, Ms. Sells was re-appointed as Vice President of Regulatory Affairs and was appointed as Corporate Secretary by the Board of Directors. Ms. Sells resigned as Corporate Secretary of BSD in March 2002. Ms. Sells also serves on the Board of Directors of the Intermountain Biomedical Association.

Sam Maravich, Jr. was appointed Vice President of Sales and Marketing in February 2012. Mr. Maravich has over 8 years of clinical experience and 34 years of medical device sales and marketing experience with both medical device start up and Fortune 500 companies. His clinical expertise includes respiratory, trauma, enteral feeding, and ICU. He has been responsible for developing sales and marketing strategies for new innovative products and changing direction on mature product categories. He has initiated sales processes, developed sales teams, and used sales operations to measure progress towards sales goals. He helped develop new marketing plans for innovative products in Interventional Radiology and Respiratory Therapy. Prior to joining BSD, Mr. Maravich served in various sales positions, including Director of Sales Operations Medical Devices Kimberly Clark from April 2002 to July 2003, Director of Sales Temperature Management Kimberly Clark from July 2003 to April 2006, Director of Sales Operations Marketing Kimberly Clark from April 2006 to July 2008, and Director of Sales Medical Devices Kimberly Clark from May 2008 to February 2012. Mr. Maravich has a BA in Finance from The Ohio State University.

Todd H. Turnlund was appointed Vice President of Engineering in January 2010. Mr. Turnlund has over 21 years of medical device experience with both medical device start up and Fortune 500 companies. His expertise includes translating unmet clinical needs into commercially successful products, creating intellectual property, developing new technology, and transferring product designs to manufacturing. Prior to joining BSD, Mr. Turnlund served in various research and development management positions, including Director of Research and Development at Boston Scientific from January 2005 to January 2008, an independent consultant from January 2008 to October 2009, and Director of Research and Development at C.R. Bard from November 2009 to January 2010. Mr. Turnlund has a Mechanical Engineering Degree from the University of California at Santa Barbara, and an MBA from Santa Clara University.

Paul F. Turner, MSEE, has served as Chief Technology Officer since August 1999 and leads the Company's research activities for its hyperthermia and ablation products. Mr. Turner also served as Senior Vice President of BSD from August 1999 to December 2010, and served as a director from 1994 to February 2011. From October 1995 to August 1999, Mr. Turner served as the Acting President of BSD. From 1978 to October 1995, Mr. Turner served in various capacities with BSD, including Staff Engineer, 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 antenna 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.

COMPENSATION DISCUSSION AND ANALYSIS

The following discussion and analysis provides information regarding our executive compensation objectives and principles, procedures, practices and decisions, and is provided to help give perspective to the numbers and narratives that follow in the tables in this section. This discussion will focus on our objectives, principles, practices and decisions with regards to the compensation of Harold R. Wolcott, President and Dennis P. Gauger, Chief Financial Officer and Secretary, our named executive officers ("Named Executive Officers") for the fiscal year ended August 31, 2012.

Executive Compensation Objectives and Principles

The overall objective of our executive compensation program is to help create long-term value for our shareholders by attracting and retaining talented executives, rewarding superior operating and financial performance, and aligning the long-term interests of our executives with those of our shareholders. Accordingly, our executive compensation program incorporates the following principles:

- Compensation should be based upon individual job responsibility, demonstrated leadership ability, management experience, individual performance, and Company performance.
- Compensation should reflect the fair market value of the services received. We believe that a fair and competitive pay package is essential to attract and retain talented executives in key positions.
- Compensation should reward executives for long-term strategic management and enhancement of shareholder value.
- Compensation should reward performance and promote a performance oriented environment.

Executive Compensation Procedures

We believe that compensation paid to our executive officers should be closely aligned with our performance and the performance of each individual executive officer on both a short-term and a long-term basis, should be based upon the value each executive officer provides to us, and should be designed to assist us in attracting and retaining the best possible executive talent, which we believe is critical to our long-term success. To attain our executive compensation objectives and implement the underlying compensation principles, we follow the procedures described below.

Role of the Compensation Committee. The Compensation Committee has responsibility for establishing and monitoring our executive compensation programs and for making decisions regarding the compensation of our Named Executive Officers. The agenda for meetings of the Compensation Committee is determined by the Chairman of the Compensation Committee. The Compensation Committee sets the compensation package and annual bonus of the Named Executive Officers. Our President, Mr. Wolcott, suggests items to be considered by the Compensation Committee from time to time, including the compensation package for the other Named Executive Officers; and participates in meetings in which the compensation package of the other Named Executive Officers is discussed.

The Compensation Committee relies on its judgment in making compensation decisions after reviewing our performance and evaluating our executives' leadership abilities and responsibilities with our Company and their current compensation arrangements. The Compensation Committee assessment process is designed to be flexible so as to better respond to the evolving business environment and individual circumstances.

At our 2011 annual meeting of stockholders, over 95% of the votes cast were in favor of our executive compensation program. When designing our executive compensation program, the Compensation Committee considered, among other things, the 2011 voting results and other feedback we received from our stockholders and determined not to make any significant changes to the design of our executive compensation program.

Role of Compensation Consultant. We have not engaged a compensation consultant since 2006.

Elements of Compensation

Our executive compensation objectives and principles are implemented through the use of the following elements of compensation, each discussed more fully below:

- Base Salary
- Annual Incentive Bonuses
- Stock-Based Compensation
- Other Benefits

Base Salary. The Compensation Committee approved the salaries of all our executive officers for fiscal year 2012. Base salaries are offered to ensure that our executive officers receive an ongoing level of compensation. Salary decisions concerning these officers were based upon a variety of considerations consistent with the compensation philosophy stated above. First, salaries were competitively set relative to both other companies in the medical products industry and other comparable companies. In determining the salaries for our executives in fiscal 2012, the Compensation Committee considered the compensation of some of the public companies in the biotechnology industry. The Compensation Committee considered each officer's level of responsibility and individual performance, including an assessment of the person's overall value to the Company. In addition, internal equity among employees was factored into the decision. Finally, the Compensation Committee considered our financial performance and our ability to absorb any increases in salaries.

Annual Incentive Bonuses. Annual incentive bonuses are designed to reward extraordinary performance by our executives. For fiscal years 2012 and 2011, the Compensation Committee did not precisely define the parameters of a bonus program for the Named Executive Officers, and no bonuses were awarded to the Named Executive Officers.

Stock-Based Compensation. Each Named Executive Officer is eligible to participate in the Stock Incentive Plan, which provides for the granting of stock options, stock appreciation rights, performance awards, other stock-based awards, and cash-based awards to selected employees, non-employees and directors. Stock-based compensation is designed to more closely align the interests of management with those of our shareholders. Historically, we have issued options pursuant to this incentive plan, and typically these options vest ratably over a term of up to 5 years as determined by the Compensation Committee. Recent stock option grants vest over 3 years. We do not have any policies for allocating compensation between long-term and currently paid out compensation or between cash and non-cash compensation or among different forms of non-cash compensation. Although we do not have any formal policy for determining the amount of stock options or the timing of

our stock option grants, we have historically granted stock options to high-performing employees (i) in recognition of their individual achievements and contributions to our company, and (ii) in anticipation of their future service and achievements. There were no stock options granted to the Named Executive Officers during fiscal 2012.

Other Benefits. Our Named Executive Officers receive the same benefits that are available to all other full time employees, including the payment of health, dental, life and disability insurance premiums.

Deductibility of Executive Compensation

Internal Revenue Service (“IRS”) Code Section 162(m) limits the amount that we may deduct for compensation paid to our principal executive officer and to each of our three most highly compensated officers (other than our principal financial officer) to \$1.0 million per person, unless certain exemption requirements are met. Exemptions to this deductibility limit may be made for various forms of performance-based compensation. In the past, annual salary and bonus compensation to our executive officers has not exceeded \$1.0 million per person, so the compensation has been deductible. In addition to salary and bonus compensation, upon the exercise of stock options that are not treated as incentive stock options, the excess of the current market price over the option price, or option spread, is treated as compensation and accordingly, in any year, such exercise may cause an officer’s total compensation to exceed \$1.0 million. Under certain regulations, option spread compensation from options that meet certain requirements will not be subject to the \$1.0 million cap on deductibility. While the Compensation Committee cannot predict how the deductibility limit may impact our compensation program in future years, the Compensation Committee intends to maintain an approach to executive compensation that strongly links pay to performance.

The Compensation Committee reviews and considers the deductibility of executive compensation under Section 162(m) of the IRS Code. In certain situations, the Compensation Committee may approve compensation that will not meet the requirements of IRS Code Section 162(m) in order to ensure competitive levels of total compensation for its executive officers.

Material Issues Relating to Fiscal 2013 Compensation

On November 28, 2012, we and Dennis P. Gauger entered into a written Separation Agreement and Release of All Claims pursuant to which Mr. Gauger resigned his position as the Chief Financial Officer, effective at the close of business on December 31, 2012.

The Separation Agreement and Release of All Claims (the “Agreement”) entered into between the Company and Mr. Gauger provides that Mr. Gauger will be paid a total of \$97,200, the equivalent of six (6) months of his current base salary. Such amount will be paid to Mr. Gauger in accordance with our customary payroll policies, including the withholding of appropriate state and federal income tax. The first payment to Mr. Gauger will be made on January 11, 2013. Additionally, the Company will pay a portion of COBRA insurance payments for Mr. Gauger until the earlier of June 30, 2013, or the date that Mr. Gauger becomes eligible to participate in a health insurance plan of another employer, or the date that Mr. Gauger is no longer eligible for COBRA coverage. Under the Agreement, Mr. Gauger has agreed to provide the Company with not more than 10 hours of consulting services each week through June 30, 2013, at a rate of \$100 per hour.

Our Board of Directors has appointed William S. Barth as our new Chief Financial Officer and Corporate Secretary. Mr. Barth commenced his employment with us on December 10, 2012, and will assume the duties of Chief Financial Officer and Corporate Secretary effective January 1, 2013, upon the departure of Mr. Gauger. Mr. Barth’s annual salary will initially be \$200,000, and he will be granted options pursuant to our Stock Incentive Plan, as amended.

COMPENSATION COMMITTEE REPORT

The Compensation Committee has reviewed the foregoing Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K, and discussed the Compensation Discussion and Analysis with the Company’s management. Based on such review and discussions with management, the Compensation Committee recommended to the Board that the foregoing Compensation Discussion and Analysis be included in this Proxy Statement.

COMPENSATION COMMITTEE

Douglas P. Boyd
Steven G. Stewart
Michael Nobel
Timothy C. McQuay
Damian E. Dupuy

Summary Compensation Table

The table below summarizes the total compensation paid to or earned by each of the Named Executive Officers for services in all capacities to the Company and its affiliates for the years ended August 31, 2012, 2011 and 2010:

Name and Principal Position	Year	Salary	Bonus	Option Awards(1)	All Other Compensation	Total
(a)	(b)	(c)	(d)	(e)	(i)	(j)
Harold R. Wolcott President	2012	\$ 250,000	\$ —	\$ —	\$ 13,437(2)	\$ 263,437
	2011	\$ 250,000	—	331,500	12,354(2)	593,854
	2010	250,000	—	—	10,965(2)	260,965
Dennis P. Gauger Chief Financial Officer	2012	194,400	—	—	14,233(3)	208,633
	2011	189,996	—	169,750	12,546(3)	372,292
	2010	180,000	—	—	14,795(3)	194,795

- (1) The amounts shown in column (e) reflect the aggregate grant date fair value with respect to employee stock options granted to the Named Executive Officers during the respective fiscal years in accordance with ASC Topic 718. The stock options awarded to Messrs. Wolcott and Gauger in fiscal year 2011 vest over a three year period. Assumptions used in calculating the amounts for fiscal year 2011 are included in Note 10 to the Company's financial statements included in our Annual Report on Form 10-K for the year ended August 31, 2011. No stock options were awarded to Messrs. Wolcott and Gauger in fiscal years 2012 and 2010.
- (2) These amounts consist of: medical insurance reimbursement of \$9,794, life insurance premiums of \$131, dental insurance premiums of \$462, disability insurance premiums of \$2,050, and holiday payment of \$1,000 paid by the Company in fiscal year 2012; medical insurance reimbursement of \$9,794, life insurance premiums of \$142, dental insurance premiums of \$425, disability insurance premiums of \$993, and holiday payment of \$1,000 paid by the Company in fiscal year 2011; and medical insurance reimbursement of \$9,794, life insurance premiums of \$136, dental insurance premiums of \$394, and disability insurance premiums of \$641 paid by the Company in fiscal year 2010.
- (3) These amounts consist of: medical insurance premiums of \$10,678, life insurance premiums of \$166, dental insurance premiums of \$462, disability insurance premiums of \$1,927, and holiday payment of \$1,000 paid by the Company in fiscal year 2012; medical insurance premiums of \$10,017, life insurance premiums of \$142, dental insurance premiums of \$425, disability insurance premiums of \$962, and holiday payment of \$1,000 paid by the Company in fiscal year 2011; and medical insurance premiums of \$10,220, life insurance premiums of \$151, dental insurance premiums of \$394, disability insurance premiums of \$641, holiday payment of \$500, and accrued vacation of \$2,889 paid by the Company in fiscal year 2010.

Grants of Plan-Based Awards – Fiscal Year 2012

There were no plan-based awards granted to the Company's Named Executive Officers in fiscal year 2012.

Employment Agreements

On April 4, 2009, the Board of Directors of the Company appointed Mr. Wolcott as the President of the Company, effective as of April 7, 2009. In addition, Mr. Wolcott was appointed as a member of the Board of Directors, effective as of April 7, 2009. The Company and Mr. Wolcott agreed to the terms of an offer letter, dated April 7, 2009 (the "Offer Letter"), pursuant to which Mr. Wolcott receives an annual salary of \$250,000 and received 655,760 stock options pursuant to the Company's Amended and Restated 1998 Stock Incentive Plan. Mr. Wolcott also participates in the other benefit plans available to employees of the Company.

Dennis P. Gauger, Chief Financial Officer, served the Company on a part-time, contract basis through July 15, 2008, and received monthly compensation of \$6,000. On July 16, 2008, Mr. Gauger became an employee of the Company, and currently receives an annual base salary of \$194,400.

On November 28, 2012, we and Dennis P. Gauger entered into a written Separation Agreement and Release of All Claims pursuant to which Mr. Gauger resigned his position as the Chief Financial Officer, effective at the close of business on December 31, 2012. For a description of the compensation Mr. Gauger received pursuant to such agreement, please see “Compensation Discussion and Analysis—Material Issues Relating to Fiscal 2013 Compensation”.

Outstanding Equity Awards at Fiscal Year-End 2012

This table provides information on the year-end 2012 holdings of Company stock options by the Named Executive Officers.

Name (a)	Number of Securities Underlying Unexercised Options Exercisable (#) (b)	Number of Securities Underlying Unexercised Options Unexercisable (#) (c)	Option Exercise Price (\$) (e)	Option Expiration Date (f)
Harold R. Wolcott	323,456	262,304(1)	1.70	04/10/2019
Harold R. Wolcott	50,000	100,000(2)	4.66	02/02/2021
Dennis P. Gauger	40,000	—	7.31	09/12/2018
Dennis P. Gauger	60,000	40,000(1)	2.40	04/28/2019
Dennis P. Gauger	16,667	33,333(2)	4.66	02/02/2021
Dennis P. Gauger	8,333	16,667(2)	3.82	05/21/2021

(1) Options vest in equal annual installments (20% each year) on the anniversary of the grant date.

(2) Options vest in equal annual installments (33.3% each year) on the anniversary of the grant date.

Option Exercises and Stock Vested for Fiscal Year 2012

The Named Executive Officers did not exercise any stock options during the year ended August 31, 2012.

Potential Payments Upon Termination

As of August 31, 2012, the Company did not have any agreement with Messrs. Wolcott and Gauger to pay them severance or other benefits following termination of their employment. Therefore, if Mr. Wolcott’s and Mr. Gauger’s employment by the Company had terminated for any reason on August 31, 2012, they would not have been entitled to any severance or other benefits following such termination. In addition, there would not have been any acceleration of vesting of stock options granted to Messrs. Wolcott and Gauger.

On November 28, 2012, we and Dennis P. Gauger entered into a written Separation Agreement and Release of All Claims pursuant to which Mr. Gauger resigned his position as the Chief Financial Officer, effective at the close of business on December 31, 2012. For a description of the compensation Mr. Gauger received pursuant to such agreement, please see “Compensation Discussion and Analysis—Material Issues Relating to Fiscal 2013 Compensation”.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information known to us with respect to beneficial ownership of our Common Stock as of December 14, 2012 for (i) each director and nominee, (ii) each holder of 5.0% or greater of our Common Stock, (iii) our Named Executive Officers, and (iv) all executive officers and directors as a group. Beneficial ownership is determined in accordance with the rules of the Commission, and generally includes voting or investment power with respect to securities. Shares subject to options that are exercisable within 60 days following December 14, 2012 are deemed to be outstanding and beneficially owned by the optionee or group of optionees for the purpose of computing share and percentage ownership of that optionee or group of optionees, but are not deemed to be outstanding for the purpose of computing the percentage ownership of any other person. 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 29,753,191 shares of Common Stock outstanding as of December 14, 2012. Except as otherwise noted, the address of each person listed on the following table is 2188 West 2200 South, Salt Lake City, Utah 84119.

Name of Beneficial Owner	Common Stock Beneficially Owned	
	Shares	Percent
Officers and Directors		
Dr. Gerhard W. Sennewald (1)	6,377,167	21.4%
Dr. Michael Nobel (2)	429,486	1.4%
Douglas P. Boyd (3)	252,669	*
Steven G. Stewart (4)	153,799	*
Timothy C. McQuay (5)	70,708	*
Damian E. Dupuy, MD	15,271	*
Harold R. Wolcott (6)	428,456	1.4%
Dennis P. Gauger (7)	133,333	*
William S. Barth	1,500	*
All Executive Officers and Directors as a Group (9 persons) (8)	7,862,389	25.6%

* Less than 1%

- (1) Includes 84,000 shares subject to stock options that are currently exercisable or exercisable within 60 days after December 14, 2012.
- (2) Includes 129,000 shares subject to stock options that are currently exercisable or exercisable within 60 days after December 14, 2012.
- (3) Includes 109,000 shares subject to stock options that are currently exercisable or exercisable within 60 days after December 14, 2012.
- (4) Includes 100,368 shares subject to stock options that are currently exercisable or exercisable within 60 days after December 14, 2012.
- (5) Includes 37,966 shares subject to stock options that are currently exercisable or exercisable within 60 days after December 14, 2012.
- (6) Includes 423,456 shares subject to stock options that are currently exercisable or exercisable within 60 days after December 14, 2012.
- (7) Includes 133,333 shares subject to stock options that are currently exercisable or exercisable within 60 days after December 14, 2012.
- (8) Includes 1,017,123 shares subject to stock options that are currently exercisable or exercisable within 60 days after December 14, 2012.

EQUITY COMPENSATION PLAN INFORMATION

The following table summarizes the Company's equity compensation plans as of August 31, 2012.

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	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)	(b)	(c)
Equity compensation plans approved by security holders (1)	3,182,239	\$ 3.54	2,679,526
Equity compensation plans not approved by security holders	—	—	—
Total	3,182,239	\$ 3.54	2,679,526

- (1) A total of 8,087,300 shares of Common Stock have been reserved for issuance under the plans. To date, a total of 2,216,561 options have been exercised under the plans.

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934, as amended, requires the Company's directors and officers and persons who own more than 10% of a registered class of the Company's equity securities to file with the Commission initial reports of ownership and reports of changes in ownership of equity securities of the Company. Officers, directors, and greater than 10% stockholders are required to furnish the Company with copies of all Section 16(a) forms they file. Based solely on review of the copies of such forms received by the Company, or written representations from certain reporting persons, the Company believes that during the year ended August 31, 2012 all reporting persons complied with all applicable filing requirements.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

Since September 1, 2010, there has not been, nor is there any proposed transaction in which the Company was or will be a party or in which it was or will be a participant, involving an amount that exceeded or will exceed \$120,000 and in which any director, executive officer, beneficial owner of more than 5% of any class of the Company's voting securities, or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than the transactions which are described below.

Dr. Sennewald Medizintechnik GmbH. BSD supplies hyperthermia therapy systems and related component parts to Dr. Sennewald Medizintechnik GmbH ("Medizintechnik") located in Munich, Germany, which is a significant distributor of BSD's products in Europe. Medizintechnik purchases equipment, which it installs, and component parts to service the BSD hyperthermia therapy systems that Medizintechnik sells to its customers in Europe. For the fiscal years 2012 and 2011, BSD had revenue of \$333,663 and \$1,063,495, respectively, from the sale of systems and various component parts sold to Medizintechnik. As of August 31, 2012 and 2011, accounts receivable from Medizintechnik were \$33,257 and \$408,323, respectively. Dr. Gerhard W. Sennewald, one of BSD's directors and significant stockholders, is the President and Chief Executive Officer of Medizintechnik and its sole stockholder. Management believes the terms of the transactions with Medizintechnik were arms length and fair to the Company.

The Company does not have a formal written process for reviewing related person transactions. The Company expects that the Audit Committee will review for potential conflict of interest situations, on an ongoing basis, any future proposed transaction, or series of transactions, with related persons, and either approve or disapprove each reviewed transaction or series of related transactions with related persons.

STOCKHOLDER PROPOSALS

No proposals have been submitted by stockholders of the Company for consideration at the Annual Meeting. It is anticipated that the next annual meeting of stockholders will be held on or about February 1, 2014. Stockholders may present proposals for inclusion in the proxy statement to be mailed in connection with the 2014 annual meeting of stockholders of the Company, provided such proposals are received by the Company in writing no later than August 31, 2013 and are otherwise in compliance with Commission regulations regarding the inclusion of stockholder proposals in company-sponsored proxy materials. Pursuant to rules adopted by the Commission, if a shareholder intends to propose any matter for a vote at the Company's 2014 annual meeting of stockholders, but fails to notify the Company of that intention by November 14, 2013, then a proxy solicited by the Board of Directors may be voted on that matter in the discretion of the proxy holder, without discussion of the matter in the proxy statement soliciting the proxy and without the matter appearing as a separate item on the proxy card.

OTHER MATTERS

The Company is unaware of any business, other than described in this Proxy Statement that may be considered at the Annual Meeting. If any other matters should properly come before the Annual Meeting, it is the intention of the persons named in the accompanying form of proxy to vote the proxies held by them in accordance with their best judgment.

To assure the presence of the necessary quorum and to vote on the matters to come before the Annual Meeting, please promptly indicate your choices via the internet, by phone or by mail, according to the procedures described on the proxy card. The submission of a proxy via the internet, by phone or by mail does not prevent you from attending and voting at the Annual Meeting.

AVAILABLE INFORMATION

The Company is subject to the informational requirements of the Securities Exchange Act of 1934, as amended, and, in accordance therewith, files reports and other information with the Commission. Any interested party may inspect information filed by the Company, without charge, at the public reference facilities of the Commission at its principal office at 100 F. Street, N.E., Washington, D.C. 20549. Any interested party may obtain copies of all or any portion of the information filed by the Company at prescribed rates from the Public Reference Section of the Commission at its principal office at 100 F. Street, N.E., Washington, D.C. 20549. In addition, the Commission maintains an Internet site that contains reports, proxy and information statements and other information regarding the Company and other registrants that file electronically with the Commission at <http://www.sec.gov>.

The Company's Common Stock is listed on the NASDAQ Stock Market and trades under the symbol "BSDM".

ADDITIONAL INFORMATION

The Company will provide without charge to any person from whom a proxy is solicited by the Board of Directors, upon the written request of that person, a copy of the Company's Annual Report on Form 10-K for the fiscal year ended August 31, 2012, including the financial statements and schedules thereto (as well as exhibits thereto, if specifically requested), required to be filed with the Commission. Written requests for that information should be directed to the Secretary of the Company at the address on the first page of this proxy statement.

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

FORM 10-K

(Mark One)

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

For the Fiscal Year Ended August 31, 2012

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

For the Transition Period From _____ to _____

Commission File Number: 001-32526

BSD MEDICAL CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

2188 West 2200 South, Salt Lake City, Utah
(Address of principal executive office)

75-1590407

(I.R.S. Employer
Identification No.)

84119
(Zip Code)

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

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

Title of Each Class
Common Stock, Par Value \$0.001

Name of Each Exchange on which Registered
The NASDAQ Stock Market LLC

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

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

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

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

Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (Section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

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

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

Large accelerated filer ☐

Non-accelerated filer ☐

(Do not check if a smaller reporting company)

Accelerated filer ☒

Smaller reporting company ☐

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

The aggregate market value of the common stock held by non-affiliates of the registrant as of February 28, 2012 was approximately \$50,192,000.

As of November 9, 2012, the registrant had 29,753,191 shares of its common stock, par value \$.001, outstanding.

Documents Incorporated by Reference: Portions of the definitive Proxy Statement to be delivered to shareholders in connection with the 2013 Annual Meeting of Shareholders, which is expected to be held February 6, 2013, are incorporated by reference into Part III hereof.

BSD MEDICAL CORPORATION
FORM 10-K

For the Year Ended August 31, 2012

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PART I

ITEM 1. BUSINESS

Forward-Looking Statements

This annual report on Form 10-K contains 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 Item 1A, “Risk Factors,” and Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations.” We assume no obligation to revise or update any forward-looking statements for any reason, except as required by law.

Overview

BSD Medical Corporation (the “Company” or “BSD”) was originally incorporated under the laws of the State of Utah on March 17, 1978. On July 3, 1986, the Company was reincorporated in the State of Delaware.

We develop, manufacture, market and service systems to treat cancer and benign diseases using heat therapy delivered using focused radiofrequency (“RF”) and microwave energy. Our business objectives are to commercialize our products for the treatment of cancer and to further expand our products to treat other diseases and medical conditions. Our product line for cancer therapy has been created to offer hospitals and clinics a complete solution for thermal treatment of cancer using microwave/RF systems.

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

In spite of the advances in cancer treatment technology, nearly 40% of cancer patients continue to die from the disease in the United States. Our product line includes systems that have been strategically designed to offer a range of thermal treatment systems for the treatment of cancer, including both ablation and hyperthermia treatment systems. Studies have shown that both ablation and hyperthermia treatments kill cancer, but they have different clinical applications.

Our microwave ablation system is used to ablate (destroy) soft tissue with heat alone. Thermal ablation usually refers to heat treatments delivered at temperatures above 55°C for short periods of time. Thermal ablation is used to destroy local tumors using a short intense focus of heat on a specific area.

Our hyperthermia cancer treatment systems are used to treat cancer with heat (hyperthermia) while boosting the effectiveness of radiation for certain tumors through a number of biological mechanisms. Hyperthermia is usually used to increase the effectiveness of other therapies; e.g., radiation therapy and chemotherapy for the treatment of locally advanced cancers. Hyperthermia usually refers to treatments delivered at temperatures of 40-49°C for one hour.

Commercialization of our systems that are used to treat cancer is our most immediate business objective. Current and future cancer treatment sites for our systems may include cancers of the prostate, breast, head, neck, bladder, cervix, colon/rectum, ovaries, esophagus, liver, kidney, brain, bone, stomach and lung. Our cancer treatment systems have been used to treat thousands of patients throughout the world and have received many awards, including the Frost & Sullivan “Technology Innovation of the Year Award” for cancer therapy devices, which was awarded in 2005 for the development of the BSD-2000 Hyperthermia System (“BSD-2000”).

Although we have not yet taken advantage of many of these market opportunities, we believe that our technology has application for a number of other medical purposes in addition to cancer.

Through August 31, 2012, most of our operating revenues have been from the sale of our hyperthermia cancer systems and related revenues. However, we are experiencing increased revenues from our microwave ablation line of products as a result of the expansion of a fee-per-use rental program and direct sales support in major U.S. metropolitan areas. In addition to revenues from the sale of ablation and hyperthermia treatment systems, we recognize revenue from the sale of parts and accessories related to our systems, the sale of consumable devices used with certain of our systems, training,

service contracts, and other miscellaneous revenues. System and product sales totaled \$1,358,604, \$2,581,275 and \$1,261,490 for the years ended August 31, 2012, 2011 and 2010, respectively. Equipment rental income was \$129,350, \$110,207 and \$0 for the years ended August 31, 2012, 2011 and 2010, respectively. Sales of consumable devices, service and other revenues totaled \$583,238, \$345,993 and \$320,786 for the years ended August 31, 2012, 2011 and 2010, respectively. Additional information regarding our assets, revenues and results of our operations is contained in the financial statements and notes thereto included in this annual report on Form 10-K.

Our common stock trades on the NASDAQ Stock Market (NASDAQ) under the symbol “BSDM.”

Our Contributions to Cancer Therapy

Despite the massive attention given to cancer prevention and treatment, the American Cancer Society estimates that during 2012 approximately 1,639,000 new cancer cases will be diagnosed and that approximately 577,000 Americans will die from cancer. In the United States, the chance of developing cancer during a person’s lifetime is one in two for men and one in three for women. Cancer is the second most common cause of death in the US, exceeded only by heart disease, accounting for nearly 1 of every 4 deaths. Cancer develops when abnormal cells in a part of the body begin to grow out of control and spread to other parts of the body.

Our cancer treatment systems have been developed to both kill cancer directly with heat and to increase the effectiveness of the primary cancer treatments used in conjunction with the heat therapy. Therapies currently used to treat cancer include:

- Radiation therapy, which is treatment with high-energy ionizing rays. The radiation may come from outside of the body (external radiation) or from radioactive materials placed directly in a tumor (internal or implanted radiation sources, sometimes called brachytherapy).
- Chemotherapy, which is treatment with drugs.
- Surgery, which is the resection, or removal, of a tumor or organ of the body.
- Ablation, which is the use of precision-guided energy to ablate (destroy) soft tissue. Some cancers, such as certain cancers of the liver, prostate, kidney, bone metastases and lung are treated using ablation as an alternative to surgery.
- Hyperthermia, which is the delivery of focused therapeutic heating to solid cancerous tumors by targeting radiofrequency or microwave energy to the tumor site. Hyperthermia is usually used to increase the effectiveness of other therapies; e.g., radiation therapy and chemotherapy, for the treatment of locally advanced cancers.

Because cancer remains a leading cause of death, the current primary cancer therapies are still inadequate, and there is a need for better treatments. We have engineered systems designed to increase the effectiveness of these cancer treatments through the use of precision-focused RF/microwave energy to selectively heat cancer, creating “hyperthermia” in cancerous tumors. Hyperthermia is a cancer therapy that both kills cancer cells directly and has been shown to be a potent additive treatment in making certain of the major existing cancer therapies more effective for some cancers.

Hyperthermia has been shown to be a significant potentiator of other therapies. Clinical studies have demonstrated that hyperthermia can more than double the efficacy of radiation therapy in select tumors, without an increase in toxicity, and can enhance the efficacy of a number of chemotherapeutic agents, providing a safe and efficacious treatment for many types of solid tumors. Published data from 18 randomized trials on hyperthermia demonstrated significantly better results from hyperthermia combined with radiotherapy (n=13), chemotherapy (n=3), and radiotherapy plus chemotherapy (n=2), compared to the same treatment without hyperthermia.

A meta-analysis was published that included all published, randomized studies that compared hyperthermia and radiation therapy to radiation therapy alone. The analysis involved 23 studies of 1,861 patients. Results of this meta-analysis showed a significant improvement in outcome from the addition of hyperthermia to radiotherapy for a number of tumor sites; i.e., chest wall, cervix, rectum, bladder, melanoma, and head and neck, to a high degree of statistical significance. 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. High risk soft-tissue sarcoma patients were 30% more likely to be alive and cancer free almost three years after starting treatment if hyperthermia was added to their chemotherapy treatment. Median disease-free survival was 32 months in the hyperthermia and chemotherapy group vs. 17 months in the chemotherapy only group. Almost three years after starting treatment, the sarcoma patients treated with hyperthermia and chemotherapy were 42% less likely to experience a recurrence of their cancer at the same site or to die than those who were getting chemotherapy alone.

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 (hypoxic), since there is not enough blood to carry sufficient oxygen to these cells. Oxygen-starved cancer cells are resistant to radiation therapy because the destructive power of radiation therapy depends heavily on tearing apart the oxygen molecules located in cancer cells. When oxygen molecules are torn apart, they form oxygen radicals that can attack cancer cell DNA. Blood depletion also makes cancer resistant to chemotherapy, where blood transport is required to deliver the drug into the tumor.

Our hyperthermia therapy systems deliver microwave energy to elevate the temperature of tumors, usually between 40°C and 45°C (104°F to 113°F). Laboratory and clinical studies have documented multiple mechanisms of action for the efficacy of hyperthermia. Hyperthermia kills cells in solid tumors, without damaging normal tissues, because higher temperatures selectively destroy cells that are hypoxic and have low pH, a condition of tumor cells and not a condition of normal cells. 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 destructive effects of hyperthermia therapy. The basis for the supra-additive effect of hyperthermia on radiotherapy comes from the ability of hyperthermia to kill cells that are hypoxic, have a low pH, and are in the S-phase of division, which are all conditions that make cells radioresistant. The elevated temperatures draw blood to the tumor as the body's natural response to the stimulus of heat, leading to higher oxygen concentration. These effects on blood flow and tumor oxygenation make the cancer cells more susceptible to other anti-cancer therapies. The increased blood supply to the tumor improves delivery of drugs to tumors in 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. Hyperthermia has also been shown to inhibit cellular repair mechanisms, stimulate the body's immune system, induce heat-shock proteins, denature proteins, induce apoptosis, inhibit angiogenesis, and reduce the tumor resistance sometimes observed with other cancer therapies.

Hyperthermia can have other therapeutic uses. Clinical studies have shown that hyperthermia can be used to shrink tumors prior to surgery, potentially making resection easier or even possible. Research has shown hyperthermia can be an activator for some 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 may be an angiogenesis inhibitor, which means it helps prevent cancer from inducing growth of new blood vessels to expand its blood supply. Hyperthermia may 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 some of the side effects of cancer.

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

We have developed various technologies for heating cancerous tumors, depending on their location in the body. Through our developments, cancers such as melanomas or recurrent breast cancer located near the surface of the body can be treated with superficial cancer treatment applicators and systems. Cancers that can be accessed through catheters inserted into the tumor as part of invasive radiation techniques (which are used to treat prostate cancer or head and neck cancer) can be treated with small, inserted antennas that we have developed to deliver focused microwave energy directly into the cancerous tissue. We have also developed systems to non-invasively treat cancers located deep in the body by focusing electromagnetic energy on the cancer through a cylindrical applicator that surrounds the body. This cylindrical applicator contains an array of multiple antennae that focus radio frequency energy and therefore target heat on the tumor. Temperature levels for treatments

are monitored through small temperature sensors. Some of our systems can be interfaced with magnetic resonance imaging, or MRI, so that the treatment in progress can be observed, and temperatures can be monitored through images colorized to depict gradation of temperature levels (thermography).

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

The BSD-500 has received U.S. Food and Drug Administration (“FDA”) approval for the treatment of certain tumors. In addition, the system has gone through an extensive revision, and we have obtained FDA approval of two major supplements that were necessary for commercialization. We have certified the BSD-500 for the CE (Conformite Europeenne) Mark required for export into certain European and non-European countries.

On November 18, 2011, we obtained Humanitarian Device Exemption (“HDE”) marketing approval for the BSD-2000 from the FDA. The BSD-2000 is approved for use in conjunction with radiation therapy for the treatment of cervical cancer patients who normally would be treated with combined chemotherapy and radiation but are ineligible for chemotherapy due to patient related factors. The HDE approval authorizes the commercial sale of the BSD-2000. An HDE approval is obtained after a company has demonstrated the product’s safety and probable benefit for the treatment of a disease affecting fewer than 4,000 people in the United States every year. We have certified the BSD-2000 for the CE Mark required for export into certain European and non-European countries. We sought and obtained regulatory approval for the sale of the BSD-2000 in the People’s Republic of China during 2005.

Our Phase I MicroThermX[®] Microwave Ablation System (“MicroThermX[®]”) thermal ablation system received FDA marketing clearance in September 2008 for ablation of soft tissue. Following field evaluations of the original design, we elected to pursue a more advanced Phase II ablation system before entering the market. The more advanced Phase II design of our MicroThermX[®] provides superior performance, improved ease of use and, we expect, additional revenue streams. The MicroThermX[®] was designed to provide a higher power, optimized system targeted to the growing therapeutic interventional and surgical oncology market. We believe the MicroThermX[®] has the potential to be a market leader in microwave ablation. Our Phase II MicroThermX[®] received FDA marketing clearance in August 2010 for ablation of soft tissue. We have certified the MicroThermX[®] for the CE Mark required for export into certain European and non-European countries.

Our Products and Services

We have developed technology and products for thermal ablation and hyperthermia cancer therapy through multiple techniques:

- Thermal ablation ablates (destroys) soft tissues at high temperatures through focused microwave energy.
- Superficial hyperthermia non-invasively treats cancerous tumors located within a few centimeters of the surface of the body, such as melanoma and recurrent breast cancer.
- Internal or interstitial hyperthermia treats tumors in combination with internal radiation therapy by inserting tiny microwave antennae that deliver hyperthermic microwave energy to tumors through the same catheters used to deliver radioactive materials, or “seeds,” to tumors for radiation therapy. This technique can be employed in treating prostate cancer, breast cancer, head and neck cancer as well as other cancer sites.
- Deep hyperthermia non-invasively treats tumors located deep within the body.

MicroThermX[®] Microwave Ablation System. Our MicroThermX[®] is a compact, mobile, state-of-the-art, proprietary system that includes a microwave generator, single-patient-use disposable antennas, and a thermistor-based temperature monitoring system. The innovative design of the MicroThermX[®] is the first of its kind that allows delivery of higher power levels using a single generator. The MicroThermX[®] utilizes innovative synchronous phased array technology that was developed and patented by us to provide larger and more uniform zones of ablation during a single procedure.

The MicroThermX[®] introduces into our product line an innovative SynchroWave disposable antenna that is used in each ablation treatment, which we believe will provide a significant ongoing revenue stream after the sale of the system. We recently expanded the MicroThermX[®] market opportunity by introducing a new SynchroWave short tip (“ST”) antenna that can be used to deliver smaller, spherical ablation zones that more accurately target smaller tumors. The existing SynchroWave long tip (“LT”) antenna delivers larger ablation zones, reducing the need for multiple ablations on larger

tumors. The multiple configurations of the SynchroWave antenna provide physicians the ability to precisely target the ablation zone to the numerous sizes and shapes of diseased tissue, significantly increasing the number of cases that can be treated with the MicroThermX[®]. The soft tissue ablation world market potential is estimated to exceed \$2.3 billion.

We recently introduced a new Table Top MicroThermX[®] Microwave Ablation System (“T2”) designed for our fee-per-use rental program, which is more fully described below. Portability and ease of use are keys to successful implementation of the equipment rental program. The T2 is a small, lightweight, tabletop configuration that has the same advanced features as the original MicroThermX[®] configuration.

In August 2010, the FDA granted us a 510(k) clearance to market the MicroThermX[®] for ablation of soft tissue. Clearance from the FDA of the 510(k) Premarket Notification submission authorizes the commercial sale of the MicroThermX[®] in the United States. We have also received CE Marking for the MicroThermX[®], which allows us to market the MicroThermX[®] in the thirty countries that comprise the European Union (“EU”) and the European Free Trade Association (“EFTA”). CE Marking is also recognized in many countries outside of the EU, providing us the ability to market the MicroThermX[®] to a number of international markets. As further discussed below, we have established distribution in a number of EU countries and have accepted purchase orders for and have shipped both MicroThermX[®] systems and SynchroWave antennas.

Increased sales activity has resulted in a full schedule of clinical evaluations and an increase in the number of sites evaluating MicroThermX[®] equipment for purchase. We have placed a select number of MicroThermX[®] systems with pivotal, high-profile, interventional oncology opinion leaders. These medical facilities continue to reorder disposable SynchroWave antennas, validating the ongoing revenue stream we anticipate. Existing users of the MicroThermX[®] continue to report positive clinical results in the treatment of cancerous tumors.

Over 300 patients have been successfully treated with the MicroThermX[®] at hospitals throughout the U.S. and Europe. Clinicians have used the MicroThermX[®] to treat patients with cancers of the liver, lung, bone, and kidneys. These evaluations represent an important milestone in the MicroThermX[®] sales cycle. However, with hospital capital budgeting, committee review and other approvals, the sales cycle for the MicroThermX[®] may extend to well over six months. Political and economic uncertainty in the industry due to recent government healthcare reform is also slowing hospital acquisition of capital equipment at all levels.

To bolster our MicroThermX[®] sales line and accelerate and maximize revenues, we recently added a MicroThermX[®] fee-per-use equipment rental program. We have experienced ongoing success with a MicroThermX[®] fee-per-use equipment rental program in the Salt Lake City, Utah area. The Company launched a program with 5 hospitals in Salt Lake City that allowed hospitals to purchase disposable SynchroWave antennas and pay a fee-per-use equipment rental for the treatment of patients using the MicroThermX[®], dramatically shortening the sales cycle. This rental program has generated a revenue stream from sales of disposable SynchroWave antennas combined with highly profitable equipment rental fees, and we continue an aggressive rollout of this successful equipment rental program throughout the U.S.

We expanded the successful equipment rental program throughout the U.S., hiring new direct sales representatives in key major metropolitan areas who will provide “personal service” to new users of the microwave ablation technique. These new hires are experienced interventional sales representatives with seasoned contacts in the field of interventional oncology. We also added a new Vice President of Sales and Marketing with a 36 year history in marketing medical equipment to physicians. He will initially focus his efforts exclusively on the worldwide sale of our MicroThermX[®] line of products and the implementation of our fee-per-use equipment rental program. Our U.S. sales program also includes one domestic specialty distribution firm.

This new sales model will allow us to clearly focus on major areas of opportunity in the ablation market. We have hired direct sales representatives to cover the following key metropolitan areas: Florida, New York, New Jersey, Philadelphia, Chicago, Phoenix, Las Vegas, Southern California, Dallas and Houston, Ohio, Western Pennsylvania, Northern Kentucky and Oklahoma. We plan to continue to expand the direct sales program into other metropolitan areas in the future.

We also continue our emphasis on Europe and other international markets. We hired a Director of International Sales, have met with several international distribution firms and have entered into exclusive distribution agreements with specialty distribution firms in Italy, Ireland, Northern Ireland, The Netherlands and Turkey. These firms have purchased MicroThermX[®] systems and SynchroWave antennas. We provide our international sales teams with extensive hands-on training to ensure success in clinical use of the MicroThermX[®] system. We continue to build our international sales and distribution network to expand upon a dedicated team of medically trained sales representatives presenting the advantages of the MicroThermX[®] to interventional oncologists throughout Europe. We anticipate reaching agreements with additional international distribution firms, and we anticipate additional international shipments of the MicroThermX[®] and supplies of SynchroWave antennas in calendar year 2013.

BSD-500. Our BSD-500 Hyperthermia System, or the BSD-500, is used to deliver either superficial hyperthermia therapy, which is non-invasive and delivered externally using antennae placed over the tumor, or interstitial hyperthermia therapy, which is delivered using antennae that are inserted into the tumor, or both. 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 applicator (radiating antennae) configurations, depending on the system. Various configurations of non-invasive applicators (antennae) are used for superficial hyperthermia treatments. For interstitial hyperthermia treatments, the system may include up to 24 small microwave heat-delivering antennae that are inserted into catheters used for internal radiation therapy (called brachytherapy).

Our primary FDA approval (described as a pre-market approval, or “PMA”, which is the standard FDA approval required to market Class III medical devices in the United States) for the BSD-500 is for the use of hyperthermia and radiation therapy to treat certain tumors using the BSD-500. The BSD-500 is indicated for use alone or in conjunction with radiation therapy in the palliative management of certain solid surface and subsurface malignant tumors (i.e., melanoma, squamous- or basal-cell carcinoma, adenocarcinoma, or sarcoma) that are progressive or recurrent despite conventional therapy.

There are some clinical studies that have been published that show the effectiveness and safety for the use of hyperthermia and certain chemotherapy drugs for the treatment of some cancers. However, we do not currently have FDA approval for the use of hyperthermia in conjunction with chemotherapy. Physicians are allowed to utilize medical devices that have been approved or cleared by the FDA, including the BSD-500, for off label indications (indications for use that are not included in the FDA approval or clearance), but a manufacturer cannot promote for an off label use in the United States, as the FDA considers this to be an unproven clinical application.

We have received FDA approval through FDA supplements for implementation of a new operating system and a new power generation system and other commercial upgrades for the BSD-500 configurations. We have also certified the BSD-500 systems for the CE Mark, which is required for export into some European and non-European countries.

BSD-2000. The BSD-2000 Hyperthermia System, or 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 localized therapeutic heating (hyperthermia) to solid tumors by applying radiofrequency (RF) energy to certain cancerous tumors, including those located deep within the body. These systems consist of four major subsystems: an RF power generator delivery subsystem; a proprietary, thermistor-based, thermometry subsystem; a computerized monitoring and control subsystem; and an applicator subsystem that includes an applicator and patient support system; as well as various accessories. The BSD-2000 delivers energy to a patient using a power source and an array of multiple antennae that surround the patient’s body. The BSD-2000 systems create a central focusing of energy that can be adjusted to target the shape, size, and location of the tumor, thus providing dynamic control of the heating delivered to the tumor region. The basic BSD-2000 has eight microwave antennae, enabling 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 used with a magnetic resonance system that provides non-invasive 3D imaging of the heated regions, thus permitting the clinician to view the heating pattern in the tumor and steer the energy to the tumor site.

We have received CE Marking for the BSD-2000 family of products, which allows us to market the BSD-2000 systems in the thirty countries that comprise the EU and the EFTA. CE Marking is also recognized in many countries outside of the EU, providing us the ability to market the BSD-2000 family of products to a number of international markets. We have also obtained regulatory approval for the sale of the BSD-2000 in the People’s Republic of China.

On May 18, 2009, the FDA granted HUD designation for our BSD-2000 for use in conjunction with radiation therapy for the treatment of cervical carcinoma patients who are ineligible for chemotherapy. This is the first of the two steps required to obtain HDE marketing approval. Subsequent to the FDA granting the HUD for the BSD-2000, which confirms that the intended use population is fewer than 4,000 patients per year, we filed an HDE submission with the FDA.

On November 21, 2011, we announced that the Company had obtained HDE marketing approval for the BSD-2000 from the FDA. The BSD-2000 is approved for use in conjunction with radiation therapy for the treatment of cervical cancer patients who normally would be treated with combined chemotherapy and radiation but are ineligible for chemotherapy due to patient related factors. The HDE approval authorizes the commercial sale of the BSD-2000. An HDE approval is obtained after a company has demonstrated the product’s safety and probable benefit for the treatment of a disease affecting fewer than 4,000 people in the United States every year. In addition, we cannot charge an amount for an HDE approved device that exceeds the costs of research and development, fabrication, and distribution. A device can have both PMA and an HDE

approval as long as the approvals are for different indications for use. In addition, a product can have multiple HDE approvals for different applications, and we may decide to pursue a PMA and/or additional HDE approvals for the BSD-2000 in the future.

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 United States research institutions as Duke University, Northwestern University, University of Southern California, Stanford University, University of Utah and University of Washington St. Louis. Contributing European research institutions include Daniel den Hoed Cancer Center of the Academisch Ziekenhuis (Rotterdam, Netherlands), Haukeland University Hospital (Bergen, Norway), Dusseldorf University Medical School, Tübingen University Medical School, Essen University Hospital, Charité Medical School of Humboldt University (Berlin), Luebeck University Medical School, Munich University Medical School Grosshadern, Interne Klinik Argirov of the Munich Comprehensive Cancer Center, University of Erlangen (all of Germany), University of Verona Medical Center (Italy), Graz University Medical School (Austria) and Kantonsspital Aarau (Switzerland).

BSD-2000/3D. Through research funded by the National Cancer Institute in the United States and supportive efforts by other domestic and international research institutions, we enhanced the BSD-2000 to create the BSD-2000/3D. The BSD-2000/3D adds three-dimensional steering of deep focused energy, enabling additional electronic steering along the long axis of the body. As part of our international collaborative research efforts, sophisticated treatment planning software for the BSD-2000/3D has also been developed.

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

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

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

As is the case for the BSD-2000/3D, we have not yet submitted to the FDA a marketing 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/MR, provided we interface the system with an MRI system that also is approved in Europe.

Marketing and Distribution

Our target customers include clinics, hospitals and institutions in which cancer is treated, located either in the United States or international markets.

Hyperthermia Systems. To support our direct sales and marketing efforts for our hyperthermia systems and products in the United States, we currently utilize independent sales representatives supported by senior management of the Company.

Historically, a significant portion of our revenues have been derived from sales to Dr. Sennewald Medizintechnik GmbH located in Munich, Germany, which is our exclusive distributor of hyperthermia systems in Germany, Austria and Switzerland, and to certain medical institutions in Belgium and the Netherlands. This company is owned by Dr. Gerhard W. Sennewald, one of our directors and a significant stockholder. We have also sold systems in Poland and Italy, and have conducted our own direct sales and marketing efforts in India and other countries in Europe and Asia.

In 2005, we entered into an agreement with Dalian Orientech Co. LTD (“Orientech”), a privately owned company, to assist us in obtaining regulatory approval for the sale of the BSD-2000 in the People’s Republic of China, and thereafter to act as our distributor for the sale of the BSD-2000 in that country. We subsequently obtained Chinese regulatory approval, allowing the distributor to begin to market and sell the BSD-2000 system to hospitals in China. We renewed this exclusive distribution agreement in February 2012, which requires Orientech to purchase a minimum number of BSD-2000 Hyperthermia Systems from us each year. Orientech is also leading efforts to renew our Chinese regulatory approval.

In December 2011, we announced that the Company signed an exclusive agreement with CyberKnife Korea (“CKK”) for the sale and distribution of our hyperthermia products in South Korea. CKK is a premier distributor of sophisticated medical devices in South Korea and represents a number of major medical device companies. CKK is a leading distributor of oncology products in South Korea and has established strong relationships with radiation oncologists throughout the country. As part of the agreement, CKK is required to purchase a minimum number of hyperthermia systems from us each year. We are in the process of obtaining regulatory approval for the BSD-2000 in South Korea.

In August 2012, we announced that the Company had obtained approval to market its hyperthermia systems in the Russian Federation. The marketing approval covers all BSD-2000 Hyperthermia System configurations and the BSD-500 Hyperthermia System.

MicroThermX[®] Microwave Ablation System. As previously discussed, our U.S. network of direct sales representatives and one domestic specialty distribution firm provides nationwide sales coverage for the MicroThermX[®] line of products.

In addition, we have a Director of International Sales and have entered into exclusive distribution agreements with specialty distribution firms in Italy, Ireland, Northern Ireland, The Netherlands and Turkey.

Third-Party Reimbursement

We view obtaining adequate third-party reimbursement arrangements as essential to achieving commercial acceptance of our hyperthermia and ablation 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 (“CMS”), has established billing codes that allow for third-party reimbursement and can be used for or in combination with the delivery of hyperthermia and ablation therapies, depending on the circumstances of the treatment. Appropriate codes apply to billing for superficial and interstitial hyperthermia delivered using our BSD-500 systems when used in combination with radiation therapy. Appropriate codes apply to billing for certain ablation procedures. Codes also have been established for providing deep hyperthermia therapy. Billing codes are available for both institutions and physicians. Even though billing codes have been established, payments must also be approved by and authorized through the various third-party payors, and third-party payors can establish varying reimbursement plans and levels that can affect hyperthermia and ablation reimbursement levels.

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

Competition

We have presented what we believe are our competitive advantages in the discussion of our products above.

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

Competitors in the thermal ablation market include RadioTherapeutics, a division of Boston Scientific Corporation, Covidien Ltd., Angiodynamics, Inc., NeuWave Medical, MedWaves Incorporated, and Microsulis Medical Ltd. Many of these companies have been in the thermal ablation business for several years, are significantly larger organizations, and have more financial resources than the Company.

Product Service

We generally provide a 12-month warranty and record a liability for the warranty following installation on all hyperthermia 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 hyperthermia systems sold to foreign customers and are responsible for managing their own warranty programs for their customers, including labor and travel expenses. We provide training, procedures and forms to the distributors providing these types of services. 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 13485:2003 certified and follows FDA quality systems regulations. Some equipment components we purchase from suppliers are customized to our specifications. Key factors in our manufacturing process are assembly and testing. We purchase component parts and other materials from a variety of suppliers. We do not depend on a single supplier for any item, and believe we can acquire materials and parts from multiple sources on a timely basis.

Product Liability Exposure

The manufacturing and marketing of medical devices involves an inherent risk of product liability. We presently carry product liability insurance with coverage limits of \$5 million. However, we cannot assure that our product liability insurance will provide adequate coverage against potential claims that might be made against us. No product liability claims are presently pending against us; however, we cannot assume that product liability claims will not be filed in the future or that such claims will not exceed our coverage limits.

Government Regulation

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

Although our MicroThermX[®] has received FDA marketing clearance as a 510(k) submission, most of our hyperthermia treatment systems, including the BSD-500 and the BSD-2000 and related products, have required or require PMA or an HDE marketing approval from the FDA instead of the simpler 510(k) clearance. PMA or HDE approval requires that we demonstrate that the medical device is safe and effective or safe with a probable benefit. To do this, we conduct either laboratory and/or clinical testing. 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 for PMA or HDE approved devices must be submitted to the FDA under investigational device exemptions, or IDEs, or under PMA or HDE supplements. As described in the above section entitled "Our Products and Services", we have obtained a PMA for our BSD-500 system and an HDE for our BSD-2000 system. Significant changes to the MicroThermX[®] may require a new 510(k).

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. 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 market a medical device, we continue to have ongoing responsibilities under the Federal Food, Drug, and Cosmetic Act and FDA regulations. The FDA reviews design and manufacturing practices, labeling, record-keeping, and required reporting of adverse experiences. All medical devices must be manufactured in accordance with regulations specified in the FDA Quality System Regulations, or QSR, and in compliance with the ISO and other applicable

standards. In complying with these regulations, we must continue to expend time, money and effort in the areas of design control, production, and quality control to ensure full compliance. The FDA's mandatory Medical Device Reporting regulation requires us to provide information to the FDA on death or serious injuries alleged to have been associated with the use of our products, as well as information on product malfunctions that would likely cause or contribute to a death or serious injury if the malfunctions were to recur. In Europe, the MDD vigilance system regulations require that we, through a representative in Europe, provide information to authorities on death or serious injuries alleged to have been associated with the use of our products, as well as information on product malfunctions that would likely cause or contribute to a death or serious injury if the malfunctions were to recur. If the FDA were to assert that we are not in compliance with applicable laws or regulations, or that any of our medical devices are ineffective or pose an unreasonable risk to patient health, the FDA could seize our medical devices, ban such medical devices, or order a recall, repair, replacement or refund of such devices, and require us to notify health care professionals and others that the devices present unreasonable risk of substantial harm to the public. The FDA may also impose operating restrictions 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 and the MicroThermX[®] ablation system and applicators emit 915 MHz, which is approved by the FCC for medical applications. Accordingly, these systems do not require shielding to prevent interference with communications. Our BSD-2000 deep hyperthermia variable-frequency generators and applicators require electromagnetic shielding.

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 four non-expired patents in the United States related to certain components or technology of our hyperthermia systems. We currently have one patent license from Duke University. Twelve new U.S. patent applications are pending and eleven have been published in the United States, and one foreign patent is issued and others are pending. A total of 25 U.S. patents have been issued to BSD. We believe that our patents represent the early pioneering and dominant patents in this field.

In July 1979, we entered into an exclusive worldwide license for a unique temperature probe (sensor) called the Bowman Probe. The Bowman Probe is considered to be the "gold standard" in temperature monitoring devices for hyperthermia. 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 July 31, 2007, BSD obtained an exclusive sub-license to a patent owned by Duke University using phased array technology for the treatment of primary breast cancer on terms that included hyperthermia equipment upgrades and payment of some prior patent costs. This technology and patent is expected to enhance future developments with the current BSD phased array hyperthermia systems.

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

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

Research and Development

Research and development expenses for fiscal years 2012, 2011 and 2010 were \$2,364,608, \$1,483,659 and \$2,429,215, respectively. Our research and development expenses for the year ended August 31, 2011 have been partially offset by the \$488,958 proceeds from two separate U.S. government grants under the Qualifying Therapeutic Discovery Project ("QTDP") Program received in our first fiscal quarter ended November 30, 2010.

We submitted QTDP grant applications for our BSD-2000 Hyperthermia System and our MicroThermX[®] Microwave Ablation System and both applications were approved for the maximum award for a single program of \$244,479, or a total of \$488,958. In order to qualify for the QTDP grants, the project must have the potential to develop new treatments that address "unmet medical needs" or chronic and acute diseases; reduce long-term health care costs; represent a significant advance in finding a cure for cancer; advance U.S. competitiveness in the fields of life, biological, and medical sciences; or create or sustain well-paying jobs, either directly or indirectly. The QTDP was created by Congress in March 2010 as part of the Patient Protection and Affordable Care Act and provides a tax credit or a grant equal to 50% of eligible costs and expenses for tax years 2009 and 2010.

We continue our efforts to enhance our current hyperthermia and ablation products and to develop new products related to the following:

- development of various commercial configurations of the BSD-2000/3D/MR to adapt to both Siemens and GE MR configurations;
- updating our BSD-500 and BSD-2000 system designs for both reduced cost and improved manufacturability;
- making enhancements to the BSD-500 and 2000 systems;
- incorporating new requirements into the design and manufacturing processes;
- development of table top MicroThermX[®];
- designing and testing of new advanced cooled disposable microwave ablation antennas;
- development of SynchroWave short tip antenna used to deliver smaller, spherical ablation zones;
- supporting BSD-2000, BSD-2000/3D and BSD-2000/3D/MR CE Marking approval efforts;
- supporting MicroThermX[®] CE marking approval efforts;
- supporting product approvals for non-US governments;
- R&D projects not publicly disclosed.

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

Seasonality

Our operations are generally not subject to seasonal fluctuations.

Segment Information and Sales Concentrations

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

A significant portion of our revenues are derived from sales to Dr. Sennewald Medizintechnik GmbH located in Munich, Germany, which is a significant distributor of our products in Europe and which is owned by Dr. Gerhard W. Sennewald, one of our directors and a significant stockholder. For fiscal year 2012 we had sales of \$333,663, or 16% of our total sales, from the sale of hyperthermia systems and various component parts sold to Medizintechnik, as compared to sales of \$1,063,495, or 35% of our total sales, in fiscal 2011. Management believes the terms of the transactions with Medizintechnik were arms length and fair to the Company.

A significant portion of our revenues are derived from sales to foreign customers. During the years ended August 31, 2012, 2011 and 2010, export sales totaled \$694,629, \$1,135,372 and \$678,893, or 34%, 37% and 43% of total sales, respectively. During fiscal years 2012 and 2011, export sales to Germany were approximately 16% and 35% of total sales, respectively. During fiscal year 2010, export sales to China and Germany were approximately 23% and 12% of total sales, respectively.

During the years ended August 31, 2012, 2011 and 2010, domestic sales totaled \$1,376,563, \$1,902,103 and \$903,383, or 66%, 63% and 57%, respectively.

In addition, because of the small number of hyperthermia systems sold each year, each customer may be considered significant.

Backlog

As of August 31, 2012, we had no sales backlog.

Employees

As of August 31, 2012, we had 50 employees; 48 of whom were full-time employees. None of our employees are covered by a collective bargaining agreement. We consider our relations with our employees to be satisfactory. We depend upon a limited number of key management, manufacturing, and technical personnel. Our future success will depend in part on our ability to retain these highly qualified employees.

Available Information

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

The Company's Internet address is <http://www.bsdmedical.com>. We make available on or through our investor link on our website, free of charge, our Annual Reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to those reports as soon as reasonably practicable after this material is electronically filed or furnished to the SEC.

ITEM 1A. RISK FACTORS

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

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

Since our inception in 1978, our expenses have substantially exceeded our revenue, resulting in continuing losses and an accumulated deficit of \$37,377,247 at August 31, 2012. We reported net losses of \$7,960,660, \$5,285,517 and \$7,456,948 in fiscal years 2012, 2011 and 2010, respectively.

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 systems and our MicroThermX[®] line of products to improve our profitability on a quarterly or annual basis. We have been unable to do this in the past and we may be unable to do so in the future, and therefore may never achieve profitability.

Adverse worldwide economic conditions have made it difficult for our customers to obtain approval for the purchase of and funding for our hyperthermia systems.

Our cancer treatment systems represent capital equipment purchases for our customers. Adverse worldwide economic conditions have made it difficult for our customers to obtain approval for the purchase of and funding for our systems. This has contributed to a lack of growth in the worldwide sales of our systems and to a slower than anticipated introduction into the market place of our MicroThermX[®] line of products. To the extent that adverse economic conditions continue, we believe our sales of cancer treatment systems will continue to be negatively impacted.

Our revenues can fluctuate significantly from period to period because our sales to date have been largely based upon a relatively small number of systems, the sales price of each being substantial enough to greatly impact revenue levels in the periods in which they occur.

Our revenues can fluctuate significantly from period to period because our sales, to date, have been based upon a relatively small number of hyperthermia systems, the sales price of each being substantial enough to greatly impact revenue levels in the periods in which they occur. Sales of a few systems, particularly BSD-2000/3D/MR systems, can cause a large change in our revenues from period to period and the sales cycle for our systems generally extends over multiple financial reporting periods. In addition, differences in the configuration of the systems sold, pricing, and other factors can result in significant differences in the sales price per system and in the total revenues reported in a given period. As a result, there may be quarterly financial reporting periods where we may report no or minimal revenues from the sale of hyperthermia systems.

A significant portion of our revenues have been from related parties, and we have had significant concentrations of revenues in foreign countries.

During the years ended August 31, 2012, 2011, and 2010, we had sales of \$333,663, \$1,063,495 and \$309,259, respectively, to entities controlled by a significant stockholder and member of our Board of Directors. These related party transactions represent approximately 16%, 35% and 20% of total sales for each respective year.

A significant portion of our revenues are derived from sales to foreign customers. Export sales were \$694,629, \$1,135,372 and \$678,893 in fiscal years 2012, 2011 and 2010, respectively. During fiscal years 2012 and 2011, export sales to Germany were approximately 16% and 35% of total sales, respectively. During fiscal year 2010, export sales to China and Germany were approximately 23% and 12% of total sales, respectively.

To the extent that we are unable to maintain or increase the level of our revenues derived from related parties or foreign customers, the results of our operations could be negatively impacted.

We have obtained FDA clearance to market our MicroThermX[®] Microwave Ablation System, and have experienced early success in sales of the MicroThermX[®] family of products. We cannot be assured that our efforts to commercialize the MicroThermX[®] will be successful or that we will attain expected revenue levels.

In August 2010, the FDA granted us a 510(k) clearance to market our MicroThermX[®] Microwave Ablation System for ablation of soft tissue, authorizing the commercial sale of the MicroThermX[®] in the United States. Our MicroThermX[®] represents a major part of our business plan moving forward and introduces into our product line an innovative, high-end disposable that is used in each ablation treatment and which we believe will provide a significant ongoing revenue stream.

Political and economic uncertainty in the healthcare industry due to recent government healthcare reform and the continuing worldwide economic downturn has made hospital acquisitions of capital equipment difficult at all levels. With hospital capital budgeting, committee review and other approvals, the sales cycle for the MicroThermX[®] may extend to well over six months. To accelerate revenues from the MicroThermX[®] line of products, we have launched a program that allows

hospitals to purchase disposable SynchroWave antennas and pay a fee-per-use rental for the treatment of patients using the MicroThermX[®]. We expanded the equipment rental program throughout the U.S., hiring new direct sales representatives in key major metropolitan areas who will provide “personal service” to new users of the microwave ablation technique. These new hires are experienced interventional sales representatives with seasoned contacts in the field of interventional oncology. We have experienced early success with this direct sales program; however, we cannot be assured that we will attain expected revenue levels from the MicroThermX[®] line of products. If these efforts are not successful, our business will be adversely affected.

International sales of our MicroThermX[®] family of products depend on our ability to successfully establish our international sales distribution channels.

With our United States direct sales network in place for our MicroThermX[®] family of products, we are placing significant emphasis on Europe and other international markets. We hired an International Sales Manager and have entered into exclusive distribution agreements with specialty distribution firms in Italy, Ireland, Northern Ireland, The Netherlands and Turkey. International sales of our MicroThermX[®] family of products will depend on our ability to successfully establish further sales distribution channels in Europe and other international markets. If these efforts are not successful, our business will be adversely affected.

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

To date, hyperthermia therapy has not gained wide acceptance by cancer-treating physicians. We believe this is due in part to the lingering impression created by the inability of early hyperthermia therapy technologies to focus and control heat directed at specific tissue locations as well as inaccurate conclusions drawn in early scientific studies that hyperthermia was only marginally effective. Additionally, market acceptance depends upon physicians and hospitals obtaining adequate reimbursement rates from third-party payors to make our products commercially viable, and we believe that reimbursement rates have not been adequate to stimulate strong interest in adopting hyperthermia as a new cancer therapy. If our sales and marketing efforts to promote hyperthermia therapy acceptance in the medical community fail, or our efforts to improve third-party reimbursement rates for hyperthermia therapy are not successful, then our future revenue from sales of our products may be limited, and we may never be able to obtain profitable recurring operations.

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

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

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

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

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

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 the cancer treatment business), and they have significantly greater resources than we do.

Increasing sales of our hyperthermia systems depends on our ability to successfully expand our sales distribution channels; however, 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.

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

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

We may face significant uncertainty in the industry due to government healthcare reform.

Political, economic and regulatory influences are subjecting the healthcare industry to fundamental changes. We anticipate that the current and future administration, Congress and certain state legislatures will continue to review and assess alternative healthcare delivery systems and payment methods with an objective of ultimately reducing healthcare costs and expanding access. Public debate of these issues will likely continue in the future. The uncertainties regarding the ultimate features of reform initiatives and their enactment and implementation may have an adverse effect on our customers' purchasing decisions regarding our products and services. At this time, we cannot predict which, if any, healthcare reform proposals will be adopted, when they may be adopted or what impact they may have on our business.

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. The FDA is currently considering a number of reforms in its regulatory processes, which may make the FDA review process longer and more cumbersome for medical devices.

Obtaining pre-market approval or marketing clearance as a 510(k) submission from the FDA is necessary for us to commercially market our systems in the United States. Obtaining approvals is a lengthy and expensive process. We may not be able to obtain these approvals on a timely basis, if at all, and such failure could harm our business prospects substantially. Further, even if we are able to obtain the approvals we seek from the FDA, the approvals granted might include significant limitations on the indicated uses for which the products may be marketed, which restrictions could negatively impact our business.

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

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

We are also subject to ongoing compliance and review requirements with our CE Mark certifications. Failure to comply with these ongoing requirements could result in CE Mark imposed operating restrictions on us.

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. We presently carry product liability insurance with coverage limits of \$5 million. Our product liability insurance does not cover intended injury, injury or damage resulting from the intoxication of any person, payment of workers' compensation benefits, injury of our own employee, injury or damage due to war, damage to property that we own, damage to our work, loss of use of property, patent infringements, pollution claims, interest payments, depreciation of property, or injury or damage resulting from asbestos inhalation. We are responsible to pay the first \$10,000 resulting from any claim up to a maximum of \$50,000 in one year. We cannot assure that our product liability insurance will provide adequate coverage against potential claims that might be made against us. If we were to be subject to a claim in excess of our coverage or to a claim not covered by our insurance and the claim succeeded, we would be required to pay the claim from our limited resources, which would reduce our limited capital resources and liquidity and reduce capital we could otherwise use to obtain approvals for and market our products. In addition, liability or alleged liability could harm our business by diverting the attention and resources of our management and by damaging our reputation.

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

Our success will be largely dependent upon the efforts of Harold R. Wolcott, our President, Sam Maravich, Jr., our Vice President of Sales and Marketing, Dixie Toolson Sells, our Vice President of Regulatory Affairs, Dennis P. Gauger, our Chief Financial Officer, and other key employees. We do not maintain key-person insurance on any of these employees. Our future success also will depend in large part upon our ability to identify, attract and retain other highly qualified managerial, technical and sales and marketing personnel. Competition for these individuals is intense. The loss of the services of any of our key personnel, the inability to identify, attract or retain qualified personnel in the future or delays in hiring qualified personnel could make it more difficult for us to manage our business and meet key objectives such as the sale of our products and the introduction of new products.

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

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

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

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

Our directors and executive officers own approximately 23% 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.

Future sales of shares of our securities pursuant to our universal shelf registration statement may negatively affect our stock price.

We currently have the ability to offer and sell up to \$50.0 million of common stock, preferred stock, warrants, senior debt, subordinated debt or units under a currently effective universal shelf registration statement. We have previously completed four offerings utilizing a universal shelf registration statement. Each of these offerings was completed during calendar year 2010. Sales of substantial amounts of shares of our common stock or other securities under our universal shelf registration statement could lower the market price of our common stock and impair our ability to raise capital.

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

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

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We own our office, production and research facilities located in Salt Lake City, Utah. The complete headquarters and production facility occupies approximately 20,000 square feet. The building is currently in good condition, is adequate for our needs, and is suitable for all company functions. We believe that we carry adequate insurance on the property.

ITEM 3. LEGAL PROCEEDINGS

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

ITEM 4. MINE SAFETY DISCLOSURES

This item is not applicable to the Company.

PART II

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

Our common shares trade on the Nasdaq Stock Market under the symbol "BSDM". The following table sets forth the high and low sales prices, as provided by NASDAQ for the quarters in fiscal years 2011 and 2012. The amounts reflect inter-dealer prices, without retail mark-up, markdown or commission, and may not represent actual transactions.

Quarter Ended:	High	Low
November 30, 2010	\$ 7.40	\$ 2.13
February 28, 2011	5.57	3.62
May 31, 2011	4.79	3.40
August 31, 2011	4.50	2.30
November 30, 2011	3.28	2.25
February 29, 2012	2.52	2.00
May 31, 2012	2.44	1.58
August 31, 2012	1.82	0.76

As of August 31, 2012, there were 472 holders of record of our common stock. We have not paid any cash dividends on our common stock since our inception, and we currently plan to retain our future earnings, if any, to fund the growth of our business.

On November 9, 2012, the last reported sales price of our common stock on the Nasdaq Stock Market was \$2.09 per share.

Repurchases of Equity Securities

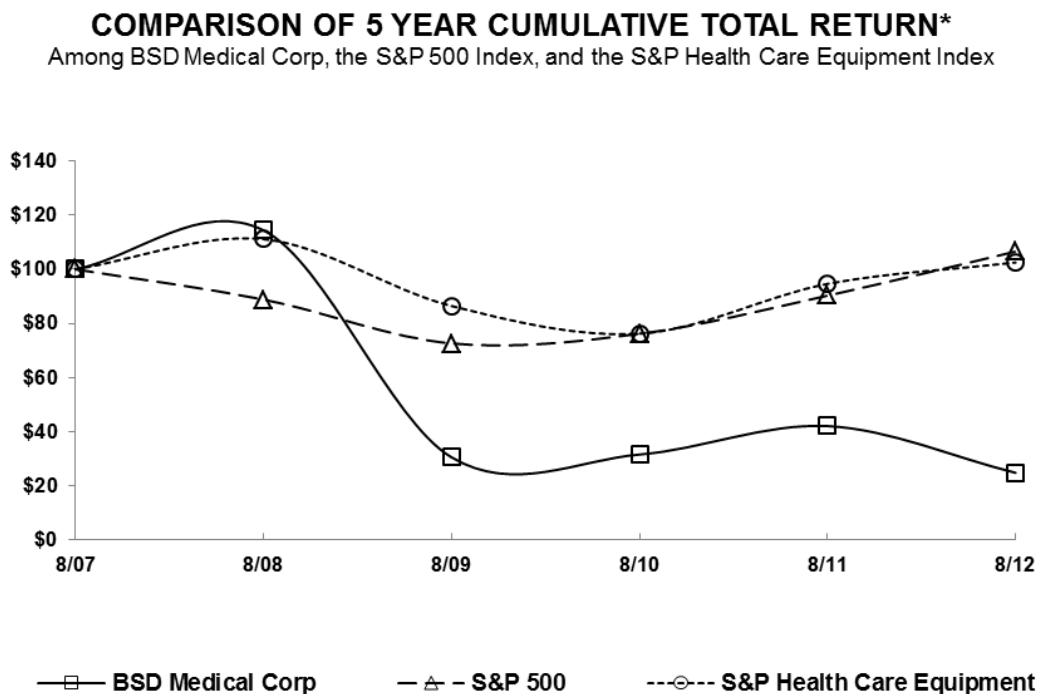
None.

Recent Sales of Unregistered Securities

None.

Performance Graph

The following graph shows a comparison of the five-year cumulative total return for the Company's common stock, the S&P 500 Index, and the S&P Health Care Equipment Index, assuming an investment of \$100 on August 31, 2007. The cumulative return of the Company was computed by dividing the difference between the price of the Company's common stock at the end and the beginning of the measurement period (August 31, 2007 to August 31, 2012) by the price of the Company's common stock at the beginning of the measurement period.



*\$100 invested on 8/31/07 in stock or index, including reinvestment of dividends.
Fiscal year ending August 31.

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ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data as of and for each of the fiscal years in the five year period ended August 31, 2012 were derived from the Company's financial statements audited by Tanner LLC, independent registered public accountants. The data set forth below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Item 7 of this Form 10-K and the financial statements and notes thereto included in Item 8 of this Form 10-K.

	Years Ended August 31,				
	2012	2011	2010	2009	2008
Results of Operations Data:					
Revenues	\$ 2,071,192	\$ 3,037,475	\$ 1,582,276	\$ 3,536,487	\$ 5,143,140
Loss from operations	(8,013,247)	(5,348,671)	(7,477,966)	(6,526,493)	(4,252,344)
Net loss	(7,960,660)	(5,285,517)	(7,456,948)	(11,384,870)	(2,439,099)
Loss per common share - diluted	\$ (0.27)	\$ (0.18)	\$ (0.32)	\$ (0.52)	\$ (0.11)
Dividends per common share	\$ —	\$ —	\$ —	\$ —	\$ —
Balance Sheet Data:					
Total Assets	\$ 15,366,049	\$ 21,939,906	\$ 12,702,169	\$ 12,857,358	\$ 21,486,898
Long-term debt	—	—	—	—	—
Stockholders' equity	14,497,332	21,071,594	12,118,225	11,940,989	20,155,860

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

This Management's Discussion and Analysis of Financial Condition and Results of Operations and other parts of this annual report on Form 10-K contain forward-looking statements that involve risks and uncertainties. Forward-looking statements can also be identified by words such as "anticipates," "expects," "believes," "plans," "predicts," and similar terms. Forward-looking statements are not guarantees of future performance and our actual results may differ significantly from the results discussed in the forward-looking statements. Factors that might cause such differences include, but are not limited to, those discussed in the subsection entitled "Forward-Looking Statements" below and the Item 1A "Risk Factors" above. The following discussion should be read in conjunction with our financial statements and notes thereto included in Item 8 of this Form 10-K. All information presented herein is based on our fiscal year ended August 31, 2012. We assume no obligation to revise or update any forward-looking statements for any reason, except as required by law.

We develop, manufacture, market, and service systems to treat cancer and benign diseases using heat therapy delivered using focused radiofrequency (RF) and microwave energy. Our product lines include both ablation and hyperthermia treatment systems. Our microwave ablation system has been developed as a stand-alone therapy to employ precision-guided microwave energy to ablate (destroy) soft tissue. Our hyperthermia cancer treatment systems, which have been in use for several years in the United States, Europe and Asia, are used to treat certain tumors with heat (hyperthermia) while increasing the effectiveness of other therapies such as radiation therapy. We have developed extensive intellectual property, multiple products in the market and established distribution in the United States, Europe and Asia. Certain of our products have received regulatory approvals and clearances in the United States, Europe and China.

On August 18, 2010 we announced that the FDA granted the Company a 510(k) clearance to market our MicroThermX[®] for ablation of soft tissue. Clearance from the FDA of BSD's 510(k) Premarket Notification submission authorizes the commercial sale of the MicroThermX[®] in the United States. The MicroThermX[®] was designed to provide a higher power, optimized system targeted to the growing therapeutic interventional and surgical oncology market. The MicroThermX[®] represents a major part of our business plan moving forward. It introduces into our product line an innovative disposable that is used in each treatment, which we believe will provide a significant ongoing revenue stream.

To accelerate revenues from the MicroThermX[®] line of products, we have launched a program that allows hospitals to purchase disposable SynchroWave antennas and pay a fee-per-use rental for the treatment of patients using the MicroThermX[®]. We expanded the equipment rental program throughout the U.S., hiring new direct sales representatives in key major metropolitan areas who will provide “personal service” to new users of the microwave ablation technique. These new hires are experienced interventional sales representatives with seasoned contacts in the field of interventional oncology. We have experienced early success with this direct sales program with increasing levels of revenues from the MicroThermX[®] line of products.

We also continue our emphasis on Europe and other international markets. We hired a Director of International Sales, have met with several international distribution firms and have entered into exclusive distribution agreements with specialty distribution firms in Italy, Ireland, Northern Ireland, The Netherlands and Turkey. International sales of our MicroThermX[®] family of products will depend on our ability to successfully establish sales distribution channels in Europe and other international markets.

Through August 31, 2012, most of our operating revenues have been from the sale of our hyperthermia cancer systems and related revenues. In addition to revenues from the sale of ablation and hyperthermia treatment systems, we recognize revenue from the sale of parts, accessories, and disposables related to our systems, equipment rental, training, service support contracts, and other miscellaneous revenues. System and product sales totaled \$1,358,604, \$2,581,275 and \$1,261,490 for the years ended August 31, 2012, 2011 and 2010, respectively. Equipment rental income was \$129,350, \$110,207 and \$0 for the years ended August 31, 2012, 2011 and 2010, respectively. Sales of disposables, service and other revenues totaled \$583,238, \$345,993 and \$320,786 for the years ended August 31, 2012, 2011 and 2010, respectively.

As of August 31, 2012, we had no sales backlog.

Results of Operations

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 and market acceptance for our ablation and hyperthermia systems and related component parts and services, world-wide economic conditions, availability of financing for our customers, changes in the medical capital equipment market, changes in order mix and product order configurations, competition, regulatory developments, insurance reimbursement and other matters. Operating expenses may fluctuate as a result of the timing of sales and marketing activities, research and development, 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.

Revenues

We recognize revenue from the sale of our ablation and hyperthermia cancer treatment systems and related parts and accessories (collectively, product sales), the sale of disposables used with certain of our systems, training, service support contracts and other miscellaneous revenues. During the years ended August 31, 2012 and 2011, we also recognized revenues from equipment rental, including our fee-per-use rental income from our MicroThermX[®]. Our revenues can fluctuate significantly from period to period because our sales, to date, have been based upon a relatively small number of hyperthermia systems, the sales price of each being substantial enough to greatly impact revenue levels in the periods in which they occur. Sales of a few hyperthermia systems, particularly BSD-2000/3D/MR systems, can cause a large change in our revenues from period to period and the sales cycle for our systems generally extends over multiple financial reporting periods. In addition, differences in the configuration of the hyperthermia systems sold, pricing, and other factors can result in significant differences in the sales price per system and in the total revenues reported in a given period. As a result, there may be quarterly financial reporting periods where we may report no or minimal revenues from the sale of hyperthermia systems. Through fiscal year 2011 and the first part of fiscal year 2012, we had minimal revenues from our MicroThermX[®] family of products. However, with the successful introduction of our fee-per-use rental program and accelerating sales of disposable SynchroWave antennas, our revenues from our MicroThermX[®] family of products continue to grow.

To date, hyperthermia therapy has not gained wide acceptance by cancer-treating physicians. We believe this is due in part to the lingering impression created by the inability of early hyperthermia therapy technologies to focus and control heat directed at specific tissue locations and inaccurate conclusions drawn in early scientific studies that hyperthermia was only marginally effective. Additionally, we do not believe that reimbursement rates from third-party payers have been adequate to promote hyperthermia therapy acceptance in the medical community.

We also believe the continuing worldwide economic downturn has made it difficult for many of our customers to obtain approval for the purchase of our hyperthermia and microwave ablation systems and to arrange related financing.

Political, economic and regulatory influences are subjecting the U.S. healthcare industry to fundamental changes. We may continue to face significant uncertainty in the industry due to recent governmental healthcare reform. We believe the uncertainties regarding the ultimate features of reform initiatives and their enactment and implementation may also have an adverse effect on our customers' purchasing decisions regarding our products and services.

As a result of these negative factors, we have been unable to sustain a significant increase in the number of hyperthermia systems sold, and we believe these difficulties may continue to negatively impact the sales of our hyperthermia systems, the market introduction of our MicroThermX[®], and our operating results.

The following table summarizes the number of our ablation and hyperthermia systems sold for the years ended August 31, 2012, 2011 and 2010:

	<u>2012</u>	<u>2011</u>	<u>2010</u>
MicroThermX [®]	<u>5</u>	<u>1</u>	<u>—</u>
Hyperthermia Systems:			
BSD-500	3	4	3
BSD-2000	2	2	2
BSD-2000/3D	—	—	—
BSD-2000/3D/MR	<u>—</u>	<u>1</u>	<u>—</u>
Total	<u>5</u>	<u>7</u>	<u>5</u>

We have historically derived a significant portion of our revenues from sales to related parties. All of the related party revenue was for the sale of hyperthermia systems and related component parts and services sold to Dr. Sennewald Medizintechnik GmbH. Dr. Sennewald, one of our directors and significant stockholders, is a stockholder, executive officer and a director of Medizintechnik. We derived \$333,663, or approximately 16%, of our total revenue in the year ended August 31, 2012 from sales to related parties, compared to \$1,063,495 or approximately 35%, in the year ended August 31, 2011, and \$309,259 or approximately 20% in the year ended August 31, 2010.

In the year ended August 31, 2012, we derived \$1,737,529, or approximately 84%, of our total revenue from non-related parties, as compared to \$1,973,980, or 65%, in the year ended August 31, 2011, and \$1,273,017, or 80%, in the year ended August 31, 2010.

The following tables summarize the sources of our revenues for the years ended August 31, 2012, 2011 and 2010:

<u>Non-Related Parties</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>
Product sales	\$ 1,063,754	\$ 1,569,688	\$ 1,095,440
Disposables	316,701	116,724	12,300
Service contracts	202,613	141,224	131,826
Other	<u>25,111</u>	<u>36,137</u>	<u>33,451</u>
	1,608,179	1,863,773	1,273,017
Equipment rental	<u>129,350</u>	<u>110,207</u>	<u>—</u>
Total	<u>\$ 1,737,529</u>	<u>\$ 1,973,980</u>	<u>\$ 1,273,017</u>
<u>Related Parties</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>
Product sales	\$ 294,850	\$ 1,011,587	\$ 166,050
Disposables	28,050	38,700	33,000
Other	<u>10,763</u>	<u>13,208</u>	<u>110,209</u>
Total	<u>\$ 333,663</u>	<u>\$ 1,063,495</u>	<u>\$ 309,259</u>

Total revenues for the year ended August 31, 2012 were \$2,071,192 compared to \$3,037,475 for the year ended August 31, 2011, a decrease of \$966,283, or approximately 32%. The overall decrease in revenues in fiscal year 2012 is due to the sale of fewer hyperthermia systems, partially offset by higher levels of equipment rental from our MicroThermX[®] fee-per-use rental program and increasing sales of disposable SynchroWave antennas. We sold five hyperthermia systems in fiscal year 2012 compared to seven hyperthermia systems in fiscal year 2011, which included the sale of a higher priced BSD-200/3D/MR to a related party.

Total revenues for the year ended August 31, 2011 were \$3,037,475 compared to \$1,582,276 for the year ended August 31, 2010, an increase of \$1,455,199, or approximately 92%. The overall increase in revenues in fiscal year 2011 is due to more sales of hyperthermia systems, including the sale of one higher priced BSD-2000/3D/MR to a related party. We sold seven hyperthermia systems in fiscal year 2011 compared to five hyperthermia systems in fiscal year 2010. In addition, we recorded revenues in fiscal year 2011 of \$110,207 from equipment rental and \$189,257 from our MicroThermX[®] family of products. We had no revenues in the prior fiscal years from these sources.

Gross Margin

Our gross margin and gross margin percentage will fluctuate from period to period depending on the mix of revenues reported for the period and the type and configuration of the hyperthermia systems sold during the period. Our total gross margin was \$554,561, or 27% of total sales, for fiscal year 2012, \$1,324,549, or 44% of total sales, for fiscal year 2011, and \$81,266, or 5%, for fiscal year 2010. The decrease in gross margin and gross margin percentage in fiscal years 2012 and 2010 resulted primarily from the decrease in product sales, for which our gross margin is higher than our other sources of revenue. In addition, as sales volume increases, we believe we will more fully absorb certain fixed operating costs that are included in cost of sales, thus increasing our gross profit percentage.

Operating Costs and Expenses: Comparison of Fiscal Years ended August 31, 2012 and 2011

Cost of Sales – Cost of sales include raw material, labor and allocated overhead costs. We calculate and report separately cost of sales for both non-related and related party sales, which are sales to Medizintechnik. Cost of sales as a percentage of sales will fluctuate from period to period depending on the mix of sales for the period and the type and configuration of the hyperthermia systems sold during the period. Total cost of sales for fiscal 2012 was \$1,516,631 compared to \$1,712,926 for fiscal 2011, a decrease of \$196,295, or approximately 11%. This decrease resulted primarily from the sale of fewer hyperthermia systems in the current fiscal year compared to the last fiscal year, as further discussed above.

Research and Development Expenses – Research and development expenses include expenditures for new product development and development of enhancements to existing products. Research and development expenses were \$2,364,608 for fiscal 2012 compared to \$1,483,659, for fiscal 2011, an increase of \$880,949, or approximately 59%. Our research and development expenses for the year ended August 31, 2011 have been partially offset by the \$488,958 proceeds from two separate U.S. government grants under the QTDP Program received in November 2010. In addition, research and development expenses increased in the current fiscal year primarily due to new MicroThermX[®] product line enhancement projects, including development of the table top MicroThermX[®] and the SynchroWave short tip antenna.

Selling, General and Administrative Expenses – Selling, general and administrative expenses were \$6,203,200 for fiscal 2012 compared to \$5,189,561 in fiscal 2011, an increase of \$1,013,639, or approximately 20%. We expanded our successful MicroThermX[®] equipment rental program throughout the U.S. by hiring new direct sales representatives in key metropolitan areas, adding a new Vice President of Sales and Marketing and incurring additional marketing, sales and related operating expenses. We believe that the level of our selling, general and administrative expenses will continue to increase over the levels reported for the year ended August 31, 2012, and the increase may be significant.

Operating Costs and Expenses: Comparison of Fiscal Years ended August 31, 2011 and 2010

Cost of Sales – Cost of sales include raw material, labor and allocated overhead costs. We calculate and report separately cost of sales for both non-related and related party sales, which are sales to Medizintechnik. Cost of sales as a percentage of sales will fluctuate from period to period depending on the mix of sales for the period and the type and configuration of the hyperthermia systems sold during the period. Total cost of sales for fiscal 2011 was \$1,712,926 compared to \$1,501,010 for fiscal 2010, an increase of \$211,916, or approximately 14%. This increase resulted primarily from the sale of more hyperthermia systems in fiscal year 2011 compared to fiscal year 2010, as further discussed above.

Research and Development Expenses – As discussed above, our research and development expenses for the year ended August 31, 2011 have been partially offset by the \$488,958 proceeds from two separate U.S. government grants under the QTDP Program received in November 2010. Research and development expenses were \$1,483,659 for fiscal 2011 compared to \$2,429,215, for fiscal 2010, a decrease of \$945,556, or approximately 39%. In addition to the offset of the QTDP grants, research and development expenses decreased in fiscal year 2011 primarily from the shift from product development activities to initial sales and marketing efforts for the MicroThermX[®] product line, and due to our operating expense reduction measures.

Selling, General and Administrative Expenses – Selling, general and administrative expenses were \$5,189,561 for fiscal 2011 compared to \$5,130,017 in fiscal 2010, an increase of \$59,544, or approximately 1%. We implemented headcount reductions and other operating expense reduction measures in the latter part of fiscal year 2010. However, as we continued the roll out of the MicroThermX[®] product line and the support of its global distribution network, we increased our marketing and sales staff, including three regional sales managers, an international sales manager, a director of marketing and a customer service manager, and incurred additional marketing, sales and related operating expenses. As a result, we incurred an increase in our selling, general and administrative expenses for the year ended August 31, 2011.

Other Income (Expense)

Interest Income: Interest income earned on our money market funds and savings accounts is currently immaterial to our business, and was \$59,783, \$67,233, and \$11,042 for the years ended August 31, 2012, 2011 and 2010, respectively.

Other Income (Expense): Other income (expense) is also immaterial to our business, and was \$(6,208), \$(3,279) and \$3,405 for the years ended August 31, 2012, 2011 and 2010, respectively.

Income Tax (Provision) Benefit

For the years ended August 31, 2012 and 2011, we recorded an income tax provision of \$988 and \$800, respectively, and we recorded an income tax benefit of \$6,571 for the year ended August 31, 2010. Due to our operating losses, our income tax (provision) benefit is primarily related to state income taxes and is currently immaterial to our business.

Liquidity and Capital Resources

Since inception through August 31, 2012, we have generated an accumulated deficit of \$37,377,247 where generally our operating revenues have been insufficient to cover our operating expenses. We have financed our operations primarily through the sale of our common stock and the exercise of stock options and warrants. As of August 31, 2012, we had cash and cash equivalents of \$11,102,508, comprised primarily of money market funds and savings accounts.

As of August 31, 2012, we had current liabilities totaling \$742,297, comprised of accounts payable, accrued liabilities, customer deposits and deferred revenue incurred in the normal course of our business. Our long-term liabilities consisted of deferred revenue of \$126,420.

Stock Offerings

On October 1, 2009, a universal shelf registration statement was declared effective by the SEC for the issuance of common stock, preferred stock, warrants, senior debt, subordinated debt and units up to an aggregate amount of \$50.0 million. We completed four stock offerings utilizing the universal shelf registration statement during calendar year 2010, and we received total net proceeds of approximately \$16.2 million.

On September 28, 2012, we again filed a universal shelf registration statement with the SEC for the issuance of common stock, preferred stock, warrants, senior debt, subordinated debt and units up to an aggregate amount of \$50.0 million. We may periodically offer one or more of these securities in amounts, prices and on terms to be announced when and if the securities are offered. At the time any of the securities covered by the registration statement are offered for sale, a prospectus supplement will be prepared and filed with the SEC containing specific information about the terms of any such offering. On October 11, 2012, the universal shelf registration statement was declared effective by the SEC.

Warrant Exercises

During our fiscal year ended August 31, 2011, investors exercised warrants issued in the stock offerings to purchase a total of 1,501,134 common shares, with net proceeds to the Company of approximately \$3.0 million.

Cash Flows from Operating, Investing and Financing Activities

During the year ended August 31, 2012, we used net cash of \$5,935,939 in operating activities, primarily as a result of our net loss of \$7,960,660, decreased by non-cash expenses of \$1,538,237, including depreciation and amortization, stock-based compensation, stock issued for services and loss on disposition of property and equipment. Net cash used in operating activities also included decreases in accounts payable of \$106,182 and accrued liabilities of \$11,087, partially offset by decreases in receivables of \$482,743, inventories of \$2,257 and other current assets of \$1,079, and increases in accrued liabilities of \$92,694 and customer deposits of \$24,980.

During the year ended August 31, 2011, we used net cash of \$4,157,225 in operating activities, primarily as a result of our net loss of \$5,285,517, decreased by non-cash expenses totaling \$1,362,205, including depreciation and amortization, stock-based compensation and stock issued for services. Net cash used in operating activities also included increases in receivables of \$414,223 and inventories of \$167,960, partially offset by decreases in income tax receivable of \$50,000 and other current assets of \$13,902, and increases in accounts payable of \$104,854, accrued liabilities of \$108,084 and deferred revenue of \$71,430.

Net cash used in investing activities, resulting from the purchase of property and equipment, was \$97,521 and \$214,554 for the years ended August 31, 2012 and 2011, respectively.

We had no net cash provided by financing activities for the year ended August 31, 2012.

Net cash provided by financing activities for the year ended August 31, 2011 was \$13,024,182, comprised of net proceeds from the sale of common stock of \$9,702,656, proceeds from the exercise of warrants of \$2,989,406 and proceeds from the exercise of stock options of \$332,120.

We believe that our current cash and cash equivalents will be sufficient to fund our operations for the next twelve months.

If we cannot cover any future cash shortfalls with cost cutting or available cash, or our sales are less than projected, we would need to obtain additional financing. Due to adverse conditions in the global financial markets, we cannot be certain that any financing will be available when needed or will be available on terms acceptable to us. If we raise equity capital, our stockholders will be diluted. Insufficient funds may require us to delay, scale back or eliminate some or all of our programs designed to facilitate the commercial introduction of our systems or entry into new markets.

As of August 31, 2012, we had no significant commitments for the purchase of property and equipment.

We had no material off balance sheet arrangements as of August 31, 2012.

Other Cash Receipts

In November 2010, we were awarded two separate U.S. government grants under the QTDP Program. We submitted grant applications for our BSD-2000 and our MicroThermX[®] and both applications were approved for the maximum award for a single program of \$244,479, or a total of \$488,958. In order to qualify for the QTDP grants, the project must have the potential to develop new treatments that address “unmet medical needs” or chronic and acute diseases; reduce long-term health care costs; represent a significant advance in finding a cure for cancer; advance U.S. competitiveness in the fields of life, biological, and medical sciences; or create or sustain well-paying jobs, either directly or indirectly. The QTDP was created by Congress in March 2010 as part of the Patient Protection and Affordable Care Act and provides a tax credit or a grant equal to 50% of eligible costs and expenses for tax years 2009 and 2010.

Critical Accounting Policies

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

Revenue Recognition: Revenue from the sale of cancer treatment systems is recognized when a purchase order has been received, the system has been shipped, the selling price is fixed or determinable, and collection is reasonably assured. Most system sales are F.O.B. shipping point; therefore, shipment is deemed to have occurred when the product is delivered to the transportation carrier. Most system sales do not include installation. If installation is included as part of the contract, revenue is not recognized until installation has occurred, or until any remaining installation obligation is deemed to be perfunctory. Some sales of systems may include training as part of the sale. In such cases, the portion of the revenue related to the training, calculated based on the amount charged for training on a stand-alone basis, is deferred and recognized when

the training has been provided. The sales of our cancer treatment systems do not require specific customer acceptance provisions and do not include the right of return except in cases where the product does not function as warranted by us. To date, returns have not been significant.

Revenue from the sale of consumable devices is recognized when a purchase order has been received, the devices have been shipped, the selling price is fixed or determinable, and collection is reasonably assured. Currently, our customers are not required to purchase a minimum number of disposable devices in connection with the purchase of our systems.

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.

Revenue from equipment rental under an operating lease is recognized when billed in accordance with the lease agreement.

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 include amounts from service contracts as well as cash received for the sales of products, which have not been shipped.

Inventory Reserves: We maintain a reserve for obsolete inventories to reduce excess and obsolete inventories to their estimated net realizable value. This reserve is a significant estimate and we periodically reviewed our inventory levels and usage, paying particular attention to slower-moving items. If projected sales do not materialize or if our hyperthermia systems do not receive increased market acceptance, we may be required to increase the reserve for obsolete inventories in future periods.

Product Warranty: We provide product warranties on our systems. These warranties vary from contract to contract, but generally consist of parts and labor warranties for one year from the date of installation. To date, expenses resulting from such warranties have not been material. We record a warranty expense at the time of each sale. This reserve is estimated based on prior history of service expense associated with similar units sold in the past.

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

Stock-based Compensation: Stock-based compensation cost of stock options and other stock-based awards to employees and directors is measured at the grant date based on the estimated value of the award granted, using the Black-Scholes option pricing model, and recognized over the period in which the award vests. For stock awards no longer expected to vest, any previously recognized stock compensation expense is reversed in the period of termination. The stock-based compensation expense has been allocated to the various categories of operating costs and expenses in a manner similar to the allocation of payroll expense. The Black-Scholes valuation model utilizes inputs that are subject to change over time, including the volatility of the market price of our common stock, risk free interest rates, requisite service periods and assumptions made by us regarding the assumed life and vesting of stock options and stock-based awards. As new options or stock-based awards are granted, additional non-cash compensation expense will be recorded by us.

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

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

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

Recent Accounting Pronouncements

No new accounting pronouncements were issued during the year ended August 31, 2012 and through the date of filing this report that we believe are applicable or would have a material impact on our financial statements.

FORWARD-LOOKING STATEMENTS

With the exception of historical facts, the statements contained in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and other parts of this annual report on Form 10-K 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 belief about the market opportunities for our products;
- our anticipated financial performance and business plan;
- our expectations regarding the commercialization of, and the potential revenue from, the BSD-2000, BSD 500 and MicroThermX[®] systems;
- our expectations that we will continue to incur expenses related to seeking governmental and regulatory approvals for our products;
- our belief that the MicroThermX[®] will be a major part of our business plan moving forward and that the growth in our revenues and our ultimate profitability will be largely dependent on the success of our MicroThermX[®] marketing and sales efforts;
- our expectations that we will continue and grow the successful results from our MicroThermX[®] fee-per-use equipment rental program throughout the U.S. that we have experienced to date;
- our expectations that the SynchroWave antennas to be used in conjunction with the MicroThermX[®] will represent a significant ongoing revenue stream;
- our expectations that we will reach agreements with additional international distribution firms;
- our expectations that additional international shipments of the MicroThermX[®] and supplies of SynchroWave antennas will occur in calendar year 2013;
- our intentions to continue to devote substantial sums to research and development;
- our belief that the level of our operating expenses, including selling, general and administrative expenses, will increase and that the increase may be significant;
- our belief that our operating results, revenue and operating expenses may fluctuate in the future from year to year as well as from quarter to quarter; and
- our belief that our current cash and cash equivalents will be sufficient to finance our operations for the next twelve months.

We wish to caution readers that the forward-looking statements and our operating results are subject to various risks and uncertainties that could cause our actual results and outcomes to differ materially from those discussed or anticipated, including the factors set forth in Item 1A – “Risk Factors” in this Annual Report and our other filings with the Securities and Exchange Commission. We also wish to advise readers not to place any undue reliance on the forward-looking statements contained in this report, which reflect our beliefs and expectations only as of the date of this report. We assume no obligation to update or revise these forward-looking statements to reflect new events or circumstances or any changes in our beliefs or expectations, other than as required by law.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our cash and cash equivalents consist primarily of money market funds and savings accounts, which are investment grade securities. These accounts bear variable interest rates that are adjusted to market conditions and changes in financial market conditions and in market rates will affect interest income earned on these funds. We do not believe, however, that the interest income earned on our money market funds and savings accounts is material to the results of our operations. Further, we do not believe that we are currently exposed to changes in financial market conditions that expose our money market funds and savings accounts to material changes in the market value of their principal.

We do have significant sales to foreign customers and are therefore subject to the effects changes in foreign currency exchange rates may have on demand for our products and services. We currently do not utilize derivative instruments to offset the exposure to changes in foreign currency exchange rates. To minimize foreign exchange risk, our export sales are transacted in United States dollars.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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

The following table presents selected unaudited quarterly financial data for each of the four quarters in our fiscal years 2012 and 2011. The selected quarterly financial data reflects, in the opinion of management, all adjustments necessary to fairly present the results of operations for such periods. Results of any one or more quarters are not necessarily indicative of continuing trends.

	2012				2011			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Total revenues	\$ 658,998	\$ 271,883	\$ 651,387	\$ 488,924	\$ 506,985	\$ 444,439	\$ 1,675,477	\$ 410,574
Gross margin (loss)	288,120	(75,730)	200,604	141,567	147,256	38,502	1,034,039	104,752
Net loss	(1,687,405)	(2,102,598)	(2,097,854)	(2,072,803)	(947,301)	(1,553,965)	(817,540)	(1,966,711)
Loss per common share - diluted	\$ (0.06)	\$ (0.07)	\$ (0.07)	\$ (0.07)	\$ (0.04)	\$ (0.05)	\$ (0.03)	\$ (0.07)

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

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

Management, under the supervision and with the participation of our Chief Executive Officer (Principal Executive Officer) and Chief Financial Officer (Principal Accounting Officer), evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) or 15d-15(e) promulgated under the Act), as of August 31, 2012. Based on that evaluation, management concluded that our disclosure controls and procedures were effective as of August 31, 2012.

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

Management's Report on Internal Control Over Financial Reporting

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

Our internal control over financial reporting includes those policies and procedures that:

1. pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;
2. provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and
3. provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

A material weakness is a significant deficiency, or combination of significant deficiencies, in internal controls over financial reporting such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. Management performed an assessment of the effectiveness of the Company's internal control over financial reporting as of August 31, 2012, utilizing the criteria described in the "Internal Control — Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). The objective of this assessment was to determine whether our internal control over financial reporting was effective as of such date. In its assessment of the effectiveness of internal control over financial reporting as of August 31, 2012, management concluded that our internal control over financial reporting is effective.

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

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting (as such item is defined in Rule 13a-15(f) under the Act) that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on the Effectiveness of Controls

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

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information about our directors can be found under the captions “Directors,” “Business Experience and Qualifications of Nominees for Election to the Board of Directors” and “Composition of the Board of Directors” in the Company’s definitive Proxy Statement to be filed for the 2013 Annual Meeting of Stockholders (the “Proxy Statement”). That information is incorporated by reference. Information about our executive officers and significant employees appearing under the captions “Executive Officers” and “Significant Employees” in the Proxy Statement is incorporated by reference.

ITEM 11. EXECUTIVE COMPENSATION

Information appearing under the captions “Director Compensation 2012,” “Director Compensation Table,” “Executive Compensation,” and “Compensation Committee Report,” in the Proxy Statement is incorporated by reference.

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

Information appearing under the captions “Equity Compensation Plan Information” and “Security Ownership of Certain Beneficial Owners and Management” in the Proxy Statement is incorporated by reference.

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

Information appearing under the captions “Certain Relationships and Related Person Transactions” and “Affirmative Determinations Regarding Director Independence” in the Proxy Statement is incorporated by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information appearing under the captions “Principal Accountant Fees and Services” and “Pre-Approval Policies” in the Proxy Statement is incorporated by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1) Financial Statements

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

(2) Financial Statement Schedules

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

(3) Exhibits

The following exhibits are incorporated herein by reference as indicated:

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation. Incorporated by reference to Exhibit 3.1 of the BSD Medical Corporation Annual Report Form 10-KSB, filed December 1, 2003.
3.2	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of BSD Medical Corporation. Incorporated by reference to Exhibit 3.1 to the BSD Medical Corporation Form 8-K, filed February 7, 2011.
3.3	By-Laws. Incorporated by reference to Exhibit 3.2 of the BSD Medical Corporation Registration Statement on Form S-1, filed October 16, 1986.
3.4	Amendment to Bylaws. Incorporated by reference to Exhibit 3.1 of Current Report on Form 8-K filed January 4, 2008.

Exhibit Number	Description
4.1	Specimen Common Stock Certificate. Incorporated by reference to Exhibit 4 of the BSD Medical Corporation Registration Statement on Form S-1, filed October 16, 1986.
4.2	Form of Common Stock Purchase Warrant. Incorporated by reference to Exhibit 4.1 to the BSD Medical Corporation Form 8-K, filed February 11, 2010.
4.3	Form of Common Stock Purchase Warrant. Incorporated by reference to Exhibit 4.1 to the BSD Medical Corporation Form 8-K, filed May 3, 2010.
4.4	Form of Common Stock Purchase Warrant. Incorporated by reference to Exhibit 4.1 to the BSD Medical Corporation Form 8-K, filed August 19, 2010.
4.5	Form of Common Stock Purchase Warrant. Incorporated by reference to Exhibit 4.1 to the BSD Medical Corporation Form 8-K, filed November 15, 2010.
10.1*	BSD Medical Corporation Fourth Amended and Restated 1998 Director Stock Plan. Incorporated by reference to Exhibit A of the BSD Medical Corporation Schedule 14A, filed December 28, 2009.
10.2*	BSD Medical Corporation Third Amended and Restated 1998 Stock Incentive Plan. Incorporated by reference to Exhibit B of the BSD Medical Corporation Schedule 14B, filed December 28, 2009.
10.3*	BSD Medical Corporation Form of Employee Stock Option Grant. Incorporated by reference to Exhibit 10.7 to BSD Medical Corporation's Annual Report on Form 10-K filed November 14, 2008.
10.4*	BSD Medical Corporation Form of Director Stock Option Grant. Incorporated by reference to Exhibit 10.8 to BSD Medical Corporation's Annual Report on Form 10-K filed November 14, 2008.
10.5*	Employment Agreement dated November 2, 1988 between BSD Medical Corporation and Paul F. Turner. Incorporated by reference to Exhibit 10.8 to BSD Medical Corporation's Registration Statement on Form SB-2 filed January 27, 2004.
10.6*	Offer Letter, dated April 7, 2009, between BSD Medical Corporation and Harold R. Wolcott. Incorporated by reference to Exhibit 10.2 of Current Report on Form 8-K filed on April 8, 2009.
10.11	Exclusive Distribution Agreement with Dr. Sennewald Medizintechnik GmbH dated May 13, 2009. Incorporated by reference to Exhibit 10.11 to BSD Medical Corporation's Annual Report on Form Form 10-K filed on November 6, 2009.
21.1	Subsidiary List. Incorporated by reference to Exhibit 21.1 of the BSD Medical Corporation Annual Report on Form 10-KSB filed December 1, 2003.
23.1	Consent of Independent Registered Public Accounting Firm.
31.1	Certification of Chief Executive Officer of BSD pursuant to Rule 13a-14.
31.2	Certification of Chief Financial Officer of BSD pursuant to Rule 13a-14.
32.1	Certification of Chief Executive Officer attached pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes Oxley Act of 2002.
32.2	Certification of the Chief Financial Officer of BSD pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS**	XBRL Instance Document
101.SCH**	XBRL Taxonomy Extension Schema
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase
101.DEF**	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB**	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

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

** The XBRL related information in Exhibit 101 shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to liability of that section and shall not be incorporated by reference into any filing or other document pursuant to the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such filing or document.

SIGNATURES

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

BSD MEDICAL CORPORATION

Date: November 14, 2012

By: /s/ Harold R. Wolcott
Harold R. Wolcott
President and Member of the Board of Directors
(principal executive officer)

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

Date: November 14, 2012

By: /s/ Harold R. Wolcott
Harold R. Wolcott
President and Member of the Board of Directors
(principal executive officer)

Date: November 14, 2012

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

Date: November 14, 2012

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

Date: November 14, 2012

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

Date: November 14, 2012

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

Date: November 14, 2012

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

Date: November 14, 2012

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

Date: November 14, 2012

By: /s/ Damian E. Dupuy
Dr. Damian E. Dupuy
Member of the Board of Directors

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

To the Board of Directors and Stockholders
of BSD Medical Corporation

We have audited the internal control over financial reporting of BSD Medical Corporation (the Company) as of August 31, 2012, based on criteria established in Internal Control–Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management’s Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit.

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

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

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of August 31, 2012, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the balance sheets of the Company as of August 31, 2012 and 2011, and the related statements of comprehensive loss, stockholders’ equity, and cash flows for each of the years in the three-year period ended August 31, 2012, and our report dated November 14, 2012 expressed an unqualified opinion thereon.

/s/ TANNER LLC

Salt Lake City, Utah
November 14, 2012

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
of BSD Medical Corporation

We have audited the accompanying balance sheets of BSD Medical Corporation (the Company) as of August 31, 2012 and 2011, and the related statements of comprehensive loss, stockholders' equity and cash flows for each of the years in the three-year period ended August 31, 2012. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of BSD Medical Corporation as of August 31, 2012 and 2011, and the results of its operations and its cash flows for each of the years in the three-year period ended August 31, 2012, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of BSD Medical Corporation's internal control over financial reporting as of August 31, 2012, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated November 14, 2012 expressed an unqualified opinion thereon.

/s/ TANNER LLC

Salt Lake City, Utah
November 14, 2012

BSD MEDICAL CORPORATION
Balance Sheets

	<u>August 31,</u>	
	<u>2012</u>	<u>2011</u>
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 11,102,508	\$ 17,135,968
Accounts receivable, net of allowance for doubtful accounts of \$20,000	289,587	397,264
Related party trade accounts receivable	33,257	408,323
Inventories, net	2,403,957	2,406,214
Other current assets	<u>120,069</u>	<u>121,148</u>
Total current assets	13,949,378	20,468,917
Property and equipment, net	1,412,639	1,445,897
Patents, net	<u>4,032</u>	<u>25,092</u>
	<u><u>\$ 15,366,049</u></u>	<u><u>\$ 21,939,906</u></u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 195,754	\$ 301,936
Accrued liabilities	424,698	332,004
Customer deposits	24,980	—
Deferred revenue – current portion	<u>96,865</u>	<u>42,214</u>
Total current liabilities	742,297	676,154
Deferred revenue – net of current portion	<u>126,420</u>	<u>192,158</u>
Total liabilities	<u>868,717</u>	<u>868,312</u>
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, \$.001 par value; 10,000,000 shares authorized, no shares issued and outstanding	—	—
Common stock, \$.001 par value, 80,000,000 shares authorized, 29,777,522 and 29,686,154 shares issued, respectively	29,778	29,686
Additional paid-in capital	51,845,035	50,458,729
Treasury stock, 24,331 shares at cost	(234)	(234)
Accumulated deficit	<u>(37,377,247)</u>	<u>(29,416,587)</u>
Total stockholders' equity	<u>14,497,332</u>	<u>21,071,594</u>
	<u><u>\$ 15,366,049</u></u>	<u><u>\$ 21,939,906</u></u>

See accompanying notes to financial statements

BSD MEDICAL CORPORATION
Statements of Comprehensive Loss

	Years Ended August 31,		
	2012	2011	2010
Revenues:			
Sales	\$ 1,608,179	\$ 1,863,773	\$ 1,273,017
Sales to related parties	333,663	1,063,495	309,259
Equipment rental	129,350	110,207	—
Total revenues	<u>2,071,192</u>	<u>3,037,475</u>	<u>1,582,276</u>
Cost of revenues:			
Cost of sales	1,244,290	1,074,030	1,182,328
Cost of related party sales	260,553	618,823	318,682
Cost of equipment rental	11,788	20,073	—
Total cost of revenues	<u>1,516,631</u>	<u>1,712,926</u>	<u>1,501,010</u>
Gross margin	<u>554,561</u>	<u>1,324,549</u>	<u>81,266</u>
Operating costs and expenses:			
Research and development	2,364,608	1,483,659	2,429,215
Selling, general and administrative	6,203,200	5,189,561	5,130,017
Total operating costs and expenses	<u>8,567,808</u>	<u>6,673,220</u>	<u>7,559,232</u>
Loss from operations	<u>(8,013,247)</u>	<u>(5,348,671)</u>	<u>(7,477,966)</u>
Other income (expense):			
Interest income	59,783	67,233	11,042
Other income (expense)	(6,208)	(3,279)	3,405
Total other income (expense)	<u>53,575</u>	<u>63,954</u>	<u>14,447</u>
Loss before income taxes	(7,959,672)	(5,284,717)	(7,463,519)
Income tax (provision) benefit	<u>(988)</u>	<u>(800)</u>	<u>6,571</u>
Net loss and comprehensive loss	<u>\$ (7,960,660)</u>	<u>\$ (5,285,517)</u>	<u>\$ (7,456,948)</u>
Loss per common share:			
Basic	<u>\$ (0.27)</u>	<u>\$ (0.18)</u>	<u>\$ (0.32)</u>
Diluted	<u>\$ (0.27)</u>	<u>\$ (0.18)</u>	<u>\$ (0.32)</u>
Weighted average number of shares outstanding:			
Basic	29,717,000	28,838,000	23,257,000
Diluted	29,717,000	28,838,000	23,257,000

See accompanying notes to financial statements

BSD MEDICAL CORPORATION
Statements of Stockholders' Equity
Years Ended August 31, 2012, 2011 and 2010

	<u>Common Stock</u>		<u>Additional Paid-in Capital</u>	<u>Treasury Stock</u>		<u>Accumulated Deficit</u>	<u>Total</u>
	<u>Shares</u>	<u>Amount</u>		<u>Shares</u>	<u>Amount</u>		
Balance, September 1, 2009	22,039,301	\$ 22,040	\$ 28,593,305	24,331	\$ (234)	\$ (16,674,122)	\$ 11,940,989
Common stock issued for:							
Services	93,170	93	149,907	—	—	—	150,000
Cash, net of offering costs of \$762,528	4,046,208	4,046	6,489,677	—	—	—	6,493,723
Stock-based compensation	—	—	990,461	—	—	—	990,461
Net loss	—	—	—	—	—	(7,456,948)	(7,456,948)
Balance, August 31, 2010	26,178,679	26,179	36,223,350	24,331	(234)	(24,131,070)	12,118,225
Common stock issued for:							
Services	36,538	36	150,129	—	—	—	150,165
Cash, net of offering costs of \$744,844	1,750,000	1,750	9,700,906	—	—	—	9,702,656
Exercise of warrants for cash	1,501,134	1,501	2,987,905	—	—	—	2,989,406
Exercise of options for cash	213,000	213	331,907	—	—	—	332,120
Cashless option exercises	6,803	7	(7)	—	—	—	—
Stock-based compensation	—	—	1,064,539	—	—	—	1,064,539
Net loss	—	—	—	—	—	(5,285,517)	(5,285,517)
Balance, August 31, 2011	29,686,154	29,686	50,458,729	24,331	(234)	(29,416,587)	21,071,594
Common stock issued for services	91,368	92	179,908	—	—	—	180,000
Stock-based compensation	—	—	1,206,398	—	—	—	1,206,398
Net loss	—	—	—	—	—	(7,960,660)	(7,960,660)
Balance, August 31, 2012	<u>29,777,522</u>	<u>\$ 29,778</u>	<u>\$ 51,845,035</u>	<u>24,331</u>	<u>\$ (234)</u>	<u>\$ (37,377,247)</u>	<u>\$ 14,497,332</u>

See accompanying notes to financial statements

BSD MEDICAL CORPORATION
Statements of Cash Flows

	<u>Years Ended August 31,</u>		
	<u>2012</u>	<u>2011</u>	<u>2010</u>
Cash flows from operating activities:			
Net loss	\$ (7,960,660)	\$ (5,285,517)	\$ (7,456,948)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	151,721	147,501	148,602
Stock issued for services	180,000	150,165	150,000
Stock-based compensation	1,206,398	1,064,539	990,461
Loss on disposition of property and equipment	118	—	—
Decrease (increase) in:			
Receivables	482,743	(414,223)	(60,731)
Income tax receivable	—	50,000	1,365,758
Inventories	2,257	(167,960)	(443,778)
Other current assets	1,079	13,902	(40,514)
Increase (decrease) in:			
Accounts payable	(106,182)	104,854	(29,823)
Accrued liabilities	92,694	108,084	(324,159)
Customer deposits	24,980	—	—
Deferred revenue	<u>(11,087)</u>	<u>71,430</u>	<u>21,557</u>
Net cash used in operating activities	<u>(5,935,939)</u>	<u>(4,157,225)</u>	<u>(5,679,575)</u>
Cash flows from investing activities:			
Purchase of property and equipment	<u>(97,521)</u>	<u>(214,554)</u>	<u>(122,521)</u>
Net cash used in investing activities	<u>(97,521)</u>	<u>(214,554)</u>	<u>(122,521)</u>
Cash flows from financing activities:			
Net proceeds from the sale of common stock	—	9,702,656	6,493,723
Proceeds from the exercise of warrants	—	2,989,406	—
Proceeds from the exercise of options	<u>—</u>	<u>332,120</u>	<u>—</u>
Net cash provided by financing activities	<u>—</u>	<u>13,024,182</u>	<u>6,493,723</u>
Net increase (decrease) in cash and cash equivalents	(6,033,460)	8,652,403	691,627
Cash and cash equivalents, beginning of year	<u>17,135,968</u>	<u>8,483,565</u>	<u>7,791,938</u>
Cash and cash equivalents, end of year	<u><u>\$ 11,102,508</u></u>	<u><u>\$ 17,135,968</u></u>	<u><u>\$ 8,483,565</u></u>

See accompanying notes to financial statements

BSD MEDICAL CORPORATION
Notes to Financial Statements

Note 1: Organization and Significant Accounting Policies

Organization and Business – BSD Medical Corporation (the “Company”) was incorporated in the State of Delaware on July 3, 1986. We develop, manufacture, market, and service systems to treat cancer and benign diseases using heat therapy delivered using focused radiofrequency (RF) and microwave energy. Our product lines include both hyperthermia and ablation treatment systems. Our hyperthermia cancer treatment systems, which have been in use for several years in the United States, Europe and Asia, are used to treat certain tumors with heat (hyperthermia) while increasing the effectiveness of other therapies such as radiation therapy. Our microwave ablation system has been developed as a stand-alone therapy to ablate and destroy soft tissue. We have developed extensive intellectual property, multiple products in the market and well established distribution in the United States, Europe and Asia. Certain of our products have received regulatory approvals in the United States, Europe and China.

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

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

Inventories – Parts and supplies inventories are stated at the lower of cost or market. Cost is determined using the average cost method. Work-in-process and finished goods are stated at the lower of the accumulated manufacturing costs or market. We maintain a reserve for obsolete inventories to reduce excess and obsolete inventories to their estimated net realizable value. The reserve was \$100,000 as of August 31, 2012 and 2011.

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

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

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

The cost and accumulated depreciation of property and equipment sold or otherwise retired are removed from the accounts and any related gain or loss on disposition is reflected in net income or loss for the period.

Patents – Patents are carried at cost and are being amortized over their remaining legal life, up to a period of 17 years.

Warranty Reserve – We provide limited warranties to our customers for products sold. Estimated future warranty obligations are accrued each period. As of August 31, 2012 and 2011, the accrued warranty reserve was \$24,261 and \$28,867, respectively. During the fiscal years ended August 31, 2012, 2011, and 2010, total warranty expense was \$43,334, \$34,303 and \$28,509, respectively.

Income Taxes – We account for income taxes using the asset and liability method. Under the asset and liability method, deferred tax assets and liabilities are recognized for the future 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.

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 and warrants to purchase 5,590,762, 5,260,762 and 5,236,043 shares of common stock at prices ranging from \$1.20 to \$7.95, \$1.20 to \$7.95, and \$0.56 to \$7.95 per share were excluded from the calculation of diluted earnings per share for the years ended at August 31, 2012, 2011 and 2010, respectively, because their effect was anti-dilutive.

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

	Years Ended August 31,		
	2012	2011	2010
Weighted average number of shares outstanding – basic	29,717,000	28,838,000	23,257,000
Dilutive effect of stock options and warrants	—	—	—
Weighted average number of shares outstanding, assuming dilution	29,717,000	28,838,000	23,257,000

Stock-Based Compensation - Stock-based compensation is measured at the grant date based on the value of the award granted using the Black-Scholes option pricing model, and recognized over the period in which the award vests. For stock awards no longer expected to vest, any previously recognized stock compensation expense is reversed in the period of termination. The stock-based compensation expense is allocated to the various categories of operating costs and expenses in a manner similar to the allocation of payroll expense.

Revenue Recognition – We recognize revenue from the sale of medical systems, the sale of parts, accessories, and consumable devices related to the systems, equipment rental, training, and service support contracts. Total product sales, including related party product sales, were \$1,358,604, \$2,581,275 and \$1,261,490 for the years ended August 31, 2012, 2011 and 2010, respectively. Equipment rental income was \$129,350, \$110,207 and \$0 for the years ended August 31, 2012, 2011 and 2010, respectively. Total service and other revenues, including related party service and other revenues, were \$583,238, \$345,993 and \$320,786 for the years ended August 31, 2012, 2011 and 2010, 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 systems may include training as part of the sale. In such cases, the portion of the revenue related to the training, calculated based on the amount charged for training on a stand-alone basis, is deferred and recognized when the training has been provided. The sales of our cancer treatment systems do not require specific customer acceptance provisions and do not include the right of return except in cases where the product does not function as warranted by us. To date, returns have not been significant.

Revenue from the sale of consumable devices is recognized when a purchase order has been received, the devices have been shipped, the selling price is fixed or determinable, and collection is reasonably assured. Currently, our customers are not required to purchase a minimum number of disposable devices in connection with the purchase of our systems.

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.

Revenue from equipment rental under an operating lease is recognized when billed in accordance with the lease agreement.

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 include amounts from service contracts as well as cash received for the sales of products, which have not been shipped.

Concentration of Credit Risk – Financial instruments that potentially subject us to concentration of credit risk consists primarily of trade receivables. In the normal course of business, we provide credit terms to our customers. Accordingly, we perform ongoing credit evaluations of our customers and maintain allowances for possible losses.

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

Advertising and Promotion – Advertising and promotion costs, which are principally included in sales expenses, are expensed as incurred. Advertising and promotion expense was \$179,669, \$275,393 and \$61,294 for the years ended August 31, 2012, 2011 and 2010, respectively.

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

Comprehensive Loss – Comprehensive loss is the same as net loss for all years presented.

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

Note 2: Detail of Certain Balance Sheet Accounts

Details of certain balance sheet accounts are as follows:

	<u>August 31,</u>	
	<u>2012</u>	<u>2011</u>
Accounts receivable:		
Trade receivables – non-related party	\$ 306,053	\$ 416,495
Other receivables	3,534	769
Allowance for doubtful accounts	<u>(20,000)</u>	<u>(20,000)</u>
	<u>\$ 289,587</u>	<u>\$ 397,264</u>
Inventories:		
Parts and supplies	\$ 1,180,428	\$ 1,248,534
Work-in-process	803,049	1,110,362
Finished goods	520,480	147,318
Reserve for obsolete inventories	<u>(100,000)</u>	<u>(100,000)</u>
	<u>\$ 2,403,957</u>	<u>\$ 2,406,214</u>
Accrued liabilities:		
Warranty reserve	\$ 24,261	\$ 28,867
Training and installation reserve	10,589	9,341
Accrued taxes payable	93,551	34,685
Payroll and other	<u>296,297</u>	<u>259,111</u>
	<u>\$ 424,698</u>	<u>\$ 332,004</u>

Note 3: Property and Equipment

Property and equipment consist of the following:

	August 31,	
	2012	2011
Equipment	\$ 1,368,183	\$ 1,314,814
Rental equipment	58,940	58,940
Furniture and fixtures	298,576	298,576
Building improvements	54,736	47,005
Building	956,000	956,000
Land	244,000	244,000
	<u>2,980,435</u>	<u>2,919,335</u>
Less accumulated depreciation	<u>(1,567,796)</u>	<u>(1,473,438)</u>
	<u>\$ 1,412,639</u>	<u>\$ 1,445,897</u>

Depreciation expense for the years ended August 31, 2012, 2011 and 2010 totaled \$130,661, \$121,388 and \$122,174, respectively.

Note 4: Patents

We have certain patents recorded net of accumulated amortization. The patents are being amortized on a straight-line basis over their remaining legal life, up to a period of 17 years. Amortization expense was \$21,060, \$26,113 and \$26,428 for the years ended August 31, 2012, 2011, and 2010, respectively.

Note 5: Stockholders' Equity

The Company has 10,000,000 authorized shares of \$.001 par value preferred stock. As of August 31, 2012 and 2011, there were no shares of preferred stock outstanding. The Company also has 80,000,000 authorized shares of \$.001 par value common stock.

Stock Offerings

On October 1, 2009, a universal shelf registration statement was declared effective by the SEC for the issuance of common stock, preferred stock, warrants, senior debt, subordinated debt and units up to an aggregate amount of \$50.0 million. Subsequent to August 31, 2012, we filed a new universal shelf registration statement with the SEC for the issuance of common stock, preferred stock, warrants, senior debt, subordinated debt and units up to an aggregate amount of \$50.0 million. See Note 16. We may periodically offer one or more of these securities in amounts, prices and on terms to be announced when and if the securities are offered. At the time any of the securities covered by the registration statement are offered for sale, a prospectus supplement will be prepared and filed with the SEC containing specific information about the terms of any such offering. We have previously completed four offerings utilizing our universal shelf registration statement. Each of these offerings was completed during calendar year 2010.

On each of February 11, 2010, May 3, 2010, August 19, 2010, and November 15, 2010, we entered into a placement agency agreement (collectively, the "Agency Agreements") with Roth Capital Partners, LLC (the "Placement Agent"), pursuant to which the Placement Agent agreed to use its reasonable efforts to arrange for the sale of shares of our common stock and warrants in registered direct public offerings. These offerings are referred to herein as the "February Offering," "May Offering," "August Offering" and "November Offering" (each, an "Offering" and collectively the "2010 Offerings"). In connection with each of the Offerings, we and certain institutional investors also entered into securities purchase agreements (collectively, the "Purchase Agreements") pursuant to which we agreed to sell shares of our common stock and warrants to purchase additional shares of our common stock to the investors. The common stock and warrants were sold in fixed combinations, with each combination consisting of one share of common stock and a warrant to purchase 0.75 shares of common stock (0.50 shares in the case of the November Offering). The warrants became exercisable six months and one day following the closing date of the Offering and will remain exercisable for five years thereafter. The exercise price of the warrants is subject to adjustment in the case of stock splits, stock dividends, combinations of shares and similar recapitalization transactions.

The number of shares of our common stock and number of shares of our common stock issuable upon exercise of the warrants as well as the purchase price per fixed combination and the exercise price associated with each warrant which were sold in the 2010 Offerings are shown below:

2010 Offerings	Shares of Common Stock	Warrants – Shares of Common Stock Issuable upon Exercise of the Warrants	Purchase Price per Fixed Combination	Warrant Exercise Price (Per Share)
February Offering	1,176,471	882,354	\$ 1.70	\$ 2.04
May Offering	1,644,737	1,233,553	\$ 1.52	\$ 1.94
August Offering	1,225,000	918,750	\$ 2.25	\$ 3.27
November Offering	1,750,000	875,000	\$ 5.97	\$ 7.73

The Placement Agent was entitled to a cash fee of 6.5% of the gross proceeds paid to us for the securities we would sell in each of the Offerings. We would also reimburse the Placement Agent for all reasonable and documented out-of-pocket expenses that would be incurred by the Placement Agent in connection with each of the Offerings, which could not exceed in the case of each of the Offerings the lesser of (i) \$75,000 (\$30,000 in the case of November Offering and in the case of the February Offering, \$75,000 less a \$25,000 cash advance for expenses), or (ii) 8% of the gross proceeds of the Offering, less the Placement Agent's placement fee (and in the case of the February Offering, also less the \$25,000 cash advance for expenses). Each of the Agency Agreements contains customary representations, warranties and covenants by us. They also provide for customary indemnification by us and the Placement Agent for losses or damages arising out of or in connection with the sale of the securities being offered. We also agreed to indemnify the Placement Agent against liabilities under the Securities Act of 1933, as amended. We also agreed to contribute to payments the Placement Agent may be required to make in respect of such liabilities.

The exercisability of the warrants sold in the 2010 Offerings may be limited if, upon exercise, the holder or any of its affiliates would beneficially own more than 4.9% of our common stock.

We agreed with each of the purchasers that while the warrants are outstanding, we will not affect or enter into an agreement to affect a "Variable Rate Transaction," which means a transaction in which we:

- issue or sell any convertible securities either (A) at a conversion, exercise or exchange rate or other price that is based upon and/or varies with the trading prices of, or quotations for, the shares of our common stock at any time after the initial issuance of such convertible securities, or (B) with a conversion, exercise or exchange price that is subject to being reset at some future date after the initial issuance of such convertible securities or upon the occurrence of specified or contingent events directly or indirectly related to our business or the market for our common stock, other than pursuant to a customary "weighted average" anti-dilution provision; or
- enter into any agreement (including, without limitation, an equity line of credit) whereby we may sell securities at a future determined price (other than standard and customary "preemptive" or "participation" rights).

We agreed with each of the purchasers if we issue securities within the 12 months following the closing of an Offering, the purchasers shall have the right to purchase all of the securities on the same terms, conditions and price provided for in the proposed issuance of securities.

We also agreed to indemnify each of the purchasers against certain losses resulting from our breach of any of our representations, warranties, or covenants under agreements with each of the purchasers, as well as under certain other circumstances described in the Purchase Agreements.

We closed the February Offering on February 17, 2010. The aggregate gross proceeds to us from the February Offering, before deducting fees to the Placement Agent and other offering expenses payable by us, were approximately \$2 million. The net proceeds to us from the February Offering, after deducting placement agent fees and the offering expenses borne by us, were approximately \$1.7 million.

We closed the May Offering on May 6, 2010. The aggregate gross proceeds to us from the May Offering, before deducting fees to the Placement Agent and other offering expenses payable by us, were approximately \$2.5 million. The net proceeds to us from the May Offering, after deducting placement agent fees and the offering expenses borne by us, were approximately \$2.3 million.

We closed the August Offering on August 24, 2010. The aggregate gross proceeds to us from the August Offering, before deducting fees to the Placement Agent and other offering expenses payable by us, were approximately \$2.75 million. The net proceeds to us from the August Offering, after deducting placement agent fees and the offering expenses borne by us, were approximately \$2.5 million.

We closed the November Offering on November 18, 2010. The aggregate gross proceeds to us from the November Offering, before deducting fees to the Placement Agent and other offering expenses payable by us, were approximately \$10.45 million. The net proceeds to us from the November Offering, after deducting placement agent fees and the offering expenses borne by us, were approximately \$9.7 million.

Warrant Exercises

During our fiscal year ended August 31, 2011, investors exercised warrants to purchase a total of 1,501,134 common shares, with net proceeds to the Company of approximately \$3.0 million. We have issued 772,060 shares of our common stock as a result of the exercise of warrants issued in the February Offering, and 729,074 shares of our common stock as a result of the exercise of warrants issued in the May Offering.

A summary of the outstanding warrants issued in the stock offerings as of August 31, 2012 and changes during the year then ended is as follows:

	<u>Shares</u>	<u>Weighted-Average Exercise Price</u>	<u>Weighted-Average Remaining Contract Term (Years)</u>
Outstanding as of August 31, 2011	2,408,523	\$ 4.56	
Granted	—	—	
Exercised	—	—	
Forfeited or expired	—	—	
Outstanding and exercisable as of August 31, 2012 (all exercisable)	<u>2,408,523</u>	<u>\$ 4.56</u>	<u>3.48</u>

Note 6: Deferred Revenue

We have entered into certain service contracts for which we have received payment in advance. We are recognizing these service revenues over the life of the service agreements.

As of August 31, 2012 and 2011, we had deferred revenue of \$223,285 and \$234,372, respectively.

Note 7: Major Customers and Foreign Sales

During the year ended August 31, 2012, we had sales to four customers totaling 16.11%, 12.64%, 11.05% and 10.86% of total revenues. During the year ended August 31, 2011, we had sales to three customers totaling 35.01%, 10.01% and 10.01% of total revenues. During the year ended August 31, 2010, we had sales to five customers totaling 22.75%, 19.55%, 19.15%, 15.86% and 12.04% of total revenues.

Export sales were \$694,629, \$1,135,372 and \$678,893 in fiscal years 2012, 2011 and 2010, respectively.

During fiscal years 2012 and 2011, export sales to Germany were approximately 16% and 35% of total sales, respectively. During fiscal year 2010, export sales to China and Germany were approximately 23% and 12% of total sales, respectively.

As of August 31, 2012, 64% of accounts receivable was due from one customer.

Note 8: Related Party Transactions

During the years ended August 31, 2012, 2011, and 2010, we had sales of \$333,663, \$1,063,495 and \$309,259, respectively, to entities controlled by a significant stockholder and member of the Board of Directors. These related party transactions represent 16%, 35% and 20% of total sales for each respective year.

As of August 31, 2012 and 2011, receivables include \$33,257 and \$408,323, respectively, from these related parties.

Note 9: Income Taxes

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

	Years Ended August 31,		
	2012	2011	2010
Current:			
Federal	\$ —	\$ —	\$ —
State	(988)	(800)	6,571
	(988)	(800)	6,571
Deferred:			
Federal	—	—	—
	(988)	(800)	6,571

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

	Years Ended August 31,		
	2012	2011	2010
Income tax benefit at federal statutory rate	\$ 2,706,000	\$ 1,797,000	\$ 2,538,000
Stock-based compensation	(324,000)	(249,000)	(205,000)
State income taxes, net of federal benefit	263,000	174,000	246,000
Research and development credit	88,000	102,000	209,000
Valuation allowance	(3,000,000)	(1,688,000)	(3,127,000)
Other	266,012	(136,800)	345,571
	(988)	(800)	6,571

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

	August 31,	
	2012	2011
Current Asset:		
Accruals and reserves	\$ 19,000	\$ 21,000
Deferred revenue	76,000	87,000
Inventories	71,000	85,000
Research and development and other tax credits	1,680,000	1,651,000
Net operating loss carryforwards	8,848,000	5,903,000
Valuation allowance	(10,694,000)	(7,747,000)
	\$ —	\$ —
Long-Term Asset:		
Deferred compensation	\$ 550,000	\$ 505,000
Long-Term Liability:		
Depreciation and amortization	(1,000)	(9,000)
Valuation allowance	(549,000)	(496,000)
	\$ —	\$ —

The ultimate realization of the deferred tax assets is dependent, in part, upon the tax laws in effect, our future earnings, and other events. As of August 31, 2012, we recorded a valuation allowance of \$10,694,000 against current deferred tax assets and a valuation allowance of \$549,000 against net long-term deferred tax assets. The increase in the valuation allowance for the year ended August 31, 2012 relates primarily to our operating losses. In recording the valuation allowance, we were unable to conclude that it is more likely than not that our deferred tax assets will be realized.

As of August 31, 2012, we had a net operating loss carryforward available to offset future taxable income of approximately \$22,000,000, which will begin to expire in 2029. If substantial changes in the Company's ownership should occur, there would be an annual limitation of the amount of the net operating loss carryforward which could be utilized.

We perform a review of our material tax positions in accordance with recognition and measurement standards established by authoritative accounting literature, which requires a company to determine whether it is more likely than not that a tax position will be sustained upon examination based upon the technical merits of the position. If the more-likely-than-not threshold is met, a company must measure the tax position to determine the amount to recognize in the financial statements. Based upon our review and evaluation, during the years ended August 31, 2012, 2011 and 2010, we concluded the Company had no unrecognized tax benefit which would affect its effective tax rate if recognized.

We classify any interest and penalties arising from the underpayment of income taxes in our statements of comprehensive loss in other income (expense). As of August 31, 2012 and 2011, we had no accrued interest or penalties related to uncertain tax positions.

We file income tax returns in the U.S. federal jurisdiction and various state jurisdictions. U.S. federal income tax returns from the year ended August 31, 2006 through the year ended August 31, 2012 are subject to examination.

Note 10: Stock-Based Compensation

Our Third Amended and Restated 1998 Stock Incentive Plan (the “Plan”) authorizes the granting of incentive stock options to certain key employees and non-employees who provide services to the Company. The Plan, as amended, provides for the granting of options for an aggregate of 6,337,300 shares. The options vest subject to management’s discretion.

Our Fourth Amended and Restated 1998 Directors Stock Plan (the “Director Plan”) provides an annual retainer of \$60,000 to each non-employee director with the exception of the Audit Committee Chairman who is to receive \$65,000. The cash portion of the compensation of \$30,000 (\$35,000 for the Audit Committee Chairman) is paid 50% twice each year, with \$30,000 of compensation paid in common stock of the Company once each year. Prior to February 4, 2009, the annual compensation consisted of \$15,000 cash (\$20,000 for the Audit Committee Chairman) paid 50% twice each year, with \$15,000 in common stock of the Company. Prior to February 4, 2009, the Director Plan also granted each non-employee outside director 30,000 options each year at an exercise price equal to the fair market value of the common stock at the date the option was granted. The options vest according to a set schedule over a five-year period and expire upon the director’s termination, or after ten years from the date of grant. The Director Plan, as amended, allows for an aggregate of 1,750,000 shares to be granted.

Stock-based compensation cost is measured at the grant date based on the estimated value of the award granted, using the Black-Scholes option pricing model, and recognized over the period in which the award vests. For stock awards no longer expected to vest, any previously recognized stock compensation expense is reversed in the period of termination.

The stock-based compensation expense has been allocated to the various categories of operating costs and expenses in a manner similar to the allocation of payroll expense as follows for the years ended August 31:

	<u>2012</u>	<u>2011</u>	<u>2010</u>
Cost of sales	\$ 64,090	\$ 38,273	\$ 40,617
Research and development	202,453	185,406	174,026
Selling, general and administrative	<u>939,855</u>	<u>840,860</u>	<u>775,818</u>
Total	<u>\$ 1,206,398</u>	<u>\$ 1,064,539</u>	<u>\$ 990,461</u>

During the year ended August 31, 2012, we granted 408,000 stock options to employees with exercise prices ranging from \$1.47 to \$2.58 per share and with one third vesting each year for the next three years. The weighted average estimated grant-date fair value per share of these stock options was \$1.28, and our assumptions used in the Black-Scholes valuation model to determine this estimated fair value are shown below:

Expected volatility	69.81%
Expected dividends	0.00%
Expected term	7.30 Years
Risk-free interest rate	1.34%

The expected volatility rate was estimated based on the historical volatility of our common stock. The expected term was estimated based on historical experience of stock option exercise and forfeitures. The risk-free interest rate is the rate provided by the U.S. Treasury for Daily Treasury Yield Curve Rates commonly referred to as “Constant Maturity Treasury” rate in effect at the time of grant with a remaining term equal to the expected option term.

Unrecognized stock-based compensation expense expected to be recognized over the estimated weighted-average amortization period of 1.24 years is approximately \$1,864,000 as of August 31, 2012.

A summary of the time-based stock option awards as of August 31, 2012, and changes during the year then ended, is as follows:

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contract Term (Years)	Aggregate Intrinsic Value
Outstanding as of September 1, 2011	2,852,239	\$ 3.74		
Granted	408,000	2.19		
Exercised	—	—		\$ —
Forfeited or expired	(78,000)	4.02		
Outstanding as of August 31, 2012	<u>3,182,239</u>	<u>\$ 3.54</u>	<u>6.72</u>	<u>\$ 124,222</u>
Exercisable as of August 31, 2012	<u>1,684,777</u>	<u>\$ 3.76</u>	<u>5.53</u>	<u>\$ 113,753</u>

The aggregate intrinsic value in the preceding table represents the total pretax intrinsic value, based on the Company's closing stock price of \$1.73 as of August 31, 2012, which would have been received by the holders of in-the-money options had the option holders exercised their options as of that date.

Note 11: Grant Awards

In November 2010, we were awarded two separate U.S. government grants under the Qualifying Therapeutic Discovery Project ("QTDP") Program. We submitted grant applications for our BSD-2000 Hyperthermia System and our MicroThermX[®] Microwave Ablation System, and both applications were approved for the maximum award for a single program of \$244,479, or a total of \$488,958. In order to qualify for the QTDP grants, the project must have the potential to develop new treatments that address "unmet medical needs" or chronic and acute diseases; reduce long-term health care costs; represent a significant advance in finding a cure for cancer; advance U.S. competitiveness in the fields of life, biological, and medical sciences; or create or sustain well-paying jobs, either directly or indirectly. The QTDP was created by Congress in March 2010 as part of the Patient Protection and Affordable Care Act and provides a tax credit or a grant equal to 50% of eligible costs and expenses for tax years 2009 and 2010.

Note 12: Supplemental Cash Flow Information

During the years ended August 31, 2012, 2011 and 2010, we paid no amounts for interest. During the years ended August 31, 2012, 2011 and 2010 we paid \$988, \$800 and \$0 for income taxes.

During the years ended August 31, 2012 and 2010 we had no non-cash financing and investing activities. During the year ended August 31, 2011, non-cash financing and investing activities consisted of an increase to common stock and a decrease to additional paid-in capital of \$7.

Note 14: Commitments and Contingencies

We entered into an employment agreement with our Chief Technical Officer ("CTO") dated November 2, 1988. The agreement sets the CTO's annual base salary for each year until October 1, 1993 and provides that after October 1, 1993 the CTO's annual base salary will be based upon a reasonable mutual agreement between the CTO and the Company. The CTO's annual base salary was raised to \$210,000 effective September 1, 2006. In the event of termination of the CTO's employment with the Company without cause (as defined in the agreement) or the CTO's resignation for good reason (as defined in the agreement), the agreement provides that the CTO 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 the CTO's average annual salary for the 12-month period immediately prior to the termination. The agreement also requires us to pay the CTO for any accrued, unused vacation at the time of termination. We are also obligated to pay the CTO \$1,000 (or the equivalent value in stock options) for each newly issued patent obtained by us as a result of the CTO's efforts (the CTO receives only \$500 if multiple inventors are involved). The CTO'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 the CTO in writing and by continuing the severance payments for the additional years during which the non-competition period is extended.

We have an exclusive worldwide license for a unique temperature probe. The license has no determinable life. We pay royalties based upon sales of this probe. Accrued royalties were \$1,015 and \$700 as of August 31, 2012 and 2011, respectively. Royalty expense amounted to \$2,275, \$3,535 and \$3,360 for the years ended August 31, 2012, 2011 and 2010, respectively.

Note 15: Recent Accounting Pronouncements

No new accounting pronouncements were issued during the year ended August 31, 2012 and through the date of filing this report that we believe are applicable or would have a material impact on our financial statements.

Note 16: Subsequent Events

Shelf Registration Statement – On September 28, 2012, we filed a universal shelf registration statement with the SEC for the issuance of common stock, preferred stock, warrants, senior debt, subordinated debt and units up to an aggregate amount of \$50.0 million. We may periodically offer one or more of these securities in amounts, prices and on terms to be announced when and if the securities are offered. On October 11, 2012, the universal shelf registration statement was declared effective by the SEC.



BSD MEDICAL

*Delivering Thermal Energy
to Medicine*

2188 West 2200 South

Salt Lake City, Utah, USA 84119

Tel: 801.972.5555 | Fax: 801.972.5930

www.BSDMedical.com

NASDAQ: BSDM