BSD MEDICAL CORP Form S-8 May 15, 2007

Registration No. 333-_

As filed with the Securities and Exchange Commission on May 14, 2007

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

FORM S-8
REGISTRATION STATEMENT
Under
THE SECURITIES ACT OF 1933

BSD MEDICAL CORPORATION (Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 75-1590407 (I.R.S. Employer Identification No.)

2188 West 2200 South Salt Lake City, UT, 84119

(Address, including zip code, of registrant's principal executive offices)

BSD Medical Corporation 1998 Stock Incentive Plan (Full title of the plan)

Hyrum A. Mead
President
BSD Medical Corporation
2188 West 2200 South
Salt Lake City, Utah 84119
(801) 972-5555

(Name, address and telephone number, including area code, of agent for service of process)

Copy to:

Nolan S. Taylor, Esq.
Dorsey & Whitney LLP
170 South Main Street, Suite 900
Salt Lake City, Utah 84101
(801) 933-7360

CALCULATION OF REGISTRATION FEE

Proposed

Proposed

| Title of securities to be registered | Amount to be registered | maximum offering price per share | maximum aggregate offering price | Amount of registration fee |
|---|-------------------------------|---|---|----------------------------|
| Common Stock, par value \$0.001 per share | 2,474,719(1) | \$7.10(2) | \$7,382,401(2) | \$226.64 |

- (1) Represents 2,474,719 shares of Common Stock previously issued or reserved for future issuance under the BSD Medical Corporation 1998 Stock Incentive Plan. Pursuant to Rule 416(a), this Registration Statement also covers an indeterminate number of additional shares of Common Stock that may be offered and issued to prevent dilution resulting from stock splits, stock dividends or similar transactions. In addition, this Registration Statement covers the resale by certain Selling Stockholders named in the Prospectus included in and filed with this Form S-8 of certain of the shares of Common Stock subject to this Registration Statement, for which no additional registration fee is required pursuant to Rule 457(h)(3).
- (2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(h)(1) and (c). The proposed maximum aggregate offering price has been calculated as follows: options to purchase 1,781,137 shares have been granted with an approximate weighted average exercise price of \$1.38; the exercise price or purchase price with respect to 693,582 shares that are being registered herein but remain unisssued is based upon the average of the high and low prices of the Common Stock as reported on the American Stock Exchange on May 14, 2007.

Explanatory Note

BSD Medical Corporation has prepared this Registration Statement in accordance with the requirements of Form S-8 under the Securities Act of 1933, as amended (the "Securities Act") to register shares of its common stock, par value \$0.001 per share (the "Common Stock") that will be issued upon the exercise of options granted under the BSD Medical Corporation 1998 Stock Incentive Plan (the "1998 Plan"). This Registration Statement also includes a reoffer prospectus prepared in accordance with General Instruction C of Form S-8 and in accordance with the requirements of Part I of Form S-3. The reoffer prospectus may be used by the selling stockholders named therein (the "Selling Stockholders") for reoffers and resales on a continuous or delayed basis in the future of up to an aggregate of 966,960 shares of Common Stock that have been issued or are issuable upon exercise of options issued pursuant to the 1998 Plan, that are "restricted securities" or "control securities" within the meaning of Form S-8, and that are held by the Selling Stockholders.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

Item 1. Plan Information.

Information required by Item 1 to be contained in the Section $10\,(a)$ prospectus is omitted from this Registration Statement in accordance with Rule 428 adopted under the Securities Act of 1933, as amended (the "Securities Act"), and the Note to Part I of Form S-8.

Item 2. Registrant Information and Employee Plan Annual Information.

Information required by Item 2 to be contained in the Section 10(a) prospectus is omitted from this Registration Statement in accordance with Rule 428 adopted under the Securities Act and the Note to Part I of Form S-8.

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REOFFER PROSPECTUS

BSD MEDICAL CORPORATION

966,960 Shares of Common Stock, Par Value \$0.001 Per Share

This prospectus is being used in connection with the offering from time to time by the Selling Stockholders, or by their pledgees, donees, transferees or other successors in interest, of up to an aggregate of 966,960 shares of the Common Stock of BSD Medical Corporation previously issued, or that will be issued, upon the exercise of stock options awarded to the Selling Stockholders in connection with their employment by BSD Medical Corporation or their service as a director of BSD Medical Corporation. We will not receive any of the proceeds from any such offering.

The prices at which the Selling Stockholders may sell the shares will be determined by the prevailing market price for the shares at the time of sale or through negotiated transactions with third parties.

This prospectus has been prepared under the Securities Act of 1933, as amended (the "Securities Act") to allow for future sales by the Selling Stockholders without restriction. The Selling Stockholders may sell our Common Stock through ordinary broker transactions, directly to market makers of our shares, directly to third parties, through underwriters in public offerings, or through other means described in the section entitled "Plan of Distribution" beginning on page 9.

Our Common Stock is listed on the American Stock Exchange under the ticker symbol "BSM." The last reported sale price for our Common Stock on May 14, 2007 was \$7.05 per share.

You should carefully consider the risk factors beginning on page 2 of this prospectus before purchasing any of the Common Stock offered by this prospectus.

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

The date of this prospectus is May 14, 2007.

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

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

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PROSPECTUS SUMMARY

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

Company Overview

We develop, manufacture, market and service medical systems that deliver precision-focused radio frequency (RF) or microwave energy into diseased sites of the body, heating them to specified temperatures as required by a

variety of medical therapies. Our business objectives are to commercialize our products developed for the treatment of cancer and to further expand our developments to treat other diseases and medical conditions. Our product line for cancer therapy has been created to offer hospitals and clinics a complete solution for thermal treatment for cancer provided through 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 much of the technology that has successfully created a substantial new medical industry using that therapy. In accordance with our strategic plan, we subsequently sold our interest in TherMatrx, Inc., the company established to commercialize our technology to treat enlarged prostate symptoms, to provide substantial funding that we can utilize for commercializing our systems used in the treatment of cancer and in achieving other business objectives.

Our primary mission is to develop the full spectrum of medical uses for our special competence in precision-focused RF/microwave systems, and to broadly apply the utilization of our technology to treat cancer and benign diseases and conditions.

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

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

On July 15, 2004, TherMatrx, Inc. was sold to American Medical Systems Holdings, Inc. (AMS). Our part of the total proceeds from this sale was

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approximately 25%. A portion of the payout from the sale was based on contingency payments. By the close of fiscal 2006, we had concluded the receipt of contingency payments from the TherMatrx sale; the payout to us, including contingency payments, being approximately \$33.5 million.

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

use of deep hyperthermia through clinical trials. We believe that our BSD-2000 system has emerged from this development effort as the world's most advanced system for hyperthermia therapy. However, hyperthermia therapy has not been widely accepted as a cancer therapy and reimbursement for hyperthermia therapy needs to increase in order for the therapy to be viable for hospitals and treatment centers.

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

The Offering

The Selling Stockholders identified in this prospectus are selling up to 966,960 shares of our Common Stock previously issued, or that will be issued, upon the exercise of stock options granted under the BSD Medical Corporation 1998 Stock Incentive Plan (the "1998 Plan") and that are held by the Selling Stockholders. We will not receive any proceeds from the sale of the shares by the Selling Stockholders.

RISK FACTORS

Our future operating results are highly uncertain. Before deciding to invest in BSD Medical or to maintain or increase your investment, you should carefully consider the risks described below, in addition to the other information contained in this Prospectus. If any of these risks actually occur, our business, financial condition or results of operations could be seriously harmed. In that event, the market price for our common stock could decline and you may lose all or part of your investment.

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

Since our inception in 1978, our expenses have exceeded our revenue, resulting in continuing losses and an accumulated deficit of \$1,076,414 at February 28, 2007. For the six months then ended we recorded a net loss of \$1,574,456. In fiscal 2006, we recorded a net profit of \$9,249,496 which eliminated the accumulated deficit and resulted in positive retained earnings of \$498,042 as of August 31, 2006.

Our net profit in fiscal year 2006 was primarily due to the sale of our ownership in TherMatrx, to American Medical Systems Holdings, Inc., or AMS. Substantially all revenues from this sale have now been received with no

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significant future revenues expected. We may continue to incur operating losses in the future as we continue to incur costs to develop our products, protect our intellectual property and expand our sales and marketing activities. To become profitable we will need to increase significantly the revenues we receive from sales of our hyperthermia therapy products to sustain and increase our profitability on a quarterly or annual basis. We have been unable to do this in the past and we may be unable to do so in the future, and therefore may never achieve profitability.

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

To date, hyperthermia therapy has not gained wide acceptance by cancer-treating physicians. We believe this is due in part to the lingering impression created by the inability of early hyperthermia therapy technologies

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

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

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

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

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

Increasing sales of our hyperthermia systems depends on our ability to successfully expand our sales distribution channels; we have had failures with

the productivity of new channels of distribution in the past. Expanding our channels of distribution will also significantly increase our sales expenses, which could negatively impact our financial performance.

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

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

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

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

Our research and development efforts, pre-clinical tests and clinical trials, and the manufacturing, marketing, distribution and labeling of our products are subject to extensive regulation by the FDA and comparable

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international agencies. The process of obtaining FDA and other required regulatory approvals is lengthy and expensive and our financial resources are limited.

We have not yet received pre-market approval for our BSD-2000 systems. Obtaining these pre-market approvals from the FDA is necessary for us to commercially market these 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.

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

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

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

A product liability settlement could exceed our ability to pay.

The manufacturing and marketing of medical devices involves an inherent risk of product liability. Because our products are intended to be used in hospitals on patients who may be physiologically unstable and severely ill, we are exposed to potential product liability claims. We presently carry product liability insurance with coverage limits of \$1 million. Our product liability insurance does not cover intended injury, injury or damage resulting from the intoxication of any person, payment of workers' compensation benefits, injury of our own employee, injury or damage due to war, damage to property that we own,

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

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

Our success will be largely dependent upon the efforts of Paul F. Turner, our Chairman of the Board, Senior Vice President, and Chief Technology Officer, Hyrum A. Mead, our President, and Dixie T. Sells, our Vice President of Regulatory Affairs, and other key employees. We do not maintain key-person insurance on any of these employees. Our future success also will depend in large part upon our ability to identify, attract and retain other highly

qualified managerial, technical and sales and marketing personnel. Competition for these individuals is intense. The loss of the services of any of our key personnel, the inability to identify, attract or retain qualified personnel in the future or delays in hiring qualified personnel could make it more difficult for us to manage our business and meet key objectives such as the sale of our products and the introduction of new products.

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

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

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

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

Our directors and executive officers own approximately 46% of our outstanding voting power. Accordingly, these stockholders, individually and as a group, may be able to influence the outcome of stockholder votes involving the election of directors, the adoption or amendment of provisions in our certificate of incorporation and bylaws and the approval of certain mergers or other similar transactions, such as a sale of substantially all of our assets. Such control by existing stockholders could have the effect of delaying, deferring or preventing a change in control of our company.

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.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of a registration statement that we filed with the SEC. The registration statement, including the attached exhibits, contains additional relevant information about us. The rules and regulations of the SEC allow us to omit some of the information included in the registration statement from this prospectus. In addition, we file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission. You may read and copy any document we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our SEC filings are also available to the public at the SEC's web site at http://www.sec.gov. In addition, we maintain an Internet website at www.bsdmc.com. We do not intend that our website be a part of this prospectus.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The following documents of the Company heretofore filed with the Commission are hereby incorporated in this Prospectus by reference:

- (1) Annual Report on Form 10-KSB for the year ended August 31, 2006, filed November 29, 2006;
- (2) Quarterly Report on Form 10-Q for the quarter ended February 28, 2007,
- (3) Quarterly Report on Form 10-Q for the quarter ended November 30, 2006;
- (4) Current Report on Form 8-K filed on March 7, 2007; and

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(5) The description of our Common Stock contained in the registration statement on Form 8-A, SEC File Number 333-112240, filed June 8, 2005, together with any amendment or report filed for the purpose of updating such description.

All reports and other documents subsequently filed by the Company pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the filing of a post-effective amendment to the registration statement of which this Prospectus forms a part which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold shall be deemed to be incorporated by reference in this Prospectus and to be a part hereof from their respective dates of filing.

Any statement contained herein or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Prospectus to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such earlier statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Prospectus.

The information relating to the Company contained in this Prospectus should be read together with the information in the documents incorporated by reference.

The Company hereby undertakes to provide without charge to each person to whom a copy of this Prospectus has been delivered, upon the written or oral request of any such person, a copy of any and all of the documents referred to

above which have been or may be incorporated in this Prospectus by reference, other than exhibits to such documents which are not specifically incorporated by reference into such documents. Investors should direct requests to Dennis Bradley, BSD Medical Corporation, 2188 West 2200 South, Salt Lake City, Utah 84119, telephone: (801) 972-5555.

USE OF PROCEEDS

The shares of Common Stock offered by this prospectus will be sold by the Selling Stockholders, and the Selling Stockholders will receive all of the proceeds from sales of such shares. We will not receive any proceeds from the sale of the shares offered by this prospectus.

SELLING STOCKHOLDERS

This prospectus relates to certain shares of Common Stock that have been issued, or are issuable upon exercise of stock options granted pursuant to the 1998 Plan, to the Selling Stockholders, and which may be offered for sale from time to time. The Selling Stockholders may resell all, a portion, or none of the shares of Common Stock.

The following table sets forth the name and position of the Selling Stockholders, and the information with respect to the number of shares of Common Stock owned, or which may be owned, by the Selling Stockholders and as adjusted to give effect to the sale of the shares that may be offered pursuant to this

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prospectus. Because the Selling Stockholders may from time to time offer all or some of the shares pursuant to this offering, we cannot estimate the number of shares that will be held by the Selling Stockholders after completion of the offering. However, for purposes of the table below, we have assumed that, after the completion of the offering, none of the shares covered by this prospectus as of the date of this prospectus will be held by the Selling Stockholders.

| Selling Stockholders | Position | Number of Shares of Common Stock Beneficially Owned Prior to the Offering | Number of Shares of Common Stock Being Offered in the Offering | Number of Shares of Common Stock Beneficially Owned After the Offering | Percentage of Outstanding Shares of Common Stock Owned After the Offering |
|-------------------------|--|--|--|---|---|
| Paul F. Turner | Chairman and Senior Vice President | 2,172,554 | 287,212 | 1,885,342 | 8.9% |
| Hyrum A. Mead | President | 784,748 | 679,748 | 105,000 | * |

(*) Less than 1%

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

increase in the number of our outstanding shares of common stock.

As of May 14, 2007, there were 21,146,689 shares of our Common Stock issued and outstanding.

PLAN OF DISTRIBUTION

The purpose of the Prospectus is to permit the Selling Stockholders, if they desire, to offer for sale and sell the Shares they acquired (or, in some cases, may acquire) pursuant to the 1998 Plan at such times and at such places as the Selling Stockholders choose.

The decision to exercise options for Shares, or to sell any Shares, is within the discretion of the holders thereof, subject generally to the Company's policies affecting the timing and manner of sale of Common Stock by certain individuals. There can be no assurance that any of the options will be exercised or any Shares will be sold by the Selling Stockholders.

The Selling Stockholders have advised the Company that sales of Shares may be effected from time to time in one or more types of transactions (which may include block transactions) on the American Stock Exchange, in the over-the-counter market, in negotiated transactions, or a combination of such methods of sale, at market prices prevailing at the time of sale, at fixed prices (which may be changed) or at negotiated prices. Such transactions may or may not involve brokers or dealers. The Selling Stockholders have advised the Company that they have not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of their Shares, nor is there an underwriter or coordinating broker acting in connection with the proposed sale of the Shares by the Selling Stockholders.

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The Selling Stockholders may effect such transactions by selling Shares directly to purchasers or to or through broker-dealers, which may act as agents or principals. Such broker-dealers may receive compensation in the form of discounts, concessions, or commissions from the Selling Stockholders and/or the purchasers of Shares for whom such broker-dealers may act as agents or to whom they sell as principal, or both (which compensation as to a particular broker-dealer might be in excess of customary commissions).

The Selling Stockholders and any broker-dealers that act in connection with the sale of Shares might be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act, and any commissions received by such broker-dealers and any profit on the resale of the Shares sold by them while acting as principals might be deemed to be underwriting discounts or commissions under the Securities Act. The Selling Stockholders may agree to indemnify any agent, dealer or broker-dealer that participates in transactions involving sales of the Shares against certain liabilities, including liabilities arising under the Securities Act.

Because the Selling Stockholders may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act, the Selling Stockholders will be subject to the prospectus delivery requirements of the Securities Act, which may include delivery through the facilities of the American Stock Exchange pursuant to Rule 153 under the Securities Act.

The Company has informed the Selling Stockholders that the anti-manipulative provisions of Regulation M promulgated under the Securities Exchange Act of 1934, as amended, may apply to their sales in the market.

The Selling Stockholders also may resell all or a portion of the Shares in open market transactions in reliance upon Rule 144 under the Securities Act, provided they meet the criteria and conform to the requirements of such Rule.

LEGAL MATTERS

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

EXPERTS

Tanner LC, independent registered public accountants, have audited our financial statements incorporated by reference in this prospectus for the year ended August 31, 2006, as set forth in their report which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Tanner LC's report, given on their authority as experts in accounting and auditing.

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PART II

INFORMATION REQUIRED IN REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

We incorporate information into this Registration Statement by reference, which means that we disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus, except for any such information superseded by information contained in later-filed documents or directly in this prospectus. This prospectus incorporates by reference the documents set forth below that we have previously filed with the SEC. These documents contain important information about us and our financial condition:

- (1) Annual Report on Form 10-KSB for the year ended August 31, 2006, filed November 29, 2006;
- (2) Quarterly Report on Form 10-Q for the quarter ended February 28, 2007,
- (3) Quarterly Report on Form 10-Q for the quarter ended November 30, 2006:
- (4) Current Report on Form 8-K filed on March 7, 2007; and
- (5) The description of our Common Stock contained in the registration statement on Form 8-A, SEC File Number 333-112240, filed June 8, 2005, together with any amendment or report filed for the purpose of updating such description.

We also incorporate all documents subsequently filed by Company pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in the registration statement and to be part thereof from the date of filing of such documents.

We will provide at no cost to each person to whom this prospectus is delivered, including any beneficial owner, upon written or oral request, a copy of any or all of the information that has been incorporated by reference in this prospectus but not delivered with this prospectus. Investors should direct requests to Dennis Bradley, BSD Medical Corporation, 2188 West 2200 South, Salt Lake City, Utah 84119, telephone: (801) 972-5555.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

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Item 6. Indemnification of Directors and Officers.

Indemnification

Section 145 of the Delaware General Corporation Law grants the Company the power to indemnify its officers and directors, under certain circumstances and subject to certain conditions and limitations as stated therein, against all expenses and liabilities incurred by or imposed upon them as a result of suits brought against them as such officers and directors if they act in good faith and in a manner they reasonably believe to be in or not opposed to the best interests of the Company, and, with respect to any criminal action or proceeding, have no reasonable cause to believe their conduct was unlawful.

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

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

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

Liability Insurance

Section 145 of the Delaware General Corporation Law also permits a Delaware corporation to purchase and maintain insurance on behalf of its directors and officers. The Company's bylaws permit the registrant to purchase such insurance on behalf of its directors and officers. The Company maintains a policy of liability insurance for its officers and directors.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

| Exhibit Number | Description |
|-------------------|--|
| 4.1 | Amended and Restated Certificate of Incorporation. Incorporated by reference to Exhibit 3.1 of the BSD Medical Corporation Form 10-KSB filed December 1, 2003 (File Number 000-10783). |
| 4.2 | By-Laws. Incorporated by reference to Exhibit 3.2 of the BSD Medical Corporation Registration Statement on Form S-1, filed October 16, 1986 (File Number 033-09534). |
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| 4.3 | 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 (File Number 033-09534). |
| 5.1 | Opinion of Dorsey & Whitney LLP. |
| 23.1 | Consent of Tanner LC, Independent Registered Public Accounting Firm. |
| 23.2 | Consent of Dorsey & Whitney LLP (contained in Exhibit 5.1 to this Registration Statement). 24.1 Power of Attorney (included with the signatures in Part II of this registration statement). |

Item 9. Undertakings.

- (a) The undersigned registrant hereby undertakes:
- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended (the "Securities Act");
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement.

 Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the

Registration Statement or any material change to such information in the Registration Statement;

Provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to

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be a new Registration Statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference in the Registration Statement shall be deemed to be a new Registration Statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Salt Lake City, State of Utah, on May 14, 2007.

BSD MEDICAL CORPORATION

By /s/ Hyrum A. Mead

Name: Hyrum A. Mead

Title: President and Chief Executive Officer

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Hyrum A. Mead and Paul F. Turner, his or her true and lawful attorney-in-fact and agent with full powers of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities indicated on May 14, 2007.

| /s/ Paul F. Turner | Chairman of the Board, Senior Vice President |
|--------------------------|--|
| Paul F. Turner | and Chief Technology Officer |
| /s/ Hyrum A. Mead | President and Chief Executive Officer |
| Hyrum A. Mead | (principal executive officer) and Director |
| /s/ Dennis P. Gauger | Chief Financial Officer (principal financial and accounting officer) |
| Dennis P. Gauger | and accounting officer/ |
| /s/ Gerhard W. Sennewald | Director |
| Gerhard W. Sennewald | |
| /s/ Michael Nobel | Director |
| Michael Nobel | |
| /s/ Douglas P. Boyd | Director |
| Douglas P. Boyd | |
| /s/ Steven G. Stewart | Director |
| Steven G. Stewart | |

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Exhibit Index to Form S-8

BSD Medical Corporation

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