AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON JUNE 9, 2000
REGISTRATION NO. 333-94379

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SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

PRE-EFFECTIVE AMENDMENT NO. 1
TO
FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

BOSTON BIOMEDICA, INC.
(Exact Name of Registrant as Specified in Its Charter)

MASSACHUSETTS	04-2652826
(STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)	(IRS EMPLOYER IDENTIFICATION NUMBER)

375 WEST STREET
WEST BRIDGEWATER, MASSACHUSETTS 02379
(508) 580-1900
(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

RICHARD T. SCHUMACHER
BOSTON BIOMEDICA, INC.
375 WEST STREET
WEST BRIDGEWATER, MA 02379
(508) 580-1900
(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

COPIES TO:
STEVEN R. LONDON, ESQUIRE
BROWN, RUDNICK, FREED & GESMER
ONE FINANCIAL CENTER
BOSTON, MASSACHUSETTS 02111
TEL: (617) 856-8200
FAX: (617) 856-8201

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Registration Statement.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. [ ]

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. [X]

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. [ ]

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

PROSPECTUS (SUBJECT TO COMPLETION)

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. WE HAVE FILED A REGISTRATION STATEMENT RELATING TO THE COMMON STOCK WITH THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION. WE MAY NOT SELL THE COMMON STOCK UNTIL THE SEC DECLARES THAT THE REGISTRATION STATEMENT IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THE COMMON STOCK AND IT IS NOT SOLICITING AN OFFER TO BUY THE COMMON STOCK IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

BOSTON BIOMEDICA, INC.

Up to 633,306 Shares of Common Stock

The shareholders named on page 13 may offer and sell up to 633,306 shares of our common stock under this prospectus. The selling shareholders may offer the common stock through public or private transactions, at prevailing market prices, or at privately negotiated prices. We will not receive any proceeds from the sale of our common stock by the selling shareholders. See "Plan of Distribution."

Our common stock is traded on the Nasdaq National Market under the symbol "BBII". On June 8, 2000, the last reported sale price of our common stock was $4.3125 per share.

AN INVESTMENT IN THE COMMON STOCK OFFERED UNDER THIS PROSPECTUS INVOLVES A HIGH DEGREE OF RISK. SEE "RISK FACTORS" BEGINNING ON PAGE 4.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is _____, 2000

TABLE OF CONTENTS

SUMMARY

THIS SUMMARY BRIEFLY DESCRIBES OUR BUSINESS AND THE PROPOSED SALE OF SHARES OF OUR COMMON STOCK.

ABOUT BOSTON BIOMEDICA

We are an infectious disease management company providing products and services for the detection and treatment of infectious diseases such as AIDS, lyme disease, and viral hepatitis. We currently operate four business units:

(1) BBI Diagnostics, a manufacturer and seller of quality control and diagnostic products that increase the accuracy of diagnostic tests that are performed IN VITRO, in a test tube or other laboratory equipment;

(2) BBI Clinical Laboratories, a leading infectious disease testing laboratory that specializes in nucleic acid based testing, tick borne diseases and blood bank testing;

(3) BBI Biotech Research Laboratories, our research and development arm, which provides research and development support for our other business units as well as contract research and repository services for other parties; and,

(4) BBI Source Scientific, a manufacturer and seller of laboratory and medical instruments.

In addition, we are conducting research in pressure cycling technology and drug discovery, with the goal of introducing new solutions for improving blood plasma safety, specimen preparation in nucleic acid testing and treatment of infectious diseases.

We were The Company was organized in Massachusetts in 1978 and commenced significant operations in 1986. Our principal executive offices are located at 375 West Street, West Bridgewater, Massachusetts 02379. Our telephone number is (508) 580-1900.

THE OFFERING

The selling shareholders named on page 13 may offer and sell up to 633,306 shares of our common stock under this prospectus. We will not receive any proceeds from those sales or transfers. The 633,306 shares of our common stock that we are registering under this prospectus include shares that may be issued to selling shareholders upon the conversion of outstanding stock purchase warrants.

RISK FACTORS

BEFORE YOU BUY SHARES OF OUR COMMON STOCK, YOU SHOULD BE AWARE THAT THERE ARE VARIOUS RISKS ASSOCIATED WITH THAT PURCHASE, INCLUDING THOSE DESCRIBED BELOW. YOU SHOULD CONSIDER CAREFULLY THESE RISK FACTORS, TOGETHER WITH ALL OF THE OTHER INFORMATION IN THIS PROSPECTUS AND THE DOCUMENTS WE HAVE INCORPORATED BY REFERENCE IN THE SECTION "WHERE YOU CAN FIND MORE INFORMATION" BEFORE YOU DECIDE TO PURCHASE SHARES OF OUR COMMON STOCK.

IF WE ARE UNABLE TO OBTAIN A STEADY AND ADEQUATE SUPPLY OF RARE SPECIMENS OF PLASMA AND SERUM, THEN WE MAY BE UNABLE TO PRODUCE SOME OF OUR PRODUCTS.

We manufacture our products from human plasma and serum, which we obtain from nonprofit and commercial blood centers in the United States and from similar sources throughout the world. Some of our products contain unique and rare plasma specimens that we can only obtain from individuals during short time-period windows. As a result, quantities of these specimens are limited, and as we sell our products we must find replacement specimens that are equally unique and rare. Competition to obtain these specimens may increase, which may increase our costs and our ability to obtain these specimens. If we fail to obtain a steady and adequate supply of these unique and rare specimens of plasma and serum, then we may be unable to produce some of our products, which would reduce our future revenues and operating results.

WE RELY ON PURCHASE ORDERS AND CONTRACTS FROM A SMALL NUMBER OF CUSTOMERS FOR A LARGE PORTION OF OUR REVENUES; THE LOSS OF BUSINESS FROM THESE CUSTOMERS MAY MATERIALLY REDUCE OUR REVENUES AND INCOME.

In 1999, our three largest customers together accounted for approximately 16% of our revenues. Purchase orders account for the majority of our orders; none of our customers have contractually committed to make future product purchases from us. The loss of any major customer or a material reduction in a major customer's purchases would materially reduce our revenues and our operating results.

GOVERNMENT REGULATION OF OUR PRODUCTS MAY DELAY OR PREVENT US FROM GETTING OUR PRODUCTS TO MARKET.

The manufacture and distribution of medical devices, including products that we manufacture that are intended for IN VITRO diagnostic use, are subject to extensive government regulation in the United States and in other countries.

In the United States, the Food, Drug, and Cosmetic Act prohibits the marketing of most IN VITRO diagnostic products until the Food and Drug Administration either clears or approves the products through processes that are time-consuming, expensive and uncertain. Some IN VITRO diagnostic products may be exempt from FDA clearance or approval if they have undergone validation studies. As of March 1, 2000, we believe that a total of 31 of our Accurun 1(R) and Accurun(R) products are either exempt from, or have received, FDA clearance. However, the FDA may not agree that some of these products are entitled to an exemption and may adopt a different interpretation of the Food, Drug, and Cosmetic Act or other laws it administers. In addition, we currently label some of our other products "for research use only" because they are not intended for use in diagnostic procedures, and we believe that they are therefore not subject to FDA clearance or approval requirements. It is possible, however, that some purchasers of these products may use them for diagnostic purposes rather than for research, despite our labeling efforts. In any of these circumstances, the FDA could allege that some or all of these products should have been cleared or approved, or otherwise validated prior to marketing, and initiate enforcement action against us. If the FDA initiates enforcement action against us, we will likely expend a large amount of time, money, resources and management attention to resolve the matter. In addition, if we cannot obtain or are delayed in obtaining FDA clearances or approvals for our products, we may encounter delays or be unable to ever sell those products to the end-user market.

We are also subject to strict FDA good manufacturing practice regulations which govern testing, control and documentation practices, and other post-marketing restrictions with respect to the manufacture of our medical device products. Various regulatory authorities monitor our ongoing compliance with good manufacturing practices and other applicable regulatory requirements through periodic inspections. If we fail to comply with good manufacturing practices or other regulatory requirements, we may not be able to obtain future

pre-market clearances or approvals, or the FDA or other regulatory agencies may impose corrective action requirements, including total or partial suspension of product distribution, injunctions, civil penalties, recall or seizure of products, and criminal prosecution, each of which would lead to increased costs and a drain on resources and could reduce our revenues and operating results.

A variety of other statutes and regulations govern the manufacture, process and sale of human therapeutic and diagnostic products in the U.S. and elsewhere. These laws require controlled research, product testing and approval of manufacturing facilities. To comply with these laws, we must provide, for government review and approval, a submission containing manufacturing, preclinical and clinical data in order to obtain marketing approval for our products. Approval is based on whether we are able to establish the safety and efficacy of our product for each use sought.

Our BBI BioSeq and Panacos Pharmaceuticals subsidiaries are currently developing products that will require significant additional development, preclinical and clinical testing and investment of substantial funds prior to their commercialization. As described above, the process of obtaining required approvals can be costly and time-consuming, and we may not be able to successfully develop our future products, prove them to be safe and effective in clinical trials or receive applicable regulatory approvals. If we are not able to receive regulatory approvals for products developed by our BBI BioSeq and Panacos Pharmaceuticals, Inc., subsidiaries, our future revenues and income will be less than we have projected.

Because of the nature of our products, we are also subject to other national, state and local laws and regulations, including those relating to the use and disposal of biohazardous, radioactive and other hazardous substances and wastes. Our failure to comply with these laws and regulations could result in enforcement action or litigation against us, which could lead to increased costs and a drain on resources.

BECAUSE WE CONDUCT OUR BUSINESS WORLDWIDE, FACTORS THAT AFFECT OUR INTERNATIONAL SALES MAY MATERIALLY REDUCE OUR TOTAL REVENUES.

Our international sales accounted for approximately 13.7% of our total revenues for the year ended December 31, 1999. Many factors may affect our international sales, including:

- international regulatory requirements and policy changes, including existing and future restrictions on importation of blood and blood derivatives;
- political and economic changes and disruptions;
- difficulties in international accounts receivable collection;
- difficulties in managing international distributors or representatives;

- governmental currency controls;

- currency exchange rate fluctuations; and
- tariff regulations.

Unanticipated adverse changes in any or all of these factors could result in reduced international sales, which may materially reduce our total revenues and income.

IF WE ARE NOT ABLE TO REACT QUICKLY TO TECHNOLOGICAL CHANGE, WE MAY NOT BE ABLE TO COMPETE EFFECTIVELY.

The infectious disease test kit industry is characterized by rapid and significant technological change, and changes in customer requirements. As a result, our ability to continue to compete effectively in this industry depends upon our ability to enhance our existing products and to develop or acquire, and introduce in a timely manner, new products that take advantage of technological advances and respond to customer requirements. We may not be successful in developing and marketing such new products or enhancements to our existing products on a timely basis, if at all, and such products may not adequately address the changing needs of the marketplace. Furthermore, rapid technological development may result in our products or services becoming obsolete or noncompetitive before we recover our investment in research, development and commercialization.

IF WE ARE UNABLE TO ATTRACT AND RETAIN HIGHLY QUALIFIED SCIENTIFIC AND MANAGEMENT PERSONNEL, THEN WE MAY NOT BE ABLE TO DEVELOP AND REFINE OUR PRODUCTS AND SERVICES.

Our products and services are highly technical and our key personnel must have specialized training or advanced degrees in order to develop and refine these products and services. There are a limited number of qualified scientific and management personnel who possess the technical background necessary to adequately understand and improve our products and services. We compete for these personnel with other companies, academic institutions, government entities and other organizations engaged in research and development of quality control products. If we are unable to attract and retain scientific and management personnel with the appropriate credentials who are capable of developing and refining our products and services, then our products and services could become inaccurate or unreliable, or could fail to obtain FDA approval and we may be unable to deliver new products.

IF OUR BBI SOURCE SCIENTIFIC, INC. AND BBI BIOSEQ, INC. SUBSIDIARIES CONTINUE TO HAVE SUBSTANTIAL OPERATING LOSSES, THEN WE MAY NOT BE ABLE TO REALIZE THE BOOK VALUE OF CERTAIN ASSETS.

As a result of our July 1997 acquisition of Source Scientific, Inc., we recorded approximately $2,200,000 of goodwill. Since this acquisition, our BBI Source Scientific subsidiary has incurred cumulative operating losses of approximately $1,927,000, as of December 31, 1999. That subsidiary may continue to have operating losses and may never become profitable. As of December 31, 1999, the net book value of goodwill from the BBI Source Scientific acquisition was approximately $1,827,000, which represented 7.0% of our total assets on that date. This amount may become impaired to the extent that expected future operating profits fall below the current net book value of this goodwill. If BBI Source Scientific continues to have losses, we may not be able to realize the net book value of this goodwill.

Our BBI BioSeq subsidiary has incurred operating losses of approximately $1,352,000, since its acquisition in September 1998, through December 31, 1999. This subsidiary may not be successful in developing its in-process technology, and its technology may never achieve commercial viability. If we cannot successfully commercially develop its technology, our BBI BioSeq subsidiary may never become profitable.

Because these subsidiaries have incurred significant operating losses we have also reported operating losses in our consolidated results. If we continue to incur losses on a consolidated basis, we may be unable to realize some or all of our deferred and current tax assets; and if we determine that some or all of these tax assets are not realizable we will incur a charge to earnings and write down the asset to its expected realizable value.

IF WE ARE UNABLE TO INCREASE OUR SALES OF QUALITY CONTROL PRODUCTS TO END-USERS OF INFECTIOUS DISEASE KITS, THEN OUR FUTURE REVENUES COULD BE LESS THAN WE HAVE PROJECTED.

Currently, we sell most of our quality control products for infectious disease test kits to test kit manufacturers and regulators. We also sell quality control products to end-users of infectious disease test kits, including hospital laboratories, blood donor testing centers, public health laboratories and commercial laboratories. Currently, we expect to increase both the frequency of use and the number of products used by our current end-user customers. However, end-users of infectious disease test kits may not increase their use of our products. If the end-user market for quality control products does not develop further, or if we are unable to increase our sales to this market, our future revenues could be substantially less than we have projected.

COMPETITION FROM COMPANIES WITH GREATER RESOURCES THAN WE HAVE MAY ERODE OUR MARKET SHARE OR INCREASE OUR COSTS.

We believe that our quality control products are currently the industry standard for the independent assessment of the performance of HIV and hepatitis test kits. We currently have approximately 40% of the market share with respect to sales of quality control products for infectious diseases. We do, however, experience substantial competition and the threat of competition from:

- independent reference laboratories;
- integrated plasma collection and processing centers; and
- manufacturers of quality controls and other diagnostic components.

Many of our competitors have greater financial, manufacturing and marketing resources than we do. The entrance or further emergence of any of these competitors into the quality control market for infectious disease test kits could substantially reduce our market share.

Competition for our customers is intense, and our ability to maintain market share depends principally on our ability to provide products of the quality and in the quantity that our customers require, as well as our ability to provide sophisticated specialty laboratory services at competitive prices. In addition, we derive some of our products from specimens provided by donors with rare antibody characteristics. If competition for blood specimens from these donors increases, our cost of obtaining blood specimens may increase.

IF WE CANNOT PROTECT OUR INTELLECTUAL PROPERTY, WE MAY BE UNABLE TO COMPETE EFFECTIVELY.

Our ability to compete effectively with other companies depends in part on our ability to maintain the proprietary nature of our technologies and products. We rely primarily on a combination of trade secrets and non-disclosure and confidentiality agreements to establish and protect our proprietary rights in our technology and products. In addition, we have obtained five patents that we hold jointly with the University of North Carolina at Chapel Hill relating to compounds, pharmaceutical compositions and therapeutic methods in connection with our drug discovery program at the University of North Carolina at Chapel Hill. We also have 15 patents pending related to the pressure cycling technology that our BBI BioSeq subsidiary is developing. If we have not adequately protected our technology, or if our

competitors misappropriate our intellectual property, we could lose market share and our future revenues and operating income could be significantly less than projected.

INSIDERS CONTROL A SIGNIFICANT PERCENTAGE OF VOTING POWER AND MAY EXERCISE THEIR VOTING POWER IN A MANNER ADVERSE TO OTHER SHAREHOLDERS' INTERESTS.

Our chief executive officer, Richard T. Schumacher, his relatives, and our other existing officers and directors collectively have voting control approximately 35% of the outstanding shares of our common stock. Accordingly, these shareholders, should they choose to act in concert, are in a position to exercise a significant degree of control and to significantly influence shareholder votes on the election of directors, increasing the authorized capital stock, and authorizing mergers and sales of assets. These shareholders may act in a manner that is adverse to your personal interests.

ANTI-TAKEOVER PROVISIONS IN OUR CHARTER AND BY-LAWS MAY DISCOURAGE THIRD PARTIES FROM PURSUING A TAKEOVER.

Our amended and restated articles of organization and restated bylaws contain provisions that may make an acquisition of us more difficult and discourage changes in our management. These provisions could limit the price that investors might be willing to pay in the future for shares of our common stock. These provisions include:

- a classified board of directors;
- advance notice to the board of directors of shareholder proposals and shareholder nominees for the board of directors;
- limitations on the ability of shareholders to remove directors and call shareholders meetings;
- a provision that allows a majority of the directors to fill vacancies on the board of directors; and
- the ability of the board of directors to issue, without further shareholder approval, preferred stock with rights and privileges that could be senior to the common stock.

We are also subject to the Massachusetts General Laws which, subject to certain exceptions, prohibit a Massachusetts corporation from engaging in any of a broad range of business combinations with any "interested shareholder" for a period of three years following the date that shareholder became an interested shareholder. These provisions could discourage a third party from pursuing a takeover at a price considered attractive by many shareholders and could have the effect of preventing or delaying a potential acquirer from acquiring control.

WARNINGS REGARDING FORWARD-LOOKING STATEMENTS

Some of the statements contained in this prospectus under "Summary" and "Risk Factors," and in the documents incorporated by reference, are forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. In essence, forward-looking statements are predictions of future events. Although we would not make forward-looking statements unless we believe we have a reasonable basis for doing so, we cannot guarantee their accuracy, and actual results may differ materially from those we anticipated due to a number of uncertainties, many of which we are not aware. We urge you to consider the risks and uncertainties discussed under "Risk Factors" and in the other documents filed with the SEC that we have referred you to in evaluating our forward-looking statements.

You should also understand that we have no plans to update our forward-looking statements. Our forward-looking statements speak only as of the date of this prospectus, or in the case of forward-looking statements in documents incorporated by reference, as of the date of those documents.

We generally identify forward-looking statements with the words "plan," "expect," "anticipate," "believe," "intend," "estimate," "continue," "will," "may," "should" and similar expressions. Examples of our forward-looking statements may include statements related to:

- our plans, objectives, expectations and intentions;
- the timing, availability, cost of development and functionality of products under development or recently introduced; and
- the anticipated markets for our products and the success of our products in those markets.

USE OF PROCEEDS

The selling shareholders are selling all of the shares covered by this prospectus for their own account. Accordingly, we will not receive any proceeds from the resale of the shares.

We prepared this prospectus to satisfy our obligations to the selling shareholders to register their shares. We will bear the expenses relating to this registration, other than selling discounts and commissions, which will be paid by the selling shareholders.

SELLING SHAREHOLDERS

The selling shareholders named below may offer and sell up to 633,306 shares of our common stock under this prospectus. We will not receive any

proceeds from those sales. The 633,306 shares of our common stock that we are registering under this prospectus include shares that may be issued to selling shareholders upon the conversion of outstanding stock purchase warrants.

Paradigm Group, L.L.C. obtained its shares upon the exercise of stock purchase warrants that it received in connection with its investment in Boston Biomedica. The total purchase price for the warrants was $50,000. We prepared this prospectus to satisfy the registration rights we granted to Paradigm Group in connection with its investment.

David Kavrell, Brian Friedman, Craig Gould, Steven Rothstein and Robert Daskal obtained their shares upon the exercise of stock purchase warrants that they received by transfer from Paradigm Group. These shareholders and Paradigm Group have agreed to pay us a total of $2,225,000, as payment of the aggregate exercise price of their warrants, on the business day after the SEC declares our registration statement relating to these shares effective.

National Securities received stock purchase warrants as a fee for services rendered in connection with Paradigm Group's investment in Boston Biomedica. National Securities may exercise warrants to purchase up to 40,000 shares of our common stock at an exercise price of $4.25 per share and warrants to purchase up to 25,000 shares of our common stock at an exercise price of $8.00 per share in connection with Paradigm Group's exercise of its warrants. In addition, National Securities may exercise warrants to purchase up to 10,000 shares of our common stock at an exercise price of $5.25 per share. National Securities' warrants expire on August 15, 2001.

MdBio, Inc., received 29,153 stock units in connection with its award of $175,000 to Boston Biomedica under a manufacturing incentive program that MdBio instituted. Each stock unit consists of one share of our common stock and a warrant to purchase one additional share of our common stock at an exercise price of $10.00 per share. MdBio's warrants expire on September 29, 2003.

The following table sets forth information regarding the beneficial ownership of our common stock by the selling shareholders as of April 30, 2000 and as adjusted to reflect the sale or transfer by the selling shareholders of the shares of our common stock being registered under this prospectus, including the sale or transfer of shares of our common stock underlying warrants held by selling shareholders. This information is based upon information received from or on behalf of the selling shareholders.

<TABLE>
<CAPTION>

	SHARES BENEFICIALLY OWNED PRIOR TO OFFERING	NUMBER OF SHARES BEING OFFERED	SHARES BENEFICIALLY OWNED AFTER OFFERING

NAME OF SECURITYHOLDER	NUMBER	PERCENT	NUMBER	NUMBER	PERCENT
<S>	<C>	<C>	<C>	<C>	<C>
Paradigm Group, L.L.C.	425,000	7.76%	425,000	0	*
David Kavrell	15,000	*	15,000	0	*
Brian Friedman	10,000	*	10,000	0	*
Craig Gould	20,000	*	20,000	0	*
Steven Rothstein	20,000	*	20,000	0	*
Robert Daskal	10,000	*	10,000	0	*
National Securities	75,000 (1)	1.37%	75,000	0	*
MdBio, Inc.	58,306 (2)	1.06%	58,306	0	*

</TABLE>

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* Less than 1%.

(1) Consists of warrants to purchase an aggregate of 75,000 shares of our common stock.

(2) Consists of stock units comprised of 29,153 shares of our common stock and warrants to purchase an additional 29,153 shares of our common stock.

PLAN OF DISTRIBUTION

The selling shareholders and their pledgees, donees, transferees and other non-sale transferees may offer their shares at various times in one or more of the following transactions:

- in the Nasdaq National Market;
- in the over-the-counter market; or
- in privately negotiated transactions

at prevailing market prices at the time of sale, at prices related to those prevailing market prices, at negotiated prices or at fixed prices.

The selling shareholders may also sell the shares under Rule 144 instead of under this prospectus, if Rule 144 is available for those sales.

The transactions in the shares covered by this prospectus may be carried out by one or more of the following methods:

- ordinary brokerage transactions and transactions in which the broker solicits purchasers;

- purchases by a broker or dealer as principal, and the resale by that broker or dealer for its account as part of the distribution under this prospectus, including resale to another broker or dealer;

- block trades in which the broker or dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal in order to facilitate the transaction; or

- negotiated transactions between selling shareholders and purchasers, with or without a broker or dealer.

The selling shareholders and any broker-dealers or other persons acting on behalf of parties that participate in the distribution of the shares may be deemed to be underwriters. Any commissions or profits they receive on the resale of the shares may be deemed to be underwriting discounts and commissions under the Securities Act.

As of the date of this prospectus, we are not aware of any agreement, arrangement or understanding between any broker or dealer and any of the selling shareholders with respect to the offer or sale of the shares under this prospectus.

We have advised the selling shareholders that, during the time each is engaged in distributing shares covered by this prospectus, each must comply with the requirements of the Securities Act and the Exchange Act, including Rule 10b-5 and Regulation M. Under those rules and regulations, they:

- may not engage in any stabilization activity in connection with our securities;

- must furnish each broker that offers common stock covered by this prospectus with the number of copies of this prospectus that are required by each broker; and

- may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities other than as permitted under the Exchange Act.

Under the terms of each of the warrants, we have agreed to indemnify and hold harmless each selling shareholder against liabilities under the Securities Act, which may be based upon, among other things, any untrue statement or alleged untrue statement of a material fact or any omission or alleged omission of a material fact, unless made or omitted in reliance upon written information provided to us by that selling shareholder for use in this prospectus. We have agreed to bear the expenses incident to the registration of the shares, other than selling discounts and commissions.

INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Our Amended and Restated Articles of Organization eliminate, subject to certain exceptions, the personal liability of our directors for monetary damages for breaches of fiduciary duties as directors. Our Restated Articles do not provide for the elimination of, or any limitation on, the personal liability of a director for (i) any breach of the director's duty of loyalty to Boston Biomedica and our shareholders; (ii) acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law; (iii) certain unauthorized dividends, redemptions or distributions as provided under Section 61 of the Massachusetts Business Corporation Law; (iv) certain loans of company assets to any of our officers or directors as provided under Section 62 of the Massachusetts Business Corporation Law; or (v) any transaction from which the director derived an improper personal benefit. This provision of our Amended and Restated Articles of Organization will limit the remedies available to you in the event of breaches of any director's duties to Boston Biomedica and our shareholders. Our Amended and Restated Articles of Organization provide that we may, either in our by-laws or by contract, provide for the indemnification of directors, officers, employees and agents, by whomever elected or appointed, to the full extent permitted by law.

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

LEGAL MATTERS

For the purpose of this offering, Brown, Rudnick, Freed & Gesmer, Boston, Massachusetts, will pass upon the validity of the shares of common stock covered under this prospectus.

EXPERTS

The financial statements incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 1999 have been so incorporated in reliance on the report of

PricewaterhouseCoopers LLP, independent accountants, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's public reference rooms at 450 Fifth Street, N.W., Washington, D.C., 20549, in Chicago, Illinois and in New York, New York. Please call the SEC at

1-800-SEC-0330 for further information on the public reference rooms. Our SEC filings are also available to the public over the Internet on the SEC's website at http://www.sec.gov.

We have filed with the SEC a registration statement on form S-3 under the Securities Act of 1933, as amended, with respect to the common stock offered in connection with this prospectus. This prospectus does not contain all of the information set forth in the registration statement. We have omitted parts of the registration statement in accordance with the rules and regulations of the SEC. For further information with respect to us and our common stock, you should refer to the registration statement and to the exhibits and schedules filed as part of the registration statement, as well as the documents discussed below. Statements contained in this prospectus as to the contents of any contract or other document are not necessarily complete and, in each instance, you should refer to the copy of the contract or document filed as an exhibit to or incorporated by reference in the registration statement. Each statement as to the contents of any contract or document is qualified in all respects by reference to the contract or document itself. You may obtain copies of the registration statement from the SEC's principal office in Washington, D.C. upon payment of the fees prescribed by the SEC, or you may examine the registration statement without charge at the offices of the SEC described above.

The SEC allows us to "incorporate by reference" the information that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the following documents:

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 1999;

- Our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2000; and

- The description of our common stock contained in our registration statement on Form 8-A dated October 25, 1996.

We also incorporate by reference any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, prior to the termination of the offering to which this prospectus relates.

You may request a copy of any or all of these filings, at no cost, by writing or telephoning us at the following address:

Boston Biomedica, Inc.
375 West Street
West Bridgewater, MA 02379

(508) 580-1900
Attn: Investor Relations

THIS PROSPECTUS IS PART OF A REGISTRATION STATEMENT WE FILED WITH THE SEC. YOU SHOULD RELY ONLY ON THE INFORMATION OR REPRESENTATIONS PROVIDED IN THIS PROSPECTUS. WE HAVE NOT AUTHORIZED ANYONE TO PROVIDE YOU WITH ANY INFORMATION THAT IS NOT CONTAINED IN THIS PROSPECTUS. THE SELLING SHAREHOLDERS DESCRIBED IN THIS PROSPECTUS ARE NOT MAKING AN OFFER TO SELL OR SOLICITING AN OFFER TO BUY ANY SHARES IN ANY JURISDICTION WHERE THE OFFER OR SALE IS NOT PERMITTED. YOU SHOULD NOT ASSUME THAT THE INFORMATION IN THIS PROSPECTUS IS ACCURATE AS OF ANY DATE OTHER THAN THE DATE OF THIS PROSPECTUS.

TABLE OF CONTENTS

BOSTON BIOMEDICA, INC.

Up to 633,306 Shares of Common Stock

PROSPECTUS
(Subject to Completion)

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth the various expenses payable by us in connection with the sale and distribution of the securities registered hereby. All amounts are estimated except the SEC and Nasdaq fees. We will bear all of the costs of issuance and distribution as follows:

<TABLE>

<S>	<C>
SEC Registration Fee.....	$ 481
Nasdaq Filing Fee.....	$ 17,500
Accounting Fees and Expenses.....	$ 35,000
Legal Fees and Expenses.....	$ 26,000
Costs of Printing and Engraving	$ 500
Miscellaneous.....	$ 519
Total.....	$ 80,000

</TABLE>

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Our amended and restated by-laws include provisions to permit the indemnification of our officers and directors for damages arising out of the performance of their duties unless such damages arise out of the officer's or director's failure to exercise his duties and to discharge the duties of his office in good faith and in the reasonable belief that his action was in, or not opposed to, the best interest of Boston Biomedica, and with respect to any criminal action or proceeding, do not have reasonable cause to believe that his conduct was unlawful.

ITEM 16. EXHIBITS

<TABLE>
<CAPTION>

EXHIBIT NUMBER	<C>	<C>
4.1	Description of certificate for shares of Boston Biomedica common stock	*
4.2	Form of Warrant Certificate	**
5.1	Legal Opinion of Brown, Rudnick, Freed & Gesmer, P.C.	filed herewith
23.1	Consent of PricewaterhouseCoopers LLP	filed herewith
23.2	Consent of Brown, Rudnick, Freed & Gesmer, P.C. (included in Exhibit 5.1)	filed herewith
24.1	Power of Attorney	previously filed

</TABLE>

- ----------

*The above exhibit was previously filed as an exhibit of the same number to our registration statement on Form S-1 (registration no. 333-10759), as amended, filed on August 23, 1996 and is incorporated herein by reference.

**The above exhibit was previously filed as exhibit number 4.3 to our quarterly report on Form 10-Q for the period ended September 30, 1999, and is incorporated herein by reference.

ITEM 17. 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 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;

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment 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; and

(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 of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) 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) Not applicable.

(d) Not applicable.

(e) Not applicable.

(f) Not applicable.

(g) Not applicable.

(h) Insofar as indemnification for liabilities arising under the Securities Act of 1933 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 SEC such indemnification is against public policy as expressed in the Securities Act of 1933 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 of whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

(i) Not applicable.

(j) Not applicable.

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 the requirements for filing on Form S-3 and has duly caused this pre-effective amendment number 1 to the registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of West Bridgewater, Commonwealth of Massachusetts, on June 9, 2000.

BOSTON BIOMEDICA, INC.

By: /s/ RICHARD T. SCHUMACHER

Richard T. Schumacher,
Chief Executive Officer

PURSUANT TO THE REQUIREMENTS OF THE SECURITIES ACT OF 1933, THIS PRE-EFFECTIVE AMENDMENT NUMBER 1 TO THE REGISTRATION STATEMENT HAS BEEN SIGNED BY THE FOLLOWING PERSONS IN THE CAPACITIES AND ON THE DATES INDICATED.

<TABLE>
<CAPTION>

SIGNATURE	TITLE	DATE
<S>	<C>	<C>
/s/ Richard T. Schumacher Richard T. Schumacher	Director and Principal Executive Officer	June 9, 2000
/s/ Kevin W. Quinlan Kevin W. Quinlan	Director and Principal Financial and Accounting Officer	June 9, 2000

* Francis E. Capitanio	Director	June 9, 2000
* Calvin A. Saravis, Ph.D.	Director	June 9, 2000
* William R. Prather, R.Ph, M.D.	Director and Treasurer	June 9, 2000

* By: /s/ RICHARD T. SCHUMACHER

Richard T. Schumacher,
Attorney-in-Fact

EXHIBIT INDEX

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Exhibit 5.1

June 9, 2000

Boston Biomedica, Inc.
375 West Street
West Bridgewater, MA 02379

Attn: Richard T. Schumacher, Chief Executive Officer

RE: Registration Statement on Form S-3 filed on June 9, 2000

Ladies and Gentlemen:

We have acted as counsel to Boston Biomedica, Inc., a Massachusetts corporation (the "Company"), in connection with the preparation and filing with the Securities and Exchange Commission of Amendment No. 1 to the Registration Statement on Form S-3 (Registration No. 333-94379) (the "Registration Statement") pursuant to which the Company is registering under the Securities Act of 1933, as amended (the "Act"), a total of 633,306 shares of common stock, $.01 par value (the "Shares"), issuable upon exercise of outstanding warrants of the Company (the "Warrants"). This opinion is being rendered in connection with the filing of the Registration Statement.

In connection with this opinion, we have examined the following documents (collectively, the "Documents"):

(i) the Amended and Restated Articles of Incorporation of the Company;

(ii) the Amended and Restated By-laws of the Company;

(iii) the corporate minute books and other records of the Company;

(iv) the Warrant Purchase Agreement dated August 18, 1999, by and between the Company and Paradigm Group, L.L.C. (the "Warrant Purchase Agreement");

(v) a form of Warrant, the terms of which we assume to be substantially similar to the terms of all the Warrants; and

(vi) the Registration Statement.

We have, without independent investigation, relied upon the representations and warranties of the various parties as to matters of objective fact contained in the Documents.

We have not made any independent review or investigation of orders, judgments, rules or other regulations or decrees by which the Company or any of its property may be bound, nor have we made any independent investigation as to the existence of actions, suits, investigations or proceedings, if any, pending or threatened against the Company.

The opinions expressed herein are based solely upon (i) our review of the Documents, (ii) discussions with Richard T. Schumacher, the Chairman of the Board and Chief Executive Officer of the Company, (iii) discussions with those of our attorneys who have devoted substantive attention to the

matters contained herein, and (iv) such review of published sources of law as we have deemed necessary.

This firm, in rendering legal opinions, customarily makes certain assumptions which are described in Schedule A hereto. In the course of our representation of the Company in connection with the preparation of the Registration Statement, nothing has come to our attention which causes us to believe reliance upon any of those assumptions is inappropriate, and, with your

concurrence, the opinions hereafter expressed are based upon those assumptions.

We express no legal opinion upon any matter other than that explicitly addressed below, and our express opinion therein contained shall not be interpreted to be an implied opinion upon any other matter.

Our opinion contained herein is limited to the laws of the Commonwealth of Massachusetts and the Federal law of the United States of America.

Based upon and subject to the foregoing, we are of the opinion thatthe Shares have been duly authorized and, when issued and delivered in accordance with the terms of the Warrants and the Warrant Purchase Agreement, will be validly issued, fully paid and non-assessable.

We understand that this opinion is to be used in connection with the Registration Statement. We consent to the filing of this opinion as an Exhibit to said Registration Statement and to the reference to our firm wherever it appears in the Registration Statement, including the prospectus constituting a part thereof and any amendments thereto. This opinion may be used in connection with the offering of the Shares only while the Registration Statement, as it may be amended from time to time, remains effective under the Act.

Very truly yours,

BROWN, RUDNICK, FREED & GESMER

By: BROWN, RUDNICK, FREED & GESMER,
P.C., a Partner

By: /s/ Steven R. London

Steven R. London, A Member
Duly Authorized

SRL/DHM/MRF

SCHEDULE A

BROWN, RUDNICK, FREED & GESMER
STANDARD ASSUMPTIONS

In rendering legal opinions in third party transactions, Brown, Rudnick, Freed & Gesmer makes certain customary assumptions described below:

1. Each natural person executing any of the Documents has sufficient legal capacity to enter into such Documents and perform the transactions contemplated thereby.

2. The Company holds requisite title and rights to any property involved in the transactions described in the Documents and purported to be owned by it.

3. Each person other than the Company has all requisite power and authority and has taken all necessary corporate or other action to enter into those Documents to which it is a party or by which it is bound, to the extent necessary to make the Documents enforceable against it.

4. Each person other than the Company has complied with all legal requirements pertaining to its status as such status relates to its rights to enforce the Documents against the Company.

5. Each Document is accurate, complete and authentic, each original is authentic, each copy conforms to an authentic original and all signatures are genuine.

6. All official public records are accurate, complete and

properly indexed and filed.

7. There has not been any mutual mistake of fact or misunderstanding, fraud, duress, or undue influence by or among any of the parties to the Documents.

8. The conduct of the parties to the transactions described in the Documents has complied in the past and will comply in the future with any requirement of good faith, fair dealing and conscionability.

9. Each person other than the Company has acted in good faith and without notice of any defense against the enforcement of any rights created by, or adverse claim

to any property or security interest transferred or created as part of, the transactions described in the Documents.

10. There are no agreements or understandings among the parties to or bound by the Documents, and there is no usage of trade or course of prior dealing among such parties, that would define, modify, waive, or qualify the terms of any of the Documents.

11. The Company will not in the future take any discretionary action (including a decision not to act) permitted under any Document that would result in a violation of law or constitute a breach or default under that or any other Document or court or administrative orders, writs, judgments and decrees that name the Company and are specifically directed to it or its property.

12. The Company will obtain all permits and governmental approvals not required at the time of the closing of the transactions contemplated by the Documents but which are subsequently required, and will take all actions similarly required, relevant to subsequent consummation of the transactions contemplated by the Documents or performance of the Documents.

13. All parties to or bound by the Documents will act in accordance with, and will refrain from taking any action that is forbidden by, the terms and conditions of the Documents.

Exhibit 23.1

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 (File No. 333-94379) of our report dated February 29, 2000 relating to the consolidated financial statements and financial statement schedule, which appears in Boston Biomedica, Inc.'s Annual Report on Form 10-K for the year ended December 31, 1999. We also consent to the incorporation by reference of our report dated July 10, 1998, except as to certain information in the second paragraph of Note I, for which the date is September 30, 1998 relating to the financial statements of BioSeq, Inc., which appears in such Annual Report on Form 10-K. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts
June 8, 2000