

Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

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FORM S-3  
REGISTRATION STATEMENT  
Under  
The Securities Act of 1933  
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BOSTON BIOMEDICA, INC.

(Exact Name of Registrant as Specified in Its Charter)

Massachusetts 04-2652826  
(State or Other Jurisdiction of (IRS Employer  
Incorporation or Organization) 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)

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Copies to:  
Steven R. London, Esquire  
Brown, Rudnick, Freed & Gesmer  
One Financial Center  
Boston, Massachusetts 02111  
Tel:(617) 856-8200  
Fax:(617) 856-8201  
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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. [ ]

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. [ ]

CALCULATION OF REGISTRATION FEE

<TABLE>  
<CAPTION>

Title Of Each Class Of Securities To Be Registered	Amount To Be Registered	Proposed Maximum Offering Price Per Share(1)	Proposed Maximum Aggregate Offering Price(1)	Amount Of Registration Fee
<S> Common Stock, \$.01 par value per share	<C> 633,306 shares (2)	<C> \$2.875	<C> \$1,820,751.75	\$480.68

</TABLE>

(1) Calculated pursuant to Rule 457(c) under the Securities Act of 1933, as  
amended, on the basis of the average of the bid and asked price of the  
common stock of Boston Biomedica, Inc., as reported on the Nasdaq National  
Market on January 6, 2000.

(2) Also registered hereunder are such presently indeterminable number of additional shares of Common Stock as may be issued in the event of a merger, consolidation, reorganization, recapitalization, stock dividend, stock split or other similar change in Common Stock.

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.

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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 seeking 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

This prospectus relates to the offer and sale of an aggregate of up to 633,306 shares of our common stock beneficially owned by the following selling stockholders: Paradigm Group, L.L.C. ; National Securities; David Kavrell; Brian Friedman; Craig Gould; Steven Rothstein; Robert Daskal and MdBio, Inc. Paradigm Group, L.L.C. may offer and sell up to 425,000 shares of our common stock under this prospectus upon the exercise of outstanding stock purchase warrants. National Securities may offer and sell up to 75,000 shares of our common stock under this prospectus upon the exercise of outstanding stock purchase warrants. David Kavrell may offer and sell up to 15,000 shares of our common stock under this prospectus upon the exercise of outstanding stock purchase warrants. Brian Friedman may offer and sell up to 10,000 shares of our common stock under this prospectus upon the exercise of outstanding stock purchase warrants. Craig Gould may offer and sell up to 20,000 shares of our common stock under this prospectus upon the exercise of outstanding stock purchase warrants. Steven Rothstein may offer and sell up to 20,000 shares of our common stock under this prospectus upon the exercise of outstanding stock purchase warrants. Robert Daskal may offer and sell up to 10,000 shares of our common stock under this prospectus upon the exercise of outstanding stock purchase warrants. MdBio, Inc. may offer and sell up to 29,153 outstanding shares of our common stock under this prospectus and an additional 29,153 shares of our common stock under this prospectus upon the exercise of outstanding stock purchase warrants. The selling stockholders may offer the common stock through public or private transactions, at prevailing market prices, or at privately negotiated prices.

The common stock is traded on the Nasdaq National Market under the symbol "BBII". On January 6, 2000, the last reported sale price of the common stock on the Nasdaq National Market was \$2.875 per share.

An investment in the common stock offered under this prospectus involves a high degree of risk. See "Risk Factors" beginning on page 7.

Neither 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  
January 7, 2000.

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## SUMMARY

This summary briefly describes our business and the proposed sale of shares of our common stock.

### About Boston Biomedica

We are a leading worldwide provider of proprietary quality control products for use with in vitro diagnostic test kits for the detection, analysis and monitoring of infectious diseases, including AIDS, Hepatitis and Lyme Disease. These products are used to develop test kits, to permit the monitoring of laboratory equipment and personnel, and to help ensure the accuracy of test results. Our products are derived from human plasma and serum using proprietary manufacturing processes. We believe our Quality Control Panel products are viewed as the current industry standard for the independent assessment of the performance of HIV and Hepatitis test kits. We also manufacture diagnostic test kit components and provide specialty laboratory services, including clinical trials.

We sell our products primarily to test kit manufacturers and regulatory agencies, but we also sell quality control products directly to the emerging end-user market for quality control products for infectious disease test kits. Our customers include Abbott Diagnostics, Boehringer Mannheim, Chiron, Fujirebio, Hoffman LaRoche, Ortho Diagnostics (Johnson & Johnson) and Sanofi Diagnostics; regulatory agencies such as the United States FDA (Food and Drug Administration), the British Public Health Laboratory Service, the French Institut National de la Transfusion Sanguine and the German Paul Ehrlich Institute; and end-users of diagnostic test kits, such as blood banks, hospitals and clinical laboratories. We sell our products to our customers pursuant to purchase orders for discrete purchases and not pursuant to long-term contracts.

We offer two broad product classes used in in vitro diagnostics ("IVD"): "Diagnostic Products" consisting of Quality Control Panels, Accurun (R) Run Controls and Diagnostic Components, all used in connection with infectious disease testing, and "Laboratory Instruments". Diagnostic Products are used throughout the entire test kit life cycle, from initial research and development, through the regulatory approval process and test kit production, to training, troubleshooting and routine use by end-users. Our Quality Control Panels, which combine human blood specimens with comprehensive quantitative data useful for comparative analysis, help ensure that test kits detect the correct analyte (specificity), detect it the same way every time (reproducibility), and detect it at the appropriate levels (sensitivity). Our Accurun(R) Run Controls enable end-users of test kits to confirm the validity of results by monitoring test performance, thereby minimizing false negative test results and improving error detection. In addition, we provide Diagnostic Components, which are custom processed human plasma and serum products, to test kit manufacturers.

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Our specialty clinical laboratory services include both routine and sophisticated infectious disease testing in microbiology, immunology and molecular biology. We focus our specialty laboratory services in advanced areas of infectious disease testing, and provide contract research and clinical trials for domestic and foreign test kit manufacturers.

We operate an independent specialty clinical reference laboratory through our wholly owned subsidiary, BBI Clinical Laboratories, Inc., to perform both routine and sophisticated infectious disease testing, with special emphasis in AIDS, Viral Hepatitis and Lyme Disease. Our specialty clinical laboratory combines traditional microbiology, advanced immunology, and current molecular diagnostic techniques to detect and identify microorganisms, their antigens and related antibodies, and their nucleic acids. Our customers include blood banks, physicians, clinics, hospitals and other clinical/research laboratories.

We offer a variety of contract research services through our wholly owned subsidiary, BBI Biotech Research Laboratories, Inc., in molecular biology, cell biology and immunology. We provide these services to governmental agencies, diagnostic test kit manufacturers and biomedical researchers. Molecular biology services include DNA sequencing, recombinant DNA support, probe labeling and custom PCR (Polymerase Chain Reaction) assays. Cell biology and immunology services include sterility testing, virus infectivity assays, cultivations of virus or bacteria from clinical specimens, preparation of viral or bacterial antigens or nucleic acids, and production of antibodies.

We also support domestic and foreign test kit manufacturers by conducting clinical trials that allow them to collect data for submission to the United States FDA and other regulatory agencies. By providing this service, we are able to maintain close contact with test kit manufacturers and regulators, and we are able to evaluate new technologies in various stages of development. We believe that the reputation of our laboratory and scientific staff, our large number of Quality Control Panels, and our inventory of characterized serum and plasma specimens assist us in marketing our clinical trial services to our customers.

We also design, develop, manufacture and market laboratory instrumentation for hospitals, clinics, laboratories and diagnostic companies through our wholly owned subsidiary, BBI Source Scientific, Inc. These services range in complexity from consulting to full system development and distribution. We also provide after-sales-service, which we believe to be a major marketing advantage in many of our markets, since many of our customers do not maintain their own full service departments.

Bioseq, Inc., our wholly owned subsidiary, is a development stage company with patent pending technology based on pressure cycling technology. Our pressure cycling technology research is focused in two areas: nucleic acid extraction and purification of target nucleic acids in connection with sample preparation for molecular testing; and pathogen inactivation in blood plasma for transfusion.

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Through our drug discovery and development efforts we have formed a new wholly owned subsidiary, Panacos Pharmaceuticals, Inc. We intend to "spin-off" Panacos and eventually become a minority shareholder. We believe that by separating Panacos from Boston Biomedica we will be able to attract the significant capital required to develop their technology which was originally discovered in collaboration with Dr. K.H. Lee of the School of Pharmacy at the University of North Carolina at Chapel Hill.

We were organized in Massachusetts in 1978, but we did not commence significant operations until 1986. Our principal executive offices are located at 375 West Street, West Bridgewater, Massachusetts 02379. Our telephone number is (508) 580-1900.

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#### The Offering

The following selling stockholders may offer and sell up to 633,306 shares of our common stock under this prospectus: Paradigm Group, L.L.C.; National Securities; and MdBio, Inc. 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 are comprised of: an aggregate of up to 500,000 shares of our common stock that may be issued to Paradigm Group and its transferees upon the conversion of outstanding stock purchase warrants; an aggregate of up to 75,000 shares of our common stock that may be issued to National Securities and its transferees upon the conversion of outstanding stock purchase warrants; 29,153 outstanding shares of our common stock beneficially owned by MdBio, Inc.; and an aggregate of up to 29,153 additional shares of our common stock that may be issued to MdBio, Inc. upon the conversion of outstanding stock purchase warrants.

Paradigm Group obtained its stock purchase warrants in connection with its investment in Boston Biomedica. The total purchase price for the warrants was \$50,000. Certain of the warrants evidence the right to purchase an aggregate of 400,000 shares of our common stock at an exercise price of \$4.25 per share and the balance of the warrants evidence the right to purchase an aggregate of 100,000 shares of our common stock at an exercise price of \$5.25 per share. Paradigm Group's warrants expire on February 18, 2000. We prepared this prospectus to satisfy the registration rights we granted to Paradigm Group in connection with its investment.

National Securities received its 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.

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#### RISK FACTORS

The common stock that is offered with this prospectus involves a high degree of risk. You should carefully consider the following risk factors in addition to other information in this prospectus before deciding to purchase the common stock.

Our growth could be adversely affected if an end-user market for quality control products does not develop or if we cannot increase our sales to this market

We focus our product development and sales and marketing efforts on quality control products for end-users of infectious disease test kits. Currently, most quality control products for infectious disease test kits are sold to test kit manufacturers and regulators. End-users of infectious disease test kits are currently using quality control products only to a very limited extent. Our strategy is based primarily upon significant growth in sales of quality control products to the end-user market. End-users of infectious disease test kits may not increase their use of quality control products, and we may not be able to increase our sales of quality control products to such end-users. Clearance or approval by the United States FDA will be necessary before quality control products may be sold for clinical laboratory use rather than for research purposes only. If the end-user market for quality control products does not develop, or if we are unable to increase our sales to this market, our future growth could be adversely affected.

We face competition in sales of our products and our specialty laboratory services

In sales of both our products and our specialty laboratory services, we experience substantial competition and the threat of competition from established and potential competitors, most of which have greater financial, manufacturing and marketing resources than we do. Competition for customers is intense and depends principally on our ability to provide products of the quality and in the quantity required by customers, as well as our ability to provide sophisticated specialty laboratory services, at competitive prices. We currently compete against independent reference laboratories, integrated plasma collection and processing centers and manufacturers of quality controls and other diagnostic components. Other manufacturers and other companies may enter the market. The entrance of any other of these companies into the quality control market for infectious disease test kits could materially and adversely affect our business, particularly our ability to achieve our strategy to capitalize on the end-user market for quality control products for infectious disease test kits. In addition, certain of our products are derived from donors with rare antibody characteristics. Competition for blood specimens from such donors may increase, which may increase the cost of obtaining such specimens. Such increased competition may adversely affect our business.

We depend on certain key personnel

Our success depends in large part upon our ability to attract and retain highly qualified scientific and management personnel. We compete for such individuals with other companies, academic institutions, government entities and other organizations. We may not be successful in hiring or retaining requisite personnel. Our failure to recruit and retain qualified scientific and management personnel could have a material adverse effect on our business. None of our key management or scientific personnel is subject to an employment agreement. The loss of the services of any such key personnel, including Richard T. Schumacher, our Chief Executive Officer, could have a material adverse effect on our business. We maintain key person life insurance on certain of our officers, including Mr. Schumacher, on whose life we have \$10,000,000 of insurance.

Our future success depends in part on our ability to manage growth while we increase production and broader distribution

Our future success depends in part on our ability to manage growth as we increase our production capacity and broaden distribution of our products. To compete effectively and manage future growth, if any, we must continue to implement and improve our operational, financial and management information systems, procedures and controls on a timely basis, and to expand, train, motivate and manage our workforce. Our personnel, systems, procedures and controls may not be adequate to support our future operations. Our failure to implement new and improved existing operation, financial and

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management systems or to expand, train, motivate or manage employees could have a material adverse effect on our business, operating results and financial condition.

Fluctuations in our quarterly results of operations may negatively affect the market price of our common stock

Our results of operations have been subject to quarterly fluctuations due to a variety of factors, including customer purchasing patterns and seasonal demand for laboratory testing services. In particular, our sales of quality control products and diagnostic components typically have been highest in the fourth quarter and lowest in the first quarter of each fiscal year. We believe that our customers may expend end-of-year budget surpluses in the fourth quarter, thereby causing our fourth quarter product sales to be higher at the expense of the first quarter product sales. Moreover, the margins for our different products and services vary, with quality control products generally having the highest margins and contract research the lowest. Therefore, our results may vary from period to period as a result of the mix of products and services and the mix among products. As a result, quarterly results of operations may not be indicative of future results of operations. Also variations in our quarterly results of operations may affect the market price of our common stock.

We may be unsuccessful in acquiring acceptable financing for future acquisitions

We intend to continue to pursue strategic acquisitions to expand our core product line, strengthen our base in medical science and technology, and secure new sources of blood supply. We are subject to various risks associated with an acquisition strategy, including the risk that we will be unable to identify and attract suitable acquisition candidates or to integrate and manage any acquired business. We compete for acquisition candidates with companies which have significantly greater financial and management resources than we do. Acquisitions could place a significant burden on our management and operating personnel. Implementing our expansion strategy may also require significant capital resources. Capital is needed not only for acquisitions, but also for the effective integration, operation and expansion of such businesses. We may need to raise the capital through the issuance of long-term or short-term indebtedness or the issuance of our securities in a private or public transaction, which could result in dilution of existing equity positions, increased interest and amortization expense or decreased income to fund future expansion. Acceptable financing for future acquisitions may not be available and we may be unable to achieve the integration of future acquisitions and expansion of our existing business.

Operating losses realized from recently acquired subsidiaries could impair some intangible assets

Over the past two and a half years we have completed two acquisitions: the assets and certain liabilities of Source Scientific, Inc., to form BBI Source Scientific, Inc. and all of the outstanding common stock of BioSeq, with the name now changed to BBI BioSeq, Inc. Since acquiring these companies both have realized significant operating losses. There can be no guarantee that either of these companies will become profitable. As a result of both acquisitions, and in accordance with appropriate accounting standards, we have recorded a significant amount of goodwill, which may become impaired. Furthermore, as a result of these unprofitable subsidiaries we have reported a net operating loss during 1998 and 1999, to date. If we continue to report consolidated losses the realizability of certain tax assets could also become impaired.

Our early stage development subsidiary may not be able to commercialize its products

We recently formed a subsidiary, Panacos Pharmaceuticals, Inc. Panacos was founded in 1999 and is at an early stage of development. Panacos has not completed the development of any products and, accordingly, has not begun to market or generate revenues from the commercialization of its products. Panacos's products, primarily in the development of antivirals and HIV vaccine assays, will require significant additional pre-clinical and clinical testing and investment prior to commercialization. A commitment of substantial resources by Panacos and its partners to conduct time-consuming research, pre-clinical testing and clinical trials will be required if Panacos is to complete the development of its portfolio of product candidates. We cannot assure that any of Panacos's product candidates will successfully complete pre-clinical or clinical testing, meet applicable regulatory standards, obtain required regulatory approvals, be capable of being produced in commercial quantities at reasonable costs, be successfully marketed or be competitive with other products on the market. Most of Panacos's products are not expected to be commercially available for a number of years.

We may have difficulty in obtaining certain raw materials

We manufacture our products from human plasma and serum which we obtain from nonprofit and commercial blood centers, primarily in the United States, but also from similar sources throughout the world. Certain of our products, including

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our seroconversion and performance panels, are comprised of unique and rare plasma specimens obtained from individuals during the short period of time when the disease markers of particular diseases are converting from negative to positive. As a result, the quantity of any such panel is limited, so we must replace such panels as they sell out with another panel comprised of specimens equally unique and rare. Competition to obtain such specimens may increase, which may increase the cost of obtaining such products. We may not continue to be successful in obtaining a steady and adequate supply of the unique and rare specimens of plasma and serum necessary for certain of our products. Our inability to continue to obtain such specimens, or any significant delays in obtaining such specimens, would have a material adverse effect on our business.

We depend on a few key customers

Our three largest customers accounted for an aggregate of approximately 20% of our revenues in 1998, however the majority of our orders are based upon purchase orders. None of our customers are 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 have a material adverse effect upon our business.

We are subject to stringent government regulation

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 (FDCA) prohibits the marketing of in vitro diagnostic products until they are either: approved or cleared by the Food and Drug Administration (FDA), a process that is time-consuming, expensive and uncertain; or exempt from the requirement for a pre-market notification as defined by the Food and Drug Administration Modernization Act of 1997 (the FDMA) and have undergone validation studies. Any significant changes to the product that may affect its safety and effectiveness, including new indications for use or major changes in the manufacturing process, may necessitate additional FDA approval or clearance, or further validation studies.

Our Accurun I(R) Controls and 11 of our Accurun (R) Controls have been cleared by the FDA. Many of our Accurun (R) Controls are exempt from the requirement for a pre-market approval and have either been validated or are scheduled for validation. Other quality control products that we manufacture that are not part of the Accurun (R) product line are marketed "for research use only" because they are not intended for use in diagnostic procedures. Our labeling for these products limits their use to research purposes; however, it is possible that some purchasers of these products use them for diagnostic purposes despite our intended use. In these circumstances, the FDA could allege that these products should have been cleared or approved by the FDA prior to marketing and initiate enforcement action against us, which could have a material adverse effect on our business. Failure to obtain, or delays in obtaining, FDA clearances or approval would adversely affect our strategy of capitalizing on the end-user market.

We believe that our quality control panels are not regulated by the FDA because they are not intended for diagnostic purposes. We believe that our diagnostic components, which are components of in vitro diagnostic products, may be subject to certain regulatory requirements under the FDCA and other laws administered by the FDA, but do not require that we obtain a premarket approval or clearance. The FDA may not agree and may adopt a different interpretation of the FDCA or other laws it administers. Such an interpretation could result in a material adverse effect on our business.

In addition, both before and after clearance or approval, medical devices, such as Accurun I(R), are subject to certain export and import requirements under the FDCA.

We are also subject to strict FDA Good Manufacturing Practices regulations governing testing, control and documentation, and to other post-marketing restrictions with respect to the manufacture of our medical device products. Ongoing compliance with Good Manufacturing Practices and other applicable regulatory requirements is monitored through periodic inspections by the regulatory authorities. Failure to comply with Good Manufacturing Practices or other regulatory requirements can result, among other consequences, in the failure to obtain pre-market clearances or approvals, withdrawal of clearances or approvals, total or partial suspension of product distribution, injunctions, civil penalties, recall or seizure of products, and criminal prosecution, each of which would have a material adverse effect on our business.

Laws and regulations affecting our products are in effect in many of the countries, states and other jurisdictions in which we market or intend to market our products. We may not be able to obtain required regulatory clearances or approvals

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on a timely basis, or at all. Delays in receipt of or failure to obtain such clearances or approvals, or the failure to comply with regulatory requirements in these countries, states or other jurisdictions, could have a material adverse effect on our business, financial condition and results of operations.

The manufacture and sale of human therapeutic and diagnostic products in the U.S. and elsewhere are governed by a variety of statutes and regulations. These laws require approval of manufacturing facilities, controlled research and testing of products and government review and approval of a submission containing manufacturing, preclinical and clinical data in order to obtain marketing approval based on establishing the safety and efficacy of the product for each use sought, including adherence to good manufacturing practices during production and storage and control of marketing activities, including advertising and labeling. The products currently under development by Panacos will require significant development, preclinical and clinical testing and investment of substantial funds prior to their commercialization. The process of obtaining required approvals can be costly and time-consuming, and there can be no assurance that future products will be successfully developed and will prove to be safe and effective in clinical trials or receive applicable regulatory approvals. Potential investors should be aware of the risks, problems, delays, expenses and difficulties which may be encountered by Panacos in view of the extensive regulatory environment which controls its business.

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. Failure to comply with such laws and regulations could have a material adverse effect on our business, financial condition and results of operations.

If foreign restrictions on importation of blood derivatives are imposed, they would adversely effect our business

Sales outside the United States in 1998 represented approximately 15.7% of our revenues for 1998. Foreign sales are primarily to Western Europe and Japan. Concern over blood safety has led to movements in a number of European and other countries to restrict the importation of blood and blood derivatives, including antibodies. Such restrictions continue to be debated and additional restrictions could be imposed in the future. If imposed, such restrictions could have a material adverse effect on our business.

Our success depends on our ability to take advantage of technological change

The infectious disease test kit industry is characterized by rapid and significant technological change and changes in customer requirements. As a result, our success 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 and such products may not adequately address the changing needs of the marketplace. Furthermore, rapid technological development may result in products or services becoming obsolete or noncompetitive before we recover our investment in research, development and commercialization.

Our ability to compete depends on our ability to maintain the proprietary nature of our technological products

None of our quality control products or diagnostic components have been patented, and we do not intend to seek patent protection for such products. Our ability to compete effectively with other companies depends in part on our ability to maintain the proprietary nature of our technologies and products and operate without infringing the rights of third parties. We rely primarily on a combination of trade secrets and non-disclosure and confidentiality agreements, and in certain limited circumstances, patents, to establish and protect our proprietary rights in our technology and products. Others could independently develop or otherwise acquire the same, similar or more advanced trade secrets and know-how.

We have five United States patents 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. These issued patents may not provide any competitive advantage or may be challenged, circumvented or invalidated.

Third parties may be issued patents to or may otherwise acquire the rights to, technology necessary or potentially useful to our business. Our success is dependent in part upon our not infringing patents or other intellectual property rights of third parties. Litigation relating to the infringement of the patents or other intellectual property rights of others could result in substantial costs. Litigation which could result in substantial costs to us may also be necessary to enforce our intellectual

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property rights or to determine the scope and validity of the proprietary rights of others. Any such substantial costs would have a material adverse effect on our business.

Changes in the healthcare industry may adversely affect our business and our customers' ability to receive reimbursement for our products and services

Political, economic and regulatory influences are subjecting the healthcare industry in the United States to fundamental change. Although to date Congress has failed to pass comprehensive health care reform legislation, we anticipate that Congress and state legislatures will continue to review and assess alternative healthcare delivery and payment systems and may in the future propose and adopt legislation effecting fundamental changes in the healthcare delivery system. We expect legislative debate to continue in the future. In addition, the private sector has been changing the healthcare industry through consolidations and alternatives in healthcare delivery systems. We cannot predict what impact the adoption of any federal or state healthcare reform measures or future private sector reform may have on our industry or business.

In both domestic and foreign markets, our customers' sales of products and services that incorporate or affect the demand for our products may depend in part on the availability of reimbursement from third-party payors such as government health administration authorities, private health insurers and other organizations. Third-party payors are increasingly challenging the price and cost-effectiveness of medical products and services. Pricing pressures that our customers experience may adversely affect us because customers may determine that our products are no longer cost effective or because customers may no longer receive adequate third-party reimbursements. In addition, where the payor for our specialty laboratory services is the patient rather than third-party payors, we face a greater risk of non-payment.

Claims of hazardous waste damages or product liability could expose us to substantial liabilities and expenses

Our manufacturing processes involve the controlled use of biohazardous materials and chemicals. We cannot completely eliminate the risk of accidental



contamination or injury from these materials. In the event of such an accident, we could be held liable for any damages that result, and any such liability could exceed our resources. We may incur substantial costs to maintain safety in the use of biohazardous materials and to comply with environmental regulations as we further develop our manufacturing capacity.

Further, our business exposes us to liability risks that are inherent in the testing, manufacturing and marketing of our products. We do not currently have product liability insurance. Product liability claims could expose us to substantial liabilities and expenses, which could materially and adversely affect our business.

We have significant foreign sales and we are exposed to the risks of currency fluctuation

We have generated significant sales outside the United States and anticipate that foreign sales will continue to account for a significant percentage of our net revenues. Our foreign sales accounted for approximately 16% of our total revenues for the year ended December 31, 1998. We are therefore subject to risks associated with foreign sales, including United States and foreign regulatory requirements and policy changes, political and economic instability, difficulties in accounts receivable collection, difficulties in managing distributors or representatives and seasonality of sales. Although our sales and receivables are denominated in United States dollars, the value of the United States dollar in relation to foreign currencies may also adversely affect our sales to foreign customers. To the extent that we expand our international operations or change our pricing practices to denominate prices in foreign currencies, we will be exposed to increased risks of currency fluctuation.

Insiders control a significant percentage of voting power

Richard T. Schumacher, Chief Executive Officer, his relatives, and our other existing officers and directors collectively have voting control over approximately 35% of the outstanding shares of common stock. Accordingly, these stockholders, should they choose to act in concert, are in a position to exercise a significant degree of control and to significantly influence stockholder votes on the election of directors, increasing the authorized capital stock, mergers, and sales of assets.

Anti-takeover provisions in our charter and by-laws may discourage third-parties from pursuing a takeover

Certain provisions of our Amended and Restated Articles of Organization and Restated Bylaws could have the effect of discouraging a third party from pursuing a non-negotiated takeover and preventing certain changes in control. These

provisions include a classified board of directors, a fair price provision, advance notice to the board of directors of stockholder proposals and stockholder nominees for the board of directors, limitations on the ability of stockholders to remove directors and call stockholders meetings, the provision that vacancies on the board of directors be filled by a majority of the remaining directors and the ability of the board to issue, without further stockholder approval, preferred stock with rights and privileges which could be senior to the common stock. We are also subject to Chapter 110F of the Massachusetts General Laws which, subject to certain exceptions, prohibits a Massachusetts corporation from engaging in any of a broad range of business combinations with any "interested stockholder" for a period of three years following the date that such stockholder became an interested stockholder. These provisions could discourage a third party from pursuing a takeover at a price considered attractive by many stockholders, since such provisions could have the effect of preventing or delaying a potential acquiror from acquiring control.

Year 2000 Readiness

Our Year 2000 program is designed to minimize the possibility of serious Year 2000 interruption. Possible Year 2000 worst case scenarios include the interruption of significant parts of our business as a result of internal business system failure or the failure of the business systems of its suppliers, distributors or customers. Any such interruption may have a material adverse impact on our future results. Although no significant problems have been noted to date, we acknowledge that there is still risk that such problems may exist.

#### RECENT ACCOUNTING DEVELOPMENTS

Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements", issued in December 1999, summarizes certain of the staff's views in applying generally accepted accounting principles to revenue recognition in financial statements. The statements in the staff accounting bulletins represent interpretations and practices followed by the Division of Corporation Finance and the Office of the Chief Accountant in administering the disclosure requirements of the Federal securities laws. The impact of this Staff Accounting Bulletin is currently being reviewed by the Company.

Staff Accounting Bulletin No. 100, "Restructuring and Impairment Charges", issued in November 1999, expresses views of the staff regarding the accounting

for and disclosure of certain expenses commonly reported in connection with exit activities and business combinations. This includes accrual of exit and employee termination costs pursuant to Emerging Issues Task Force (EITF) Issues No. 94-3, Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (Including Certain Costs Incurred in a Restructuring), and No. 95-3, Recognition of Liabilities in Connection with a Purchase Business Combination, and the recognition of impairment charges pursuant to Accounting Principles Board (APB) Opinion No. 17, Intangible Assets, and Statement of Financial Accounting Standards (SFAS) No. 121, Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of. In accordance with Staff Accounting Bulletin No. 100, the value of the Company's intangible and goodwill assets related to its instrument business, will be carefully reviewed to see if there is any impairment as of December 31, 1999. Separately, in light of the Company's continuing consolidated losses from operations, the Company will be evaluating the carrying value of its deferred tax asset.

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#### 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 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 understand also that we have no plans to update our forward-looking statements. Our forward-looking statements are accurate 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 identify forward-looking statements with the words "plan," "expect," "anticipate," "estimate," "will," "should" and similar expressions. Examples of our forward-looking statements may include statements related to:

- our plans, objectives, expectations and intentions;
- the timing of, 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

We will not receive any proceeds from the selling stockholders' sale of our common stock being registered under this prospectus.

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#### SELLING STOCKHOLDERS

The following table sets forth information regarding the beneficial ownership of our common stock by the selling stockholders as of January 6, 2000 and as adjusted to reflect the sale or transfer by the selling stockholders 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 the selling stockholders. This information is based upon information received from or on behalf of Paradigm Group, L.L.C., National Securities, David Kavrell, Brian Friedman, Craig Gould, Steven Rothstein, Robert Daskal and MdBio, Inc.

Name of Securityholder	Shares Beneficially Owned		Number of Shares Being Offered	Shares Beneficially Owned After Offering	
	Number	Percent		Number	Percent
Paradigm Group, L.L.C.	425,000 (1)	8.18%	425,000 (1)	0	0%
National Securities	75,000 (2)	1.55%	75,000 (2)	0	0%
David Kavrell	15,000 (3)	.31%	15,000 (3)	0	0%
Brian Friedman	10,000 (4)	.21%	10,000 (4)	0	0%
Craig Gould	20,000 (5)	.42%	20,000 (5)	0	0%

Steven Rothstein	20,000 (6)	.42%	20,000 (6)	0	0%
Robert Daskal	10,000 (7)	.21%	10,000 (7)	0	0%
MdBio, Inc.	58,306 (8)	1.21%	58,306 (8)	0	0%

\* Less than 1%.

- (1) Consists of warrants to purchase an aggregate of 425,000 shares of our common stock.
- (2) Consists of warrants to purchase an aggregate of 75,000 shares of our common stock.
- (3) Consists of warrants to purchase an aggregate of 15,000 shares of our common stock.
- (4) Consists of warrants to purchase an aggregate of 10,000 shares of our common stock.
- (5) Consists of warrants to purchase an aggregate of 20,000 shares of our common stock.
- (6) Consists of warrants to purchase an aggregate of 20,000 shares of our common stock.
- (7) Consists of warrants to purchase an aggregate of 10,000 shares of our common stock.
- (8) 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.

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#### 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 in the offering.

#### EXPERTS

The financial statements incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 1998, 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 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. 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:

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- Our Annual Report on Form 10-K for the fiscal year ended December 31, 1998;
- Our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 1999, June 30, 1999 and September 30, 1999; 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

You should rely only on the information contained in this document (or any supplement) or that we have referred you to. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus or any supplement is accurate as of any date other than the date on the front of those documents.

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 authorized no one to provide you with different information. The selling stockholders described in this prospectus are not making an offer in any jurisdiction where the offer 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.

BOSTON BIOMEDICA, INC.

Up to 633,306 Shares of Common Stock

PROSPECTUS

January 7, 2000

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 filing fee. We will bear all of the costs of issuance and distribution as follows:

SEC Registration Fee.....	\$481
Nasdaq Filing Fee.....	\$12,000
Accounting Fees and Expenses.....	\$10,000
Legal Fees and Expenses.....	\$11,000
Costs of Printing and Engraving	\$500
Miscellaneous.....	\$1,019
	----
Total.....	\$35,000

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 the Company, and with respect to any criminal action or proceeding, do not have reasonable cause to believe that his conduct was unlawful. We intend to enter into indemnification contracts with each of our directors and officers.

## Item 16. Exhibits

<TABLE>  
 <CAPTION>  
 Exhibit  
 Number

<S>	<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 (contained on page II-6 hereof)	filed herewith

</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.

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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 the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of West Bridgewater, Commonwealth of Massachusetts, on January 7, 2000.

BOSTON BIOMEDICA, INC.

By: /s/Richard T. Schumacher

Richard T. Schumacher,  
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Richard T. Schumacher, his or her true and lawful attorney-in-fact and agent, with full power 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 or 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, and, in connection with any registration of additional securities pursuant to Rule 462(b) under the Securities Act of 1933, to sign any abbreviated registration statement and any and all amendments thereto, and to file the same, with all exhibits thereto and other documents in connection therewith, in each case, 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 and 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 substitute, 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 and on the dates indicated.

<TABLE>  
<CAPTION>

<S>	Signature	<C> Title	<C> Date
/s/Richard T. Schumacher	----- Richard T. Schumacher	Director and Chief Executive Officer	January 7, 2000
/s/Kevin W. Quinlan	----- Kevin W. Quinlan	Director and President	January 7, 2000
/s/Francis E. Capitanio	----- Francis E. Capitanio	Director	January 7, 2000
/s/Calvin A. Saravis	----- Calvin A. Saravis	Director	January 7, 2000
/s/William R. Prather	----- William R. Prather	Director Principal Financial and Accounting Officer	January 7, 2000

</TABLE>

EXHIBIT INDEX

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<CAPTION>

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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 (contained on page II-6 hereof)		filed herewith

- - - - -  
</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.

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E-1

Exhibit 23.1

#### CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated February 24, 1999, except as to certain information in the first paragraph of Note 9, for which the date is March 31, 1999, 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, 1998. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

PricewaterhouseCoopers LLP

Boston, Massachusetts  
January 7, 2000

January 7, 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 January 7, 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 a Registration Statement on Form S-3 (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

Boston Biomedica, Inc.  
January 7, 2000  
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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 those explicitly addressed in numbered paragraph 1 and 2 below, and our express opinions therein contained shall not be interpreted to be an implied opinion upon any other matter.

Our opinions contained herein are 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 that:

1. The Warrants have been duly authorized and validly issued, and are fully paid and non-assessable.
2. The 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

Boston Biomedica, Inc.  
January 7, 2000  
Page 3

#### SCHEDULE A

BROWN, RUDNICK, FREED & GESMER

#### STANDARD ASSUMPTIONS

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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

Boston Biomedica, Inc.

January 7, 2000

Page 4

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.