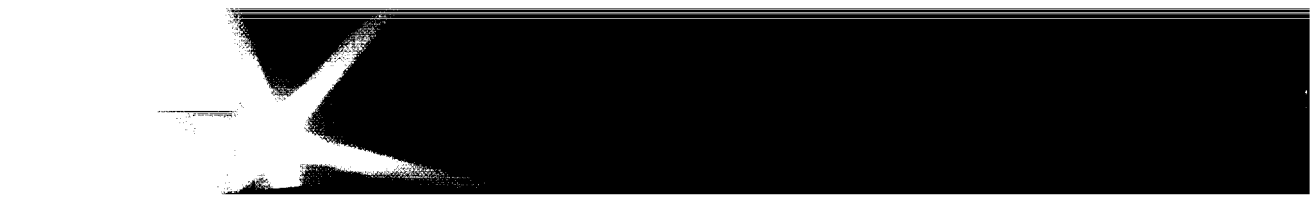

2004 Annual Report

Advancing Our Clinical Portfolio

Boston Life Sciences, Inc.

A Promising Future...

Dear Shareholders:

We are well into 2005 and approaching my one year anniversary with Boston Life Sciences. Although this letter is covering our 2004 Annual Report, my discussion of 2004 will provide a framework for describing a vision for the future.

About a year ago, Boston Life Sciences was emerging from a proxy fight resulting in the appointment of a new board of directors and a search for a new chief executive officer. When I considered Boston Life Sciences, I saw a company with promising programs of high potential value supported by considerable intellectual property, a newly appointed board of directors comprised of highly respected individuals, experienced employees working with proven, credible clinical investigators and collaborators, and very supportive major shareholders. I also saw a company with a weak balance sheet burdened by $4 million of short term debt, a preferred security with rights and preferences that made it difficult to attract external sources of funding, the challenge of Sarbanes-Oxley compliance, the prospect of NASDAQ de-listing and an executive management team that was missing the leadership and experience required to design and implement mission critical tasks.

We accomplished a great deal in the past year. We eliminated $4 million of debt, converted the outstanding Series E preferred stock to common stock, facilitated the exercise of a sizable number of outstanding warrants, raised $6 million in new equity financing and regained compliance for continued listing on the NASDAQ SmallCap Market. Our management team was strengthened considerably with the addition of Mark Pykett and Ken Rice. We also filled key positions in our organization in order to advance our development programs, re-brand our company in the scientific, patient, medical and financial communities, and assist with Sarbanes-Oxley compliance as part of our overall corporate governance initiative. We recruited premier clinical trial sites specializing in movement disorders and SPECT imaging and are well into a pivotal Phase III trial of ALTROPANE® in Parkinson's disease. In addition, we are continuing to work with the FDA in connection with the filing of our Inosine IND for the treatment of stroke. Our intellectual property review has resulted in plans to accelerate certain preclinical programs and to de-emphasize and/or out-license intellectual property that is not squarely in our CNS focus area.

As CEO, my mission is to set direction, assemble a first-rate organization and garner the financial resources required to maximize returns to shareholders. I fully understand the disappointment that arises when companies fail to deliver on their promises. We are all committed to setting and achieving realistic goals. We hold ourselves to the highest standards in everything we do and in every relationship. You have placed your trust and confidence in our organization and I am committed to ensuring that our culture is one of professionalism, respect and commitment to quality. I will focus on institutionalizing these values for our company. It is these values and shared vision that will enable us to achieve the goals we have set for the future.

I believe that our future corporate worth will depend in large part upon our ability to set and consistently achieve realistic goals. We will continue to selectively strengthen our

organization, our board of directors and our scientific and clinical advisory boards. We are committed to finding a premier partner to deliver the full value of the ALTROPANE diagnostic program and accelerate its realization. This will provide resources and enable us to focus on the development of our therapeutic products. To maximize the value of the program and partnership, we will focus on completing the current pivotal Phase III trial of ALTROPANE for Parkinson's disease, the Phase II development of ALTROPANE for ADHD and the pre-clinical development of FLUORATEC™ as well as developing a comprehensive partnering support package for the product. We will continue to work with the FDA on Inosine to enable us to initiate our first Phase I clinical trial for stroke. We currently intend to pursue a partner for this program after we complete Phase I. We believe that 0-1369 could represent a new class of therapeutic for treating Parkinson's disease. Along with symptom management, this drug candidate may have disease modifying properties that could slow the progression of this debilitating condition. We are accelerating the development of O-1369 and are targeting initiation of clinical trials by the end of 2006. We plan to complete further pre-clinical development of our Troponin and MDP14 assets for potential ocular indications, for which we will seek one or more partners as well. To grow our therapeutic product pipeline, we will continue to cultivate our existing relationships with Harvard University and Children's Hospital of Boston and we will pursue accretive product and business opportunities to leverage our existing resources, relationships, programs and organization.

We will need additional financial resources to achieve our objectives. Our goal is to attract additional high quality investors who share our vision. Accordingly, we have initiated awareness campaigns focused on scientific credibility, patient advocacy, media access, re-branding in the financial community and visibility in the pharmaceutical and biotechnology industries.

We are in the business of converting sound, novel scientific discoveries and ideas into new diagnostics and drugs that will enable the medical community to improve the quality of human life. Unfortunately, much of what goes on in the human body remains a mystery: This business is not for the faint of heart, the impatient or the unfocused. Our business requires perseverant, disciplined people with vision, drive, and talent. There is no business in the world that is more difficult or challenging than ours. And, at the same time, there is no business in the world that is more rewarding. One only has to know the patients, their families and their caregivers to know the value of a successful new product.

We at Boston Life Sciences are dedicated to investing our resources wisely to create and realize value for all of our stockholders. My colleagues and I encourage you to attend our annual meeting on Tuesday, September 13, 2005.

Sincerely,

Your Chairman & CEO
Peter G. Savas

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-K*
FOR ANNUAL AND TRANSITION REPORTS PURSUANT TO SECTIONS 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2004

OR

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

Commission file number 0-6533

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

DELAWARE	**87-0277826**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**
20 NEWBURY STREET, 5th FLOOR BOSTON, MASSACHUSETTS	**02116**
(Address of Principal Executive Offices)	**(Zip Code)**

Registrant's telephone number, including area code: (617) 425-0200

Securities registered pursuant to Section 12(b) of the Act:
NONE

Securities registered pursuant to Section 12(g) of the Act:
Common Stock, Par Value $.01 Per Share
Warrants to Purchase Common Stock
Rights to Purchase Preferred Stock
(Title of Class)

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

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

Indicate by check mark whether the registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2). Yes ☐ No ☒

Based on the last sales price of the registrant's Common Stock as reported on the NASDAQ SmallCap Market on June 30, 2004 (the last business day of our most recently completed second fiscal quarter), the aggregate market value of the 6,384,618 outstanding shares of voting stock held by nonaffiliates of the registrant was $32,880,784.

As of March 24, 2005, there were 10,390,490 shares of the registrant's Common Stock issued and outstanding.

Documents incorporated by reference:

* This document contains the Form 10-K filed by the registrant with the SEC on March 31, 2005. This document does not contain the registrant's Amendment No. 1 to Form 10-K on Form 10-K/A filed with the SEC on May 2, 2005 to include previously omitted information required to be set forth in Part III of Form 10-K. The information required to be set forth in Part III of Form 10-K is included in the proxy statement for the 2005 Annual Meeting of Stockholders that accompanies this 2005 Annual Report. You may obtain a copy of Amendment No. 1 to Form 10-K by accessing the website maintained by the SEC at www.sec.gov, by accessing the registrant's website at www.bostonlifesciences.com or by contacting the registrant's investor relations department at Boston Life Sciences, Inc., 20 Newbury Street, 5th Floor, Boston, Massachusetts 02116, Attn: Investor Relations, or telephone number (617) 425-0200.

PART I

Item 1. *Business.*

General

We are a development stage biotechnology company engaged in the research and development of biopharmaceutical products for the diagnosis and treatment of central nervous system, or CNS, diseases. We were organized in 1992 and are incorporated in Delaware. Our principal executive offices are located at 20 Newbury Street, 5th Floor, Boston, Massachusetts 02116, and our telephone number is (617) 425-0200. In this Annual Report of Form 10-K, the terms "Boston Life Sciences", the "Company", "we", "us" and "our" include Boston Life Sciences, Inc. and its subsidiaries.

We are strategically located in one of the world's most prominent centers of biotechnology research – Boston, Massachusetts. Many of the world's leading universities and hospitals are located in the Boston area. These institutions have established highly regarded medical schools and research facilities. Since our founding, we have utilized our close relationships with Harvard University and its affiliated hospitals, or Harvard and its Affiliates, to secure the rights to more than 20 diagnostic and therapeutic discoveries across a wide range of indications, including Parkinson's Disease, or PD, Attention Deficit Hyperactivity Disorder, or ADHD, cancer, autoimmune diseases and allergies. However, in recent years, we have begun to narrow our focus towards the development of therapeutics and diagnostics for CNS diseases. This focus reflects, in part, the progress of our lead programs, ALTROPANE®, and Inosine. In addition, our most promising early stage programs, O-1369 and FLUORATEC™, are also targeted at CNS diseases. We are presently evaluating and exploring strategic alternatives for those programs, such as Troponin (our anti-angiogenic agent), that are not within the field of CNS.

We maintain only limited internal research and development personnel and facilities. Except for our research facility in Maryland, all of our research and development is completed under sponsored research agreements.

Product Candidates

ALTROPANE for Parkinson's Disease

Our lead program is ALTROPANE which we are developing as an aide in the diagnosis of Parkinsonian Syndromes, or PS, and related movement disorders including PD. ALTROPANE is an ^{123}I-based nuclear medicine imaging agent that binds to the Dopamine Transporter, or DAT, in the brain. The amount of ALTROPANE taken up by the brain is directly proportional to the number of DATs that are present. PD is caused by a decrease in dopamine producing cells which results in a decrease in the number of DATs. The decrease in ALTROPANE uptake in patients with PD is the basis for ALTROPANE's use as a diagnostic test for PD.

Our second Phase III trial of ALTROPANE is presently ongoing. This clinical trial is being conducted under a Special Protocol Assessment, or SPA, with the United States Food and Drug Administration, or FDA. The trial is designed to distinguish Parkinsonian from non-Parkinsonian Syndromes in patients with tremors. We currently expect to enlist up to 25 centers in the United States, most of which are university-based, and to enroll a minimum of 500 patients (250 patients with Parkinsonian tremors and 250 patients with non-Parkinsonian tremors).

ALTROPANE for ADHD

We are also pursuing the development of ALTROPANE as a diagnostic for ADHD. Our initial Phase II clinical trial of ALTROPANE in ADHD confirmed prior expert diagnosis of adults with long standing ADHD and showed a statistically significant separation of these patients from unaffected individuals. Patient enrollment in our second Phase II clinical trial was initiated in December 2001 and is currently constrained as a result of our limited financial resources and may continue to be constrained in the future.

Inosine for the Treatment of Stroke

Inosine is an axon sprouting factor which specifically promotes axon outgrowth in CNS cells. Since axons form the connections between cells of the CNS (brain and spinal cord injury), we believe that Inosine could provide a means to regenerate neuronal connections following CNS damage suffered in stroke and spinal cord injury.

We initially filed an Investigational New Drug, or IND, application with the FDA in July 2004. The FDA has requested additional pharmacology and toxicology data. We are compiling the necessary information and reports. Upon receipt of FDA approval, we plan to conduct a Phase I trial designed to enroll 27 patients with moderate to severe ischemic strokes.

Recent Developments

Over the past year, there has been a restructuring of our management team and Board of Directors. We believe that these changes have significantly strengthened the leadership of the organization, and positioned us to be able to successfully raise capital, build collaborative relationships and move our clinical programs forward. Peter Savas joined us as Chairman and Chief Executive Officer in September 2004. Mr. Savas is an accomplished leader who intends to utilize a strong network of relationships in the pharmaceutical, biotechnology, and investment communities to drive our strategic direction. Dr. Mark Pykett, our President and Chief Operating Officer, joined us in November 2004. Dr. Pykett is an experienced executive whose primary focus will be to manage the development of our scientific programs and our business development activities.

During the past six months, there have been a number of developments which have simplified our capital structure and provided near term operating capital. In November 2004, we utilized funds set aside in a restricted account to repay in full our 10% Convertible Senior Secured Promissory Notes, or Notes. In February 2005, we (i) implemented a 1-for-5 reverse stock split of our common stock which enabled us to maintain our listing on the NASDAQ SmallCap Market (ii) reached an agreement with the holders of our Series E Cumulative Convertible Preferred Stock, or Series E Stock, under which they agreed to convert their preferred stock into common stock and (iii) received approximately $1,044,000 in net proceeds through the exercise of certain warrants. In March 2005, we completed a $5,000,000 private placement of common stock.

2005 Outlook

For the foreseeable future, we expect to continue to experience continuing operating losses and negative cash flows from operations as management executes our current business plan. We believe that the cash, cash equivalents, and marketable securities available at December 31, 2004 will not provide sufficient working capital to meet our anticipated expenditures for the next twelve months. We believe that the cash, cash equivalents, and marketable securities available at December 31, 2004, combined with approximately $5,000,000 in net proceeds raised in a private placement of common stock completed in March 2005, $1,044,000 in net proceeds received through the exercise of certain warrants in February 2005, and our ability to control certain costs, including those related to clinical trial programs, pre-clinical activities, and certain general and administrative expenses will enable us to meet our anticipated cash expenditures through July 2005. We will need to raise additional capital in 2005 through a collaboration, merger or other transaction with other pharmaceutical or biotechnology companies, or through one or more debt financings or equity offerings completed by us to continue as a going concern. There can be no assurance, however, that we will be successful or that additional funds will be available on acceptable terms, if at all.

Our ability to continue development of our programs in 2005, including the Phase III trial of ALTROPANE as a diagnostic for PS, the Phase II trial of ALTROPANE as a diagnostic for ADHD, and our pre-clinical programs including Inosine and O-1369 may be affected by the availability of financial resources to fund each program. During 2005, financial considerations may cause us to modify planned development activities for one or more of our programs, and we may decide to suspend development of one or more programs until we are able

to secure additional working capital. If we are not able to raise additional capital in 2005, we will not have sufficient funds to complete the Phase III clinical trial of ALTROPANE as a diagnostic for PS or the Phase II trial of ALTROPANE as a diagnostic for ADHD.

We have previously provided estimates regarding when we expected to attain various milestones associated with the development of our programs. These estimates included projected dates regarding the initiation or completion of clinical trials, as well as the submission of regulatory filings such as an IND or NDA. Estimating trial initiation and completion dates, as well as regulatory filing dates, is extremely difficult as there are numerous uncertainties associated with attaining these milestones, many of which are beyond our control. Uncertainties associated with the initiation or completion of clinical trials include obtaining FDA approval regarding the scope or design of our clinical trials, the rate of patient enrollment, the level of compliance by clinical sites to clinical trial protocols, and the availability of clinical trial material. Uncertainties associated with the submission of regulatory filings includes reliance on third parties to complete necessary pre-clinical studies and regulatory documents, the results of pre-clinical and clinical studies, and the FDA's responses to and acceptance of our regulatory filings. In addition, the adequacy of our financial resources may also affect our ability to meet estimated timelines. Due to our current financial condition and the uncertainties described above, we have determined not to provide estimates regarding when we expect to initiate or complete a clinical trial or file an IND, NDA, or any other regulatory filing. All previous timelines that we have provided should no longer be relied upon. We will report the attainment of milestones associated with initiating or completing clinical trials and submitting regulatory filings when they have occurred.

Other Information

We are subject to the informational requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and, accordingly, file our reports, proxy statements and other information which can be read and copied at the public reference facilities maintained by the Securities and Exchange Commission at the Public Reference Room, 450 Fifth Street, NW, Washington, DC 20549. Information regarding the operation of the Public Reference Room may be obtained by calling the Securities and Exchange Commission at 1-800-SEC-0330. The Securities and Exchange Commission maintains a web site (http://www.sec.gov) that contains material regarding issuers that file electronically with the Securities and Exchange Commission.

Our Internet address is www.bostonlifesciences.com. We are not including the information contained on our web site as a part of, or incorporating it by reference into, this Annual Report on Form 10-K. We make available free of charge on our website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission.

The following are trademarks of ours that are mentioned in this Annual Report on Form 10-K: ALTROPANE® and FLUORATEC™. Other trademarks used in this Annual Report on Form 10-K are the property of their respective owners.

ALTROPANE Imaging Agent

Background

ALTROPANE is a small molecule invented by researchers at Harvard and its Affiliates, including the Massachusetts General Hospital. We licensed worldwide exclusive rights to develop ALTROPANE. The license agreement provides for milestone payments and royalties based on product sales that are consistent with industry averages for such products. We are developing ALTROPANE as an aide in the diagnosis of PS and related movement disorders including PD. We are also developing ALTROPANE as a diagnostic for ADHD.

Proposed Mechanism of Action

ALTROPANE is an ^{123}I-based nuclear medicine imaging agent that binds with extremely high affinity and specificity to the DAT. The DAT is a protein that is on the surface membrane of specialized neurons in the brain that produce dopamine, a key neurotransmitter.

ALTROPANE selectively binds to the DAT in the brain. We believe that the amount of ALTROPANE taken up by the brain is therefore directly proportional to the number of DATs that are present in any given area of the brain. Since DATs are on the membrane of dopamine-producing cells, destruction of these cells results in decreased numbers of DATs. Therefore, PD, which is caused by a decreased number of dopamine producing cells, is associated with a marked decreased in the number of DATs. As a result, when ALTROPANE is administered to patients with PD, its uptake is substantially diminished as compared to patients without PD. This marked decrease in the ALTROPANE imaging agent uptake in patients with PD is the basis for the use of the ALTROPANE imaging agent as a diagnostic test for Parkinsonian Syndromes, including PD.

The route of administration of the ALTROPANE molecule is by intravenous injection. By radioactively labeling ALTROPANE with ^{123}I, it can be used as a nuclear imaging agent that can be detected using a specialized nuclear medicine camera known as a Single Photon Emission Computed Tomography, or SPECT, camera. SPECT cameras are widely available in both community and academic medical centers. The scanning procedure using ALTROPANE takes about 40 minutes to complete. Results of these tests are usually available the same day as the scanning procedure.

Diagnostic for Parkinsonian Syndromes (PS)

Background

Parkinsonian Syndromes are characterized by presynaptic loss of dopamine-producing cells. The most prevalent form of PS is PD which is a chronic, irreversible, neurodegenerative disease that generally affects people over 50 years old. It is caused by a significant decrease in the number of dopamine producing cells in specific areas of the brain. Inadequate production of dopamine causes the PD symptoms of resting tremor, muscle retardation and rigidity. PD afflicts approximately 500,000 to 1,000,000 Americans and about four million individuals worldwide. The number of individuals affected by PD is expected to grow substantially as people continue to live longer and the overall population ages. Since administration of currently available therapies at an early stage of PD may delay the progression of the disease, early definitive diagnosis may be of substantial benefit.

Need for an Objective Diagnosis

To our knowledge, there is presently no objective test commercially available in the United States to diagnose PS. The current process for diagnosing PS highlights the critical need for an effective diagnostic. Presently, patients who have experienced tremors and other evidence of a movement disorder may pursue treatment with a number of medical professionals. These include an individual's family doctor, a neurologist, or a movement disorder specialist, or MDS, whose practice is focused on movement disorders.

Many neurologists believe that a clinical history and a physical diagnosis are adequate for diagnosing most patients with PS. However, it is speculated that approximately 25 percent of these patients present with symptoms and/or a clinical history that are inconclusive. Given this disparity, there is a need for a diagnostic test that would provide physicians with additional clinical information to help them make a definitive diagnosis when clinical symptoms and the patient's history are inconclusive.

We believe that the accuracy rates for a MDS is significantly superior to other doctors. However, there are only an estimated 250 MDSs in the United States. The limited availability of MDSs underscores the potential utility of a diagnostic tool such as ALTROPANE.

There are a number of important and potentially harmful results associated with misdiagnosis. These include:

- Patients who are improperly diagnosed as having PS but actually do not (false positive) may be administered L-Dopa or other medications for PS. These drugs can have damaging effects on individuals who do not actually have PS.
- Patients who are improperly diagnosed as not having PS but actually do (false negative), may not benefit from available treatments, thereby suffering further disease progression.

Clinical Trial Program

Diagnostic products are subject to the same regulatory requirements as a new therapeutic drug. These requirements include:

Phase I clinical trial—The purpose of a Phase I clinical trial is to determine whether a drug is safe in clinical studies involving healthy volunteers. We completed our 39 subject Phase I trial for ALTROPANE in 1998.

Phase II clinical trials—The purpose of a Phase II clinical trial is to gather additional information about short-term safety but mainly to begin to assess the effectiveness of the drug or diagnostic. We completed our 37 patient Phase II trial for ALTROPANE in February 1999. The results of this trial indicated that patients with early or mild PD were reliably differentiated from unaffected patients based on the ALTROPANE imaging agent scan results. The differentiation of PD patients from unaffected patients was demonstrated by the distinct differences in binding potential. The highest binding potential for a PD patient (0.66) was still well below the lowest binding potential seen in an unaffected patient (0.90). Qualitative assessment of the scans revealed moderate to marked decrease in at least one quadrant of the striatum in the brain of PD patients compared to the unaffected patients.

Phase III clinical trials—The purpose of a Phase III clinical trial is to determine the safety, efficacy, and appropriate dosage for a new drug. Generally, the FDA requires that two separate Phase III trials be completed before it will consider approving a product. Our first Phase III trial was designed to demonstrate ALTROPANE's ability to differentiate PS movement disorders from non-PS movement disorders. Our second Phase III trial, which is ongoing, is designed to demonstrate ALTROPANE's ability to distinguish Parkinsonian from non-PS in patients with tremors.

Initial Phase III Trial

Our initial Phase III study was designed to confirm ALTROPANE's ability to differentiate PS movement disorders (including PD) from other non-PS movement disorders. The study assessed ALTROPANE imaging agent SPECT scans in a sample population representative of those individuals that consult with neurologists or internists for undiagnosed movement disorders. Both of the trial's primary endpoints were met on a statistically significant basis. The study enrolled 100 subjects having the clinical diagnosis of PS and 65 patients having non-PS movement disorders. We completed enrollment in April 2000. The clinical diagnosis of patients in the trial was made by expert neurologists specializing in movement disorders. ALTROPANE SPECT scans were performed on each subject and reviewed by an independent three-member panel of nuclear medicine physicians specializing in neuroimaging who had no knowledge of the clinical diagnosis. The ALTROPANE scans were read and categorized as being consistent with either PS or non-PS and were then compared to the expert clinical diagnosis. There were no ALTROPANE related serious adverse events reported in the study.

Post Initial Phase III Trial Activities

Following completion of our initial Phase III trial, we had a series of meetings and discussions with the FDA regarding all of the clinical trial data that we had accumulated to date, as well as other related

considerations associated with a late stage product. The purpose of these communications and conferences was to determine what additional clinical information would be required before the FDA would consider approving ALTROPANE. Our communications with the FDA also included an assessment of the market opportunity for ALTROPANE based on the indications tested to date and the possibility of increasing the market size by expanding the indications tested. During this period, we also began compiling the clinical and regulatory information that will be required in order to submit a NDA for ALTROPANE with the FDA.

In July 2003, we filed an SPA with the FDA relating to the design and analysis of the study protocol for a second Phase III trial. In April 2004, we reached an agreement with the FDA regarding the protocol design for a new Phase III clinical trial of ALTROPANE.

Second Phase III Trial

Our second Phase III clinical trial is designed to distinguish PS from non-PS in patients with tremors. The trial will enroll subjects who have been referred to a neurology clinic with a diagnosis of tremor who have previously been diagnosed by a general practitioner or internist as having either a Parkinsonian or non-Parkinsonian tremor. Each subject will then undergo an ALTROPANE SPECT scan prior to being diagnosed by an MDS as having either a Parkinsonian or non-Parkinsonian tremor. The SPECT scans will be read "blind" by a panel of nuclear medicine physicians. The results of the blinded reads will then be compared to the MDS diagnosis for sensitivity and specificity. The primary endpoint will be the confirmation of the hypothesis that the diagnostic accuracy of ALTROPANE is significantly superior to the diagnostic accuracy of the internist or general practitioner. The diagnosis of an MDS will be utilized as the "gold standard." Because we have elected to pursue a single, large Phase III trial for this indication, rather than two smaller, replicate trials, the SPA provides that the trial be powered to potentially achieve a p-value of 0.02 or less. FDA may require this level of statistical significance for the primary endpoint in order to achieve approvability. We currently expect to enlist up to 25 centers in the United States, most of which are university-based, and to enroll a minimum of 500 patients (250 patients with Parkinsonian tremors and 250 patients with non-Parkinsonian tremors). Enrollment for this second Phase III trial is ongoing. We believe that, if the endpoints are met and no significant safety concerns or protocol deviations occur, this Phase III trial could provide the basis for an NDA submission and ultimate approval of ALTROPANE. However, we can provide no assurance that the FDA will not request additional clinical trial data or other regulatory information before it will accept an NDA submission for ALTROPANE.

GMP Manufacturing

FDA regulations require that we establish a manufacturing source for the commercial supply of ALTROPANE under the current Good Manufacturing Practice, or cGMP, regulations established by the FDA. MDS Nordion, Inc., or MDS Nordion, a Canadian corporation and well-recognized manufacturer of ^{123}I and radioactively labeled imaging agents, has supplied ALTROPANE to us since 2001. MDS Nordion completed the cGMP commercial manufacturing scale-up process for ALTROPANE in September 2001. We expect MDS Nordion will also supply the cGMP ALTROPANE imaging agent for our ADHD and other clinical trials. We do not, however, have a manufacturing agreement relating to the commercial production of ALTROPANE with MDS Nordion or any other manufacturer. We can provide no assurances that such an agreement will be executed on acceptable terms.

MDS Nordion assisted in the preparation of the regulatory information for the Chemistry Manufacturing and Controls, or CMC, section of our planned NDA. In February 2003, MDS Nordion submitted a Drug Master File describing the manufacture of ALTROPANE to the FDA.

Sales and Marketing Strategy

We are currently developing our sales, marketing and distribution strategy for ALTROPANE so that we are adequately prepared to launch the product when and if marketing approval is received from the FDA. No assurances can be made that we will receive such approval or that such launch will be successful and result in revenues.

Competition

To our knowledge, there is presently no approved diagnostic in the United States for PD and other movement disorders. DATScan™, a PD diagnostic, was approved for sale in Europe. DATScan is marketed by Nycomed Amerisham, a leading provider of diagnostic imaging agents.

Market Assessment

We have commissioned an independent market analysis the results of which form the basis for our assessment of the potential market for a PS diagnostic, including expected demand, estimated pricing, and other factors such as insurance reimbursement. It is estimated that approximately 140,000 individuals per year present to their physician with new, undiagnosed movement disorders such as PD and Benign Essential Tremor, and are therefore candidates for the ALTROPANE imaging agent scan to diagnose or rule out early PS. This market is expected to grow 3-5 percent annually as demographics drive an increase in the overall age of the U.S. population.

Diagnostic for Attention Deficit Hyperactivity Disorder (ADHD)

Background

ADHD is the most commonly diagnosed behavioral disorder in children and is the fastest growing psychiatric disorder in adults. ADHD is characterized by inattention, impulsivity, and hyperactivity. It is estimated that between 3 and 5 percent of children have ADHD, or approximately 2 to 3 million children in the United States. ADHD often continues to manifest itself throughout a patient's adolescence and into adulthood. It is estimated that 30 to 70 percent of children with ADHD still meet the diagnostic criteria in adolescence and adulthood.

It is also estimated that two to four percent of adults are affected by ADHD. Adults with ADHD tend to have fewer problems with hyperactivity, but more problems with inattention and distractibility. Many patients with ADHD often express other psychiatric disorders as well, such as depression, anxiety, obsessive compulsive disorder, and alcohol and substance abuse.

ADHD is a chronic disorder, therefore it is important for a physician to establish a continuing plan of monitoring, evaluating, and optimizing treatment plans. ADHD is typically treated with stimulant medications. It should be noted, however, that there is controversy over the long-term use of these stimulant medications, particularly in children.

Diagnosing ADHD

ADHD is currently diagnosed according to a set of behavioral criteria defined in the Diagnostic and Statistical Manual, or DSM, used by psychiatrists. This manual provides clinicians with the currently accepted list of diagnostic criteria to use in diagnosing the vast majority of mental disorders. A comprehensive evaluation is necessary to establish a diagnosis, rule out other causes and determine the presence or absence of co-morbid conditions. Such evaluation should include a clinical assessment of the individual's academic, social, emotional, functional and developmental capabilities. Because these signs are difficult to categorize, the guidelines for diagnosing ADHD are very specific. According to the DSM, the diagnosis of ADHD requires that patients exhibit three broad behavioral symptoms that may be indicative of the disease: inattentiveness, hyperactivity, and impulsiveness. In children and teenagers, the symptoms are typically more frequent or more severe than in other children the same age. In adults, the symptoms generally impair a patient's ability to function normally in daily life. In addition, the behaviors must create significant difficulty in at least two areas of a patient's life, such as at home, in social settings, at school, or at work. Finally, symptoms must be present for at least six consecutive months.

Need for an Objective Diagnosis

While these criteria provide a structural framework for diagnosing ADHD, it has not been possible to validate these criteria against an objective biological standard. The lack of a definitive biological basis for

ADHD had led to confusion concerning the diagnosis of ADHD. For example, 40 percent of adult patients who likely have ADHD would not meet the criteria set forth in the DSM because it states that symptoms must have been evident before the age of seven. We believe that current diagnostic methods result in the frequent misdiagnosis of ADHD. As such, the introduction of an objective test to assist in the definitive diagnosis of ADHD would help avoid the unnecessary treatment of patients who simply have behavioral problems unrelated to ADHD. An objective test would also identify those patients who have not received treatment for the condition because of inadequate diagnostic methods.

Researchers have recently postulated, but have not been able to confirm, that ADHD may be linked to an abnormality in the DAT. A number of stimulant medications, including RITALIN® and other newer therapeutics, currently constitute the most prescribed treatment for the broadly described disorder labeled ADHD. RITALIN, in part, binds to the DAT and blocks dopamine reuptake. Since there has not been an objective test available, the increasing use of potentially addictive drugs among children has prompted vigorous public debate amongst educators, parents and the medical community. This concern has escalated in recent years as evidenced by widespread coverage in the media.

Our Clinical Trial Program for ADHD

We initiated our development program utilizing the ALTROPANE imaging agent for the early diagnosis of ADHD in June 1999. Under a Physician's Sponsored IND application, adult patients with ADHD underwent SPECT scans using ALTROPANE and were found to have a significant elevation in the number of DATs in the midbrain. All of the patients tested showed this abnormality. The excessive number of dopamine transporters found in the midbrain in these ADHD subjects suggests that this may be a detectable biochemical abnormality in at least some individuals presenting with symptoms of ADHD. The results of the study were subsequently published in the British medical journal, *The Lancet*.

We completed our initial Phase II clinical trial in September 2000. The trial, consisting of 40 adult patients, was designed to expand and elaborate on the findings obtained in our Physician's Sponsored IND trial. In March 2001, we announced that the ALTROPANE imaging agent had succeeded in identifying adults with long-standing expertly-diagnosed ADHD in the Phase II study. Adults (ages 20-40) diagnosed by clinical experts as having ADHD had highly statistically significant elevations in the number of their brain dopamine transporters ($p<0.001$) compared to unaffected (non-ADHD) individuals of the same age group. The 40 subject study was carried out at four academic medical institutions in the United States and the data analysis was performed at the Massachusetts General Hospital in Boston. The highly statistically significant separation of ADHD from unaffected individuals based on the ALTROPANE imaging agent brain scan in this study confirmed the results of the Physician's IND study.

A second Phase II trial was initiated in order to confirm the results of the first Phase II trial and to test the validity of a newly-developed imaging processing algorithm that could potentially be used to more effectively separate AHDH patients from normal individuals. We are currently conducting our second Phase II trial of ALTROPANE for the diagnosis of ADHD in adults. Patient enrollment in this trial has been constrained by our limited financial resources. We do not expect to be able to accelerate enrollment in this trial until such time as we raise sufficient additional capital. No assurances can be given that such capital will be available on acceptable terms.

Market Potential for an ADHD Diagnostic

It has been estimated that 1.5 million adults in the United States between the ages of 18 to 30 are tentatively diagnosed with ADHD. The most significant market is the 2 to 3 million children in the United States who are categorized as having ADHD. It has been estimated that approximately 1.5 million adults and children visit a physician each year with behavioral disorders, and that approximately 25 to 35% of these patients will be diagnosed as having ADHD. We believe that an effective diagnostic for ADHD will enable physicians to identify

those patients that have ADHD versus those who suffer from other behavioral disorders. Once an objective diagnosis has been completed, therapeutic intervention with drugs such as RITALIN and newer therapeutics can be administered.

Inosine

Background

We licensed worldwide exclusive rights to develop Inosine. The license agreement provides for milestone payments and royalties based on product sales that are consistent with industry averages for such products.

It has been widely believed that human beings are not capable of regenerating damaged or destroyed nerves in their CNS. Thus, severe injuries to the spinal cord and brain generally result in permanent disability. In a limited way, other accessory nerve pathways can compensate for those that have been destroyed, resulting in limited recovery with rehabilitation, particularly after stroke.

Inosine is an axon sprouting factor which specifically promotes axon outgrowth in CNS cells. Since axons form the connections between cells of the CNS (brain and spinal cord), we believe that Inosine provides a means to re-establish connections following CNS damage suffered in stroke or spinal cord injury.

Proposed Mechanism of Action

Inosine is a purine that is a naturally occurring product of the hydrolysis of adenosine, a purine nucleoside. Inosine is released in small quantities in the nervous system after injury. After a stroke, increased levels of inosine are found in the brain along with a host of other factors from the brain tissue surrounding the stroke. These factors are believed to contribute to limited reorganization of the CNS cells after stroke. Inosine acts as an agonist of a novel enzyme, N-kinase, which is thought to be the master switch for axon regeneration.

Therapeutic Potential

We believe that Inosine is differentiated in a number of important ways. Inosine does not appear to need to be given within hours after symptoms of stroke occur. Inosine does not work by limiting or reversing the brain damage caused by the interruption of arterial blood flow that results in stroke, but instead stimulates the formation of new axonal branches and connections after the stroke is complete. This means, among other things, that the so- called "treatment window" may be extended with Inosine. Our studies have shown that rats can begin Inosine treatment up to 24 hours after the completed stroke and still recover motor function. In contrast, thrombolytic and neuroprotective treatments must be given within a few hours of stroke onset (in rats or humans) to achieve any benefit. Clinically, neuroprotective and thrombolytic approaches have failed when given after the stroke is complete or after there has been significant brain cell death and a functionally important region of the brain has been definitively destroyed by stroke. In contrast, Inosine promotes motor function recovery through the formation of new axonal branches and connections in the brain and spinal cord after the stroke is complete.

An examination of the damage caused by stroke and the limitations of existing forms of treatment provides a good example of why we believe that Inosine may provide a therapeutic benefit to stroke patients. Ischemic stroke is caused by an acute blockage of a blood vessel to a specific area of the brain. Depending on the extent of the territory vascularized by this vessel, clinical consequences range from minor debility to death. As far as we know, all current therapies, both approved or in development, are focused on minimizing the damage to the affected territory of the brain, either by reversing the blockage (by clot dissolution) or protecting brain cells from the ischemic injury (cytoprotective agents). However, once the damage is complete, there is generally little or no functional recovery, since there is little or no nerve regeneration in the CNS that could compensate for the irreversible loss of the nerve cells and their connections. To date, the inability to provide regeneration therapy for stroke has been due to the absence of any effective compounds having the necessary *in vivo* regenerative activity. Based on experimental results in animals, Inosine appears to be effective in regenerating nerve connections in the CNS. Inosine can be administered directly into the cerebrospinal fluid which bathes the brain, thereby exposing

the relevant brain tissue to therapeutic amounts of Inosine while potentially minimizing toxicity. We believe Inosine can be administered via a widely-used delivery system, for several months if necessary, in order to promote the optimal amount of regeneration. In animals, Inosine appears effective even when given several hours after the damage has occurred and the stroke is complete. This is in contrast to other potential agents for stroke therapy now in development which must be given almost immediately after the stroke.

Pre-Clinical Development

Experiments and animal tests conducted by our principal collaborating scientist, Dr. Larry Benowitz and his colleagues at Children's Hospital in Boston, have reported significant accomplishments in the field of axon regeneration. We believe that these results demonstrate significant progress in the search for potentially important regenerative agents for stroke and spinal cord injury. A summary of these milestones is set forth below:

- Our collaborating scientists demonstrated that Inosine treatment produced functional recovery in an experimental rat model of stroke. The improvement in limb function in the treated animals, as assessed in a number of behavioral tasks, was statistically significant.
- Inosine stimulated axon collateral growth in an animal model of spinal cord injury. Almost all of the treated animals showed signs of extensive collateral sprouting of axons from the uninjured to the injured side of the corticospinal tract reaching below the level of the hemi-transection.
- Toxicology studies indicate that Inosine does not appear to cause random, non-regulated axon growth in normal rats. This is important because such growth could potentially cause unwanted and potentially dangerous changes in behavior, personality or other functions.
- Using a compound that acts via the same pathway as Inosine, our collaborating scientists have been able to stimulate regeneration of the optic nerve to a degree far greater than had previously been documented in scientific literature and showed that the regenerated fibers passed through an optic nerve crush injury and extend for several millimeters along the degenerated optic nerve tract towards the brain.
- Our principal collaborating scientists at Harvard and its Affiliates discovered a means to stimulate nerve fiber (axons) regeneration over long distances following injury to the optic nerve in rats and discovered a protein that acts synergistically with another of our proprietary molecules, AF-1, to increase axon outgrowth.

Codman & Shurtleff, Inc.

In September 2003, we entered into an agreement with Codman & Shurtleff, Inc., or Codman. Codman is a Johnson & Johnson subsidiary. The agreement calls for Codman to provide us with implantable pumps and catheters for our preclinical and clinical studies of Inosine. We believe that the sourcing of pumps and catheters from a reliable, high quality supplier such as Codman will enable us to complete our pre-clinical toxicology studies, file our IND and proceed into clinical development in a more streamlined manner by utilizing the same drug delivery technology in each step. In exchange for their support of our development program and regulatory submissions, Codman received a right of first refusal to exclusively license our intellectual property regarding Inosine including, but not limited to, a right to co-develop Inosine with Codman's medical devices in the event that we offer similar rights to others. Codman's rights are subject to specified terms and could extend from the date of certain completed pilot studies through the completion of Phase II clinical testing of Inosine. However, we can provide no assurances that we will ever offer such rights to another party or that Codman will exercise their right of first refusal.

Investigational New Drug Application

In July 2004, we filed an IND application with the FDA for the use of Inosine to enhance motor function recovery after stroke. The IND included data which assessed the toxicity of Inosine administered via continuous infusion into the lateral ventricle of the brain in both rats and dogs in a manner identical to that proposed for our Phase I clinical trial in the IND.

In September 2004, we announced that we had received a written response to our Inosine IND filing from the FDA. In its response, the FDA placed our Phase I study on clinical hold pending the submission of additional

pharmacology and toxicology data. We have submitted a letter to the FDA stating our intention to perform this additional work and requesting confirmation that the submission of these data will be sufficient to remove the clinical hold and to initiate the Phase I study. On September 27, 2004, we held a teleconference call with the FDA to clarify the FDA's requests for additional data. The FDA advised us to conduct the reprocessing of brain tissue samples and specialized histological staining of the brain sections and to submit these data for their review. We do not expect additional tissue analyses to yield evidence of toxicity, but there can be no assurance that will be the case. We expect that the FDA will finalize their review of the IND amendment within 30 days of receipt of our complete response to the clinical hold letter. We believe that if there are no further questions or comments by the FDA after their review, our Phase I study will be taken off clinical hold and we will be given clearance to proceed with our Phase I trial. There is no assurance that we will be taken off clinical hold or that the FDA will not have further questions or concerns that will require, among other things, an additional response or preclinical studies to be preformed prior to initiating the Phase I trial.

Clinical Trial Program

The proposed Phase I study has been designed to enroll 27 moderate to severe stroke patients. The study design calls for a dose escalation of Inosine given to three groups of stroke patients (9 patients in each dose group). The highest dose given will be the estimated human equivalent of the effective dose given to rats. All patients will be maintained on their initial dose of Inosine for the full study period. Inosine will be administered via an implantable subcutaneous pump and ICV catheter system that potentially allows the patient to leave the hospital at the same approximate time that they otherwise would have after such a stroke. In addition to safety monitoring, efficacy monitoring will also be performed, but the small number of patients and the short duration of treatment will probably preclude statistically valid efficacy conclusions to be drawn. It is expected that formal efficacy testing will be the purpose of a Phase II trial, which will follow the Phase I trial if there are no significant safety concerns raised by the Phase I trial.

Market Opportunity

We believe that Inosine has the potential to change the current clinical treatment paradigm for stroke and other CNS injuries. Our initial target application will be for stroke. We believe that Inosine also has potential for the treatment of spinal cord injury and traumatic brain injury, two additional indications that could potentially benefit from Inosine treatment.

The annual incidence of stroke in the United States is approximately 700,000 with more than 5,000,000 stroke survivors currently alive. The incidence of a moderate or severe traumatic brain injury is approximately 250,000 cases annually. The incidence of spinal cord injury is approximately 8,000 cases annually. Treatment for these conditions is presently limited to hemodynamic support, steroids to reduce inflammation, and, in the case of stroke, the correction of predisposing hematological abnormalities.

Other Pre-clinical Programs

Parkinson's Disease Therapeutic: O-1369

In September 2001, we acquired the licensing rights to a group of new therapeutic compounds developed by the same scientists who developed the ALTROPANE imaging agent. We believe that this group of compounds represents a novel and promising approach to the treatment of PD. Each product candidate in this group is a small tropane-based molecule that binds with extremely high selectivity to the DAT, thereby blocking the re-uptake of dopamine from nerve connections. This blockade results in an increase in local dopamine concentrations at the nerve junctions and thus compensates for the decreased dopamine production characteristic of PD. We believe that the strategy of DAT blockade represents a new approach to the treatment of PD.

In addition to increasing synaptic dopamine concentrations, DAT blockade may have unique disease-modifying or neuro-protective effects. The DAT has been increasingly implicated as one of the possible

fundamental putative mediators of PD. DAT may transport molecules (including potentially dopamine itself) responsible for the destruction of the dopamine neurons. DAT blockade has been shown, in a variety of animal models, to protect dopamine-producing cells from experimental toxins. Based on the accumulating data, DAT blockade may represent a credible and viable approach to potentially preventing the progression of PD in both high-risk patients and those with recent onset of symptoms.

Our leading DAT blocking compound, O-1369, has been shown in primate studies to alleviate the symptoms of PD. The efficacy of O-1369 was comparable to that of a standard dopamine agonist. Dopamine agonists are routinely used to treat the symptoms of PD both as mono-therapy agents and in conjunction with the most common treatment, LevaDopa. Preliminary studies of O-1369 in animals show a good safety profile and good bioavailability following oral administration. Based on these preliminary promising preclinical results, we intend to continue the preclinical development of this compound, which if successful, should lead to the filing of an IND and clinical testing. However, further pre-clinical development of O-1369, depends, in part, on our ability to raise additional capital. No assurance can be given that we will be able to raise such capital.

Troponin

The Troponin program is focused on developing therapeutics to prevent the growth and spread of a number of cancers. The program does not fall within our current strategic focus on developing diagnostics and therapeutics for CNS diseases. Therefore, we are currently exploring our strategic alternatives related to this program including, but not limited to, terminating further development.

Troponin-I, or Troponin, is a naturally occurring protein found within human cartilage and other tissues, such as skeletal muscle. As a tissue of the body, cartilage has few blood vessels and is a very infrequent site for tumor formation. Troponin was discovered to be present in cartilage by scientists at Children's Hospital in Boston, and found to have extremely strong anti-angiogenic activity, both *in vitro* and *in vivo*. The scientific basis for our development of Troponin was published in the *Proceedings of the National Academy of Sciences*.

Angiogenesis, the formation of new blood vessels, plays an important role in the growth and spread of cancer throughout the body. Experimental and clinical evidence strongly suggests that the inhibition of angiogenesis could potentially offer a general therapeutic approach to the prevention or treatment of all solid tumor metastases. This approach is independent of tumor type since it targets only proliferating blood vessel cells. In addition to the treatment of cancer, anti-angiogenic approaches may have potential for the treatment of eye diseases that are associated with abnormal retinal angiogenesis. Two of these diseases, macular degeneration and diabetic retinopathy, are the major causes of blindness in developed countries.

To date, much of our effort has focused on the development of a reliable manufacturing process for Troponin. This work has principally been performed at our research and manufacturing facility in Baltimore, Maryland. We believe that we have made progress in developing a proprietary method for the purification of Troponin that also conserves the biological activity of the protein. This has been a challenging problem throughout the biotechnology industry with respect to complex bacterial-produced recombinant proteins such as Troponin.

We have completed initial one-month toxicology tests for Troponin. Preliminary results revealed no significant toxicity in either species (primates and rats) during and after the one-month infusion period. We have also completed efficacy testing in animal models which indicate that Troponin, when administered by constant infusion in extremely low doses to mice, had suppressed the growth of melanoma metastases in the lung.

FLUORATEC Imaging Agent

We have initiated the preclinical development of a "second generation" technetium-based compound for the diagnosis of PD and ADHD. This compound differs from ALTROPANE in structure and in the advantageous

substitution of technetium for iodine as the radioligand. Primate studies using the technetium compound have demonstrated that this compound is taken up by the normal striatum in sufficient quantity to provide an easily readable image. Primates with experimentally-induced PD had markedly decreased uptake of the compound. Radiation dosimetry, pharmacokinetic, and toxicology studies were all favorable. Based on these pre-clinical results, a Physician's Sponsored IND was filed with the FDA and studies with the FLUORATEC imaging agent were subsequently performed in healthy volunteers and patients with PD. The image quality was comparable to that obtained with ALTROPANE. We believe that the ability to eventually follow ALTROPANE to market with a second-generation technetium product would give us a long-term competitive advantage. The use of technetium could offer cost and manufacturing advantages. However, the pace of further pre-clinical development of FLUORATEC depends, in part on our ability to access additional capital to fund such development. No assurance can be given that we will be able to raise such capital.

Scientific Collaborators

A summary of the principal scientific, research and development professionals associated with us, and a composite of their professional backgrounds and affiliations is as follows:

Larry I. Benowitz, Ph.D., Director, Laboratories for Neuroscience Research in Neurosurgery, Children's Hospital, Boston; Associate Professor of Neuroscience, Department of Surgery, Harvard Medical School;

Alan J. Fischman, M.D., Ph.D., Director, Department of Nuclear Medicine, Massachusetts General Hospital; Professor of Radiology, Harvard Medical School;

Robert S. Langer, Sc.D., Institute Professor of Chemical and Biomedical Engineering, Massachusetts Institute of Technology;

Robert Licho, M.D., Director of Medical Imaging, Boston Life Sciences, Inc.; Clinical Director of Nuclear Medicine, University of Massachusetts/Memorial Medical Center; Associate Professor of Radiology, University of Massachusetts Medical School; and

Peter Meltzer, Ph.D., President, Organix, Inc., Woburn, MA.

Research and Development

We rely on licensing from third parties, principally Harvard and its Affiliates, as our source for new technologies and product candidates, and we maintain only limited internal research and development personnel and facilities. Research and development expenses for the years ended December 31, 2004, 2003 and 2002 were $6.4 million, $4.4 million and $6.9 million, respectively.

Licensing Agreements, Patents and Intellectual Property

We have obtained exclusive licenses to patent portfolios related to our products in development. However, as to one or more of the patents and patent applications of the patent portfolios, which we have licensed from a university or academic institution, the United States government holds a nonexclusive, royalty-free, license in exchange for providing research funding.

Our intellectual property strategy is to vigorously pursue patent protection for our technologies in the United States and major developed countries. As of March 15, 2005, we owned or licensed 23 issued U.S. patents and 15 pending U.S. patent applications. International patent applications corresponding to certain of these U.S. patent applications have also been filed. Our earliest patents on the ALTROPANE imaging agent expire in 2012, with the last U.S. patent presently issued expiring in 2022. The early patents on Inosine expire in 2017 and patents on pending applications may extend protection well into the future.

The patent positions of pharmaceutical and biotechnology companies, including ours, are uncertain and involve complex and evolving legal and factual questions. We cannot guarantee that any patents will issue from any pending or future patent applications owned by, or licensed to us. Existing or future patents may be challenged, infringed upon, invalidated, found to be unenforceable or circumvented by others. We cannot guarantee that any of our rights under any issued patents will provide sufficient protection against competitive products or otherwise cover commercially valuable products or processes. We may not have identified all United States and foreign patents that pose a risk of infringement. In addition, even if we secure patent protection, our products may still infringe on the patents or rights of other parties, and these patent holders may decide not to grant a license to us. We may be required to change our products or processes, engage in legal challenges to the validity of third party patents that block our ability to market a product, pay licensing fees, or cease certain activities because of the patent rights of third parties. Any of these events could cause additional unexpected costs and delays.

In the event that a third party has a patent or patent application overlapping an invention claimed in one of our patent applications, we may be required to participate in a patent interference proceeding declared by the United States Patent and Trademark Office to determine priority of invention. A patent interference could result in substantial uncertainties and cost for us, even if the eventual outcome is favorable to us. We cannot provide assurance that our patents and patent applications, if issued, would be held valid by a court of competent jurisdiction.

We also rely on trade secrets and proprietary know-how. We seek to protect this information through confidentiality agreements with our collaborators and consultants. There can be no guarantee that these procedures and agreements will not be breached or that we will have adequate remedies for such breach. In addition, if consultants, scientific advisors, or other third parties apply technological information which they have developed separate from us to our technologies, there may be disputes as to the ownership of such information which may not be resolved in our favor.

Competition

The biotechnology and pharmaceutical industries are highly competitive and are dominated by larger, more experienced and better capitalized companies. Thus, we compete with a number of pharmaceutical and biotechnology companies that have financial, technical and marketing resources and experience significantly greater than ours. Such greater experience and financial strength may enable them to bring their products to market sooner than us, thereby gaining a competitive advantage. In addition, research related to the causes of, and possible treatments for diseases for which we are trying to develop products, including CNS disorders such as stroke, PD and ADHD are developing rapidly, and there is a potential for extensive technological innovation in relatively short periods of time. Given that many of our competitors have greater financial resources, there can be no assurance that we will be able to effectively compete with any new technological developments. In addition, many of our competitors and potential competitors have significantly greater experience than we do in completing preclinical and clinical testing of new pharmaceutical products and obtaining FDA and other regulatory approvals of products. These advantages could enable them to bring products to market faster than us.

We expect that our products will compete with a variety of products currently offered and under development by a number of pharmaceutical and biotechnology companies that have greater financial and marketing resources than ours. We believe that our products, if successfully developed, will compete with these products principally on the basis of improved and extended efficacy and safety, and the overall economic benefit to the health care system offered by such products. However, there can be no assurance that our products, if developed, will achieve better efficacy and safety profiles than current drugs now offered or products under development by our competitors. Competition among pharmaceutical products approved for sale also may be based on, among other things, patent position, availability and price. In addition, we expect that our competitors will have greater marketing resources and experience than we do, which may enable them to market their products more successfully than we market ours.

A significant amount of research and development in the biotechnology industry is conducted by academic institutions, governmental agencies and other public and private research organizations. We possess only limited internal research and development facilities and personnel, and rely on collaborations with these entities (principally, Harvard and its Affiliates) to acquire new technologies and product candidates. These entities often seek patent protection and enter into licensing arrangements to collect royalties for use of technology or for the sale of products they have discovered or developed. We face competition in our licensing or acquisition activities from pharmaceutical and biotechnology companies that also seek to collaborate with or acquire technologies or product candidates from these entities. Accordingly, we may have difficulty licensing or acquiring technologies or product candidates on acceptable terms.

Regulatory Considerations

Our technologies must undergo a rigorous regulatory approval process, which includes extensive preclinical and clinical testing, to demonstrate safety and efficacy before any resulting product can be marketed. To date, neither the FDA nor any of its international equivalents has approved any of our technologies for marketing. In the biotechnology industry, it has been estimated that less than five percent of the technologies for which clinical efforts are initiated ultimately result in an approved product. The clinical trial and regulatory approval process can require many years and substantial cost, and there can be no guarantee that our efforts will result in an approved product.

Our activities are regulated by a number of government authorities in the United States and other countries, including the FDA pursuant to the Federal Food, Drug and Cosmetic Act. The FDA regulates pharmaceutical products, including their manufacture and labeling. Data obtained from testing is subject to varying interpretations which can delay, limit or prevent FDA approval. In addition, changes in existing regulatory requirements could prevent or affect the timing of our ability to achieve regulatory compliance. Federal and state laws, regulations and policies may be changed with possible retroactive effect, and how these rules actually operate can depend heavily on administrative policies and interpretations over which we have no control.

Obtaining FDA approvals is time-consuming and expensive. The steps required before our potential products may be marketed in the United States include (i) preclinical laboratory and animal tests, (ii) the submission to the FDA of an application for an IND, which must become effective before United States human clinical trials may commence, (iii) adequate and well-controlled human clinical trials to establish the safety and efficacy of the product, (iv) the submission to the FDA of a marketing authorization application(s) and (v) FDA approval of the application(s) prior to any commercial sale or shipment of the drug. There is no guarantee that such approvals will be granted for any of our potential products, or that the FDA review process will not involve delays that significantly and negatively affect our potential products. We also may encounter similar delays in foreign countries. In addition, even if we receive regulatory approvals, they may have significant limitations on the uses for which any approved products may be marketed. In addition, any marketed product and its manufacturer are subject to periodic review, and any discovery of previously unrecognized problems with a product or manufacturer could result in suspension or limitation of approvals.

Manufacturing

We currently outsource manufacturing for all of our products, with the exception of Troponin, and expect to continue to outsource manufacturing in the future. We believe our current suppliers will be able to manufacture our products efficiently in sufficient quantities and on a timely basis, while maintaining product quality. We seek to maintain quality control over manufacturing through ongoing inspections, rigorous review, control over documented operating procedures and thorough analytical testing by outside laboratories. We believe that our current strategy of primarily outsourcing manufacturing is cost-effective since we avoid the high fixed costs of plant, equipment and large manufacturing staffs.

FDA regulations require that we establish a manufacturing source for the commercial supply of ALTROPANE under cGMP regulations established by the FDA. In August 2000, we signed a Manufacturing

Agreement with MDS Nordion to supply ALTROPANE under cGMP standards. MDS Nordion is a well-recognized manufacturer of ^{123}I and specializes in the production of radioactive isotopes and in radioactively labeling imaging agents. MDS Nordion completed the cGMP commercial manufacturing scale-up process for the ALTROPANE imaging agent in September 2001. MDS Nordion assisted in the preparation of the regulatory information for the CMC section of our planned NDA for PD. In February 2003, MDS Nordion submitted a Drug Master File describing the manufacture of ALTROPANE to the FDA. We expect MDS Nordion will also supply the GMP ALTROPANE imaging agent for our ADHD and other clinical trials. We do not, however, have a manufacturing agreement relating to the commercial production of ALTROPANE with MDS Nordion or any other manufacturer. We can provide no assurances that such an agreement will be executed on acceptable terms.

In May 2001, we entered into a lease agreement for certain laboratory space in Baltimore, Maryland. We acquired this space to support our efforts to establish a consistent manufacturing process for Troponin. In May 2002, we increased the amount of space we are leasing in Baltimore to a total of approximately 3,300 square feet. The Troponin program is focused on developing therapeutics to prevent the growth and spread of a number of cancers. The program does not fall within our current strategic focus on developing diagnostics and therapeutics for CNS diseases. Therefore, we are currently exploring our strategic alternatives related to this program including, but not limited to, terminating further development.

Marketing and Sales

We continue to evaluate opportunities for corporate alliances and partners to assist us in developing, commercializing and marketing our products. Our strategy is to enter into collaborative arrangements with pharmaceutical and other companies for the development, manufacturing, marketing and sales of our products, including internationally. These collaborators are generally expected to be responsible for funding or reimbursing all or a portion of the development costs, including the costs of clinical testing necessary to obtain regulatory approvals and for commercial manufacturing, in exchange for rights to market certain products in particular geographic territories.

Employees

As of December 31, 2004, we employed 15 individuals full-time, five of whom hold Ph.D. and/or M.D. degrees and another three of whom hold other advanced degrees. In addition, we engaged the services of two individuals as scientific collaborators on a contractual basis. None of our employees are covered by a collective bargaining agreement. We consider our employee relations to be good.

Additional Factors That May Affect Future Results

Statements contained or incorporated by reference in this Annual Report on Form 10-K that are not based on historical fact are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Exchange Act. These forward-looking statements regarding future events and our future results are based on current expectations, estimates, forecasts, and projections, and the beliefs and assumptions of our management including, without limitation, our expectations regarding our product candidates, results of operations, selling, general and administrative expenses, research and development expenses and the sufficiency of our cash for future operations. Forward-looking statements may be identified by the use of forward-looking terminology such as "may," "could," "will," "expect," "estimate," "anticipate," "continue," or similar terms, variations of such terms or the negative of those terms.

We cannot assure investors that our assumptions and expectations will prove to have been correct. Important factors could cause our actual results to differ materially from those indicated or implied by forward-looking statements. Such factors that could cause or contribute to such differences include those factors discussed below. We undertake no intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. If any of the following risks actually occur, our business, financial condition or results of operations would likely suffer.

Risk Factors

We operate in a rapidly changing environment that involves a number of risks, some of which are beyond our control. The following discussion highlights some of these risks and others are discussed elsewhere herein.

Risks Related to our Financial Results and Need for Additional Financing

WE ARE A DEVELOPMENT STAGE COMPANY. WE HAVE INCURRED LOSSES FROM OUR OPERATIONS SINCE INCEPTION AND ANTICIPATE LOSSES FOR THE FORESEEABLE FUTURE. WE WILL NOT BE ABLE TO ACHIEVE PROFITABILITY UNLESS WE DEVELOP, AND OBTAIN REGULATORY APPROVAL FOR AND MARKET ACCEPTANCE OF OUR PRODUCT CANDIDATES.

Biotechnology companies that have no approved products or other sources of revenue are generally referred to as development stage companies. The majority of biotechnology companies are development stage companies. As of December 31, 2004, we had incurred cumulative net losses of approximately $105,647,000 since inception. We have never generated revenues from product sales and we do not currently expect to generate revenues from product sales for at least the next three years. If we do generate revenues and operating profits in the future, our ability to continue to do so in the long term could be affected by the introduction of competitors' products and other market factors. We expect to incur significant operating losses for at least the next three years. The level of our operating losses may increase in the future if more of our product candidates begin human clinical trials. We will never generate revenues or achieve profitability unless we develop and obtain regulatory approval for and market acceptance of our product candidates. This will require us to be successful in a range of challenging activities, including clinical trial stages of development, obtaining regulatory approval for our product candidates, and manufacturing, marketing and selling them. We may never succeed in these activities, and may never generate revenues that are significant enough to achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis.

WE WILL NEED SUBSTANTIAL ADDITIONAL FUNDING IN ORDER TO CONTINUE OUR BUSINESS AND OPERATIONS. IF WE ARE UNABLE TO SECURE SUCH FUNDING ON ACCEPTABLE TERMS, WE MAY NEED TO SIGNIFICANTLY REDUCE, DELAY OR CEASE ONE OR MORE OF OUR RESEARCH OR DEVELOPMENT PROGRAMS, OR SURRENDER RIGHTS TO SOME OR ALL OF OUR TECHNOLOGIES.

We require significant funds to conduct research and development, including pre-clinical studies and clinical trials of our technologies, and to commercialize our product candidates, if any such product candidates receive regulatory approval for commercial sale. Because the successful development of our products is uncertain, we are unable to estimate the actual funds we will require to develop and commercialize them. Our funding requirements depend on many factors, including:

- The scope, rate of progress and cost of our clinical trials and other research and development activities;
- Future clinical trial results;
- The terms and timing of any collaborative, licensing and other arrangements that we may establish;
- The cost and timing of regulatory approvals and of establishing sales, marketing and distribution capabilities;
- The cost of establishing clinical and commercial supplies of our product candidates and any products that we may develop;
- The cost of obtaining and maintaining licenses to use patented technologies;
- The effect of competing technological and market developments; and
- The cost of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights and other patent-related costs, including litigation costs and the results of such litigation.

Until such time, if ever, as we can generate substantial revenue from product sales or through collaborative arrangements with third parties, we may need to raise additional capital. To date, we have experienced negative cash flows from operations and have funded our operations primarily from equity financings. Additional funds may not be available to us on acceptable terms or at all. If adequate funds are not readily available, we may need to significantly reduce or even cease one or more of our research or development programs. Alternatively, to secure such funds, we may be required to enter financing arrangements with others that may require us to surrender rights to some or all of our technologies or grant licenses on terms that are not favorable to us. If the results of our current or future clinical trials are not favorable, it may negatively affect our ability to raise additional funds. If we are successful in obtaining additional equity financing, the terms of such financing will have the effect of diluting the holdings and the rights of our shareholders. Estimates about how much funding will be required are based on a number of assumptions, all of which are subject to change based on the results and progress of our research and development activities.

For the foreseeable future, we expect to experience continuing operating losses and negative cash flows from operations as management executes our current business plan. We believe that the cash, cash equivalents, and marketable securities available at December 31, 2004 will not provide sufficient working capital to meet our anticipated expenditures for the next twelve months. We believe that the cash, cash equivalents, and marketable securities available at December 31, 2004, combined with approximately $5,000,000 in net proceeds raised in a private placement of common stock completed in March 2005, $1,044,000 in net proceeds received through the exercise of certain warrants in February 2005, and our ability to control certain costs, including those related to clinical trial programs, pre-clinical activities, and certain general and administrative expenses will enable us to meet our anticipated cash expenditures through July 2005. We will need to raise additional capital in 2005 through a collaboration, merger or other transaction with other pharmaceutical or biotechnology companies, or through a debt financing or equity offerings by us to continue as a going concern. There can be no assurance, however, that we will be successful or that additional funds will be available on acceptable terms, if at all.

Our ability to continue development of our programs in 2005, including the Phase III trial of ALTROPANE as a diagnostic for PS, the Phase II trial of ALTROPANE as a diagnostic for ADHD, and our pre-clinical programs including Inosine and O-1369 may be affected by the availability of financial resources to fund each program. During 2005, financial considerations may cause us to modify planned development activities for one or more of our programs, and we may decide to suspend development of one or more programs until we are able to secure additional working capital. If we are not able to raise additional capital in 2005, we will not have sufficient funds to complete the Phase III clinical trial of ALTROPANE as a diagnostic for PS or the Phase II trial of ALTROPANE as a diagnostic for ADHD.

We have previously provided estimates regarding when we expected to attain various milestones associated with the development of our programs. These estimates included projected dates regarding the initiation or completion of clinical trials, as well as the submission of regulatory filings such as an IND or NDA. Estimating trial initiation and completion dates, as well as regulatory filing dates, is extremely difficult as there are numerous uncertainties associated with attaining these milestones, many of which are beyond our control. Uncertainties associated with the initiation or completion of clinical trials include obtaining FDA approval regarding the scope or design of our clinical trials, the rate of patient enrollment, the level of compliance by clinical sites to clinical trial protocols, and the availability of clinical trial material. Uncertainties associated with the submission of regulatory filings includes reliance on third parties to complete necessary pre-clinical studies and regulatory documents, the results of pre-clinical and clinical studies, and the FDA's responses to and acceptance of our regulatory filings. In addition, the adequacy of our financial resources may also affect our ability to meet estimated timelines. Due to our current financial condition and the uncertainties described above, we have determined not to provide estimates regarding when we expect to initiate or complete a clinical trial or file an IND, NDA, or any other regulatory filing. All previous timelines that we have provided should no longer be relied upon. We will report the attainment of milestones associated with initiating or completing clinical trials and submitting regulatory filings when they have occurred.

Risks Related to Commercialization

OUR SUCCESS DEPENDS ON OUR ABILITY TO SUCCESSFULLY DEVELOP OUR PRODUCT CANDIDATES INTO COMMERCIAL PRODUCTS.

To date, we have not marketed, distributed or sold any products and, with the exception of the ALTROPANE imaging agent, all of our technologies and early-stage product candidates are in pre-clinical development. The success of our business depends primarily upon our ability to successfully develop and commercialize our product candidates. Successful research and product development in the biotechnology industry is highly uncertain, and very few research and development projects produce a commercial product. In the biotechnology industry, it has been estimated that less than five percent of the technologies for which research and development efforts are initiated ultimately result in an approved product. If we are unable to successfully commercialize ALTROPANE or any of our other product candidates, our business would be materially harmed.

EVEN IF WE RECEIVE APPROVAL TO MARKET OUR DRUG CANDIDATES, THE MARKET MAY NOT BE RECEPTIVE TO OUR DRUG CANDIDATES UPON THEIR COMMERCIAL INTRODUCTION, WHICH COULD PREVENT US FROM SUCCESSFULLY COMMERCIALIZING OUR PRODUCTS AND FROM BEING PROFITABLE.

Even if our drug candidates are successfully developed, our success and growth will also depend upon the acceptance of these drug candidates by physicians and third-party payors. Acceptance of our product development candidates will be a function of our products being clinically useful, being cost effective and demonstrating superior therapeutic effect with an acceptable side effect profile as compared to existing or future treatments. In addition, even if our products achieve market acceptance, we may not be able to maintain that market acceptance over time.

Factors that we believe will materially affect market acceptance of our drug candidates under development include:

- The timing of our receipt of any marketing approvals, the terms of any approval and the countries in which approvals are obtained;
- The safety, efficacy and ease of administration of our products;
- The competitive pricing of our products;
- The success of our education and marketing programs;
- The sales and marketing efforts of competitors; and
- The availability and amount of government and third-party payor reimbursement.

If our products do not achieve market acceptance, we will not be able to generate sufficient revenues from product sales to maintain or grow our business.

Risk Related to Regulation

IF OUR PRE-CLINICAL TESTING AND CLINICAL TRIALS ARE NOT SUCCESSFUL, WE WILL NOT OBTAIN REGULATORY APPROVAL FOR COMMERCIAL SALE OF OUR PRODUCT CANDIDATES.

We will be required to demonstrate, through pre-clinical testing and clinical trials, that our drug candidates are safe and effective before we can obtain regulatory approval for the commercial sale of our drug candidates. Pre-clinical testing and clinical trials are lengthy and expensive and the historical rate of failure for drug candidates is high. Product candidates that appear promising in the early phases of development, such as in pre-clinical study or in early human clinical trials, may fail to demonstrate safety and efficacy in clinical trials.

Except for the ALTROPANE imaging agent, we have not yet received IND approval from the FDA for our other product candidates which will be required before we can begin clinical trials in the United States. We may

not submit INDs for our product candidates if we are unable to accumulate the necessary pre-clinical data for the filing of an IND. The FDA may request additional pre-clinical data before allowing us to commence clinical trials. As an example, the FDA has requested additional information before it will consider approving our IND filing for one of our product candidates, Inosine. The FDA or other applicable regulatory authorities may suspend clinical trials of a drug candidate at any time if we or they believe the subjects or patients participating in such trials are being exposed to unacceptable health risks or for other reasons. Adverse side effects of a drug candidate on subjects or patients in a clinical trial could result in the FDA or foreign regulatory authorities refusing to approve a particular drug candidate for any or all indications of use.

We began a second Phase III clinical trial of ALTROPANE for use in distinguishing Parkinsonian from non-Parkinsonian Syndromes in patients with tremors and have a written agreement with the FDA relating to the design and analysis of the study protocol for this second Phase III trial. The primary endpoint of the new Phase III trial will be confirmation of the hypothesis that the diagnostic accuracy of ALTROPANE is significantly superior to the diagnostic accuracy of the internist or general practitioner, when compared against the "gold standard" of diagnosis by a movement disorder specialist. Because we have elected to pursue a single, large Phase III trial for this indication, rather than two replicate, smaller trials, the FDA has required that we design the trial to achieve a p-value of 0.02 or less and that we attain level of statistical significance for the primary endpoint in order to achieve approvability. We will need to complete the study and obtain successful results prior to the filing of an NDA for ALTROPANE. Even if successfully completed, there is no assurance that this second Phase III clinical trial will be sufficient to achieve the approvability of ALTROPANE.

Clinical trials require sufficient patient enrollment which is a function of many factors, including the size of the potential patient population, the nature of the protocol, the availability of existing treatments for the indicated disease and the eligibility criteria for enrolling in the clinical trial. Delays or difficulties in completing patient enrollment can result in increased costs and longer development times.

We cannot predict whether we will encounter problems with any of our completed, ongoing or planned clinical trials that will cause us or regulatory authorities to delay or suspend those trials, or delay the analysis of data from our completed or ongoing clinical trials. Any of the following could delay the initiation or the completion of our ongoing and planned clinical trials:

- Ongoing discussions with the FDA or comparable foreign authorities regarding the scope or design of our clinical trials;
- Delays in enrolling patients and volunteers into clinical trials;
- Lower than anticipated retention rate of patients and volunteers in clinical trials;
- Negative or inconclusive results of clinical trials or adverse medical events during a clinical trial could cause a clinical trial to be repeated or a program to be terminated, even if other studies or trials related to the program are successful;
- Insufficient supply or deficient quality of drug candidate materials or other materials necessary for the conduct of our clinical trials;
- Serious and unexpected drug-related side-effects experienced by participants in our clinical trials; or
- The placement of a clinical trial on hold.

OUR PRODUCT CANDIDATES ARE SUBJECT TO RIGOROUS REGULATORY REVIEW AND, EVEN IF APPROVED, REMAIN SUBJECT TO EXTENSIVE REGULATION.

Our technologies must undergo a rigorous regulatory approval process which includes extensive pre-clinical and clinical testing to demonstrate safety and efficacy before any resulting product can be marketed. Our research and development activities are regulated by a number of government authorities in the United States and other countries, including the FDA pursuant to the Federal Food, Drug, and Cosmetic Act. The clinical trial and regulatory approval process usually requires many years and substantial cost. To date, neither the FDA nor any of its international equivalents has approved any of our product candidates for marketing.

The FDA regulates pharmaceutical products in the United States, including their testing, manufacturing and marketing. Data obtained from testing is subject to varying interpretations which can delay, limit or prevent FDA approval. The FDA has stringent laboratory and manufacturing standards which must be complied with before we can test our product candidates in people or make them commercially available. Examples of these standards include Good Laboratory Practices, or GLP, and Good Manufacturing Practices, or GMP. Our compliance with these standards are subject to initial certification by independent inspectors and continuing audits thereafter. Obtaining FDA approval to sell our product candidates is time-consuming and expensive. The FDA usually takes at least 12 to 18 months to review a New Drug Application, or NDA, which must be submitted before the FDA will consider granting approval to sell a product. If the FDA requests additional information, it may take even longer for them to make a decision especially if the additional information that they request requires us to complete additional studies. We may encounter similar delays in foreign countries. After reviewing any NDA we submit, the FDA or its foreign equivalents may decide not to approve our products. Failure to obtain regulatory approval for a product candidate will prevent us from commercializing our product candidates.

Other risks associated with the regulatory approval process include:

- Regulatory approvals may impose significant limitations on the uses for which any approved products may be marketed;
- Any marketed product and its manufacturer are subject to periodic reviews and audits, and any discovery of previously unrecognized problems with a product or manufacturer could result in suspension or limitation of approvals;
- Changes in existing regulatory requirements, or the enactment of additional regulations or statutes, could prevent or affect the timing of our ability to achieve regulatory compliance. Federal and state laws, regulations and policies may be changed with possible retroactive effect, and how these rules actually operate can depend heavily on administrative policies and interpretation over which we have no control, and we may possess inadequate experience to assess their full impact upon our business; and
- The approval may impose significant restrictions on the indicated uses, conditions for use, labeling, advertising, promotion, marketing and/or production of such product, and may impose ongoing requirements for post-approval studies, including additional research and development and clinical trials.

OUR PRODUCTS COULD BE SUBJECT TO RESTRICTIONS OR WITHDRAWAL FROM THE MARKET AND WE MAY BE SUBJECT TO PENALTIES IF WE FAIL TO COMPLY WITH REGULATORY REQUIREMENTS, OR IF WE EXPERIENCE UNANTICIPATED PROBLEMS WITH OUR PRODUCTS, WHEN AND IF ANY OF THEM ARE APPROVED.

Any product for which we obtain marketing approval, along with the manufacturing processes, post-approval clinical data, labeling, advertising and promotional activities for such product, will be subject to continual requirements of and review by the FDA and other regulatory bodies. These requirements include submissions of safety and other post-marketing information and reports, registration requirements, quality assurance and corresponding maintenance of records and documents, requirements regarding the distribution of samples to physicians and recordkeeping. The manufacturer and the manufacturing facilities we use to make any of our product candidates will also be subject to periodic review and inspection by the FDA. The subsequent discovery of previously unknown problems with a product, manufacturer or facility may result in restrictions on the product or manufacturer or facility, including withdrawal of the product from the market. Even if regulatory approval of a product is granted, the approval may be subject to limitations on the indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for costly post-marketing testing and surveillance to monitor the safety or efficacy of the product. Later discovery of previously unknown problems with our products, manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in:

- Restrictions on such products, manufacturers or manufacturing processes;

- Warning letters;
- Withdrawal of the products from the market;
- Refusal to approve pending applications or supplements to approved applications that we submit;
- Voluntary or mandatory recall;
- Fines;
- Suspension or withdrawal of regulatory approvals;
- Refusal to permit the import or export of our products;
- Product seizure; and
- Injunctions or the imposition of civil or criminal penalties.

FAILURE TO OBTAIN REGULATORY APPROVAL IN FOREIGN JURISDICTIONS WOULD PREVENT US FROM MARKETING OUR PRODUCTS ABROAD.

Although we have not initiated any marketing efforts in foreign jurisdictions, we intend in the future to market our products outside the United States. In order to market our products in the European Union and many other foreign jurisdictions, we must obtain separate regulatory approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval abroad may differ from that required to obtain FDA approval. The foreign regulatory approval process may include all of the risks associated with obtaining FDA approval and we may not obtain foreign regulatory approvals on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other foreign countries or approval by the FDA. We may not be able to file for regulatory approvals and may not receive necessary approvals to commercialize our products in any market outside the United States. The failure to obtain these approvals could materially adversely affect our business, financial condition and results of operations.

FOREIGN GOVERNMENTS TEND TO IMPOSE STRICT PRICE CONTROLS WHICH MAY ADVERSELY AFFECT OUR REVENUES, IF ANY.

The pricing of prescription pharmaceuticals is subject to governmental control in some foreign countries. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business could be adversely affected.

Risks Related to our Intellectual Property

IF WE ARE UNABLE TO SECURE ADEQUATE PATENT PROTECTION FOR OUR TECHNOLOGIES, THEN WE MAY NOT BE ABLE TO COMPETE EFFECTIVELY AS A BIOTECHNOLOGY COMPANY.

At the present time, we do not have patent protection for all uses of our technologies. There is significant competition in the field of CNS diseases, our primary scientific area of research and development. Such competitors will seek patent protection for their technologies, and such patent applications or rights might conflict with the patent protection that we are seeking for our technologies. If we do not obtain patent protection for our technologies, or if others obtain patent rights that block our ability to develop and market our technologies, our business prospects may be significantly and negatively affected. Further, even if patents can be obtained, these patents may not provide us with any competitive advantage if our competitors have stronger patent positions or if their product candidates work better in clinical trials than our product candidates. Our patents may also be challenged, narrowed, invalidated or circumvented, which could limit our ability to stop competitors from marketing similar products or limit the length of term of patent protection we may have for our products.

Our patent strategy is to obtain broad patent protection, in the United States and in major developed countries, for our technologies and their related medical indications. Risks associated with protecting our patent and proprietary rights include the following:

- Our ability to protect our technologies could be delayed or negatively affected if the United States Patent and Trademark Office, the USPTO, requires additional experimental evidence that our technologies work;
- Our competitors may develop similar technologies or products, or duplicate any technology developed by us;
- Our competitors may develop products which are similar to ours but which do not infringe on our patents or products;
- Our competitors may successfully challenge one or more of our patents in an interference or litigation proceeding;
- Our patents may infringe on the patents or rights of other parties who may decide not to grant a license to us. We may have to change our products or processes, pay licensing fees or stop certain activities because of the patent rights of third parties which could cause additional unexpected costs and delays;
- Patent law in the fields of healthcare and biotechnology is still evolving and future changes in such laws might conflict with our existing and future patent rights, or the rights of others;
- Our collaborators, employees and consultants may breach the confidentiality agreements that we enter into to protect our trade secrets and propriety know-how. We may not have adequate remedies for such breach; and
- There may be disputes as to the ownership of technological information developed by consultants, scientific advisors or other third parties which may not be resolved in our favor.

IF WE BECOME INVOLVED IN PATENT LITIGATION OR OTHER PROCEEDINGS RELATED TO A DETERMINATION OF RIGHTS, WE COULD INCUR SUBSTANTIAL COSTS AND EXPENSES, SUBSTANTIAL LIABILITY FOR DAMAGES OR BE REQUIRED TO STOP OUR PRODUCT DEVELOPMENT AND COMMERCIALIZATION EFFORTS.

A third party may sue us for infringing its patent rights. Likewise, we may need to resort to litigation to enforce a patent issued or licensed to us or to determine the scope and validity of third-party proprietary rights. In addition, a third party may claim that we have improperly obtained or used its confidential or proprietary information. There has been substantial litigation and other proceedings regarding patent and other intellectual property rights in the pharmaceutical and biotechnology industries. In addition to infringement claims against us, we may become a party to other patent litigation and other proceedings, including interference proceedings declared against us by the USPTO, regarding intellectual property rights with respect to our products and technology. The cost to us of any litigation or other proceeding relating to intellectual property rights, even if resolved in our favor, could be substantial, and the litigation would divert our management's efforts. Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. Uncertainties resulting from the initiation and continuation of any litigation could limit our ability to continue our operations.

If any parties successfully claim that our creation or use of proprietary technologies infringes upon their intellectual property rights, we might be forced to pay damages, potentially including treble damages, if we are found to have willfully infringed on such parties' patent rights. In addition to any damages we might have to pay, a court could require us to stop the infringing activity or obtain a license. Any license required under any patent may not be made available on commercially acceptable terms, if at all. In addition, such licenses are likely to be non-exclusive and, therefore, our competitors may have access to the same technology licensed to us. If we fail to obtain a required license and are unable to design around a patent, we may be unable to effectively market

some of our technology and products, which could limit our ability to generate revenues or achieve profitability and possibly prevent us from generating revenue sufficient to sustain our operations. We might be required to redesign the formulation of a product candidate so that is does not infringe, which may not be possible or could require substantial funds and time. Ultimately, we could be prevented from commercializing a product or be forced to cease some aspect of our business operations if we are unable to enter into license agreements that are acceptable to us. Moreover, we expect that a number of our collaborations will provide that royalties payable to us for licenses to our intellectual property may be offset by amounts paid by our collaborators to third parties who have competing or superior intellectual property positions in the relevant fields, which could result in significant reductions in our revenues from products developed through collaborations.

CONFIDENTIALITY AGREEMENTS WITH EMPLOYEES AND OTHERS MAY NOT ADEQUATELY PREVENT DISCLOSURE OF TRADE SECRETS AND OTHER PROPRIETARY INFORMATION.

In order to protect our proprietary technology and processes, we rely in part on confidentiality agreements with our collaborators, employees, consultants, outside scientific collaborators and sponsored researchers and other advisors. These agreements may be breached, may not effectively prevent disclosure of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. In addition, others may independently discover trade secrets and proprietary information, and in such cases we could not assert any trade secret rights against such party. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

Risks Related to our Dependence on Third Parties

IF ANY COLLABORATOR TERMINATES OR FAILS TO PERFORM ITS OBLIGATIONS UNDER AGREEMENTS WITH US, THE DEVELOPMENT AND COMMERCIALIZATION OF OUR PRODUCT CANDIDATES COULD BE DELAYED OR TERMINATED.

We are dependent on expert advisors and our collaborations with research and development service providers. Our business could be adversely affected if any collaborator terminates its collaboration agreement with us or fails to perform its obligations under that agreement. Most biotechnology and pharmaceutical companies have established internal research and development programs, including their own facilities and employees which are under their direct control. By contrast, we have limited internal research capability and have always outsourced substantially all of our research and development, pre-clinical and clinical activities. As a result, we are dependent upon our network of expert advisors and our collaborations with other research and development service providers for the development of our technologies and product candidates. These expert advisors are not our employees but provide us with important information and knowledge that may enhance our product development strategies and plans. Our collaborations with other research and development service providers are important for the testing and evaluation of our technologies, in both the pre-clinical and clinical stages.

Many of our expert advisors are employed by, or have their own collaborative relationship with Harvard and its Affiliates. A summary of the key scientific, research and development professionals with whom we work, and a composite of their professional background and affiliations is as follows:

- Larry I. Benowitz, Ph.D., Director, Laboratories for Neuroscience Research in Neurosurgery, Children's Hospital, Boston; Associate Professor of Neuroscience, Department of Surgery, Harvard Medical School.
- Alan J. Fischman, M.D., Ph.D., Director, Department of Nuclear Medicine, Massachusetts General Hospital; Professor of Radiology, Harvard Medical School.
- Robert S. Langer, Sc.D., Institute Professor of Chemical and Biomedical Engineering, Massachusetts Institute of Technology.

- Robert Licho, M.D., Director of Medical Imaging, Boston Life Sciences, Inc.; Clinical Director of Nuclear Medicine, University of Massachusetts/Memorial Medical Center; Associate Professor of Radiology, University of Massachusetts Medical School.
- Peter Meltzer, Ph.D., President, Organix, Inc., Woburn, MA.

Dr. Benowitz and Dr. Licho provide us scientific consultative services under agreements renewed annually by mutual agreement of the parties, which generally provides for total payments of approximately $150,000 per year. Dr. Benowitz provides scientific consultative services primarily related to the research and development of Inosine and AF-1. Dr. Licho provides scientific consultative services primarily related to the research and development of ALTROPANE.

We do not have a formal agreement with Dr. Meltzer individually but do enter into research and development contracts from time to time with Organix, Inc., of which Dr. Meltzer is president.

Our collaborations with Harvard and its Affiliates and other institutions include:

- Children's Hospital in Boston, Massachusetts where certain of our collaborating scientists perform their research efforts;
- Organix in Woburn, Massachusetts which manufactures our compounds for the treatment of PD and provides non-radioactive ALTROPANE for FDA mandated studies;
- Harvard Medical School in Boston, Massachusetts where certain of our collaborating scientists perform their research efforts;
- MDS Nordion in Vancouver, British Colombia which manufactures the ALTROPANE imaging agent;
- Chemic Laboratories in Canton, Massachusetts which provides ALTROPANE raw material and performs certain analytic services for our pre-clinical programs;
- Provident Preclinical, Inc. in Doylestown, Pennsylvania which conducts pre-clinical toxicology studies for us;
- Bio-Concept in Derry, New Hampshire which performs certain analytic and packaging services for us; and
- Charles River Laboratories in Worcester, Massachusetts which conducts pre-clinical toxicology and efficacy studies for us.

We generally have a number of collaborations with research and development service providers ongoing at any point in time. These agreements generally cover a specific project or study, are usually for a duration between one month to one year, and expire upon completion of the project. Under these agreements, we are usually required to make an initial payment upon execution of the agreement with the remaining payments based upon the completion of certain specified milestones such as completion of a study or delivery of a report.

We cannot control the amount and timing of resources our advisors and collaborators devote to our programs or technologies. Our advisors and collaborators may have employment commitments to, or consulting or advisory contracts with, other entities that may limit their availability to us. If any of our advisors or collaborators were to breach or terminate their agreement with us or otherwise fail to conduct their activities successfully and in a timely manner, the pre-clinical or clinical development or commercialization of our technologies and product candidates or our research programs could be delayed or terminated. Any such delay or termination could have a material adverse effect on our business, financial condition or results of operations.

Disputes may arise in the future with respect to the ownership of rights to any technology developed with our advisors or collaborators. These and other possible disagreements could lead to delays in the collaborative research, development or commercialization of our technologies, or could require or result in litigation to resolve. Any such event could have a material adverse effect on our business, financial condition or results of operations.

Our advisors and collaborators sign agreements that provide for confidentiality of our proprietary information. Nonetheless, they may not maintain the confidentiality of our technology and other confidential information in connection with every advisory or collaboration arrangement, and any unauthorized dissemination of our confidential information could have a material adverse effect on our business, financial condition or results of operations.

IF WE ARE UNABLE TO MAINTAIN OUR KEY WORKING RELATIONSHIPS WITH HARVARD AND ITS AFFILIATES, WE MAY NOT BE SUCCESSFUL SINCE SUBSTANTIALLY ALL OF OUR CURRENT TECHNOLOGIES WERE LICENSED FROM, AND MOST OF OUR RESEARCH AND DEVELOPMENT ACTIVITIES WERE PERFORMED BY, HARVARD AND ITS AFFILIATES.

Historically, we have been heavily dependent on our relationship with Harvard and its Affiliates because substantially all of our technologies were licensed from, and most of our research and development activities were performed by, Harvard and its Affiliates. Now that a portion of our early-stage research at Harvard and its Affiliates has yielded an identified product in each area of research, we have begun and expect to continue to conduct much of our later stage development work and all of our formal pre-clinical and clinical programs outside of Harvard and its Affiliates. Nevertheless, the originating scientists still play important advisory roles. Each of our collaborative research agreements is managed by a sponsoring scientist and/or researcher who has his or her own independent affiliation with Harvard and its Affiliates.

Under the terms of our license agreements with Harvard and its Affiliates, we acquired the exclusive, worldwide license to make, use, and sell the technology covered by each respective license agreement. Among other things, the technologies licensed under these agreements include:

- ALTROPANE imaging agent compositions and methods of use; and
- Inosine compositions and methods of use.

Generally, each license agreement is effective until the patent relating to the technology expires. The patents on the ALTROPANE imaging agent expire beginning in 2012, with the last issued U.S. patent expiring in 2022. The patents on Inosine expire in 2017.

We are required to make certain licensing and related payments to Harvard and its Affiliates which generally include:

- An initial licensing fee payment upon the execution of the agreement;
- Reimbursement payments for all patent related costs incurred by Harvard and its Affiliates;
- Milestone payments as licensed technology progresses through each stage of development (filing of IND, completion of one or more clinical stages and submission and approval of an NDA); and
- Royalty payments on the sales of any products based on the licensed technology.

Since inception, we have paid Harvard and its Affiliates under the terms of our current license agreements, or License Agreements approximately $850,000 in initial licensing fees and milestone payments. The License Agreements obligate us to pay up to an aggregate of $7,395,000 in milestone payments in the future. These future milestone payments are generally payable only upon the completion of later stage clinical trials and the filing of an NDA or similar application seeking product approval. Most of these contingent milestone payments are associated with technologies that are presently in early stage development.

We have entered into a small number of sponsored research agreements with Harvard and its Affiliates. Under these agreements, we provide funding so that the sponsoring scientists can continue their research efforts. These payments are generally made in equal quarterly installments over the term of the agreements which are usually for one year.

Universities and other not-for-profit research institutions are becoming increasingly aware of the commercial value of their findings and are becoming more active in seeking patent protection and licensing arrangements to collect royalties for the use of technology that they have developed. While this increased awareness will not impact our rights to previously licensed technologies, it may make it more costly and difficult for us to obtain the licensing rights to new scientific discoveries at Harvard and its Affiliates.

IF WE ARE UNABLE TO ESTABLISH, MAINTAIN AND RELY ON NEW COLLABORATIVE RELATIONSHIPS, THEN WE MAY NOT BE ABLE TO SUCCESSFULLY DEVELOP AND COMMERCIALIZE OUR TECHNOLOGIES.

To date, our operations have primarily focused on the pre-clinical development of most of our technologies, as well as conducting clinical trials for certain of our technologies. During the next eighteen months, we currently expect that the continued development of our technologies will result in the initiation of additional clinical trials, and the market introduction of any product for which regulatory approval is obtained. We expect that these developments will require us to establish, maintain and rely on new collaborative relationships in order to successfully develop and commercialize our technologies. We face significant competition in seeking appropriate collaborators. Collaboration arrangements are complex to negotiate and time consuming to document. We may not be successful in our efforts to establish additional collaborations or other alternative arrangements, and the terms of any such collaboration or alternative arrangement may not be favorable to us. There is no certainty that:

- We will be able to enter into such collaborations on economically feasible and otherwise acceptable terms and conditions;
- That such collaborations will not require us to undertake substantial additional obligations or require us to devote additional resources beyond those we have identified at present;
- That any of our collaborators will not breach or terminate their agreements with us or otherwise fail to conduct their activities on time, thereby delaying the development or commercialization of the technology for which the parties are collaborating; and
- The parties will not dispute the ownership rights to any technologies developed under such collaborations.

IF ONE OF OUR COLLABORATORS WERE TO CHANGE ITS STRATEGY OR THE FOCUS OF ITS DEVELOPMENT AND COMMERCIALIZATION EFFORTS WITH RESPECT TO OUR RELATIONSHIP, THE SUCCESS OF OUR PRODUCT CANDIDATES AND OUR OPERATIONS COULD BE ADVERSELY AFFECTED.

There are a number of factors external to us that may change our collaborators' strategy or focus with respect to our relationship with them, including:

- The amount and timing of resources that our collaborators may devote to the product candidates;
- Our collaborators may experience financial difficulties;
- We may be required to relinquish important rights such as marketing and distribution rights;
- Should a collaborator fail to develop or commercialize one of our product candidates, we may not receive any future milestone payments and will not receive any royalties for the product candidate;
- Business combinations or significant changes in a collaborator's business strategy may also adversely affect a collaborator's willingness or ability to complete its obligations under any arrangement;
- A collaborator may not devote sufficient time and resources to any collaboration with us, which could prevent us from realizing the potential commercial benefits of that collaboration;

- A collaborator may terminate their collaborations with us, which could make it difficult for us to attract new collaborators or adversely affect how we are perceived in the business and financial communities; and
- A collaborator could move forward with a competing product candidate developed either independently or in collaboration with others, including our competitors.

If any of these occur, the development and commercialization of one or more drug candidates could be delayed, curtailed or terminated because we may not have sufficient financial resources or capabilities to continue such development and commercialization on our own.

Risks Related to Competition

WE ARE ENGAGED IN HIGHLY COMPETITIVE INDUSTRIES DOMINATED BY LARGER, MORE EXPERIENCED AND BETTER CAPITALIZED COMPANIES.

The biotechnology and pharmaceutical industries are highly competitive, rapidly changing, and are dominated by larger, more experienced and better capitalized companies. Such greater experience and financial strength may enable them to bring their products to market sooner than us, thereby gaining the competitive advantage of being the first to market. Research on the causes of, and possible treatments for, diseases for which we are trying to develop therapeutic or diagnostic products are developing rapidly and there is a potential for extensive technological innovation in relatively short periods of time. Factors affecting our ability to successfully manage the technological changes occurring in the biotechnology and pharmaceutical industries, as well as our ability to successfully compete, include:

- Many of our potential competitors in the field of CNS research have significantly greater experience than we do in completing pre-clinical and clinical testing of new pharmaceutical products, the manufacturing and commercialization process, and obtaining FDA and other regulatory approvals of products;
- Many of our potential competitors have products that have been approved or are in late stages of development;
- Many of our potential competitors may develop products or other novel technologies that are more effective, safer or less costly than any that we are developing;
- Many of our potential competitors have collaborative arrangements in our target markets with leading companies and research institutions;
- The timing and scope of regulatory approvals for these products;
- The availability and amount of third-party reimbursement;
- The strength of our patent position;
- Many of our potential competitors are in a stronger financial position than us, and are thus better able to finance the significant cost of developing, manufacturing and selling new products; and
- Companies with established positions and prior experience in the pharmaceutical industry may be better able to develop and market products for the treatment of those diseases for which we are trying to develop products.

To our knowledge, there is only one company, Nycomed Amersham, that has successfully developed a diagnostic for Parkinson's Disease which is the medical purpose for which our most advanced product candidate, the ALTROPANE imaging agent, is being developed. To date, Nycomed has obtained marketing approval only in Europe, and to the best of our knowledge, is not presently seeking approval in the United States. However, Nycomed has significantly greater financial resources than us, and their decision to seek approval in the United States could significantly adversely affect our competitive position. The established market presence, and greater financial strength, of Nycomed in the European market will make it difficult for us to successfully market the ALTROPANE imaging agent in Europe.

IF WE ARE UNABLE TO COMPETE EFFECTIVELY, OUR PRODUCT CANDIDATES MAY BE RENDERED NONCOMPETITIVE OR OBSOLETE.

Our competitors may develop or commercialize more effective, safer or more affordable products, or obtain more effective patent protection, than we are able to. Accordingly, our competitors may commercialize products more rapidly or effectively than we are able to, which would adversely affect our competitive position, the likelihood that our product candidates will achieve initial market acceptance, and our ability to generate meaningful revenues from our product candidates. Even if our product candidates achieve initial market acceptance, competitive products may render our products obsolete, noncompetitive or uneconomical. If our product candidates are rendered obsolete, we may not be able to recover the expenses of developing and commercializing those product candidates.

IF WE ARE UNABLE TO OBTAIN ADEQUATE INSURANCE COVERAGE AND REIMBURSEMENT LEVELS FOR ANY OF OUR PRODUCTS WHICH ARE APPROVED AND ENTER THE MARKET, THEN THEY MAY NOT BE ACCEPTED BY PHYSICIANS AND PATIENTS.

Substantially all biotechnology products are distributed to patients by physicians and hospitals, and in most cases, such patients rely on insurance coverage and reimbursement to pay for some or all of the cost of the product. In recent years, the continuing efforts of government and third party payors to contain or reduce health care costs have limited, and in certain cases prevented, physicians and patients from receiving insurance coverage and reimbursement for medical products, especially newer technologies. Our ability to generate adequate revenues and operating profits could be adversely affected if such limitations or restrictions are placed on the sale of our products. Specific risks associated with medical insurance coverage and reimbursement include:

- Significant uncertainty exists as to the reimbursement status of newly approved health care products, and third party payors are increasingly challenging the prices charged for medical products and services;
- Adequate insurance coverage may not be available to allow us to charge prices for products which are adequate for us to realize an appropriate return on our development costs. If adequate coverage and reimbursement are not provided for use of our products, the market acceptance of these products will be negatively affected;
- Health maintenance organizations and other managed care companies may seek to negotiate substantial volume discounts for the sale of our products to their members thereby reducing our profit margins; and
- In recent years, other bills proposing comprehensive health care reform have been introduced in Congress that would potentially limit pharmaceutical prices and establish mandatory or voluntary refunds. It is uncertain if any legislative proposals will be adopted and how federal, state or private payors for health care goods and services will respond to any health care reforms.

IF THIRD-PARTY PAYORS DO NOT ADEQUATELY REIMBURSE CUSTOMERS FOR ANY OF OUR PRODUCT CANDIDATES THAT ARE APPROVED FOR MARKETING, THEY MIGHT NOT BE PURCHASED OR USED, AND OUR REVENUES AND PROFITS WILL NOT DEVELOP OR INCREASE.

We believe that the efforts of governments and third-party payors to contain or reduce the cost of healthcare will continue to affect the business and financial condition of pharmaceutical and biopharmaceutical companies such as us.

Obtaining reimbursement approval for a product from each governmental or other third-party payor is a time-consuming and costly process that could require us to provide supporting scientific, clinical and cost-effectiveness data for the use of our products to each payor. If we succeed in bringing any of our product candidates to market and third-party payors determine that the product is eligible for coverage, the third-party payors may establish and maintain price levels insufficient for us to realize a sufficient return on our investment

in product development. Moreover, eligibility for coverage does not imply that any product will be reimbursed in all cases.

The Centers for Medicare and Medicaid Services, or CMS, the agency within the Department of Health and Human Services that administers Medicare and that is responsible for setting Medicare reimbursement payment rates and coverage policies for any product candidates that we commercialize, has authority to decline to cover particular drugs if it determines that they are not "reasonable and necessary" for Medicare beneficiaries or to cover them at lower rates to reflect budgetary constraints or to match previously approved reimbursement rates for products that CMS considers to be therapeutically comparable. Third-party payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates, and both Medicare and other third-party payors may have sufficient market power to demand significant price reductions.

As a result of the trend towards managed healthcare in the United States, as well as legislative proposals to constrain the growth of federal healthcare program expenditures, third-party payors are increasingly attempting to contain healthcare costs by demanding price discounts or rebates and limiting both coverage and the level of reimbursement of new drug products. Consequently, significant uncertainty exists as to the reimbursement status of newly approved healthcare products.

THE RECENT MEDICARE PRESCRIPTION DRUG COVERAGE LEGISLATION AND FUTURE LEGISLATIVE OR REGULATORY REFORM OF THE HEALTH CARE SYSTEM MAY AFFECT OUR ABILITY TO SELL OUR PRODUCT CANDIDATES PROFITABLY.

A number of legislative and regulatory proposals to change the healthcare system in the United States and other major healthcare markets have been proposed in recent years. In addition, ongoing initiatives in the United States have exerted and will continue to exert pressure on drug pricing. In some foreign countries, particularly countries of the European Union, the pricing of prescription pharmaceuticals is subject to governmental control. Significant changes in the healthcare system in the United States or elsewhere, including changes resulting from the implementation of the Medicare prescription drug coverage legislation and adverse trends in third-party reimbursement programs, could limit our ability to raise capital and successfully commercialize our product candidates.

In particular, the Medicare Prescription Drug Improvement and Modernization Act of 2003, which President Bush signed into law in December 2003, established a new Medicare prescription drug benefit. The prescription drug program and future amendments or regulatory interpretations of the legislation could have the effect of reducing the prices that we are able to charge for any products we develop and sell through Medicare. This prescription drug legislation and related amendments or regulations could also cause third-party payors other than the federal government, including the states under the Medicaid program, to discontinue coverage for any products we develop or to lower reimbursement amounts that they pay. The legislation changed the methodology used to calculate reimbursement for drugs that are administered in physicians' offices in a manner intended to reduce the amount that is subject to reimbursement. In addition, beginning in January 2006, the legislation directs the Secretary of Health and Human Services to contract with procurement organizations to purchase physician-administered drugs from the manufacturers and provides physicians with the option to obtain drugs through these organizations as an alternative to purchasing from the manufacturers, which some physicians may find advantageous. Because we have not received marketing approval or established a price for any product, it is difficult to predict how this new legislation will affect us, but the legislation generally is expected to result constrain or reduce reimbursement for certain types of drugs.

Proposed federal legislation, if enacted, would permit more widespread re-importation of drugs from foreign countries into the United States. Such legislation may relax restrictions on re-importation of drugs from countries where they are sold at lower prices than in the United States. Any future relaxation of these import restrictions could reduce the prices of drugs in the United States, could materially adversely affect our operating results and our overall financial condition, and could limit our ability to raise capital and successfully commercialize our product candidates.

Further federal, state and foreign healthcare proposals and reforms are likely. While we cannot predict the legislative or regulatory proposals that will be adopted or what effect those proposals may have on our business, including the future reimbursement status of any of our product candidates, the announcement or adoption of such proposals could have an adverse effect on potential revenues from product candidates that we may successfully develop.

WE HAVE LIMITED MANUFACTURING CAPACITY AND MARKETING EXPERIENCE AND EXPECT TO BE HEAVILY DEPENDENT UPON THIRD PARTIES TO MANUFACTURE AND MARKET APPROVED PRODUCTS.

We currently have limited manufacturing facilities for either clinical trial or commercial quantities of any of our product candidates and currently have no plans to obtain additional facilities. To date, we have obtained the limited amount of quantities required for pre-clinical and clinical trials from contract manufacturing companies. We intend to continue using contract manufacturing arrangements with experienced firms for the supply of material for both clinical trials and any eventual commercial sale, with the exception of Troponin, which we presently plan to produce in our facility in Baltimore, Maryland.

We will depend upon third parties to produce and deliver products in accordance with all FDA and other governmental regulations. We may not be able to contract with manufacturers who can fulfill our requirements for quality, quantity and timeliness, or be able to find substitute manufacturers, if necessary. The failure by any third party to perform their obligations in a timely fashion and in accordance with the applicable regulations may delay clinical trials, the commercialization of products, and the ability to supply product for sale. In addition, any change in manufacturers could be costly because the commercial terms of any new arrangement could be less favorable and because the expenses relating to the transfer of necessary technology and processes could be significant.

With respect to our most advanced product candidate, the ALTROPANE imaging agent, we have entered into an agreement with, and are highly dependent upon, MDS Nordion. Under the terms of the agreement, which currently expires on December 31, 2005, we paid MDS Nordion a one-time fee of $300,000 in connection with its commitment to designate certain of its facilities exclusively for the production of the ALTROPANE imaging agent. We also paid MDS Nordion approximately $900,000 to establish a GMP certified manufacturing process for the production of the ALTROPANE imaging agent. Finally, we agreed to minimum monthly purchases of ALTROPANE through December 31, 2005. The agreement provides for MDS Nordion to manufacture the ALTROPANE imaging agent for our future clinical trials. The agreement also provides that MDS Nordion will compile and prepare the information regarding manufacturing that will be a required component of any NDA we file for the ALTROPANE imaging agent in the future. We do not presently have arrangements with any other suppliers in the event that Nordion is unable to manufacture ALTROPANE for us. We could encounter a significant delay before another supplier could manufacture ALTROPANE for us due to the time required to establish a GMP manufacturing process for the ALTROPANE imaging agent.

We do not have any experience in marketing pharmaceutical products. In order to earn a profit on any future product, we will be required to either enter into arrangements with third parties with respect to marketing the products or internally develop such marketing capability. We may encounter difficulty in negotiating sales and marketing arrangements with third parties on favorable terms for us. Most of the companies who can provide such services are financially stronger and more experienced in selling pharmaceutical products than we are. As a result, they may be in a position to negotiate an arrangement that is more favorable to them. We could experience significant delays in marketing any of our products if we are required to internally develop a sales and marketing organization. There are risks involved with establishing our own sales and marketing capabilities. We have no experience in performing such activities and could incur significant costs in developing such a capability.

USE OF THIRD PARTY MANUFACTURERS MAY INCREASE THE RISK THAT WE WILL NOT HAVE ADEQUATE SUPPLIES OF OUR PRODUCT CANDIDATES.

Reliance on third party manufacturers entails risks to which we would not be subject if we manufactured product candidates or products ourselves, including:

- Reliance on the third party for regulatory compliance and quality assurance;
- The possible breach of the manufacturing agreement by the third party; and
- The possible termination or nonrenewal of the agreement by the third party, based on its own business priorities, at a time that is costly or inconvenient for us.

If we are not able to obtain adequate supplies of our product candidates and any approved products, it will be more difficult for us to develop our product candidates and compete effectively. Our product candidates and any products that we successfully develop may compete with product candidates and products of third parties for access to manufacturing facilities.

Our contract manufacturers are subject to ongoing, periodic, unannounced inspection by the FDA and corresponding state and foreign agencies or their designees to ensure strict compliance with GMP regulations and other governmental regulations and corresponding foreign standards. We cannot be certain that our present or future manufacturers will be able to comply with GMP regulations and other FDA regulatory requirements or similar regulatory requirements outside the United States. We do not control compliance by our contract manufacturers with these regulations and standards. Failure of our third party manufacturers or us to comply with applicable regulations could result in sanctions being imposed on us, including fines, injunctions, civil penalties, failure of regulatory authorities to grant marketing approval of our product candidates, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or products, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our product candidates and products.

Risks Related to Employees and Growth

IF WE ARE UNABLE TO RETAIN OUR KEY PERSONNEL AND/OR RECRUIT ADDITIONAL KEY PERSONNEL IN THE FUTURE, THEN WE MAY NOT BE ABLE TO OPERATE EFFECTIVELY.

Our success depends significantly upon our ability to attract, retain and motivate highly qualified scientific and management personnel who are able to formulate, implement and maintain the operations of a biotechnology company such as ours. We consider retaining Peter Savas, our Chairman and Chief Executive Officer and Mark Pykett, our President to be key to our efforts to develop and commercialize our product candidates. The loss of the service of any of the key members of our senior management team may significantly delay or prevent the achievement of product development and other business objectives. Key members of our senior management team include Peter Savas, our Chairman and Chief Executive Officer, Mark Pykett, our President, Joseph Hernon, our Chief Financial Officer, Jeanne Marie Varga, our Senior Vice President, Regulatory Affairs, Dr. Richard Thorn, our Senior Vice President of Product Development and Manufacturing, and Dr. Irene Gonzalez, our Senior Vice President of Protein Development. None of these key executives, other than Messrs. Savas and Pykett, have agreed not to compete with us following any termination of their employment. We do not presently carry key person life insurance on any of our scientific or management personnel. We do not have employment agreements with any of these key executives, although we expect to enter into employment agreements with Messrs. Savas and Pykett.

We currently outsource most of our research and development, pre-clinical and clinical activities. If we decide to increase our internal research and development capabilities for any of our technologies, we may need to hire additional key management and scientific personnel to assist the limited number of employees that we currently employ. There is significant competition for such personnel from other companies, research and academic institutions, government entities and other organizations. If we fail to attract such personnel, it could have a significant negative effect on our ability to develop our technologies.

Risks Related to our Stock

OUR STOCK PRICE MAY CONTINUE TO BE VOLATILE AND CAN BE AFFECTED BY FACTORS UNRELATED TO OUR BUSINESS AND OPERATING PERFORMANCE.

The market price of our common stock may fluctuate significantly in response to factors that are beyond our control. The stock market in general periodically experiences significant price and volume fluctuations. The market prices of securities of pharmaceutical and biotechnology companies have been volatile, and have experienced fluctuations that often have been unrelated or disproportionate to the operating performance of these companies. These broad market fluctuations could result in significant fluctuations in the price of our common stock, which could cause a decline in the value of your investment. The market price of our common stock may be influenced by many factors, including:

- Announcements of technological innovations or new commercial products by our competitors or us;
- Announcements in the scientific and research community;
- Developments concerning proprietary rights, including patents;
- Delay or failure in initiating, conducting, completing or analyzing clinical trials or problems relating to the design, conduct or results of these trials;
- Announcement of FDA approval or non-approval of our product candidates or delays in the FDA review process;
- Developments concerning our collaborations;
- Publicity regarding actual or potential medical results relating to products under development by our competitors or us;
- Failure of any of our product candidates to achieve commercial success;
- Our ability to manufacture products to commercial standards;
- Conditions and publicity regarding the life sciences industry generally;
- Regulatory developments in the United States and foreign countries;
- Changes in the structure of health care payment systems;
- Period-to-period fluctuations in our financial results or those of companies that are perceived to be similar to us;
- Departure of our key personnel;
- Future sales of our common stock;
- Investors' perceptions of us, our products, the economy and general market conditions;
- Differences in actual financial results versus financial estimates by securities analysts and changes in those estimates; and
- Litigation.

ITEM 2. ***Properties.***

Our corporate office is located in Boston, Massachusetts. The lease on this 6,600 square foot facility expires in 2012. The lease contains provisions whereby we can sublet all or part of the space and fully retain any sublease income generated. We also lease 3,300 square feet of laboratory space located in Baltimore, Maryland that expires in May 2006. We believe that our existing facilities are adequate for their present and anticipated purposes, except that additional facilities will be needed if we elect to expand our laboratory and/or manufacturing activities.

ITEM 3. ***Legal Proceedings.***

We are subject to legal proceedings in the normal course of business. We are not currently a party to any material legal proceedings.

ITEM 4. ***Submission of Matters to a Vote of SecurityHolders.***

Not applicable.

PART II

Item 5. ***Market for Registrant's Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities.***

Market Information

Since March 27, 2003, our Common Stock has traded on the NASDAQ SmallCap Market under the symbol BLSI. Prior to March 27, 2003, our Common Stock was traded on the NASDAQ National Market under the same symbol. In February 2005, we implemented a one-for-five reverse split of our Common Stock. Unless otherwise noted, data used throughout this Annual Report on Form 10-K is adjusted to reflect the reverse stock split.

The following table sets forth the high and low per share sales prices for our common stock for each of the quarters in the period beginning January 1, 2003 through December 31, 2004 as reported by NASDAQ.

Quarter Ended	High	Low
March 31, 2003	$ 7.60	$3.25
June 30, 2003	$15.00	$4.55
September 30, 2003	$10.50	$6.90
December 31, 2003	$10.00	$5.70
March 31, 2004	$ 8.70	$5.60
June 30, 2004	$ 7.35	$4.20
September 30, 2004	$ 4.95	$2.30
December 31, 2004	$ 4.00	$2.20

Holders

On March 24, 2005, the closing sales price for our Common Stock was $2.50 per share. The number of stockholders of record of our Common Stock on March 24, 2005 was approximately 3,000. The number of beneficial holders of our Common Stock on March 24, 2005 was approximately 15,000.

Dividends

We have not paid any dividends on our Common Stock and do not expect to pay dividends on our Common Stock in the foreseeable future. We paid $201,760 in cash dividends to the former holders of outstanding Series E Stock effective October 31, 2004.

Item 6. ***Selected Financial Data.***

The selected consolidated financial information presented below has been derived from our audited consolidated financial statements. This data is qualified in its entirety by reference to, and should be read in conjunction with, our Consolidated Financial Statements and notes thereto and Management's Discussion and Analysis of Financial Condition and Results of Operations, included elsewhere herein.

	Year Ended December 31,				
	2004	2003	2002	2001	2000
Statement of Operations Data					
Revenues	$ —	$ —	$ —	$ —	$ —
Operating expenses	10,381,429	7,914,887	10,302,008	10,585,618	11,453,458
Net loss	(11,250,877)	(8,367,994)	(10,993,142)	(10,252,587)	(10,654,264)
Preferred stock beneficial conversion feature	—	(2,696,658)	—	—	—
Accrual of preferred stock dividends	(480,045)	(34,029)	—	—	—
Net loss available to common shareholders	(11,730,922)	$(11,098,681)	$(10,993,142)	$(10,252,587)	$(10,654,264)
Basic and diluted net loss available to common stockholders	(1.73)	$ (1.82)	$ (2.49)	$ (2.47)	$ (2.74)
Weighted average number of common shares outstanding	6,795,316	6,101,408	4,412,637	4,146,632	3,892,382
Balance Sheet Data					
Cash and cash equivalents	$ 152,971	$ 6,088,458	$ 794,401	$ 287,302	$ 407,327
Marketable securities	1,490,119	4,876,402	6,177,705	10,012,198	19,361,838
Restricted cash and marketable securities	—	5,036,248	—	—	—
Total assets	2,544,713	17,432,894	8,527,893	11,426,419	20,712,109
Working capital (deficit) (excludes restricted cash and marketable securities)	(187,530)	9,974,660	5,558,691	9,095,717	18,811,739
Long-term debt	—	3,811,129	3,869,872	—	—
Stockholders' equity	$ 568,940	$ 12,115,618	$ 2,822,853	$ 9,622,835	$ 19,050,816

Item 7. ***Management's Discussion and Analysis of Financial Condition and Results of Operations.***

This Annual Report on Form 10-K contains forward-looking statements. Specifically, any statements contained herein that are not based on historical fact may be deemed to be forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Without limiting the foregoing, the words "believes," "anticipates," "plans," "expects," and similar expressions are intended to identify forward-looking statements. Such statements include, without limitation, statements regarding expectations or beliefs as to future results or events, such as the expected timing and results of clinical trials, discussions with regulatory agencies, schedules of Investigational New Drug applications, or INDs, New Drug Applications, or NDAs, and all other regulatory submissions, the timing of product introductions, the possible approval of products (including the ultimate approvability of ALTROPANE), and the market size and possible advantages of our products. All such forward-looking statements involve substantial risks and uncertainties, and actual results may vary materially from these statements. Factors that may affect future results include: the availability and adequacy of financial resources, delays in the regulatory or development processes, results from clinical and pre-clinical trials, regulatory decisions (including the discretion of the Food and Drug Administration, or FDA, following completion of a Phase III trial to require us to conduct additional clinical trials in order to achieve approvability of ALTROPANE), market acceptance of our products, the ability to obtain intellectual property protection, the outcome of discussions with potential partners and other possible risks and uncertainties that have been noted in reports filed by us with the Securities and Exchange Commission, or SEC. If any of these risks actually occur, our business, financial condition or results of operations would likely suffer. We undertake no intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise.

Overview

General

We are a biotechnology company primarily focused on the research and development of biopharmaceutical products for the diagnosis and treatment of central nervous system, or CNS, diseases. At December 31, 2004, we are considered a "development stage enterprise" as defined in Statement of Financial Accounting Standards No. 7, "Accounting and Reporting by Development Stage Enterprises."

As of December 31, 2004, we have experienced total net losses since inception of approximately $106 million. For the foreseeable future, we expect to experience continuing operating losses and negative cash flows from operations as management executes our current business plan. We believe that the cash, cash equivalents, and marketable securities available at December 31, 2004 will not provide sufficient working capital to meet our anticipated expenditures for the next twelve months. We believe that the cash, cash equivalents, and marketable securities available at December 31, 2004, combined with approximately $5,000,000 in net proceeds raised in a private placement of common stock completed in March 2005, $1,044,000 in net proceeds received through the exercise of certain warrants in February 2005, and our ability to control certain costs, including those related to clinical trial programs, pre-clinical activities, and certain general and administrative expenses will enable us to meet our anticipated cash expenditures through July 2005. We will need to raise additional capital in 2005 through a collaboration, merger or other transaction with other pharmaceutical or biotechnology companies, or through a debt financing or equity offerings by us to continue as a going concern. There can be no assurance, however, that we will be successful or that additional funds will be available on acceptable terms, if at all.

Our ability to continue development of our programs in 2005, including the Phase III trial of ALTROPANE as a diagnostic for PS, the Phase II trial of ALTROPANE as a diagnostic for ADHD, and our pre-clinical programs including Inosine and O-1369 may be affected by the availability of financial resources to fund each program. During 2005, financial considerations may cause us to modify planned development activities for one or more of our programs, and we may decide to suspend development of one or more programs until we are able to secure additional working capital. If we are not able to raise additional capital in 2005, we will not have sufficient funds to complete the Phase III clinical trial of ALTROPANE as a diagnostic for PS or the Phase II trial of ALTROPANE as a diagnostic for ADHD.

We have previously provided estimates regarding when we expected to attain various milestones associated with the development of our programs. These estimates included projected dates regarding the initiation or completion of clinical trials, as well as the submission of regulatory filings such as an IND or NDA. Estimating trial initiation and completion dates, as well as regulatory filing dates, is extremely difficult as there are numerous uncertainties associated with attaining these milestones, many of which are beyond our control. Uncertainties associated with the initiation or completion of clinical trials include obtaining FDA approval regarding the scope or design of our clinical trials, the rate of patient enrollment, the level of compliance by clinical sites to clinical trial protocols, and the availability of clinical trial material. Uncertainties associated with the submission of regulatory filings includes reliance on third parties to complete necessary pre-clinical studies and regulatory documents, the results of pre-clinical and clinical studies, and the FDA's responses to and acceptance of our regulatory filings. In addition, the adequacy of our financial resources may also affect our ability to meet estimated timelines. Due to our current financial condition and the uncertainties described above, we have determined not to provide estimates regarding when we expect to initiate or complete a clinical trial or file an IND, NDA, or any other regulatory filing. All previous timelines that we have provided should no longer be relied upon. We will report the attainment of milestones associated with initiating or completing clinical trials and submitting regulatory filings when they have occurred.

There have been a number of recent developments which have simplified our capital structure. In November 2004, we utilized funds set aside in a restricted account to repay in full our Notes. In February 2005, we entered into agreements with the holders of 557.30 shares of Series E Stock, or the Holders, whereby the Holders agreed to convert their Series E Stock into common stock. In return, we agreed to pay a dividend of $564.44 for each share of Series E Stock held by the Holders and to lower the exercise price of the warrants held by the Holders from $7.75 to $0.05. We expect to record a charge of approximately $656,000 to net loss attributable to common stockholders, as determined under the Black Scholes pricing model, in the first quarter of 2005 in connection with the re-pricing of the warrants. The Holders were also granted preemptive rights with respect to up to 33% of the next $16,900,000 raised by us in any private placement exempt from the registration requirements of the Securities Act of 1933, as amended. The amount of the preemptive right was reduced to $11,900,000 in March 2005 following completion of a $5,000,000 private placement of common stock by us. On February 4, 2005, our stockholders approved an amendment to the Certificate of Designations, Rights and Preferences of the Series E Stock, providing for the mandatory conversion of all outstanding shares of Series E Stock, upon the affirmative vote of 75% of the outstanding shares of Series E Stock. We issued 900,646 shares of common stock in connection with the conversion of the 561.3 outstanding shares of the Series E Stock. In February 2005, we implemented a one-for-five reverse split of our common stock. Unless otherwise noted, data throughout this Annual Report on Form 10-K is adjusted to reflect that reverse stock split.

Product Development

ALTROPANE is an imaging agent being developed for the differential diagnosis of Parkinsonian Syndromes, or PS (including Parkinson's Disease, or PD), and non-PS in patients with tremor, and Attention Deficit Hyperactivity Disorder, or ADHD. We completed an initial Phase III trial of ALTROPANE for use in differentiating PS movement disorders from non-PS movement disorders. In April 2004, we reached an agreement with the FDA regarding our protocol design for a new Phase III clinical trial of ALTROPANE for the differentiation of Parkinsonian tremors from tremors due to other, non-Parkinsonian causes. Our second Phase III clinical trial is designed to distinguish PS from non-PS in patients with tremors. The trial will enroll subjects who have been referred to a neurology clinic with a diagnosis of tremor who have previously been diagnosed by a general practitioner or internist as having either a Parkinsonian or non-Parkinsonian tremor. Each subject will then undergo an ALTROPANE SPECT scan prior to being diagnosed by an MDS as having either a Parkinsonian or non-Parkinsonian tremor. The SPECT scans will be read "blind" by a panel of nuclear medicine physicians. The results of the blinded reads will then be compared to the MDS diagnosis for sensitivity and specificity. The primary endpoint will be the confirmation of the hypothesis that the diagnostic accuracy of ALTROPANE is significantly superior to the diagnostic accuracy of the internist or general practitioner. The diagnosis of a MDS will be utilized as the "gold standard." Because we have elected to pursue a single, large Phase III trial for this indication, rather than two smaller, replicate trials, the SPA provides that the trial be powered to potentially achieve a p-value of 0.02 or less. FDA may require this level of statistical significance for the primary endpoint

in order to achieve approvability. We currently expect to enlist up to 25 centers in the United States, most of which are university-based, and to enroll a minimum of 500 patients (250 patients with Parkinsonian tremors and 250 patients with non-Parkinsonian tremors). Enrollment for this second Phase III trial is ongoing. We believe that, if the endpoints are met and no significant safety concerns or protocol deviations occur, this Phase III trial could provide the basis for an NDA submission and ultimate approval of ALTROPANE. However, we can provide no assurance that the FDA will not request additional clinical trial data or other regulatory information before it will accept an NDA submission for ALTROPANE.

We are currently conducting our second Phase II trial of ALTROPANE for the diagnosis of ADHD in adults using a simplified scanning procedure and algorithm adjustments. Patient enrollment in this trial has been constrained by our limited financial resources. We do not expect to be able to accelerate enrollment in this trial until such time as we raise sufficient additional capital.

Inosine is an axon sprouting factor which specifically promotes axon outgrowth in CNS cells. In July 2004, we filed an IND application with the FDA for the use of Inosine to enhance motor function recovery after stroke. The IND included data which assessed the toxicity of Inosine administered via continuous infusion into the lateral ventricle of the brain in both rats and dogs in a manner identical to that proposed for our Phase I clinical trial in the IND.

In September 2004, we announced that we had received a written response to our Inosine IND filing from the FDA. In its response, the FDA placed our Phase I study on clinical hold pending the submission of additional pharmacology and toxicology data. We have submitted a letter to the FDA stating our intention to perform this additional work and requesting confirmation that the submission of these data will be sufficient to remove the clinical hold and to initiate the Phase I study. On September 27, 2004, we held a teleconference call with the FDA to clarify the FDA's requests for additional data. The FDA advised us to conduct the reprocessing of brain tissue samples and specialized histological staining of the brain sections and to submit these data for their review. We do not expect additional tissue analyses to yield evidence of toxicity, but there can be no assurance that will be the case. We expect that the FDA will finalize their review of the IND amendment within 30 days of receipt of our complete response to the clinical hold letter. We believe that if there are no further questions or comments by the FDA after their review, our Phase I study will be taken off clinical hold and we will be given clearance to proceed with our Phase I trial. There is no assurance that we will be taken off clinical hold or that the FDA will not have further questions or concerns that will require, among other things, an additional response or preclinical studies to be preformed prior to initiating the Phase I trial.

The proposed Phase I study has been designed to enroll 27 moderate to severe stroke patients. The study design calls for a dose escalation of Inosine given to three groups of stroke patients (9 patients in each dose group). The highest dose given will be the estimated human equivalent of the effective dose given to rats. All patients will be maintained on their initial dose of Inosine for the full study period. Inosine will be administered via an implantable subcutaneous pump and ICV catheter system that potentially allows the patient to leave the hospital at the same approximate time that they otherwise would have after such a stroke. In addition to safety monitoring, efficacy monitoring will also be performed, but the small number of patients and the short duration of treatment will probably preclude statistically valid efficacy conclusions to be drawn. It is expected that formal efficacy testing will be the purpose of a Phase II trial, which will follow the Phase I trial if there are no significant safety concerns raised by the Phase I trial.

Our earlier stage product candidates include O-1369 for the treatment of PD, FLUORATEC™, a "second-generation" imaging agent for the diagnosis of PD and ADHD, and Troponin, our anti-angiogenic agent. The Troponin program is focused on developing therapeutics to prevent the growth and spread of a number of cancers. The program does not fall within our current strategic focus on developing diagnostics and therapeutics for CNS diseases. Therefore, we are currently exploring our strategic alternatives related to this program including, but not limited to, terminating further development.

To date, we have not marketed, distributed or sold any products and, with the exception of ALTROPANE, all of our technologies and early-stage product candidates are in pre-clinical development. Our product candidates must undergo a rigorous regulatory approval process which includes extensive pre-clinical and clinical testing to demonstrate safety and efficacy before any resulting product can be marketed. The FDA has stringent laboratory and manufacturing standards which must be complied with before we can test our product

candidates in humans or make them commercially available. Pre-clinical testing and clinical trials are lengthy and expensive and the historical rate of failure for product candidates is high. Clinical trials require sufficient patient enrollment which is a function of many factors, and delays and difficulties in completing patient enrollment can result in increased costs and longer development times. The foregoing uncertainties and risks limit our ability to estimate the timing and amount of future costs that will be required to complete the clinical development of each program. In addition, we are unable to estimate when material net cash inflows are expected to commence as a result of the successful completion of one or more of our programs. However, we do not currently expect to generate revenues from product sales for at least the next three years.

The biotechnology and pharmaceutical industries are highly competitive and are dominated by larger, more experienced and better capitalized companies. Any delays we encounter in completing our clinical trial programs may adversely impact our competitive position in the markets in which we compete. Such delays may also adversely affect our financial position and liquidity.

Following is information on the direct research and development costs incurred on our principal scientific technology programs currently under development. These amounts do not include research and development employee and related overhead costs which total approximately $11.9 million on a cumulative basis.

Program	4th Quarter 2004	Year Ended December 31, 2004	Cumulative
Diagnostic imaging	$248,000	$ 819,000	$16,796,000
Anti-angiogenesis	90,000	376,000	13,407,000
CNS regeneration	149,000	3,216,000	8,676,000
Other	$ —	$ 170,000	$ 937,000

Estimating costs and time to complete development of a specific program or technology is difficult due to the uncertainties of the development process and the requirements of the FDA which could require additional clinical trials or other development and testing. Results of any testing could lead to a decision to change or terminate development of a technology, in which case estimated future costs could change substantially. In the event we were to enter into a licensing or other collaborative agreement with a corporate partner involving sharing or funding by such corporate partner of development costs, the estimated development costs incurred by us could be substantially less than estimated. Additionally, research and development costs are extremely difficult to estimate for early-stage technologies due to the fact that there is generally less comprehensive data available for such technologies to determine the development activities that would be required prior to the filing of an NDA. As a result, we cannot reasonably estimate the cost and the date of completion for any technology that is not at least in Phase III clinical development due to the uncertainty regarding the number of required trials, the size of such trials and the duration of development. We currently expect our second Phase III clinical trial for ALTROPANE will cost approximately $5,700,000 more to complete. However, there can be no assurance that it will not cost more to complete the current Phase III trial.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements which have been prepared by us in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. Our estimates include those related to marketable securities, research contracts, and the fair value and classification of equity instruments. We base our estimates on historical experience and on various other assumptions that we believed to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions. For a complete description of our significant accounting policies, see Note 1 to our Consolidated Financial Statements in this Annual Report on Form 10-K.

Marketable Securities

Our marketable securities consist exclusively of investments in United States agency bonds and corporate debt obligations. These marketable securities are adjusted to fair value on the consolidated balance sheet through

other comprehensive income. If a decline in the fair value of a security is considered to be other than temporary, the investment is written down to a new cost basis and the unrealized loss is removed from accumulated other comprehensive loss and recorded in the Consolidated Statement of Operations. We evaluate whether a decline in fair value is other than temporary based on factors such as the significance of the decline, the duration of time for which the decline has been in existence and our ability and intent to hold the security to maturity. To date, we have not recorded any other than temporary impairments related to our marketable securities. These marketable securities are classified as current assets because they are highly liquid and are available, as required, to meet working capital and other operating requirements.

Research Contracts

We regularly enter into contracts with third parties to perform research and development activities in connection with our scientific technologies. Costs incurred under these contracts are recognized ratably over the term of the contract or based on actual enrollment levels which we believe corresponds to the manner in which the work is performed. Clinical trial, contract services and other outside costs require that we make estimates of the costs incurred in a given accounting period and record accruals at period end as the third party service periods and billing terms do not always coincide with our period end. We base our estimates on our knowledge of the research and development programs, services performed for the period, past history for related activities and the expected duration of the third party service contract, where applicable.

Fair Value and Classification of Equity Instruments

Historically, we have issued warrants to purchase shares of our common stock in connection with our debt and equity financings. We record each of the securities issued on a relative fair value basis up to the amount of the proceeds received. We estimate the fair value of the warrants using the Black-Scholes option pricing model. The Black-Scholes model is dependent on a number of variables and estimates including: interest rates, dividend yield, volatility and the expected term of the warrants. Our estimates are based on market interest rates at the date of issuance, our past history for declaring dividends, our stock price volatility and the contractual term of the warrants. The value ascribed to the warrants in connection with debt offerings is considered a cost of capital and amortized to interest expense over the term of the debt.

We have, at certain times, issued preferred stock and notes, which were convertible into common stock at a discount from the common stock market price at the date of issuance. The discounted amount associated with such conversion rights represents an incremental yield, or "beneficial conversion feature" that is recorded when the consideration allocated to the convertible security, divided by the number of common shares into which the security converts, is below the fair value of the common stock at the date of issuance of the convertible instrument.

A beneficial conversion feature associated with the preferred stock is recognized as a return to the preferred shareholders and represents a non-cash charge in the determination of net loss available to common stockholders. The beneficial conversion feature is recognized in full immediately if there is no redemption date for the preferred stock, or over the period of issuance through the redemption date, if applicable. A beneficial conversion feature associated with debentures, notes or other debt instruments is recognized as discount to the debt and is amortized as additional interest expense ratably over the remaining term of the debt instrument.

Results of Operations

Year Ended December 31, 2004 and 2003

Our net loss was $11,250,877 during the year ended December 31, 2004 as compared with $8,367,994 during the year ended December 31, 2003. Net loss attributable to common stockholders totaled $1.73 per share during 2004 as compared with $1.82 per share during 2003. The higher net loss in 2004 was primarily due to higher research and development, general and administrative and interest expenses. The lower net loss attributable to common stockholders on a per share basis in 2004 was primarily due to the absence in 2004 of a preferred stock beneficial conversation feature and an increase in weighted average shares outstanding of approximately 694,000 shares in 2004, which was primarily the result of conversions of preferred stock into common stock in 2004.

Research and development expenses were $6,400,132 during the year ended December 31, 2004 as compared with $4,383,237 during the year ended December 31, 2003. The increase in 2004 was primarily attributable to higher pre-clinical costs for Inosine of approximately $1,858,000 associated with certain animal toxicology studies and higher clinical trial costs for ALTROPANE of approximately $503,000 related to the initiation of our second Phase III trial. We currently anticipate that our research and development expenses will increase over the next twelve months although there may be significant fluctuations on a quarterly basis. This expected increase is primarily related to costs associated with our second Phase III trial of ALTROPANE although we believe these increases may be offset, in part, by the absence of costs associated with the completion of the pre-clinical program for Inosine. Our current working capital constraints, and the results of our efforts to raise additional funds, may limit or significantly alter our planned expenditures.

General and administrative expenses were $3,981,297 during the year ended December 31, 2004 as compared with $3,531,650 during the year ended December 31, 2003. The increase in 2004 was primarily related to higher legal and consulting expenses of approximately $970,000 largely associated with a settlement and standstill agreement, or Settlement Agreement, we entered into on June 15, 2004 with Robert L. Gipson, Thomas O. Boucher, Jr., Ingalls & Snyder, LLC and Ingalls & Snyder Value Partners, L.P. Under the terms of the Settlement Agreement, we paid $300,000 to Ingalls & Snyder, LLC as reimbursement for certain expenses and approximately $278,000 in connection with consulting and separation agreements with our former Chairman of the Board of Directors. We also incurred corporate legal expenses of approximately $100,000 primarily in connection with the Settlement Agreement, including related litigation filed prior to execution of the Settlement Agreement. This increase was partially offset by lower payroll costs in 2004 of approximately $317,000 due to lower headcount and lower patent-related legal fees of approximately $55,000. We currently anticipate that our general and administrative expenses will increase over the next twelve months due to the hiring of our Chief Executive Officer in September 2004 and our President and Chief Operating Officer in November 2004.

Interest expense totaled $1,010,536 during the year ended December 31, 2004 as compared to $755,850 during the year ended December 31, 2003. The increase in 2004 was primarily due to higher non-cash interest expense related to the amortization of the discounted carrying value of the 10% Convertible Senior Secured Promissory Notes, or the Notes, resulting from the beneficial conversion features recorded in fiscal 2003. In connection with our March 2003 private placement, the conversion price of the Notes was reduced to $5.00 per share in accordance with the anti-dilution provisions of the Notes creating beneficial conversion features of approximately $368,000. In June 2003, we issued $207,167 in principal amount of Notes for interest accrued through June 1, 2003. The $207,167 Note was issued with a conversion price of $5.00 which was below the market price of the common stock at the date of issuance resulting in a beneficial conversion feature of approximately $190,000. Beneficial conversion features are recognized as a decrease in the carrying value of the Notes and an increase in additional paid in capital. During 2004, we incurred approximately $375,000 in interest payable in cash on the 10% coupon on the Notes, $581,000 in non-cash interest primarily associated with the amortization of the discounted carrying value of the Notes and $55,000 in amortization of debt issuance costs. During the 2004 period, the Notes bore an effective interest rate of approximately 17% based on the fair value of the Notes. We currently anticipate that our interest expense will decrease over the next twelve months due to the prepayment of the Notes in November 2004.

Interest income was $141,088 during the year ended December 31, 2004 as compared with interest income of $302,743 during the year ended December 31, 2003. The decrease was primarily due to a realized loss in the 2004 period of approximately $21,000 as compared to a realized gain of approximately $115,000 in 2003.

Accrual of preferred stock dividends was $480,045 during the year ended December 31, 2004 as compared with $34,029 during the year ended December 31, 2003. In December 2003, we issued 800 shares of Series E Stock with a purchase price of $10,000 per share of Series E Stock which initially yielded a cumulative dividend of 4% per annum increasing to 8% in June 2005.

At December 31, 2004, we had net deferred tax assets of approximately $45,888,000 for which a full valuation allowance has been established. As a result of our concentrated efforts on research and development,

we have a history of incurring net operating losses and expect to incur additional net operating losses for the foreseeable future. Accordingly, we have concluded that it is more likely than not that the future benefits related to the deferred tax assets will not be realized and, therefore, we have provided a full valuation allowance for these assets. In the event we achieve profitability, these deferred tax assets may be available to offset future income tax liabilities and expense, subject to limitations that may occur from ownership changes under provisions of the Internal Revenue Code.

Year Ended December 31, 2003 and 2002

Our net loss was $8,367,994 during the year ended December 31, 2003 as compared with $10,993,142 during the year ended December 31, 2002. Net loss attributable to common stockholders totaled $1.82 per share during 2003 as compared with $2.49 per share during 2002. The lower net loss in 2003 was primarily due to lower research and development expenses and the absence in 2003 of certain non-recurring equity related charges, partially offset by higher interest expense in 2003. The lower net loss attributable to common stockholders on a per share basis in 2003 was primarily due to an increase in weighted average shares outstanding of approximately 1,689,000 shares, which was primarily the result of a private placement of common stock completed in 2003.

Research and development expenses were $4,383,237 during the year ended December 31, 2003 as compared with $6,906,254 during the year ended December 31, 2002. The decrease in 2003 was primarily attributable to lower manufacturing development costs for Troponin of approximately $1,319,000, lower manufacturing development and NDA preparation costs for ALTROPANE for the diagnosis of PS of approximately $351,000, and lower pre-clinical costs for earlier stage product candidates of approximately $271,000. During 2002, our manufacturing efforts on Troponin were focused on continuing work on the development of the manufacturing process whereas in 2003 such efforts were focused on refining the purification process and accumulating material for further pre-clinical studies.

General and administrative expenses were $3,531,650 during the year ended December 31, 2003 as compared with $3,395,754 during the year ended December 31, 2002. The increase in 2003 was primarily due to higher payroll and related costs of approximately $91,000.

Other expenses were zero during the year ended December 31, 2003 as compared with $896,741 during the year ended December 31, 2002. The decrease in 2003 was due to non-cash charges related to agreements we entered into in 2002 and 2001 with significant securityholders to modify outstanding warrants. In November 2002, we agreed to extend the expiration date and lower the exercise price of certain warrants in return for the elimination of certain reset provisions of those warrants. We recorded a one-time charge of approximately $610,000 in 2002 related to this transaction. In June 2001, we agreed to issue additional warrants to a securityholder in return for a delay of the reset of the exercise price of certain warrants held by the securityholder. We recorded charges of approximately $287,000 in both 2002 and 2001 related to this transaction. The non-cash charges recognized in each transaction were based upon a fair value calculation of the warrants modified or issued in each transaction as determined under the Black-Scholes pricing model.

Interest expense totaled $755,850 during the year ended December 31, 2003 as compared to $237,610 during the year ended December 31, 2002. The increase was due to higher daily average balances in 2003 related to the Notes which were issued in July 2002, and therefore, outstanding for all of 2003 compared to less than half of 2002. During 2003, we incurred approximately $429,000 in interest on the 10% coupon on the Notes, $292,000 in non-cash interest associated with the amortization of the discounted carrying value of the Notes and $35,000 in amortization of debt issuance costs.

Interest income was $302,743 during the year ended December 31, 2003 as compared with interest income of $443,217 during the year ended December 31, 2002. The decrease was primarily due to lower average interest rates in 2003, partially offset by higher average cash, cash equivalents, and marketable securities balances and higher realized gains of approximately $73,000 in 2003.

Accrual of preferred stock dividends was $34,029 during the year ended December 31, 2003 as compared with none during the year ended December 31, 2002. In connection with the issuance of Series E Stock, we

recorded a beneficial conversion feature of $2,696,658 during the year ended December 31, 2003 as compared to none during the year ended December 31, 2002. A beneficial conversion feature is recorded when the consideration allocated to the convertible security, divided by the number of common shares into which the security converts, is below the fair value of the common stock at the date of issuance of the convertible instrument. The amount of the beneficial conversion feature has been immediately accreted and resulted in a deemed dividend as the preferred stock does not have a redemption term. The value of the beneficial conversion feature has been reflected as an adjustment to the net loss attributable to common stockholders on the Company's Statement of Operations.

Liquidity and Capital Resources

Net cash used for operating activities, primarily related to our net loss, totaled $9,666,437 in 2004 as compared to $7,814,164 in 2003. The increase in 2004 is primarily related to higher research and development expenses in 2004. Net cash provided by investing activities totaled $8,303,378 in 2004 as compared to net cash used for investing activities of $3,890,462 in 2003. The increase in net cash provided by investing activities principally reflects the decrease in restricted cash in 2004 and the purchase of marketable securities with the proceeds from the private placements, described below, completed by us in 2003, net of the sales of marketable securities which were subsequently used to fund operations. Net cash used for financing activities totaled $4,572,428 in 2004 as compared to net cash provided by financing activities of $16,998,683 in 2003. The decrease in net cash provided by financing activities principally reflects the effect of the payments of notes payable and preferred stock dividends paid by us in 2004 and the private placements, described below, completed by us in 2003.

As of December 31, 2004, we have incurred total net losses since inception of approximately $105,647,000. To date, we have dedicated most of our financial resources to the research and development of our product candidates, general and administrative expenses and costs related to obtaining and protecting patents. Since inception, we have primarily satisfied our working capital requirements from the sale of our securities through private placements. These private placements have included the sale of preferred stock and common stock, as well as notes payable and convertible debentures. A summary of financings completed during the three years ended December 31, 2004 is as follows:

Date	Net Proceeds Raised	Securities Issued
December 2003	$7.0 million	Convertible preferred stock and warrants
March 2003	$9.9 million	Common stock
July 2002	$3.9 million	Convertible 10% senior secured promissory notes and warrants
March 2002	$2.8 million	Common stock and warrants

In the future, our working capital and capital requirements will depend on numerous factors, including the progress of our research and development activities, the level of resources that we devote to the developmental, clinical, and regulatory aspects of our technologies, and the extent to which we enter into collaborative relationships with pharmaceutical and biotechnology companies.

At December 31, 2004, we had available cash, cash equivalents, and marketable securities of approximately $1,643,000 and a working capital deficit of approximately $188,000. We believe that the cash, cash equivalents, and marketable securities available at December 31, 2004 will not provide sufficient working capital to meet our anticipated expenditures for the next twelve months. We believe that the cash, cash equivalents, and marketable securities available at December 31, 2004, combined with approximately $5,000,000 in net proceeds raised in a private placement of common stock completed in March 2005, $1,044,000 in net proceeds received through the exercise of certain warrants in February 2005, and our ability to control certain costs, including those related to clinical trial programs, pre-clinical activities, and certain general and administrative expenses will enable us to meet our anticipated cash expenditures through July 2005. We will need to raise additional capital in 2005

through a collaboration, merger or other transaction with other pharmaceutical or biotechnology companies, or through a debt financing or equity offerings by us in order to continue as a going concern. There can be no assurance, however, that we will be successful or that additional funds will be available on acceptable terms, if at all.

Contractual Obligations and Commitments

Our contractual obligations as of December 31, 2004, are approximately as follows:

Contractual Obligations	Payments Due By Period				
	Total	Less Than One Year	One to Three Years	Three to Five Years	More than Five Years
Operating Lease Obligations (1) ..	$2,211,000	$ 335,000	$573,000	$575,000	$728,000
Other Contractual Obligations (3)	654,000	634,000	20,000	—	—
Other Long Term Obligations Reflected on the Balance Sheet (2)	255,000	255,000	—	—	—
Total	$3,120,000	$1,224,000	$593,000	$575,000	$728,000

(1) Such amounts primarily include minimum rental payments for our office and laboratory leases in Boston, Massachusetts and Baltimore, Maryland. The office and laboratory leases expire in 2012 and 2006, respectively. Annual rent expense on the office and laboratory leases is approximately $277,000 and $71,000, respectively.

(2) Such amounts reflect accrued dividends on our Series E Stock. On February 4, 2005, all shares of Series E Stock were converted into shares of our common stock.

(3) Such amounts primarily reflect research and development commitments with third parties.

Recent Accounting Pronouncements

In December 2004, the Financial Accounting Standards Board, or FASB, issued FASB Statement No. 123(R), "Share-Based Payments" ("FASB 123(R)"). FASB 123(R) revises FASB Statement No. 123, "Accounting for Stock-Based Compensation," supercedes APB Opinion No. 25, "Accounting for Stock Issued to Employees," and amends FASB Statement No. 95, "Statement of Cash Flows." FASB 123(R) requires companies to expense the fair value of employee stock options and other forms of stock-based compensation over the employees' service period. Compensation cost is measured at the fair value of the award at the grant date and adjusted to reflect actual forfeitures and the outcome of certain conditions. The fair value of an award is not re-measured after its initial estimation on the grant date. The statement is effective in the first interim or annual reporting period beginning after June 15, 2005. The impact of adopting SFAS No. 123(R) cannot be accurately estimated at this time, as it will depend on the market value and the amount of share-based awards granted in future periods. The transition methods include prospective and retroactive adoption options. Under the retroactive options, prior periods may be restated either as of the beginning of the year of adoption or for all periods presented. The prospective method requires that compensation expense be recorded at the beginning of the first quarter of adoption of SFAS 123(R) for all unvested stock options and restricted stock based upon the previously disclosed SFAS 123 methodology and amounts. The retroactive methods would record compensation expense beginning with the first period restated for all unvested stock options and restricted stock. We are evaluating if the adoption of SFAS 123(R) will have a material impact on our results of operations and earnings per share. We are also evaluating the requirements of SFAS 123(R) and have not yet determined the method of adoption and we have not determined whether this adoption will result in amounts that are similar to the current pro forma disclosures under SFAS No. 123 in Note 1 to our Consolidated Financial Statements.

Off-Balance Sheet Arrangements

We had no "off balance sheet arrangements" (as defined in the applicable Securities and Exchange Commission rule) during the year ended December 31, 2004.

Item 7A. ***Quantitative and Qualitative Disclosures about Market Risk.***

We generally maintain a portfolio of cash equivalents, and short-term and long-term marketable securities in a variety of securities which can include commercial paper, certificates of deposit, money market funds and government and non-government debt securities. The fair value of these available-for-sale securities are subject to changes in market interest rates and may fall in value if market interest rates increase. Our investment portfolio includes only marketable securities with active secondary or resale markets to help insure liquidity. We have implemented policies regarding the amount and credit ratings of investments. Due to the conservative nature of these policies, we do not believe we have material exposure due to market risk. We may not have the ability to hold our fixed income investments until maturity, and therefore our future operating results or cash flows could be affected if we are required to sell investments during a period in which increases in market interest rates have adversely affected the value of our securities portfolio.

Item 8. ***Financial Statements and Supplementary Data.***

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
of Boston Life Sciences, Inc.

In our opinion, the accompanying consolidated balance sheets and related consolidated statements of operations, of comprehensive loss and stockholders' equity and of cash flows present fairly, in all material respects, the financial position of Boston Life Sciences, Inc. and its subsidiaries (the "Company") (a development stage enterprise) at December 31, 2004 and 2003, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2004 and, cumulatively, for the period from October 16, 1992 (date of inception) to December 31, 2004 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring losses and negative cash flows from operations and has a net working capital deficiency that raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ PRICEWATERHOUSECOOPERS LLP

Boston, Massachusetts
March 31, 2005

BOSTON LIFE SCIENCES, INC.
(A Development Stage Enterprise)

CONSOLIDATED BALANCE SHEETS

	December 31, 2004	December 31, 2003
ASSETS		
Current assets:		
Cash and cash equivalents	$ 152,971	$ 6,088,458
Marketable securities	1,490,119	4,876,402
Restricted cash and marketable securities (Notes 1 and 6)	—	445,926
Other current assets	145,153	515,947
Total current assets	1,788,243	11,926,733
Restricted cash and marketable securities (Notes 1 and 6)	—	4,590,322
Fixed assets, net	400,178	604,662
Other assets	356,292	311,177
Total assets	$ 2,544,713	$ 17,432,894
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued expenses	$ 1,975,773	$ 1,506,147
10% convertible senior secured promissory notes (Note 5)	—	3,811,129
Commitments and contingencies (Note 8)		
Stockholders' equity:		
Preferred stock, $.01 par value; 1,000,000 shares authorized; 25,000 shares designated Convertible Series A, 500,000 shares designated Convertible Series D, and 800 shares designated Convertible Series E; 561.3 and 800 shares Convertible Series E issued and outstanding at December 31, 2004 (liquidation preference of $5,868,464) and December 31, 2003 (liquidation preference of $8,034,029), respectively	3,501,539	4,990,614
Common stock, $.01 par value; 80,000,000 and 60,000,000 shares authorized at December 31, 2004 and 2003, respectively; 6,892,856 and 6,503,918 shares issued and outstanding at December 31, 2004 and 2003, respectively	68,929	65,039
Additional paid-in capital	102,649,933	101,455,327
Accumulated other comprehensive (loss) income	(4,617)	605
Deficit accumulated during development stage	(105,646,844)	(94,395,967)
Total stockholders' equity	568,940	12,115,618
Total liabilities and stockholders' equity	$ 2,544,713	$ 17,432,894

The accompanying notes are an integral part of the consolidated financial statements.

BOSTON LIFE SCIENCES, INC.
(A Development Stage Enterprise)

CONSOLIDATED STATEMENTS OF OPERATIONS

	For the Year Ended December 31,			From Inception (October 16, 1992) to December 31,
	2004	2003	2002	2004
Revenues	$ —	$ —	$ —	$ 900,000
Operating expenses:				
Research and development	6,400,132	4,383,237	6,906,254	65,787,375
General and administrative	3,981,297	3,531,650	3,395,754	29,819,270
Purchased in-process research and development	—	—	—	12,146,544
Total operating expenses	10,381,429	7,914,887	10,302,008	107,753,189
Loss from operations	(10,381,429)	(7,914,887)	(10,302,008)	(106,853,189)
Other expenses	—	—	(896,741)	(1,580,621)
Interest expense	(1,010,536)	(755,850)	(237,610)	(4,256,453)
Investment income	141,088	302,743	443,217	7,043,419
Net loss	(11,250,877)	(8,367,994)	(10,993,142)	(105,646,844)
Preferred stock beneficial conversion feature (Note 6)	—	(2,696,658)	—	(8,062,712)
Accrual of preferred stock dividends (Note 6)	(480,045)	(34,029)	—	(514,074)
Net loss attributable to common stockholders	$(11,730,922)	$(11,098,681)	$(10,993,142)	$(114,223,630)
Basic and diluted net loss attributable to common stockholders per share	$ (1.73)	$ (1.82)	$ (2.49)	
Weighted average common shares outstanding	6,795,316	6,101,408	4,412,637	

The accompanying notes are an integral part of the consolidated financial statements.

BOSTON LIFE SCIENCES, INC.
(A Development Stage Enterprise)

CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS AND STOCKHOLDERS' EQUITY
For the Period from inception (October 16, 1992) to December 31, 2004

	Preferred Stock		Common Stock		Additional Paid-in Capital	Deferred Compensation	Accumulated Other Comprehensive Income (Loss)	Deficit Accumulated During Development Stage	Total Stockholders' Equity
	Number of Shares	Amount	Number of Shares	Par Value					
Issuance of common stock to founders			304,009	$ 3,040	$ 45,685				$ 48,725
Issuance of common stock upon exercise of warrants and options			432,912	4,329	6,477,270				6,481,599
Issuance of common stock and warrants, net of issuance costs of $1,187,864			1,177,801	11,778	25,878,599				25,890,377
Issuance of common stock and warrants upon Merger			723,947	7,239	14,596,709				14,603,948
Issuance of common stock upon conversion of convertible debentures			31,321	313	988,278				988,591
Issuance of warrants in connection with debentures, net of issuance costs of $280,806					3,319,194				3,319,194
Issuance of warrants in connection with preferred series C stock issuance and related beneficial conversion feature, net of issuance costs of $590,890					3,736,789				3,736,789
Accretion of preferred series C stock					(4,327,679)				(4,327,679)
Issuance of preferred stock, net of issuance costs of $3,397,158	239,911	$ 2,399			20,591,443				20,593,842
Conversion of preferred stock into common stock	(239,911)	(2,399)	1,167,073	11,671	6,140,728				6,150,000
Conversion of debentures and payment of interest in common stock, net of issuance costs of $307,265			317,083	3,171	4,844,249				4,847,420
Preferred stock conversion inducement					(600,564)				(600,564)
Deferred compensation related to stock options and warrants granted					804,607	$(804,607)			—
Compensation expense related to stock options and warrants					1,236,186	804,607			2,040,793
Modification of warrants					683,880				683,880
Other			783	8	69,925				69,933
Comprehensive loss:									
Unrealized gain on marketable securities							$130,818		130,818
Net loss from inception (October 16, 1992) to December 31, 2001								$(75,034,831)	(75,034,831)
Comprehensive loss from inception (October 16, 1992) to December 31, 2001									(74,904,013)
Balance at December 31, 2001	—	—	4,154,929	41,549	84,485,299	—	130,818	(75,034,831)	9,622,835
Modification of warrants					896,741				896,741
Issuance of common stock and warrants, net of issuance costs of $583,908			319,913	3,199	2,851,964				2,855,163
Issuance of warrants in connection with debentures, net of issuance costs of $112,152					313,438				313,438
Compensation expense related to stock options and warrants					143,236				143,236

The accompanying notes are an integral part of the consolidated financial statements.

BOSTON LIFE SCIENCES, INC.
(a Development Stage Enterprises)

CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS AND STOCKHOLDERS' EQUITY—(Continued)
For the Period from inception (October 16, 1992) to December 31, 2004

	Preferred Stock		Common Stock		Additional		Accumulated Other	Deficit Accumulated During	Total
	Number of Shares	Amount	Number of Shares	Par Value	Paid-in Capital	Deferred Compensation	Comprehensive Income (Loss)	Development Stage	Stockholders' Equity
Comprehensive loss:									
Unrealized loss on marketable securities							(15,418)		(15,418)
Net loss								(10,993,142)	(10,993,142)
Comprehensive loss									(11,008,560)
Balance at December 31, 2002	—	—	4,474,842	44,748	88,690,678	—	115,400	(86,027,973)	2,822,853
Issuance of common stock, net of issuance costs of $91,228			2,019,076	20,191	9,978,236				9,998,427
Issuance of common stock upon exercise of options			10,000	100	49,900				50,000
Issuance of preferred stock Series E, net of issuance costs of $681,663	800	2,293,956			2,696,658				4,990,614
Amortization of preferred stock Series E beneficial conversion feature		2,696,658			(2,696,658)				—
Issuance of warrants in connection with Series E Stock, net of issuance costs of $278,426					2,049,297				2,049,297
Accrual of dividends on preferred Series E stock					(34,029)				(34,029)
Beneficial conversion feature on 10% convertible secured promissory notes					558,000				558,000
Compensation expense related to stock options and warrants					163,245				163,245
Comprehensive loss:									
Unrealized loss on marketable securities							(114,795)		(114,795)
Net loss								(8,367,994)	(8,367,994)
Comprehensive loss									(8,482,789)
Balance at December 31, 2003	800	4,990,614	6,503,918	65,039	101,455,327	—	605	(94,395,967)	12,115,618
Conversion of preferred stock into common stock and payment of interest in common stock, net of issuance costs of $27,664	(238.7)	(1,489,075)	386,676	3,867	1,514,394				29,186
Accrual of dividends on preferred Series E stock					(480,045)				(480,045)
Issuance of common stock upon exercise of options			2,262	23	7,473				7,496
Compensation expense related to stock options and warrants					152,784				152,784
Comprehensive loss:									
Unrealized loss on marketable securities							(5,222)		(5,222)
Net loss								(11,250,877)	(11,250,877)
Comprehensive loss									(11,256,099)
Balance at December 31, 2004	561.3	$ 3,501,539	6,892,856	$68,929	$102,649,933	$ —	$ (4,617)	$(105,646,844)	$ 568,940

The accompanying notes are an integral part of the consolidated financial statements.

BOSTON LIFE SCIENCES, INC.
(A Development Stage Enterprise)

CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Year Ended December 31,			From Inception (October 16, 1992) to December 31,
	2004	2003	2002	2004
Cash flows from operating activities:				
Net loss	$(11,250,877)	$ (8,367,994)	$(10,993,142)	$(105,646,844)
Adjustments to reconcile net loss to net cash used for operating activities:				
Purchased in-process research and development	—	—	—	12,146,544
Write-off of acquired technology	—	—	—	3,500,000
Interest expense settled through issuance of notes payable	—	207,167	143,333	350,500
Non-cash interest expense	635,909	327,286	61,895	1,604,775
Non-cash charges related to options, warrants and common stock	111,284	252,900	1,039,977	4,198,767
Amortization and depreciation	218,262	223,721	170,952	2,188,917
Changes in current assets and liabilities:				
Decrease (increase) in other current assets	370,794	(94,194)	178,048	713,810
Increase (decrease) in accounts payable and accrued expenses	248,191	(363,050)	31,584	947,644
Net cash used for operating activities	(9,666,437)	(7,814,164)	(9,367,353)	(79,995,887)
Cash flows from investing activities:				
Cash acquired through Merger	—	—	—	1,758,037
Purchases of fixed assets	(13,778)	(43,487)	(432,343)	(1,343,620)
(Increase) decrease in other assets	(100,153)	2,765	(255,291)	(709,927)
Decrease (increase) in restricted cash and marketable securities	5,036,248	(5,036,248)	—	—
Purchases of marketable securities	(6,390,227)	(13,354,221)	(7,538,990)	(112,127,090)
Sales and maturities of marketable securities	9,771,288	14,540,729	11,358,065	110,632,354
Net cash provided by (used for) investing activities	8,303,378	(3,890,462)	3,131,441	(1,790,246)
Cash flows from financing activities:				
Proceeds from issuance of common stock	7,496	10,050,000	3,439,071	44,745,749
Proceeds from issuance of preferred stock	—	8,000,000	—	35,022,170
Preferred stock conversion inducement	—	—	—	(600,564)
Proceeds from issuance of notes payable	—	—	4,000,000	6,585,000
Proceeds from issuance of convertible debentures	—	—	—	9,000,000
Principal payments of notes payable	(4,350,500)	—	—	(7,146,967)
Dividend payments	(201,760)	—	—	(201,760)
Payments of financing costs	(27,664)	(1,051,317)	(696,060)	(5,464,524)
Net cash (used for) provided by financing activities	(4,572,428)	16,998,683	6,743,011	81,939,104
Net (decrease) increase in cash and cash equivalents	(5,935,487)	5,294,057	507,099	152,971
Cash and cash equivalents, beginning of period	6,088,458	794,401	287,302	—
Cash and cash equivalents, end of period	$ 152,971	$ 6,088,458	$ 794,401	$ 152,971
Supplemental cash flow disclosures:				
Non-cash transactions (see notes 1, 5, and 6)				
Cash paid for interest	$ 410,881	$ 217,525	—	$ 628,406

The accompanying notes are an integral part of the consolidated financial statements.

BOSTON LIFE SCIENCES, INC.
(A Development Stage Enterprise)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. The Company and its Significant Accounting Policies

Boston Life Sciences, Inc. and its subsidiaries (the "Company") is a development stage biotechnology company primarily focused on the research and clinical development of biopharmaceutical products for the diagnosis and treatment of central nervous system, or CNS, diseases. Boston Life Sciences ("Old BLSI"), originally a privately held company founded in 1992, merged with a publicly held company effective June 15, 1995 (the "Merger"). The publicly held company survived the Merger and changed its name to Boston Life Sciences, Inc. (the "Company"). However, all of the employees of the public company ceased employment six months prior to the Merger, the company's facilities and equipment were sold, and all directors resigned effective with the Merger, whereupon the management and directors of Old BLSI assumed management of the Company. During the period from inception through December 31, 2004, the Company has devoted substantially all of its efforts to business planning, raising financing, furthering the research and development of its technologies, and corporate partnering efforts. Accordingly, the Company is considered to be in the development stage as defined in Statement of Financial Accounting Standards ("SFAS") No. 7, "Accounting and Reporting by Development Stage Enterprises."

The accompanying consolidated financial statements have been prepared on a basis which assumes that the Company will continue as a going concern which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. The uncertainty inherent in the need to raise additional capital and the Company's recurring losses from operations and net working capital deficit raise substantial doubt about the Company's ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

As of December 31, 2004, the Company has experienced total net losses since inception of approximately $105,647,000. For the foreseeable future, the Company expects to experience continuing operating losses and negative cash flows from operations as management executes its current business plan. The Company believes that the cash, cash equivalents, and marketable securities available at December 31, 2004 will not provide sufficient working capital to meet its anticipated expenditures for the next twelve months. The Company believes that the cash, cash equivalents, and marketable securities available at December 31, 2004, combined with approximately $5,000,000 in net proceeds raised in a private placement of common stock completed in March 2005 (Note 6), $1,044,000 in net proceeds received through the exercise of certain warrants in February 2005 (Note 5), and its ability to control certain costs, including those related to clinical trial programs, pre-clinical activities, and certain general and administrative expenses will enable the Company to meet its anticipated cash expenditures through July 2005. The Company will need to raise additional capital in 2005 through a collaboration, merger or other transaction with other pharmaceutical or biotechnology companies, or through a debt financing or equity offerings by the Company to continue as a going concern. There can be no assurance, however, that the Company will be successful or that additional funds will be available on acceptable terms, if at all.

There have been a number of recent developments which have simplified the Company's capital structure. In November 2004, the Company utilized funds set aside in a restricted account to repay in full the Company's 10% Convertible Senior Secured Promissory Notes, or Notes. In February 2005, the Company entered into agreements with the holders of 557.3 shares of Series E Stock (the "Holders"), whereby the Holders agreed to convert their Series E Stock into common stock. In return, the Company agreed to pay a dividend of $564.44 for each share of Series E Stock held by the Holders and to lower the exercise price of the warrants held by the Holders from $7.75 to $0.05. The Company expects to record a charge of approximately $656,000 to net loss attributable to common stockholders, as determined under the Black Scholes pricing model, in the first quarter of 2005 in connection with the re-pricing of the warrants. The Holders were also granted preemptive rights with

respect to up to 33% of the next $16,900,000 raised by the Company in any private placement exempt from the registration requirements of the Securities Act of 1933, as amended. The amount of the preemptive right was reduced to $11,900,000 in March 2005 following completion of a $5,000,000 private placement of common stock by the Company. On February 4, 2005, our stockholders approved an amendment to the Certificate of Designations, Rights and Preferences of the Series E Stock, providing for the mandatory conversion of all outstanding shares of Series E Stock, upon the affirmative vote of 75% of the outstanding shares of Series E Stock. The Company issued 900,646 shares of common stock in connection with the conversion of the 561.3 outstanding shares of the Series E Stock outstanding.

A summary of the Company's significant accounting policies is as follows:

Basis of Consolidation

The Company's consolidated financial statements include the accounts of its six subsidiaries where a majority of the operations are conducted. At December 31, 2004, all of the subsidiaries were wholly-owned. In March 2003, the Company purchased the remaining 10% of ProCell Pharmaceuticals from the minority shareholder for 19,076 shares of common stock which had a fair market value of approximately $90,000. All significant intercompany transactions and balances have been eliminated.

Cash, Cash Equivalents and Marketable Securities

The Company considers all highly liquid marketable securities purchased with an original maturity of three months or less to be cash equivalents. The Company invests its cash equivalents primarily in overnight repurchase agreements, money market funds, and United States treasury and agency obligations. At December 31, 2004 and periodically throughout the year, the Company had cash balances at certain financial institutions in excess of federally insured limits. However, the Company does not believe that it is subject to any unusual credit risk beyond the normal credit risk associated with commercial banking relationships.

Marketable securities, which are classified as available-for-sale, are recorded at fair value. Unrealized gains or losses are not immediately recognized in the Consolidated Statements of Operations but are reflected in the Consolidated Statements of Comprehensive Loss and Stockholders' Equity as a component of accumulated other comprehensive income (loss) until realized. Realized gains (losses) are determined based on the specific identification method. If a decline in the fair value of a security is considered to be other than temporary, the investment is written down to a new cost basis and the unrealized loss is removed from accumulated other comprehensive loss and recorded in the Consolidated Statement of Operations. The Company evaluates whether a decline in fair value is other than temporary based on factors such as the significance of the decline, the duration of time for which the decline has been in existence and the Company's ability and intent to hold the security to maturity. To date, the Company has only recorded temporary impairments related to marketable securities. Marketable securities consist of United States agency bonds and corporate debt obligations (Note 2). These marketable securities are classified as current assets because they are highly liquid and are available, as required, to meet working capital and other operating requirements.

Restricted cash and marketable securities represent amounts which had been placed into a separate investment account in accordance with certain obligations under the Company's Series E Preferred Stock agreements (see Note 6).

Financial Instruments

The carrying amounts of the Company's financial instruments, which include cash and cash equivalents, marketable securities, accounts payable, accrued expenses and debt approximate their fair values as of December 31, 2004 and 2003 due to their short maturity.

Fixed Assets

Fixed assets are stated at cost and depreciated using the straight-line method over the estimated useful lives of the assets, ranging from three to five years. Leasehold improvements are stated at cost and amortized using the straight-line method over the term of the lease or the estimated useful lives of the assets, whichever is shorter.

Revenue Recognition and Concentration of Customers

Since inception, the Company has entered into two separate licensing and development agreements with certain pharmaceutical companies related to the development of certain of its technologies. Under the terms of the agreements, the pharmaceutical companies were provided with a specified period during which they had the right to evaluate the Company's technology. The Company received cash payments from the pharmaceutical companies and will also receive royalties on eventual sales of any product derived from the development effort. One agreement provided for periodic payments over a three-year period which were recognized ratably over the term of the agreement. The other agreement provided for an initial, non-recurring payment which was recognized in full upon receipt because the Company had no remaining performance obligations.

Research and Development Expenses and Concentration of Outside Researchers

The Company has entered into licensing agreements with certain institutions that provide the Company with the rights to certain patents and technologies, and the right to market and distribute any products developed. Obligations initially incurred to acquire these rights are recognized and expensed on the date that the Company acquires the rights due to the early stage of the related technology.

The Company has entered into sponsored research agreements with certain institutions for the research and development of its licensed technologies. Payments made under these sponsored research agreements are expensed ratably over the term of the agreement or based on actual enrollment levels which the Company believes corresponds with the manner in which the work is performed.

The majority of the Company's technologies currently under development were invented or discovered by researchers working for Harvard and its Affiliates. The Company currently conducts a substantial portion of its research and development through Harvard and its Affiliates pursuant to sponsored research agreements and is thus dependent upon a continuing business relationship with Harvard and its Affiliates.

Research and development activities cease when developmental work is substantially complete and when the Company believes appropriate efficacy has been demonstrated.

Income Taxes

The Company uses the liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are recorded for the expected future tax consequences of temporary differences between the financial reporting and income tax bases of assets and liabilities and are measured using the enacted tax rates and laws that are expected to be in effect when the differences reverse. A valuation allowance is established to reduce net deferred tax assets to the amount expected to be realized.

Net Loss Per Share

Basic and diluted net loss per share available to common stockholders has been calculated by dividing net loss attributable to common stockholders by the weighted average number of common shares outstanding during the period. All potentially dilutive common shares have been excluded from the calculation of weighted average common shares outstanding since their inclusion would be antidilutive.

The following common stock equivalents, on an as exercised or converted basis, were excluded from the computation of diluted net loss per common share because they were anti-dilutive. The exercise or conversion of those common stock equivalents outstanding at December 31, 2004, which could generate proceeds to the Company of up to $36 million, could potentially dilute earnings per share in the future. The preferred stock outstanding was converted into common stock in February 2005.

	2004	2003	2002
Stock options	1,484,521	857,184	854,834
Warrants	1,685,526	1,947,119	1,243,701
Unit options	79,295	79,295	79,295
Preferred stock	900,674	1,280,000	—
Convertible debentures	—	870,100	414,333
	4,150,016	5,033,698	2,592,163

Accounting for Stock-Based Compensation

The Company has elected to follow Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB 25") and related interpretations, in accounting for its employee stock-based compensation plans and related equity issuances, rather than the alternative fair value accounting method provided for under SFAS No. 123, "Accounting for Stock-Based Compensation," ("SFAS No. 123"). Under APB 25, when the exercise price of options granted under these plans equals the market price of the underlying stock on the date of grant, provided other criteria are met, no compensation expense is recognized. All stock-based awards to non-employees are accounted for in accordance with SFAS No. 123 and Emerging Issues Task Force 96-18, " Accounting for Equity Instruments that are Issued to Other than Employees for Acquiring or in Conjunction with Selling, Goods or Services."

The following table illustrates the effect on net loss and net loss per share if the Company had applied the fair value recognition provisions of SFAS No. 123 to stock-based employee compensation:

	2004	2003	2002
Net loss, as reported	$(11,250,877)	$ (8,367,994)	$(10,993,142)
Add: Stock-based employee compensation expense recognized	106,064	57,024	13,600
Deduct: Total stock-based employee compensation expense determined under fair value based methods for all awards	(1,204,097)	(740,844)	(936,820)
Pro forma net loss	$(12,348,910)	$ (9,051,814)	$(11,916,362)
Preferred stock beneficial conversion feature (Note 6)	—	(2,696,658)	—
Accrual of preferred stock dividends (Note 6)	(480,045)	(34,029)	—
Pro forma net loss attributable to common stockholders	$(12,828,955)	$(11,782,501)	$(11,916,362)
Basic and diluted net loss attributable to common stockholders per share:			
As reported	$ (1.73)	$ (1.82)	$ (2.49)
Pro forma	$ (1.89)	$ (1.93)	$ (2.70)

The fair value of each option grant was estimated on the date of the grant using the Black-Scholes option-pricing model with the following assumptions: dividend yield of zero percent; expected volatility of 100%; risk-free interest rates, based on the date of grant, ranging from 2% to 6%; and expected lives ranging from three to five years.

Beneficial Conversion Feature

The Company has, at certain times, issued preferred stock and notes which were convertible into common stock at a discount from the common stock market price at the date of issuance. The discounted amount associated with such conversion rights represents an incremental yield, i.e. a "beneficial conversion feature". A beneficial conversion feature is recorded when the consideration allocated to the convertible security, divided by the number of common shares into which the security converts, is below the fair value of the common stock at the date of issuance of the convertible instrument.

A beneficial conversion feature associated with preferred stock is recognized as a return to the preferred stockholders and represents a non-cash charge in the determination of net loss available to common stockholders. The beneficial conversion feature is recognized in full immediately if there is no redemption date for the preferred stock, or over the period of issuance through the redemption date, if applicable. A beneficial conversion feature associated with debentures, notes or other debt instruments is recognized as discount to the debt and is amortized as additional interest expense ratably over the remaining term of the debt instrument.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosures of contingencies at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Segments

The Company operates as one segment reporting to the chief operating decision maker. Substantially all long-lived assets are maintained in the United States of America.

Recent Accounting Pronouncements

In December 2004, the Financial Accounting Standards Board ("FASB") issued FASB Statement No. 123(R), "Share-Based Payments" ("FASB 123(R)"). FASB 123(R) revises FASB Statement No. 123, "Accounting for Stock-Based Compensation," supercedes APB Opinion No. 25, "Accounting for Stock Issued to Employees," and amends FASB Statement No. 95, "Statement of Cash Flows." FASB 123(R) requires companies to expense the fair value of employee stock options and other forms of stock-based compensation over the employees' service period. Compensation cost is measured at the fair value of the award at the grant date and adjusted to reflect actual forfeitures and the outcome of certain conditions. The fair value of an award is not re-measured after its initial estimation on the grant date. The statement is effective in the first interim or annual reporting period beginning after June 15, 2005. The impact of adopting SFAS No. 123(R) cannot be accurately estimated at this time, as it will depend on the market value and the amount of share-based awards granted in future periods. The transition methods include prospective and retroactive adoption options. Under the

retroactive options, prior periods may be restated either as of the beginning of the year of adoption or for all periods presented. The prospective method requires that compensation expense be recorded at the beginning of the first quarter of adoption of SFAS 123(R) for all unvested stock options and restricted stock based upon the previously disclosed SFAS 123 methodology and amounts. The retroactive methods would record compensation expense beginning with the first period restated for all unvested stock options and restricted stock. The Company is evaluating if the adoption of SFAS 123(R) will have a material impact on our results of operations and earnings per share. The Company is also evaluating the requirements of SFAS 123(R) and has not yet determined the method of adoption and the Company has not determined whether this adoption will result in amounts that are similar to the current pro forma disclosures under SFAS No. 123 in Note 1 to the Consolidated Financial Statements.

Risks and Uncertainties

The Company is subject to risks and uncertainties common to the biotechnology industry. Such risks and uncertainties include, but are not limited to: (i) results from current and planned clinical trials, (ii) scientific data collected on the Company's technologies currently in preclinical research and development, (iii) decisions made by the FDA or other regulatory bodies with respect to the initiation of human clinical trials, (iv) decisions made by the FDA or other regulatory bodies with respect to approval and commercial sale of any of the Company's proposed products, (v) the commercial acceptance of any products approved for sale and the ability of the Company to manufacture, distribute and sell for a profit any products approved for sale, (vi) the Company's ability to obtain the necessary patents and proprietary rights to effectively protect its technologies, (vii) the outcome of any collaborations or alliances entered into by the Company in the future with pharmaceutical or other biotechnology companies, (viii) dependence on key personnel, (ix) maintaining NASDAQ listing requirements and (x) competition with better capitalized companies.

2. Marketable securities

Marketable securities consist of the following at December 31:

	2004	2003
U.S. Agency obligations	$ 324,211	$4,190,821
Corporate debt obligations	1,165,908	5,645,129
	1,490,119	9,835,950
Restricted marketable securities	—	4,959,548
Unrestricted marketable securities	$1,490,119	$4,876,402

The contractual maturities of the Company's marketable securities at December 31, 2004 are as follows: less than one year—$1,490,119. Actual maturities may differ from contractual maturities because the issuers of these securities may have the right to prepay obligations without penalty. Gross unrealized gains and (losses) at December 31, 2004 totaled zero and ($4,617), respectively. Gross unrealized gains and (losses) at December 31, 2003 totaled $15,266 and ($14,661), respectively. Net realized (losses) gains totaled ($20,649), $114,577 and $55,066 in 2004, 2003 and 2002, respectively, and are included in investment income in the Consolidated Statements of Operations.

At December 31, 2003, the Company had classified $5,036,248 in cash and marketable securities as restricted in the Consolidated Balance Sheet due to obligations under the Series E Stock (see Note 6).

3. Fixed Assets

Fixed assets consist of the following at December 31:

	2004	2003
Laboratory equipment	$ 876,078	$ 876,078
Office furniture and equipment	42,837	40,568
Leasehold improvements	58,804	58,804
Computer equipment	81,776	81,892
	1,059,495	1,057,342
Less accumulated depreciation and amortization	659,317	452,680
	$ 400,178	$ 604,662

Amortization and depreciation expense on fixed assets for the years ended December 31, 2004, 2003 and 2002 was approximately $218,000, $224,000 and $171,000, respectively, and $950,000 for the period from inception (October 16, 1992) through December 31, 2004.

4. Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses consist of the following at December 31:

	2004	2003
Research and development related	$ 811,203	$ 480,741
Accrued professional fees	587,728	533,766
General and administrative related	321,378	421,357
Accrued dividends	255,464	34,029
Accrued interest	—	36,254
	$1,975,773	$1,506,147

5. Notes Payable and Debt

10% Convertible Senior Secured Promissory Notes

In July 2002, the Company entered into agreements pursuant to which the Company issued $4.0 million in principal amount of 10% Convertible Senior Secured Promissory Notes (the "Notes") to Ingalls & Snyder Value Partners, L.P. ("ISVP") in a private placement with an original conversion price of $10.80 per share. Warrants to purchase a total of 100,000 shares of the Company's common stock (the "ISVP Warrant") at $10.80 per share were also issued to ISVP.

The net proceeds of approximately $3,885,000 were allocated between the warrants (approximately $311,000) and the Notes (approximately $3,574,000) based on their relative fair values. The value of the warrants was calculated using the Black-Scholes pricing model with the following assumptions: dividend yield of zero percent; expected volatility of 100%; risk free interest rate of approximately 5% and a term of five years. Based on the fair value of the Notes, they bore an effective interest rate of 12.6%. The initial carrying value of the Notes was being accreted ratably, over the term of the Notes, to the $4,000,000 amount due at maturity. The carrying value of the Notes approximated their fair values as of December 31, 2003. Debt issuance costs totaling $105,590 were capitalized and amortized over the life of the Notes. Interest expense totaled $1,010,536 and

$755,850 in 2004 and 2003, and included $539,371 and $292,090 in discount accretion and $55,038 and $35,196 in debt issuance cost amortization, respectively.

The Notes were due in June 2005 and bore interest at 10% per annum, payable semi-annually on June 1 and December 1. The Company could elect to pay interest on the Notes in either cash or, subject to certain limitations, additional notes on the same terms. The Notes could be converted into the Company's common stock at the option of the holder, subject to anti-dilution adjustments. Among other adjustments, unless the investor consented otherwise, if the Company issued equity securities for consideration per share of common stock less than the then applicable conversion price of the Notes, the conversion price of the Notes would be reduced to equal that lower price. The Notes were secured by a first priority security interest and continuing lien on all current and after acquired property of the Company. The Company generally could have obtained a release of the security interest by providing alternative collateral in the form of either cash or a bank letter of credit. Until the Company provided alternative collateral or less than $500,000 principal amount of Notes remained outstanding, the agreements also prohibited the Company, among other things, from entering into any merger, consolidation or sale of all or substantially all of its assets, incurring additional indebtedness, encumbering its assets with any liens and redeeming or paying cash dividends on any of its capital stock. The Company was permitted to grant licenses or sublicenses of its intellectual property to third parties in the ordinary course of its business free from the security interest, but the holders of the Notes would have received a first priority security interest and continuing lien on all amounts owing to the Company in respect of any such license or sublicense. The agreements also contained certain events of default, including any change of control of the Company and breach by the Company of its representations, warranties and covenants contained in the agreements. If any event of default occurred, the Company's obligations under the Notes could have been accelerated and become immediately due and payable in full.

As a condition of the Company's December 2003 private placement of preferred stock and warrants, the Company agreed to exercise its right to obtain a release of the security interest and continuing lien on its property that secured the outstanding Notes by providing alternative collateral in the form of cash or a standby letter-of-credit in the amount of all remaining principal and interest payments on the Notes through maturity. At December 31, 2003, the Company set aside sufficient funds in a segregated account to satisfy its then remaining obligations under the Notes in order to comply with its covenant to the December 2003 private placement investors. These funds were classified as restricted cash and marketable securities on the Consolidated Balance Sheet. On June 15, 2004, the Company secured a release of the lien on its property by providing alternative collateral in the form of an irrevocable standby letter of credit in the amount of $4,785,550.

In connection with the March 2003 private placement (see Note 6), the conversion price of the Company's Notes was reduced to $5.00 per share in accordance with the anti-dilution provisions of the Notes. The reduction in the conversion price created a beneficial conversion feature, which was recognized as a decrease in the carrying value of the Notes and an increase in additional paid in capital of approximately $289,000. The value of the beneficial conversion feature was recognized as interest expense ratably over the remaining life of the Notes.

In December 2002, the Company issued $143,333 in principal amount of Notes to ISVP for interest accrued through December 1, 2002. In March 2003, the conversion price of the $143,333 Note was reset from $10.00 to $5.00 in connection with the private placement of common stock at $5.00 (see Note 6). The reduction in the conversion price created a beneficial conversion feature of approximately $79,000, which was recognized as a decrease in the carrying value of the Notes and an increase in additional paid in capital. The value of the beneficial conversion feature was recognized as interest expense ratably over the remaining life of the Notes. In June 2003, the Company issued $207,167 in principal amount of Notes to ISVP for interest accrued through June 1, 2003. The $207,167 Note was issued with a conversion price of $5.00 which was below the market price of the

common stock at the date of issuance. This resulted in a beneficial conversion feature of approximately $190,000, which was recognized as a decrease in the carrying value of the Notes and an increase in additional paid in capital. The value of the beneficial conversion feature was recognized as interest expense ratably over the remaining life of the Notes. In December 2003 and June 2004, the Company elected to make payments of $217,525 in cash to ISVP for interest due on December 1, 2003 and June 1, 2004.

In November 2004, the Company prepaid the outstanding principal plus accrued interest on the Notes in the amount of $4,543,856 and obtained a release from the letter of credit collateralizing the Notes. The payment was made with funds previously set aside in a restricted account to collateralize the Notes. As part of this transaction, the Company agreed to lower the exercise price of the ISVP Warrant from $10.80 to $5.00 per share. The Company recorded a charge of approximately $42,000, as determined under the Black Scholes pricing model, in 2004 which is included in Interest Expense in the Consolidated Statement of Operations. Upon the repayment of the Notes, the Company wrote off to interest expense approximately $221,000 in unamortized beneficial conversion features and approximately $24,000 in unamortized debt issuance costs.

In November 2002, the Company entered into a Consent to Transfer and Warrant Amendment (the "Warrant Amendment") with Ingalls & Snyder, L.L.C. ("I&S"), Robert L. Gipson ("Gipson"), Nikolaos D. Monoyios ("Monoyios") and ISVP. Pursuant to the Agreement, the Company consented to the transfer of outstanding warrants to purchase 364,025 shares of the Company's common stock (the "Warrants") by Brown Simpson Partners I, Ltd. to Gipson and Monoyios (the "Gipson and Monoyios Warrants"). Effective upon the transfer, the terms of the Warrants were amended, among other things, to reduce the exercise price from $10.75 per share to $10.00 per share, to extend the expiration date from September 22, 2004 to December 31, 2006 and to eliminate the reset and anti-dilution provisions. The Company also agreed that the conversion price of the Notes issued to ISVP would be reduced from $10.80 per share to $10.00 per share. In connection with these transactions, the Company recorded a charge of approximately $610,000, as determined under the Black Scholes pricing model (with the following assumptions: dividend yield of zero percent; expected volatility of 100%; risk free interest rate of approximately 5% and warrant terms ranging from approximately 2 to 4 years), in 2002 which is included in Other Expenses in the Consolidated Statement of Operations. In addition, the existing registration rights applicable to the shares of common stock issuable upon exercise of the Warrants were terminated, and the Company granted Gipson and Monoyios new registration rights with respect to such shares equivalent to those granted to ISVP with respect to the Notes.

In February 2005, in consideration of the immediate exercise of the warrants in cash, the Company agreed to lower the exercise price of the ISVP Warrant from $5.00 to $2.25 per share and the Gipson and Monoyios Warrants from $10.00 to $2.25. The Company received approximately $1,044,000 in connection with the exercise of these warrants. The Company expects to record a charge of approximately $360,000, as determined under the Black Scholes pricing model (with the following assumptions: dividend yield of zero percent; expected volatility of 100%; risk free interest rate of approximately 3% and warrant terms ranging from approximately 2 to 3 years), to net loss in the first quarter of 2005 in connection with this transaction.

6. Stockholders' Equity

Reverse Split

On February 4, 2005, the Company's stockholders authorized the Company's Board of Directors to effect a reverse stock split of its Common Stock at a ratio of one-for-five. The Company has retroactively applied the reverse split to all the share and per share amounts for all periods presented in these financial statements. In addition, the reverse stock split resulted in a reclassification from common stock to additional paid-in capital to reflect the adjusted share amount as the par value of the Company's common stock remained at $0.01.

Common Stock

In March 2002, the Company completed a private placement of 319,913 shares of common stock which raised approximately $3,439,000 in gross proceeds. In connection with the financing, the Company issued

warrants to the investors to purchase 79,978 shares of common stock at an exercise price equal to $13.75 per share. The Company also paid $271,772 in cash and issued a warrant to purchase 31,511 shares of common stock at an exercise price equal to $13.75 per share to the placement agent.

In March 2003, the Company completed a private placement of 2,000,000 shares of its common stock which raised approximately $10,000,000 in gross proceeds. The investors in the private placement included Robert L. Gipson, partners and employees of I&S, Thomas O. Boucher, Jr. and other individual investors. In connection with the private placement, two existing securityholders of the Company, ISVP and Robert L. Gipson, agreed to restrictions on the voting of the shares of common stock issued to them prior to June 1, 2005 pursuant to their conversion and exercise of certain Notes and warrants of the Company (Note 5). The securityholders can not (a) vote the shares of common stock received from such conversion or exercise, (b) deposit any such common stock in a voting trust, or subject such common stock to any other arrangement or agreement with respect to voting, or (c) communicate with or seek to advise or influence any other person with respect to the solicitation or voting of such common stock in opposition to any matter that has been recommended by the Board of Directors or in favor of any matter that has not been approved by the Board of Directors.

In March 2005, the Company completed a private placement of 2,000,000 shares of its common stock which raised approximately $5,000,000 in gross proceeds. The investors in the private placement included Robert L. Gipson, Thomas O. Boucher, Jr. and other affiliates of I&S. In connection with the private placement, the Company agreed to file a registration statement relating to the resale of the common stock sold in the private placement upon request of the investors. All shares purchased by the investors in the private placement are subject to a minimum holding period of one year.

Preferred Stock

The Company has authorized 1,000,000 shares of preferred stock of which 25,000 shares have been designated as Series A Convertible Preferred Stock, 500,000 shares have been designated as Series D Convertible Preferred Stock, and 800 shares have been designated as Series E Cumulative Convertible Preferred Stock. The remaining authorized shares have not been designated.

Series A Preferred Stock

In connection with the 1996 private placement of Series A Convertible Preferred Stock, the Company granted options to acquire 23.991 units to the placement agent. Each unit consists of 1,000 shares of Series A Convertible Preferred Stock and warrants to purchase 500 shares of common stock at a unit exercise price of $110,000. Each share of the Series A Convertible Preferred Stock is convertible into shares of common stock pursuant to a ratio of 3.507542 shares of common stock for each share of Series A Convertible Preferred Stock. There were 22.607 unit options outstanding at December 31, 2004.

Series E Preferred Stock

On December 9, 2003, the Company completed a private placement with a group of institutional and private investors. In connection with the financing, the Company issued 800 shares of Series E Cumulative Convertible Preferred Stock ("Series E Stock"), accompanied by warrants to purchase 576,000 shares of common stock. The purchase price of each share of Series E Stock was $10,000. Each share of Series E Stock was initially convertible into 1,600 shares of common stock based on an initial conversion price of $6.25 per share and was accompanied by a warrant to purchase 720 shares of common stock at an exercise price of $7.75 per share. The warrants became exercisable on June 9, 2004 and will expire on December 9, 2007.

Burnham Hill Partners, a division of Pali Capital, Inc., acted as placement agent with respect to the private placement and received a cash fee and placement agent warrants to purchase 128,000 shares of common stock at an exercise price of $7.45 per share. The placement agent warrants became exercisable on June 9, 2004 and will expire on December 9, 2008. Burnham Hill Partners will also receive a cash fee equal to 4% of the cash received by the Company upon the exercise of the investor warrants.

The net proceeds of approximately $7,040,000 were allocated between the warrants (approximately $2,049,000) and the Series E Stock (approximately $4,991,000) based on their relative fair values. The value of the warrants was calculated using the Black-Scholes pricing model with the following assumptions: dividend yield of zero percent; expected volatility of 100%; risk free interest rate of approximately 3% percent and a term of four years for the investor warrants and five years for the placement agent warrants. In connection with the issuance of Series E Stock, we recorded a beneficial conversion feature of $2,696,658. A beneficial conversion feature is recorded when the consideration allocated to the convertible security, divided by the number of common shares into which the security converts, is below the fair value of the common stock at the date of issuance of the convertible instrument. The amount of the beneficial conversion feature has been immediately accreted and the accretion resulted in a deemed dividend as the preferred stock does not have a redemption term. The value of the beneficial conversion feature has been reflected as an adjustment to the net loss attributable to common stockholders on the Company's Statement of Operations.

The Series E Stock was initially convertible into common stock at $6.25 per share, subject to a weighted average anti-dilution adjustment if the Company issued equity securities in the future at a lower price. The holders of Series E Stock were entitled to receive a cumulative dividend of 4% per annum (increasing to 8% effective June 9, 2005), payable beginning on October 31, 2004 and on each anniversary thereof. The dividend was payable in cash, but the Company could have elected to pay the dividend in shares of common stock under specified circumstances. Upon conversion, accrued dividends would be paid in common stock based on the then conversion price of the Series E Stock. During 2004, the Company issued 381,920 shares of common stock in connection with the conversion of 238.70 shares of Series E Stock and 4,756 shares of common stock in connection with the dividend payable upon conversion of the Series E Stock. The Company paid $201,760 in cash dividends to the holders of outstanding Series E Stock effective October 31, 2004.

The Series E Stock generally voted together with the common stock as one class. Each holder of Series E Stock generally was entitled to the number of votes equal to the number of shares of common stock into which its shares of Series E Stock could be converted on the record date for the vote assuming for such purpose a conversion price of $7.40 per share.

Under the terms of the private placement, the Company agreed to exercise its right to obtain a release of the security interest and continuing lien on its assets that secured the Notes held by ISVP by providing alternative collateral in the form of cash or a standby letter-of-credit in the amount of all remaining principal and interest payments on the Notes through maturity as more fully described in Note 5.

In 2005, the Company entered into agreements with the holders of 557.30 shares of Series E stock (the "Holders"), whereby the Holders agreed to convert their Series E Stock and in return the Company agreed to pay a dividend of $564.44 per share held by the Holders and lower the exercise price of the warrants held by the Holders from $7.71 to $0.05. The Company expects to record a charge of approximately $656,000, as determined under the Black Scholes pricing model (with the following assumptions: dividend yield of zero percent; expected volatility of 100%; risk free interest rate of approximately 3% and warrant term of approximately 3 years), to net loss attributable to common stockholders in the first quarter of 2005 in connection with this re-pricing. The Holders were also given rights to invest up to 33% in the next $16,900,000 million raised by the Company. The amount of this preemptive right was reduced to $11,900,000 in March 2005 following completion of the Company's $5,000,000 private placement (Note 5). On February 4, 2005, our stockholders approved an amendment to the Certificate

of Designations, Rights and Preferences of the Series E Stock, providing for the mandatory conversion of all outstanding shares of Series E Stock, upon the affirmative vote of 75% of the outstanding shares of Series E Stock. The Company issued 900,646 shares of common stock in connection with the conversion of the 561.3 outstanding shares of the Series E Stock.

Stock Options and Warrants

Stock Option Plans

The Company has two stock option plans under which it can issue both nonqualified and incentive stock options to employees, officers, consultants and scientific advisors of the Company. The Amended and Restated Omnibus Stock Option Plan allows for the issuance of options to purchase up to 240,000 shares of the Company's common stock through April 2005. The 1998 Omnibus Plan (the "1998 Plan") provides for the issuance of options to purchase up to 1,220,000 shares of the Company's common stock through April 2008. The Company's Board of Directors determines the term of each option, vesting provisions, option price, number of shares for which each option is granted and the rate at which each option is exercisable. The term of each option cannot exceed ten years. The exercise price of incentive stock options shall not be less than the fair market value of the Company's common stock on the date of grant. Nonqualified stock options may be issued under the Omnibus Plan at an option price determined by the Board of Directors which shall not be less than 50% of the fair market value of the Company's common stock on the date of grant.

The Company has a third stock option plan, the Amended and Restated 1990 Non-Employee Directors' Non-Qualified Stock Option Plan (the "Directors' Plan"), that allows for the issuance of up to 280,000 shares of the Company's common stock through April 2005. The Director's Plan provides for an automatic yearly grant of options to all non-employee directors of up to 500 options. Non-qualified stock options issued pursuant to the automatic yearly grant have an exercise price equivalent to 20% of the quoted market price of the Company's common stock on the date of grant. Effective July 2004, the automatic yearly grant was modified to provide for the issuance of up to 1,000 options at fair market value on the date of grant. Compensation expense related to the intrinsic value of options issued in connection with the annual grant totaled approximately $0, $9,700 and $13,600 in 2004, 2003 and 2002, respectively. All options granted under the Directors' Plan have a term of ten years from the date of grant and generally vest over periods up to three years.

Stock Options

A summary of the Company's outstanding stock options as of December 31, 2004, 2003, and 2002 and changes during the years ending on those dates is presented below.

	2004		2003		2002	
	Shares	Weighted-Average Exercise Price	Shares	Weighted-Average Exercise Price	Shares	Weighted-Average Exercise Price
Outstanding at beginning of year	857,184	$14.55	854,834	$16.70	712,783	$16.65
Granted	769,400	4.60	167,000	5.05	169,600	16.65
Exercised	(2,262)	4.15	(10,000)	5.00	—	—
Forfeited and expired	(139,801)	18.90	(154,650)	17.05	(27,549)	13.70
Outstanding at end of year	1,484,521	9.00	857,184	14.55	854,834	16.70
Options exercisable at year-end	1,013,349	11.15	764,575	15.55	639,177	17.15
Granted below fair market value	—		2,500		2,500	
Weighted-average fair value of options granted during the year at fair market value		$ 2.50		$ 3.50		$ 3.90
Weighted-average fair value of options granted during the year below fair market value		—		$ 6.60		$ 5.45

The following table summarizes information about stock options outstanding at December 31, 2004:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	Number Outstanding	Weighted-Average Remaining Contractual Life	Weighted-Average Exercise Price	Number Exercisable	Weighted-Average Exercise Price
$1.35	2,000	2.7 years	$ 1.35	2,000	$ 1.35
$3.15—$4.10	502,638	9.7 years	3.75	147,951	3.75
$5.00—$7.40	399,492	5.7 years	5.70	283,408	5.60
$8.20—$11.05	161,022	4.3 years	9.75	160,622	9.75
$12.90—$18.15	343,319	3.9 years	15.70	343,319	15.70
$22.30—$32.85	56,375	2.3 years	25.05	56,375	25.05
$38.25—$46.90	19,675	1.0 years	39.65	19,674	39.65
	1,484,521	6.3 years	$ 9.00	1,013,349	$11.15

As of December 31, 2004, 590,828 shares are available for grant under the Company's option plans.

Warrants

The Company issued 2,000, 2,000 and 42,151 warrants to purchase common stock to certain consultants and business advisors as partial compensation for their services during the years ending December 31, 2004, 2003, and 2002, respectively. The Company recorded non-cash charges of $5,220, $41,841 and $124,764 representing the fair value of those warrants during 2004, 2003, and 2002, respectively. In addition, warrants have been issued in connection with certain financing transactions (Notes 5 and 6).

As of December 31, 2004, warrants outstanding to purchase common stock were as follows:

Date of Issue	Exercise Price per Share	Warrants Outstanding	Expiration Date
January 2004	$ 6.30	2,000	January 2014
December 2003	7.42	128,000	December 2008
December 2003	7.71	576,000	December 2007
June 2003	9.30	15,378	June 2006
April 2003	5.00	2,000	April 2013
October 2002	12.50–17.50	33,000	October 2007
July 2002	5.00	100,000	July 2007
July 2002	10.80	1,000	July 2007
June 2002	6.35	32,622	June 2006
April 2002	10.00	5,000	April 2007
March 2002	13.75	114,641	March 2007
October 2001	9.50	2,000	October 2011
June 2001	17.00	32,000	June 2006
June 2000	15.00	100,000	May 2005
November 2002	10.00	364,025	December 2006
September 1999	28.75	58,000	September 2006
August 1995–April 1997	33.54–75.00	119,860	July 2005—January 2007
		1,685,526	

Each warrant is exercisable into one share of common stock. No warrants were exercised in 2004. At December 31, 2004, the Company has reserved 4,786,354 shares of common stock to meet its preferred stock, option and warrant obligations.

Rights Agreement

On September 11, 2001, the Company entered into a Rights Agreement (the "Rights Plan") dated as of September 11, 2001, with Continental Stock Transfer & Trust Company, as rights agent (the "Rights Agent"), and declared a dividend of one right (a "Right") to purchase from the Company one-thousandth of a share of its Series D Preferred Stock at an exercise price of $25 for each outstanding share of the Company's common stock at the close of business on September 13, 2001. The Rights will expire on September 11, 2011.

In general, the Rights will be exercisable only if a person or group acquires 15% or more of the Company's common stock or announces a tender offer, the consummation of which would result in ownership by a person or group of 15% or more of the Company's common stock. If, after the Rights become exercisable, the Company is acquired in a merger or other business combination transaction, or sells 25% or more of its assets or earning power, each unexercised Right will entitle its holder to purchase, at the Right's then-current exercise price, a number of the acquiring company's common shares having a market value of two times the Right's exercise price. At any time after any person or group has acquired beneficial ownership of 15% or more of the Company's common stock, the Board, in its sole discretion, may exchange all or part of the then outstanding and exercisable Rights for shares of the Company's common stock at an exchange ratio of one share of common stock per Right.

In November 2001, the Company and the Rights Agent amended the Rights Plan to provide that Rights Plan will be governed by the laws of the State of Delaware.

In November 2002, the Company and the Rights Agent amended the Rights Plan to provide that, for purposes of any calculation under the Rights Plan of the percentage of outstanding shares of the Company's common stock beneficially owned by a person, any shares of the Company's common stock such person beneficially owns that are not outstanding (such as shares underlying options, warrants, rights or convertible securities) shall be deemed to be outstanding. The amendment also exempted each of I&S, ISVP and Robert L. Gipson (the "Ingalls Parties") from being an "Acquiring Person" under the Rights Plan so long as such persons, collectively, together with all affiliates of such persons, shall beneficially own less than 20% of the shares of the Company's common stock then outstanding.

On March 12, 2003, the Company and the Rights Agent amended the Rights Plan to provide that prior to June 1, 2005, the Ingalls Parties and their affiliates will be deemed not to beneficially own certain convertible notes and warrants of the Company and any common stock issued or issuable upon their conversion or exercise for purposes of determining whether such person is an "Exempt Person" under the Rights Plan.

On December 23, 2003, the Company and the Rights Agent amended the Rights Plan to add Thomas O. Boucher, Jr. to the list of persons included in the definition of Ingalls Parties who are exempt from being an "Acquiring Person" so long as such persons, collectively, together with all affiliates of such persons, shall beneficially own less than 20% of the shares of the Company's common stock then outstanding. In addition, the amendment provides that a person shall not be deemed to beneficially own securities held by another person solely by reason of an agreement, arrangement or understanding among such persons to vote such securities, if such agreement, arrangement or understanding is for the purpose of (i) soliciting revocable proxies or consents to elect or remove directors of the Company pursuant to a proxy or consent solicitation made or to be made pursuant to, and in accordance with, the applicable proxy solicitation rules and regulations promulgated under the Securities Exchange Act of 1934, as amended, and/or (ii) nominating one or more individuals (or being nominated) for election to the Company's Board of Directors or serving as a director of the Company.

On March 14, 2005, the Company and the Rights Agent amended the Rights Plan to amend the definition of Exempt Person to include all purchasers of shares of the Company's common stock under the common stock purchase agreement, dated as of March 9, 2005, by and among the Company and the purchasers listed therein.

7. Income Taxes

Income tax benefit consists of the following for the years ended December 31:

	2004	2003	2002
Federal	$ 2,248,000	$ 2,139,000	$ 2,780,000
State	983,000	811,000	1,017,000
	3,231,000	2,950,000	3,797,000
Valuation allowance	(3,231,000)	(2,950,000)	(3,797,000)
	$ —	$ —	$ —

Deferred tax assets consist of the following at December 31:

	2004	2003	2002
Net operating loss carryforwards	$ 33,083,000	$ 31,293,000	$ 29,220,000
Capitalized research and development expenses	10,065,000	8,690,000	8,065,000
Research and development credit carryforwards	2,415,000	2,519,000	2,111,000
Other	325,000	155,000	310,000
Gross deferred tax assets	45,888,000	42,657,000	39,706,000
Valuation allowance	(45,888,000)	(42,657,000)	(39,706,000)
	$ —	$ —	$ —

The Company has provided a full valuation allowance for its deferred tax assets since it is more likely than not that the future benefits will not be realized. In the event the Company achieves profitability, these deferred tax assets could be available to offset future income tax liabilities and expense.

A reconciliation between the amount of reported tax benefit and the amount computed using the U.S. federal statutory rate of 35% for the year ended December 31 is as follows:

	2004	2003	2002
Benefit at statutory rate	$(3,938,000)	$(2,929,000)	$(3,848,000)
State taxes, net of federal benefit	(602,000)	(436,000)	(570,000)
Research and development credit	(334,000)	(422,000)	(413,000)
Expiring state net operating loss carryforwards	735,000	511,000	577,000
Permanent items	395,000	309,000	448,000
Other	513,000	17,000	9,000
	(3,231,000)	(2,950,000)	(3,797,000)
Benefit of loss not recognized, increase in valuation allowance	3,231,000	2,950,000	3,797,000
	$ —	$ —	$ —

As of December 31, 2004, the Company has federal net operating loss carryforwards of approximately $89,000,000 which expire at various dates through 2024. In addition, the Company has federal and state research and development credits of approximately $1,837,000 and $890,000, respectively, which expire at various dates through 2024 and 2019, respectively. These net operating loss carryforwards and research and development credits may be used to offset future federal and state taxable income and tax liabilities. A portion of the net operating loss carryforwards totaling approximately $1,539,000 relates to deductions for the exercise of non-qualified options and certain warrants and will be credited to additional paid-in capital upon realization.

In connection with the Merger, the Company acquired approximately $90 million of net operating loss carryforwards of which approximately $11.6 million can be utilized by the Company under the ownership change provisions of the Internal Revenue Code. These net operating losses, which expire in 2009 and 2010, cannot offset the taxable income of any of the subsidiaries of the Company. In addition, ownership changes resulting from the Company's issuance of common stock or convertible preferred stock may limit the amount of net operating loss and tax credit carryforwards that can be utilized to offset future taxable income. The amount of the limitation is determined based upon the Company's value immediately prior to the ownership change. Subsequent significant changes in ownership could further affect the limitation in future years.

8. Commitments and Contingencies

The Company recognizes and discloses commitments when it enters into executed contractual obligations with other parties. The Company accrues contingent liabilities when it is probable that future expenditures will be made and such expenditures can be reasonably estimated.

Commitments

Research and development commitments consists of contractual obligations with third parties. The Company leases office space and laboratory space under noncancelable operating leases. The Company's current corporate office lease expires in 2012 and contains provisions whereby the Company can sublet all or part of the space and fully retain any sublease income generated. The Company also leases laboratory space that expires in May 2006. As of December 31, 2004, approximate future minimum commitments under the above leases and other contractual obligations are as follows:

Year Ended December 31,	Research and Development	Operating Lease
2005	$634,000	$ 335,000
2006	20,000	296,000
2007	—	277,000
2008	—	285,000
2009	—	290,000
Thereafter	—	728,000
	$654,000	$2,211,000

Total rent expense under noncancelable operating leases was approximately $345,000, $341,000 and $310,000 for the years ended December 31, 2004, 2003, and 2002, respectively, and approximately $2,028,000 for the period from inception (October 16, 1992) through December 31, 2004.

License Agreements

Since inception, the Company has paid Harvard and its Affiliates under the terms of its current license agreements (the "License Agreements") approximately $850,000 in initial licensing fees and milestone payments. The License Agreements obligate the Company to pay up to an aggregate of $7,395,000 in milestone payments in the future. These future milestone payments are generally payable only upon the completion of later stage clinical trials and the filing of an NDA or similar application seeking product approval. Most of these contingent milestone payments are associated with technologies that are presently in early stage development.

Guarantor Arrangements

As permitted under Delaware law, the Company has entered into agreements whereby the Company indemnifies its executive officers and directors for certain events or occurrences while the officer or director is, or was serving, at the Company's request in such capacity. The term of the indemnification period is for the officer's or director's lifetime. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited; however, the Company has a director and officer insurance policy that limits the Company's exposure and enables the Company to recover a portion of any future amounts paid. As a result of the Company's insurance policy coverage, the Company believes the estimated fair value of these indemnification agreements is minimal.

The Company enters into arrangements with certain service providers to perform research, development, and clinical services for the Company. Under the terms of these arrangements, such service providers may use the Company's technologies in performing their services. The Company enters into standard indemnification agreements with those service providers, whereby the Company indemnifies them for any liability associated with their use of the Company's technologies. The maximum potential amount of future payments the Company would be required to make under these indemnification agreements is unlimited; however, the Company has product liability and general liability policies that enable the Company to recover a portion of any amounts paid. As a result of the Company's insurance policy coverage, the Company believes the estimated fair value of these indemnification agreements is minimal.

Litigation

On November 13, 2003, Robert L. Gipson, Thomas O. Boucher, Jr., Ingalls & Snyder Value Partners, L.P. and Ingalls & Snyder, L.L.C. (the "Investor Group") filed a complaint against the Company and the members of the Company's Board of Directors in the Delaware Court of Chancery alleging an improper entrenchment motive regarding the Board of Director's interpretation of the Rights Plan. On September 29, 2003 and October 15, 2003, the Investor Group filed amendments to their Schedule 13D relating to the Company's common stock in which they stated their intention to seek the removal of certain members of the Company's Board of Directors and management, to nominate an alternate slate of directors for election at the Company's next annual meeting and to seek redemption of the Rights Plan. In October 2003, the Board of Directors considered the possibility that Mr. Boucher's holdings of the Company's common stock, together with the holdings of certain other shareholders being attributed to Mr. Boucher by virtue of his acting in concert with such shareholders, may have exceeded a beneficial ownership threshold that could trigger a distribution of preferred stock purchase rights under the Rights Plan.

By letter from counsel dated October 14, 2003, the Board of Directors communicated to the Investor Group that Mr. Boucher may have exceeded the threshold for triggering the distribution of the rights under the Rights Plan and that the Board of Directors had taken action to temporarily delay the distribution of the rights. The complaint filed by the Investor Group was seeking, among other things, declaratory relief that Mr. Boucher had not exceeded the beneficial ownership threshold for triggering the distribution of rights under the Rights Plan and that the directors had breached their fiduciary duties in connection with applying the Rights Plan, and injunctive relief to compel the directors to call and hold a special meeting of stockholders. In December 2003, the Investor Group requested expedited relief in the form of a preliminary injunction regarding Mr. Boucher's status under the Rights Plan. On December 23, 2003, the Company amended the Rights Plan in order to clarify Mr. Boucher's status under the Rights Plan and the Investor Group withdrew their request for expedited relief. There have been no subsequent developments regarding this litigation.

On December 31, 2003, the Investor Group filed another complaint in the Delaware Court of Chancery against the Company and the members of its Board of Directors alleging an improper entrenchment motive and breach of fiduciary duty by the directors in connection with the issuance of preferred stock and warrants in the Company's December 2003 private placement. The complaint filed by the Investor Group was seeking unspecified equitable and monetary relief. The Company asked the court to dismiss this lawsuit because it lacked any factual basis and ignored fundamental principles of law. Instead of responding to the Company's motion to dismiss, on March 9, 2004, the Investor Group moved to dismiss their own lawsuit without prejudice prior to the deadline to explain to the court why their claim was legitimate. The Delaware Court of Chancery immediately granted the motion and dismissed the case.

On June 15, 2004, the Company entered into a settlement and standstill agreement (the "Agreement") with Investor Group. Under the terms of the Agreement, the Company reconstituted its Board of Directors at five

members, consisting of Marc E. Lanser, Robert Langer, John T. Preston, Robert L. Gipson and Michael J. Mullen. Each of the foregoing individuals was re-elected to the Board of Directors at the Company's 2004 Annual Meeting of stockholders (the "2004 Annual Meeting"). S. David Hillson retired as Chairman of the Board and as a director and consultant of the Company. In order to facilitate the settlement, Colin B. Bier and E. Christopher Palmer also resigned from the Board as independent directors. Peter G. Savas was appointed to the Board on September 13, 2004. Messrs. Gipson and Lanser resigned from the Board on October 28, 2004.

Pursuant to the Agreement, the Investor Group agreed to vote the shares over which it had voting power in favor of, and to use good faith efforts to cause its affiliates to so vote shares over which they had voting power, to re-elect the members of the Board of Directors at the 2004 Annual Meeting and to approve amendments to the Company's Amended and Restated Certificate of Incorporation and the 1998 Plan to increase the number of shares of common stock authorized for issuance thereunder. Such amendments were approved at the 2004 Annual Meeting.

The Investor Group also agreed not to seek the removal of any of the directors prior to March 31, 2005 and entered into a mutual release of claims with the Company, Mr. Hillson and Dr. Lanser. As contemplated by the Agreement, the Company obtained a release of the security interest on its property securing the Notes by providing an irrevocable standby letter of credit in the amount of $4,785,550 to collateralize the Notes. The Company also paid $300,000 to Ingalls & Snyder, LLC as reimbursement for certain expenses as part of the Agreement. The $300,000 payment was included in General and Administrative Expenses during the second quarter of 2004.

The Company also entered into an employment agreement with Dr. Lanser providing for his continued employment with the Company. Dr. Lanser's employment agreement is effective for a term of one year, provides for compensation plus other benefits, and includes confidentiality and non-competition provisions. If the Company terminates Dr. Lanser's employment for reasons other than for "cause" or Dr. Lanser resigns for any reason, Dr. Lanser is entitled to receive nine months of base salary continuation, payable in accordance with the regular payroll practices of the Company.

The Company also entered into a separation agreement with Mr. Hillson in connection with his retirement. The separation agreement requires that Mr. Hillson continue to satisfy his obligations under the non-competition, confidentiality, invention assignment and non-solicitation provisions of his previous agreement with the Company and that he release the Company from claims related to his former employment with the Company and his position on the Board of Directors. Mr. Hillson's separation agreement provided for a lump sum payment of $187,500, which represented the balance of consulting fees due to Mr. Hillson under his previous agreement with the Company, and a lump sum payment of $90,000 in recognition of Mr. Hillson's contributions to the Company and loss of certain other benefits under his previous agreement with the Company. The Company recorded a charge of $277,500 in the second quarter of 2004 related to these payments. Pursuant to the terms of the separation agreement, the Company granted options to Mr. Hillson to purchase 40,000 shares of common stock at an exercise price of $5.00 per share and cancelled options previously granted to Mr. Hillson to purchase 80,000 shares of common stock at exercise prices ranging from $18.13 per share to $39.06 per share. The separation agreement further provides that all of Mr. Hillson's remaining stock options are fully vested. FASB Interpretation No. 44, "Accounting for Certain Transactions involving Stock Compensation" requires the Company to employ variable accounting when there is both an option issuance and an option cancellation within a six month period. In addition to the 40,000 options issued in June, Mr. Hillson was awarded options in March 2004 to purchase 39,000 shares of common stock at an exercise price of $6.35 in connection with his services as a director of the Company. Of the options awarded in March 2004, options to purchase 14,000 shares of common stock were attributed to Mr. Hillson's previous consulting agreement, and accordingly, the Company recorded a

charge of approximately $56,000 representing the fair value of these options as determined using the Black-Scholes pricing model. In addition, the Company will record a charge equal to the intrinsic value (difference between the Company's stock price and exercise price) of the remaining 65,000 options which are deemed to have been repriced through the earlier of (i) the exercise of these options or (ii) the expiration of these options in the second quarter of 2008.

In connection with his retirement, Mr. Hillson also made a written request under the terms of his indemnity agreement with the Company that the Company create an indemnity trust for his benefit and fund the trust in the amount of $100,000. In response to the request, on June 15, 2004, the Company entered into a directors and officers indemnity trust agreement with Mr. Hillson and Boston Private Bank & Trust Company, as trustee, and funded the trust with $100,000. Mr. Hillson may, from time to time, request withdrawals of funds from the trust in the event that he becomes entitled to receive indemnification payments or advances from the Company. Any amounts not disbursed from the indemnity trust will become unrestricted at such time as the Company and Mr. Hillson agree that the indemnity trust is no longer required. FASB Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others" ("FIN 45") requires that upon issuance of a guarantee, the guarantor must recognize a liability for the fair value of the obligation it assumes under that guarantee. As required under the provisions of FIN 45, the Company has evaluated its obligations under the indemnity agreement and has determined that the fair value of this obligation is immaterial at December 31, 2004.

Under the terms of its directors' and officers' insurance policy, the Company was entitled to reimbursement of certain legal costs incurred in connection with the litigation described above. In October 2004, the Company received $306,000 which was recognized as an offset to general and administrative expense in the fourth quarter of 2004.

Contingencies

The Company is subject to various legal proceedings in the normal course of business. Management believes that these proceedings will not have a material adverse effect on the consolidated financial position or results of operations.

The Company has received notice from Rodman & Renshaw claiming that they are entitled to a cash payment of approximately $452,000 and warrants to purchase 72,200 shares of common stock for services that Rodman & Renshaw believes it provided in connection with the Company's private placement completed in December 2003. The Company has responded to Rodman & Renshaw, advising them that there was no legal or equitable basis for the payment of compensation to Rodman & Renshaw in connection with the private placement. Management believes that the resolution of this matter will not have a material adverse effect on the consolidated financial statements.

9. Related Party Transactions

A director of the Company provides consulting on scientific and commercial matters to the Company pursuant to which the Company paid the director consulting fees totaling approximately $26,000 and $53,000 in 2004 and 2003, respectively. This agreement was terminated upon the director's appointment to the Audit Committee.

A former director of the Company provided consulting services to the Company pursuant to which the Company paid the former director consulting fees totaling approximately $340,000 in 2004. During 2004, the

Company entered into a separation agreement with the former director regarding his retirement from the Company and the termination of the consulting agreement (Note 8). In connection with his retirement from the Company, the former director, under the terms of his indemnity agreement, requested that the Company establish a trust to fund any indemnification amounts that may be owed to him. On June 15, 2004, the Company entered into a directors and officers indemnification trust agreement with the former director and Boston Private Bank & Trust Company, as trustee, and the Company deposited a total of $100,000 with the trustee in order to fund any indemnification amounts owed to the former director.

A former director of the Company is a director and Chairman of the Executive Committee of the bank where the Company maintains its cash, cash equivalent and marketable securities accounts. The Company paid approximately $77,000 and $33,000 to the bank during fiscal 2004 and 2003, respectively, primarily for investment management advisory services. This director also purchased 4,800 shares of common stock and warrants to purchase 1,200 shares of common stock at an exercise price equal to $13.75 in the Company's March 2002 private placement (Note 6). In June 2004, the Company obtained an irrevocable standby letter of credit for the benefit of ISVP from the bank and entered into an indemnity trust for the benefit of a former director with the bank, for which the Company paid the bank customary fees.

During 2001, the Company issued a promissory note to an officer of the Company in the amount of $55,000. The note was payable on demand and accrued interest at a rate of 6%. As of December 31, 2002, the balance outstanding on the note was $32,901, and in the first quarter of 2003, the remaining outstanding principal and interest was repaid in full.

FlouroPharma, Inc., an early-stage company, is developing Positron Emission Tomography, or PET, imaging agents for the diagnosis of cardiac ischemia. The Company's Chief Medical Officer, Marc Lanser, has an equity interest in FlouroPharma and Dr. Lanser intends to serve as a director and chairman of the board of FlouroPharma. FlouroPharma has granted the Company a right of first refusal in the event that FlouroPharma pursues a development and/or sublicensing arrangement with an established biotechnology or pharmaceutical company, subject to the Company meeting certain financial, liquidity and other conditions.

Robert L. Gipson

Robert L. Gipson was a director of the Company from June 2004 through October 2004. Robert L. Gipson is a Senior Director of Ingalls & Snyder LLC ("I&S"). Thomas O. Boucher, Jr. is a Managing Director of I&S. Ingalls & Snyder Value Partners, L.P. ("ISVP") is an investment partnership managed under an investment advisory contract with I&S. Robert L. Gipson and Thomas O. Boucher, Jr. are the general partners of ISVP and share the power to vote securities of the Company held by ISVP.

In July 2002, the Company entered into agreements pursuant to which it issued $4.0 million in principal amount of 10% Convertible Senior Secured Promissory Notes, or Notes, to ISVP (Note 5).

In March 2003, the Company issued and sold an aggregate of 2,000,000 shares of its Common Stock at a purchase price of $5.00 per share in a private placement (Note 6). The investors in the private placement included Robert L. Gipson, Thomas Gipson (the brother of Robert L. Gipson), Thomas O. Boucher, Jr., Patricia Gipson (the sister-in-law of Robert L. Gipson), and other partners and employees of I&S and other individual investors. Robert L. Gipson purchased 230,000 shares in the private placement for an aggregate purchase price of $1,150,000. Thomas O. Boucher, Jr. purchased 50,000 shares in the private placement for an aggregate purchase price of $250,000. Thomas Gipson purchased 200,000 shares in the private placement for an aggregate purchase price of $1,000,000. Patricia Gipson purchased 20,000 shares in the private placement for an aggregate purchase price of $100,000.

In March 2003 and December 2003, the Company amended its Rights Plan to connection with agreements with Robert L. Gipson, Thomas O. Boucher, I&S and ISVP (Note 6).

In 2004, the Company entered into a settlement and standstill agreement with Robert L. Gipson, Thomas O. Boucher, Jr., I&S, and ISVP (Note 8).

In March 2005, the Company issued and sold an aggregate of 2,000,000 shares of its Common Stock at a purchase price of $2.50 per share in a private placement (Note 6). The investors in the private placement included Robert L. Gipson, Thomas Gipson, Thomas O. Boucher, Jr., Patricia Gipson, and other partners and employees of I&S and other individual investors. Robert L. Gipson purchased 350,000 shares in the private placement for an aggregate purchase price of $875,000. Thomas O. Boucher, Jr. purchased 50,000 shares in the private placement for an aggregate purchase price of $125,000. Thomas Gipson purchased 470,000 shares in the private placement for an aggregate purchase price of $1,175,000. Patricia Gipson purchased 180,000 shares in the private placement for an aggregate purchase price of $450,000.

10. Employee Benefit Plan

The Company maintains a savings plan (the "Plan") with employer matching provisions which was designed to be qualified under Section 401(k) of the Internal Revenue Code. Eligible employees are permitted to contribute to the Plan through payroll deductions within statutory and Plan limits. For the years ended December 31, 2004, 2003 and 2002, the Company made matching contributions of approximately $22,000, $26,000 and $19,000, respectively, to the Plan.

11. Subsequent Events

On February 14, 2005, NASDAQ notified the Company that the Company's common stock did not qualify for continued listing on The Nasdaq SmallCap Market based upon Nasdaq Marketplace Rule 4310(c)(4). NASDAQ had previously notified the Company of its plan to de-list the Company's securities from The NASDAQ SmallCap market for failure to comply with the $1 minimum bid price requirement. The Company appealed the delisting, and a hearing was scheduled for March 17, 2005. On February 4, 2005, the Company effected a 1-for-5 reverse stock split in an effort to regain compliance with the bid price requirement. During the ten day trading period ending February 18, 2005, the Company's stock closed at a bid price above $1 on each day. On February 23, 2005, NASDAQ notified the Company that it had regained compliance with the bid price requirement, and that the hearing was cancelled.

On March 11, 2005, the Company's Board of Directors approved the cancellation of options to purchase an aggregate of 483,787 shares of the Company's common stock and the regrant of options to purchase an aggregate of 454,760 shares of the Company's common stock. The per share exercise prices of the cancelled options ranged from $3.75 to $39.06, with a weighted average exercise price of $11.89. The aggregate number of stock options outstanding after such cancellation and regrant of options was reduced by approximately 6%. These cancellations and regrants were effected under the Omnibus Plan and the 1998 Plan, each of which expressly permits option exchanges. Each of the regranted options contain the following terms: (i) an exercise price equal to the fair market value on the grant date which was the last sale price on March 11, 2005, or $2.31 per share; (ii) a ten-year duration; and (iii) 33% vesting on the date of grant with the remaining 67% vesting thereafter in 36 equal monthly installments. Prior to the adoption of SFAS 123(R), the Company will record a charge each quarter equal to the intrinsic value (difference between the Company's stock price and exercise price) of the 454,760 options which are deemed to have been repriced through the earlier of (i) the exercise of these options or (ii) the expiration or cancellation of these options.

12. Supplementary Quarterly Financial Data (Unaudited)

The following tables present a condensed summary of quarterly consolidated results of operations for the years ended December 31, 2004 and 2003:

	Quarter Ended			
	March 31,	June 30,	September 30,	December 31,
2004				
Revenues	$ —	$ —	$ —	$ —
Net loss	(2,722,474)	(4,027,950)	(2,550,262)	(1,950,191)
Basic and diluted net loss per share	$ (0.41)	$ (0.59)	$ (0.37)	$ (0.28)
2003				
Revenues	$ —	$ —	$ —	$ —
Net loss	(2,353,598)	(1,901,357)	(2,017,706)	(2,095,333)
Basic and diluted net loss per share	$ (0.48)	$ (0.29)	$ (0.31)	$ (0.32)

PART III*

Item 9. ***Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.***

Not applicable.

Item 9A. ***Controls and Procedures.***

Evaluation of Disclosure Controls and Procedures

The Company's management, with the participation of the Company's chief executive officer and chief financial officer, evaluated the effectiveness of the Company's disclosure controls and procedures as of December 31, 2004. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of the Company's disclosure controls and procedures as of December 31, 2004, the Company's chief executive officer and chief financial officer concluded that, as of such date, the Company's disclosure controls and procedures were effective at the reasonable assurance level.

No change in the Company's internal control over financial reporting occurred during the fiscal quarter ended December 31, 2004 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B. ***Other Information.***

Not applicable.

Item 10. ***Directors and Executive Officers of the Registrant.***

Code of Business Conduct and Ethics

The Company has adopted a Code of Business Conduct and Ethics ("Code"). The Code constitutes the Company's Code of Ethics applicable for all of the Company's directors, officers and employees. The Code is intended to promote honest and ethical conduct, full and accurate reporting, and compliance with laws as well as other matters. The Code can be found on our web site, which is located at www.bostonlifesciences.com. We intend to make all required disclosures concerning any amendments to, or waivers from, our code of ethics on our web site.

All other information required by this Item 10, with respect to executive officers, is hereby incorporated by reference to the text appearing under Part 1, Item 4 under the caption "Executive Officers of the Registrant" in this Report, and, with respect to directors, by reference to the information included under the headings "Information Regarding Directors", "Executive Officers", and "Section 16(a) Beneficial Ownership Reporting Compliance" in the Company's definitive Proxy Statement for the 2005 Annual Meeting of Stockholders to be filed by the Company with the Securities and Exchange Commission within 120 days after the close of its Company's fiscal year.

Item 11. ***Executive Compensation.***

The information required by this Item 11 is hereby incorporated by reference to the information under the heading "Executive Compensation" and "Report of Compensation Committee on Executive Compensation" in the Company's definitive Proxy Statement for the 2005 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission within 120 days after the close of its fiscal year. The information specified in Item 402(k) and (l) of Regulation S-K and set forth in the Company's definitive Proxy Statement for the 2005 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission within 120 days after the close of its fiscal year is not incorporated by reference.

Item 12. ***Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.***

The information required by this Item 12 is hereby incorporated by reference to the information under the heading "Security Ownership of Principal Stockholders and Management" in the Company's definitive Proxy Statement for the 2005 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission within 120 days after the close of its fiscal year.

Item 13. ***Certain Relationships and Related Transactions.***

We have entered into indemnity agreements with each of our directors and executive officers containing provisions that may require us, among other things, to indemnify those directors and officers against liabilities that may arise by reason of their status or service as directors and officers. The agreements also provide for us to advance to the directors and officers expenses that they expect to incur as a result of any proceeding against them related to their service as directors and officers.

All other information required by this Item 13 is hereby incorporated by reference to the information under the heading "Certain Relationships and Related Transactions" in the Company's definitive Proxy Statement for the 2005 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission within 120 days after the close of its fiscal year.

Item 14. ***Principal Accounting Fees and Services.***

The information required by this Item 14 is hereby incorporated by reference to the information under the heading "Independent Auditors Fees" in the Company's definitive Proxy Statement for the 2005 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission within 120 days after the close of its fiscal year.

* Information required by this Part III of Form 10-K is contained in the registrant's Amendment No. 1 to Form 10-K on Form 10-K/A filed with the SEC on May 2, 2005. The information required to be set forth in Part III of Form 10-K is included in the proxy statement for the 2005 Annual Meeting of Stockholders that accompanies this 2005 Annual Report. You may obtain a copy of Amendment No. 1 to Form 10-K by accessing the website maintained by the SEC at www.sec.gov, by accessing the registrant's website at www.bostonlifesciences.com or by contacting the registrant's investor relations department at Boston Life Sciences, Inc., 20 Newbury Street, 5th Floor, Boston, Massachusetts 02116, Attn: Investor Relations, or telephone number (617) 425-0200.

PART IV

Item 15. ***Exhibits and Financial Statement Schedules.***

(a) *The following documents are included as part of this Annual Report on Form 10-K.*

1. *Financial Statements:*

Consolidated Financial Statements of the Company
Financial Statements of the Registrant and Report of Independent Registered Public Accounting Firm thereon
Consolidated Balance Sheets at December 31, 2004 and 2003
Consolidated Statements of Operations for the fiscal years ended December 31, 2004, 2003 and 2002 and for the period from inception (October 16, 1992) through December 31, 2004
Consolidated Statements of Comprehensive Loss and Stockholders' Equity for the fiscal years ended December 31, 2004, 2003 and 2002 and for the period from inception (October 16, 1992) through December 31, 2004
Consolidated Statements of Cash Flows for the fiscal years ended December 31, 2004, 2003 and 2002, and for the period from inception (October 16, 1992) through December 31, 2004
Notes to Consolidated Financial Statements

2. *Financial Statement Schedules:*

Schedules are omitted since the required information is not applicable or is not present in amounts sufficient to require submission of the schedule, or because the information required is included in the Consolidated Financial Statements or Notes thereto.

3. *Exhibits:*

The Exhibits listed in the Exhibit Index immediately preceding the Exhibits are filed as a part of this Annual Report on Form 10-K.

SIGNATURES

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

BOSTON LIFE SCIENCES, INC.
(Registrant)

March 31, 2005

By: /s/ PETER G. SAVAS
Peter G. Savas
Chairman & Chief Executive Officer

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

Signature	Title	Date
/s/ PETER G. SAVAS **Peter G. Savas**	Chairman & Chief Executive Officer (Principal Executive Officer)	March 31, 2005
/s/ JOSEPH P. HERNON **Joseph P. Hernon**	Chief Financial Officer and Secretary (Principal Financial and Accounting Officer)	March 31, 2005
/s/ ROBERT LANGER **Robert Langer**	Director	March 31, 2005
/s/ MICHAEL J. MULLEN **Michael J. Mullen**	Director	March 31, 2005
/s/ JOHN T. PRESTON **John T. Preston**	Director	March 31, 2005

EXHIBIT INDEX

Exhibit Number	Description and Method of Filing
2.1	Amended and Restated Agreement of Merger, dated as of December 29, 1994, by and between the Company and Greenwich Pharmaceuticals Incorporated (1)
2.2	Amendment No. 1 to Amended and Restated Agreement of Merger, dated as of April 6, 1995, by and between the Company and Greenwich Pharmaceuticals Incorporated (2)
3.1	Amended and Restated Certificate of Incorporation, dated March 29, 1996, as amended on June 9, 1997, and by the Certificate of Designations, Rights and Preferences of Series B Convertible Preferred Stock filed on February 5, 1999, the Certificate of Decrease of Series B Convertible Preferred Stock filed on February 18, 1999, and the Certificate of Designations, Rights and Preferences of Series C Convertible Preferred Stock filed on February 18, 1999 (3)
3.2	Certificate of Decrease and Elimination of Series B Convertible Preferred Stock filed on June 29, 1999; Certificate of Decrease of Series A Convertible Preferred Stock filed on June 29, 1999; Certificate of Correction filed on June 29, 1999; Certificate of Amendment of Amended and Restated Certificate of Incorporation filed on June 29, 1999 (4)
3.3	Certificate of Designations, Preferences and Rights of Series A Preferred Stock filed December 30, 1999; Certificate of Amendment of Amended and Restated Certificate of Incorporation filed June 15, 2000; Certificate of Correction filed March 16, 2001; Certificate of Elimination of Series A Convertible Preferred Stock filed on March 16, 2001; Certificate of Elimination of Series C Convertible Preferred Stock filed on March 16, 2001; Certificate of Designations, Preferences, and Rights of Series A Convertible Preferred Stock filed March 19, 2001; Certificate of Designations, Preferences, and Rights of Series D Preferred Stock filed March 19, 2001 (26)
3.4	Restated Certificate of Designations, Preferences, and Rights of Series D Preferred Stock filed September 13, 2001 (18); Certificate of Amendment of Amended and Restated Certificate of Incorporation filed on June 11, 2002 (25); Certificate of Amendment of Amended and Restated Certificate of Incorporation of the Company, dated as of July 9, 2003 (6); Certificate of Designations, Rights and Preferences of the Series E Cumulative Convertible Preferred Stock of the Company (24); Certificate of Amendment of Amended and Restated Certificate of Incorporation of the Company, dated as of August 5, 2004 (34); Certificate of Amendment of Amended and Restated Certificate of Incorporation of the Company, dated as of February 4, 2005 (35); Amendment No. 1 to Certificate of Designations, Rights and Preferences of the Series E Cumulative Convertible Preferred Stock of the Company, dated as of February 4, 2005 (35)
3.5	Amended and Restated By Laws, effective as of June 26, 1995 (8); Amended and Restated By Laws, effective as of June 10, 2004 (32)
4.1	Rights Agreement dated as of September 11, 2001 between the Company and Continental Stock Transfer & Trust Company, as Rights Agent, as amended on November 13, 2001, November 22, 2002, March 12, 2003, December 23, 2003 and March 14, 2005 (9)(36)
4.2	Specimen Common Stock Certificate (10)
4.3	Form of Warrant Agreement by and among the Company, the Warrant Agent and Paramount Capital, Inc. and related Form of Warrant Certificate for Purchase of Common Stock (11)
4.4	Form of Common Stock Purchase Warrants received by The Tail Wind Fund, Ltd. ("Tail Wind") and Form of Common Stock Purchase Warrant received by certain other investors (12)
4.5	Form of Common Stock Purchase Warrant received by purchasers of Series B Preferred Stock and Series C Preferred Stock (14)

Exhibit Number	Description and Method of Filing
4.6	Form of Common Stock Purchase Warrant received by holders of Series C Preferred Stock (13)
4.7	Form of 8% Convertible Debenture dated as of September 22, 1999, Form of Class A Warrant dated as of September 22, 1999, Form of Class B Warrant dated as of September 22, 1999 (15)
4.8	Form of Common Stock Purchase Warrant received by Pictet Global Sector Fund-Biotech (18); as amended on March 27, 2001 and June 25, 2001 (5)
4.9	Common Stock Purchase Warrant received by Pictet Global Sector Fund-Biotech (5)
4.10	Omnibus Agreement, dated as of May 31, 2001, by and between the Company and Brown Simpson Partners I, Ltd. (5)
4.11	Form of Common Stock Purchase Warrant received by MTR Technologies, Inc., the Trout Group LLC, and Form of Common Stock Purchase Warrant received by HCW, Matthew Balk, Scott Weisman, Jason Adelman, Eric Singer Alexandros Partners LLC, Celia Kupferberg and Robert Licho (19)
4.12	Form of Common Stock Purchase Warrant received by the Investors to the March 2002 Private Placement (17)
4.13	Amendment No. 1 to Common Stock Purchase Warrant received by the Investor named therein dated as of November 12, 2004 (37)
4.14	Amendment No. 2 to Common Stock Purchase Warrant received by the Investor named therein dated as of February 11, 2005 (37)
4.15	Amendment No. 1 to the Warrant delivered to Robert L. Gipson dated as of February 11, 2005 (37)
4.16	Amendment No. 1 to the Warrant delivered to Nikolaos P. Monoyios dated as of February 11, 2005 (37)
4.17	Form of Common Stock Purchase Warrant received by purchasers of Series E Preferred Stock (24)
4.18	Form of Placement Agent Common Stock Purchase Warrant received by the placement agents of Series E Preferred Stock (24)
10.1#	Boston Life Sciences, Inc. Amended and Restated Omnibus Stock Option Plan (2)
10.2#	Employment Agreement between Boston Life Sciences, Inc. and S. David Hillson dated as of November 7, 1994; Election Notice from S. David Hillson to Boston Life Sciences, Inc. dated December 29, 1994 relating to election of certain compensation pursuant to the terms of the Employment Agreement between Boston Life Sciences, Inc. and S. David Hillson; First Amendment dated January 25, 1995 to Employment Agreement between Boston Life Sciences, Inc. and S. David Hillson (2)
10.3#	Amendment and Extension dated January 9, 1997 of Employment Agreement between Boston Life Sciences, Inc. and S. David Hillson; Renewal of Employment Agreement dated December 28, 1999 between Boston Life Sciences, Inc. and S. David Hillson; Employment Contract, Extension and Special Retirement Provision dated January 23, 2001 between Boston Life Sciences, Inc. and S. David Hillson; Restated Executive Consulting and Director Agreement dated April 13, 2003 between Boston Life Sciences, Inc. and S. David Hillson (29)
10.4#	Boston Life Sciences, Inc. Amended and Restated 1990 Non-Employee Directors' Non Qualified Stock Option Plan, as amended (31)
10.5	License Agreement between Children's Medical Center Corporation and ProCell Pharmaceuticals, Inc. (a subsidiary of the Company) dated as of March 15, 1993 (relating to Troponin) (2)

Exhibit Number	Description and Method of Filing
10.6	License Agreement between HARVARD and NeuroBiologics, Inc. (a subsidiary of the Company) dated as of December 10, 1993 (relating to ALTROPANE) (2)
10.7	Amendment, dated March 18, 1996, to License Agreement between Children's Medical Center Corporation and ProCell Pharmaceuticals, Inc. (a subsidiary of the Company) dated as March 15, 1993 (16)
10.8	Exclusive License Agreement between Children's Medical Center Corporation and Boston Life Sciences, Inc. dated as of December 15, 1998 (relating to Inosine) (16)
10.9#	Boston Life Sciences, Inc. 1998 Omnibus Stock Option Plan, as amended (31)
10.10	Purchase Agreement dated February 5, 1999 between Tail Wind and the Company (3)
10.11	Registration Rights Agreement dated February 5, 1999 between Tail Wind and the Company (3)
10.12	License Agreement between President and Fellows of Harvard College and Boston Life Sciences, Inc. dated as of March 15, 2000 (relating to ALTROPANE) (16)
10.13	Securities Purchase Agreement dated June 1, 2000 between the Pictet Global Sector Fund-Biotech and the Company (18)
10.14	Registration Rights Agreement dated June 1, 2000 between the Pictet Global Sector Fund-Biotech and the Company (18)
10.15+	Manufacturing Agreement dated August 9, 2000 between Boston Life Sciences, Inc. and MDS Nordion, Inc. ("Manufacturing Agreement") (27)
10.16	License Agreement between Children's Medical Center Corporation and Boston Life Sciences, Inc. dated as of August 13, 2001 (relating to Macrophage Factor) (30)
10.17	Amendment dated August 23, 2001 to Manufacturing Agreement (27); Amendment dated September 18, 2002 to Manufacturing Agreement (28) Amendment dated November 22, 2003 to Manufacturing Agreement (30)
10.18	Form of Subscription Agreement, dated as of March 11, 2002, executed by the Company and each investor in the private placement (17)
10.19	Registration Rights Agreement, dated as of March 11, 2002, by and among the Company and the investors named therein (17)
10.20#	Employment Agreement between Boston Life Sciences, Inc. and Robert J. Rosenthal dated as of July 9, 2002 (20)
10.21	Securities Purchase Agreement, dated as of July 25, 2002, by and among the Company and the investor named therein (21)
10.22	Registration Rights Agreement, dated as of July 25, 2002, by and among the Company and the investor named therein (21)
10.23	Consent to Transfer and Warrant Amendment dated as of November 22, 2002, by and among the Company, Ingalls & Snyder, L.L.C., Robert L. Gipson, Nikolaos D. Monoyios and Ingalls & Snyder Value Partners, L.P. (22)
10.24	First Addendum to Registration Rights Agreement, dated as of November 22, 2002, by and among the Company, Robert L. Gipson and Nikolaos D. Monoyios (22)
10.25	Common Stock Purchase Agreement, dated as of March 12, 2003, by and among the Company and the investors named therein (23)

Exhibit Number	Description and Method of Filing
10.26	Second Addendum to Registration Rights Agreement, dated as of March 12, 2003, by and among the Company and the investors named therein (23)
10.27	Letter Agreements, each dated as of March 12, 2003, by and among the Company and the securityholders named therein (23)
10.28+	Agreement dated September 23, 2003 between Codman & Shurtleff, Inc. and the Company (7)
10.29	Preferred Stock and Warrant Purchase Agreement, dated as of December 9, 2003, by and among the Company and the investors named therein (24)
10.30	Registration Rights Agreement, dated as of December 9, 2003, by and among the Company and the investors named therein (24)
10.31#	Form of Indemnity Agreement for directors and executive officers of the Company (30)
10.32	Settlement and Standstill Agreement dated as of June 15, 2004 by and among the Company, Robert L. Gipson, Thomas O. Boucher, Jr., Ingalls & Snyder, LLC and Ingalls & Snyder Value Partners, L.P. (33)
10.33	Mutual Release of Claims dated as of June 15, 2004 by and among the Company, S. David Hillson, Marc E. Lanser, Robert L. Gipson, Thomas O. Boucher, Jr., Ingalls & Snyder, LLC and Ingalls & Snyder Value Partners, L.P.(33)
10.34	Separation Agreement dated May 27, 2004 between the Company and S. David Hillson and Letter Agreement dated June 10, 2004 between the Company and S. David Hillson (33)
10.35	Employment Agreement dated June 10, 2004 between the Company and Marc E. Lanser (33)
10.36	Director and Officer Indemnity Trust Agreement dated June 15, 2004 between the Company, S. David Hillson and Boston Private Bank & Trust Company, as Trustee (33)
10.37	Irrevocable Standby Letter of Credit issued to Ingalls & Snyder Value Partners, L.P. on June 15, 2004 by Boston Private Bank & Trust Company (33)
10.38	Continuing Letter of Credit and Security Agreement dated as of June 15, 2004 between the Company and Boston Private Bank & Trust Company (33)
10.39	Security Agreement dated as of June 15, 2004 between the Company and Boston Private Bank & Trust Company (33)
10.40	Restructuring Agreement dated as of February 4, 2005 between the Company and the investors listed therein (37)
10.41	Common Stock Purchase Agreement dated as of March 9, 2005 between the Company and the investors listed therein (37)
10.42	Amended and Restated Registration Rights Agreement dated as of March 9, 2005 between the Company and the investors listed therein (37)
10.43	Form of Incentive Stock Option Agreement (37)
10.44	Form of Non-Statutory Stock Option Agreement (37)
10.45	Non-Employee Director Compensation Summary (37)
10.46	Executive Officer Compensation Summary (37)
10.47	Lease Agreement dated as of January 28, 2002 between the Company and Brentwood Properties, Inc. (37)

Exhibit Number	Description and Method of Filing
10.48+	Amendment No. 5 dated as of August 9, 2000 to Agreement between MDS Nordion Inc. and the Company (37)
14.1	Code of Business Conduct and Ethics (30)
21.1	Subsidiaries of the Registrant (37)
23.1	Consent of Independent Registered Public Accounting Firm (37)
31.1	Certification of the Chairman and Chief Executive Officer pursuant to Section 1350 of Title 18, Unites States Code, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (37)
31.2	Certification of the Chief Financial Officer pursuant to Section 1350 of Title 18, Unites States Code, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (37)
32.1	Certification of Chairman and Chief Executive Officer pursuant to Section 1350, Chapter 63 of Title 18, United States Code, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (37)
32.2	Certification of Chief Financial Officer pursuant to Section 1350, Chapter 63 of Title 18, United States Code, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (37)

\# Management contract or compensatory plan or arrangement filed as an exhibit to this report pursuant to Items 15(a) and 15(c) of Form 10-K

\+ Confidential treatment requested as to certain portions, which portions have been separately filed with the Securities and Exchange Commission

(1) Incorporated by reference to Greenwich's Annual Report on Form 10-K for the year ended December 31, 1994

(2) Incorporated by reference to Greenwich Pharmaceuticals, Inc.'s Registration Statement on Form S-4 (No. 33-91106) (Greenwich Pharmaceuticals is the former name of the Company. The Company acquired the license agreements described above in connection with its June 1995 merger with Boston Life Sciences. The entities indicated above were subsidiaries of Boston Life Sciences)

(3) Incorporated by reference to BLSI's Annual Report on Form 10-K for the year ended December 31, 1998

(4) Incorporated by reference to BLSI's Quarterly Report on Form 10-Q for the quarter ended September 30, 1999

(5) Incorporated by reference to BLSI's Quarterly Report on Form 10-Q for the quarter ended June 30, 2001

(6) Incorporated by reference to BLSI's Quarterly Report on Form 10-Q for the quarter ended June 30, 2003

(7) Incorporated by reference to BLSI's Quarterly Report on Form 10-Q for the quarter ended September 30, 2003

(8) Incorporated by reference to BLSI's Annual Report on Form 10-K for the year ended December 31, 1995

(9) Incorporated by reference to Greenwich's Current Report on Form 8-K dated September 26, 1991, Greenwich's Registration Statement on Form 8-A dated October 22, 1991, Greenwich's Form 8-A/A dated July 28, 1993, Greenwich's Form 8-A/A dated August 8, 1994, BLSI's Form 8-A/A dated March 20, 2001, BLSI's Form 8-A/A dated September 13, 2001, BLSI's Form 8-A/A dated November 22, 2002, BLSI's Form 8-A/A dated March 18, 2003, and BLSI's Form 8-A/A dated December 29, 2003

(10) Incorporated by reference to BLSI's Registration Statement on Form S-3 (No. 33-25955)

(11) Incorporated by reference to BLSI's Registration Statement on Form S-3 (No. 333-2730)

(12) Incorporated by reference to BLSI's Registration Statement on Form S-3 (No. 333-75175)

(13) Incorporated by reference to BLSI's Registration Statement on Form S-3 (No. 333-44298)

(14) Incorporated by reference to BLSI's Registration Statement on Form S-3 (No. 333-74775)

(15) Incorporated by reference to BLSI's Registration Statement on Form S-3 (No. 333-40408)

(16) Incorporated by reference to BLSI's Registration Statement on Form S-3/A (No. 333-88726)

(17) Incorporated by reference to BLSI's Report on Form 8-K dated September 27, 1999

(18) Incorporated by reference to BLSI's Report on Form 8-K dated June 1, 2000

(19) Incorporated by reference to BLSI's Report on Form 8-K dated March 11, 2002
(20) Incorporated by reference to BLSI's Report on Form 8-K dated July 10, 2002
(21) Incorporated by reference to BLSI's Report on Form 8-K dated July 25, 2002
(22) Incorporated by reference to BLSI's Report on Form 8-K dated November 22, 2002
(23) Incorporated by reference to BLSI's Report on Form 8-K dated March 12, 2003
(24) Incorporated by reference to BLSI's Report on Form 8-K dated December 9, 2003
(25) Incorporated by reference to BLSI's Proxy Statement in connection with its 2002 Annual Meeting of Stockholders
(26) Incorporated by reference to BLSI's annual report on Form 10-K for the year ended December 31, 2000
(27) Incorporated by reference to BLSI's annual report on Form 10-K for the year ended December 31, 2001
(28) Incorporated by reference to BLSI's annual report on Form 10-K for the year ended December 31, 2002
(29) Incorporated by reference to BLSI's annual report on Form 10-K/A for the year ended December 31, 2002
(30) Incorporated by reference to BLSI's annual report on Form 10-K for the year ended December 31, 2003
(31) Incorporated by reference to BLSI's Proxy Statement in connection with its 2003 Annual Meeting of Stockholders
(32) Incorporated by reference to BLSI's Report on Form 8-K dated June 10, 2004
(33 Incorporated by reference to BLSI's Report on Form 8-K dated June 17, 2004
(34) Incorporated by reference to BLSI's Report on Form 10-Q dated August 13, 2004
(35) Incorporated by reference to BLSI's Report on Form 8-K dated February 7, 2005
(36) Incorporated by reference to BLSI's Report on Form 8-K dated March 15, 2005
(37) Filed herewith

BOARD OF DIRECTORS

Robert S. Langer, Jr., Sc.D.
Institute Professor
Massachusetts Institute of Technology

Michael J. Mullen, C.P.A.
Chief Financial Officer
JMH Capital

John T. Preston
President & Chief Executive Officer
Atomic Ordered Materials LLC

Peter G. Savas
Chairman of the Board & Chief Executive Officer
Boston Life Sciences, Inc.

CORPORATE OFFICERS

Peter G. Savas
Chairman of the Board & Chief Executive Officer

Mark J. Pykett, V.M.D., Ph.D., M.B.A.
President and Chief Operating Officer

Kenneth L. Rice, Jr., J.D., M.B.A.
Executive Vice President, Finance and Administration and Chief Financial Officer

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

PricewaterhouseCoopers LLP
125 High Street
Boston, MA 02110

LEGAL COUNSEL

Wilmer Cutler Pickering Hale and Dorr LLP
60 State Street
Boston, MA 02109

TRANSFER AGENT

Inquiries regarding stock transfer requirements, lost certificates and changes in address should be directed to the transfer agent. Other stockholder or investor inquiries, including requests for our filings with the Securities and Exchange Commission, should be directed to Investor Relations at the Company's address or number.

Continental Stock Transfer & Trust Company
17 Battery Place, 8th Floor
New York, NY 10004
Telephone: (212) 509-4000
Facsimile: (212) 509-5150

MARKET FOR SECURITIES

The Company's common stock trades on the NASDAQ SmallCap Market under the symbol BLSI.

ANNUAL REPORT ON FORM 10-K

A copy of the Company's annual report on Form 10-K as filed with the Securities and Exchange Commission is included with this Annual Report.

CORPORATE INFORMATION

Boston Life Sciences, Inc.
20 Newbury Street, 5th Floor
Boston, MA 02116
Telephone: (617) 425-0200
Facsimile: (617) 425-0996
Web site: www.bostonlifesciences.com

INVESTOR RELATIONS

Shareholders, security analysts and representatives of financial institutions should direct their inquiries to:

Investor Relations
Boston Life Sciences, Inc.
85 Main Street
Hopkinton, MA 01748
Telephone: (508) 497-2360
Facsimile: (508) 497-9964
Email: ir@bostonlifesciences.com

ANNUAL MEETING

The Annual Meeting of Stockholders will be held on Tuesday, September 13, 2005 at 10:00 a.m. at the offices of Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109.

SAFE HARBOR

Statements contained or incorporated by reference in this Annual Report that are not based on historical fact are "forward-looking statements" within the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements regarding future events and our future results are based on current expectations, estimates, forecasts and projections, and the beliefs and assumptions of our management. We cannot assure investors that our expectations and assumptions will prove to have been correct. Important factors could cause our actual results to differ materially from those indicated or implied by forward-looking statements. Such factors that could cause or contribute to such differences include those factors discussed in our Annual Report on Form 10-K for the year ended December 31, 2004, as amended under the section "Additional Factors That May Affect Future Results" as well as other documents that may be filed by us from time to time with the Securities and Exchange Commission. We undertake no intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Boston Life Sciences, Inc.

www.bostonlifesciences.com