



IN REVIEWING THIS REGISTRATION STATEMENT, YOU SHOULD CAREFULLY CONSIDER THE MATTERS DESCRIBED UNDER THE HEADINGS "RISKS RELATING TO OUR COMPANY" BEGINNING ON PAGE 15, "RISKS RELATING TO OUR INDUSTRY" ON PAGE 24 AND "RISKS RELATING TO OUR COMMON STOCK" BEGINNING ON PAGE 24.

## PART I

### ITEM 1. DESCRIPTION OF BUSINESS.

#### OVERVIEW

We are a development stage biopharmaceutical company engaged in the development and commercialization of vaccine adjuvants or immune system boosters, proprietary novel vaccines and drug delivery systems. Our core technology, which we license on an exclusive basis from the University of California, is based on the use of extremely small, solid, uniform particles, which we call "nanoparticles," as immune system boosters and for drug delivery. We have identified three potential initial applications for our core technology:

- the creation of improved versions of current vaccines by the "adjuvant" activity of our proprietary nanoparticles that would enhance the ability of a vaccine to stimulate an immune response;
- the development of new, unique vaccines against diseases for which there currently are few or no effective methods of prevention (E.G., genital herpes); and
- the creation of inhaled forms of drugs that currently must be given by injection (E.G., insulin).

Our goal is to leverage our core technology to become a pharmaceutical company that develops and commercializes a wide range of pharmaceutical products. Our strategy to obtain this goal is to:

- enter into business collaborations or joint ventures to further develop and commercialize products incorporating our core technology;
- in-license or otherwise acquire products in the late-stage development phase;
- in-license or otherwise acquire products already on the market; and
- enter into business collaborations or joint ventures with complementary firms outside the scope of our core technology.

Our outlicensing activities with respect to our adjuvant for use in other companies' vaccines have to date included meeting with target companies and, in some cases, agreeing that the target company will test our adjuvant in their animal models. Thereafter, the target company may send to us its vaccine antigen or DNA which we will then formulate with our nanoparticles and return for use in the target company's animal models. Once this is completed, if the results are positive, we would hope to sign an out-license agreement with the target company. To date, we have not entered into any out-license agreements.

On November 1, 1999, we announced that we formed a collaborative research alliance with Medi-Ject Corporation to evaluate the efficacy of continuing our nanoparticle drug delivery and adjuvant or immune system boosters with Medi-Ject's needle-free pressure injection. This research alliance will evaluate the ability of the combined systems to deliver DNA vaccines as part of a DNA vaccine program at a major U.S. university.

On November 10, 1999, our shareholders approved our name change from Ben-Abraham Technologies Inc. to BioSante Pharmaceuticals, Inc. Our company, which was initially formed as a corporation organized under the laws of the Province of Ontario on August 29, 1996, was continued as a corporation under the laws of

the State of Wyoming on December 19, 1996. Our company is the continuing corporation resulting from an amalgamation, or consolidation, of three companies, our company, which was previously named "Ben-Abraham Technologies Inc.", Structured Biologicals Inc., a corporation organized under the laws of the Province of Ontario and 923934 Ontario Inc., a corporation organized under the laws of the Province of Ontario and a wholly owned subsidiary of Structured Biologicals. The amalgamation was approved by our shareholders on November 27, 1996 and the articles of arrangement were filed and became effective as of December 6, 1996.

#### INDUSTRY BACKGROUND

In order to understand the three potential initial applications for our core technology, it is helpful to understand the vaccine, vaccine adjuvant and drug delivery markets and the need for products incorporating our core technology in each of these.

**NEW VACCINES.** The function of the human immune system is to respond to pathogens, which are agents that cause disease, such as infectious bacteria and viruses that enter the body. However, a pathogen may establish an infection and cause disease before it is eliminated by an immune response. Antibodies are produced as part of the immune response to antigens, which are components of the pathogen. These antibodies can continue to circulate in the human body for many years, providing continued protection against reinfection by the same pathogen.

Vaccines are a preemptive means of generating a protective antibody response. A vaccine consists of either a weakened pathogen or pathogen-specific, non-replicating antigens or antigens that do not reproduce, which are deliberately administered to induce the production of antibodies. When weakened pathogens are used as a vaccine, they replicate or reproduce in the body, extending presentation to the immune system and inducing the production of antibodies without causing the underlying disease. When non-replicating antigens are used as a vaccine, they must be delivered in sufficient quantity and remain in the body long enough to generate an effective antibody response. To achieve this goal, many vaccines require multiple administrations over a period of time.

The Centers for Disease Control and Prevention have estimated that every dollar spent on vaccination saves \$16 in healthcare costs. D&MD Reports, an industry research report, indicates that the vaccine segment is growing faster than any other part of the pharmaceutical market. From 1990 to 1997, annual worldwide vaccine sales increased from \$1.6 billion to \$4.1 billion. By the year 2000, the worldwide vaccine market is expected to hit \$6.5 billion. Worldwide vaccine sales are expected to grow 15% a year over the next decade, and by year 2010 vaccines are forecasted to be a \$14 billion market. We believe that the acceleration of this growth rate will largely be a result of advances in vaccine technologies and formulations that address the shortcomings of existing vaccines. Areas of potential improvement include enhancement of immune responses, which could lead to a reduction in the number of doses required for effective protection as well as effective immunization in a higher percentage of the population, and delivery of vaccines through methods other than injection.

Our nanoparticle technology presents a new, and we believe, more effective and safer, approach to vaccine preparation. Based on animal tests to date, we are contemplating developing a vaccine to prevent or treat the herpes simplex type II virus, which is most often associated with genital herpes infections. Nearly 30 million people in the U.S. are infected with the herpes simplex type II virus. Up to 500,000 new cases are reported each year, according to the Alan Guttmacher Institute. To date, there is no approved vaccine for genital herpes. In addition, we have begun discussions with other companies to out-license our adjuvant, or immune system booster, for use in those companies' vaccine development.

**VACCINE ADJUVANTS.** The antigens contained in many injectable vaccines will not produce an immune response sufficient to confer protection against infection and therefore will require the use of an adjuvant to sustain the presentation of the antigens to the human immune system. As a result, most vaccines are combined

with an adjuvant that enhances the ability of an injected vaccine to stimulate an immune response and thus protect the recipient by preventing or treating diseases. Aluminum hydroxide, or alum, is the only adjuvant currently approved by the United States Food and Drug Administration for commercial use in humans. While alum has gained widespread use, it does not sufficiently enhance the immune response to permit administration of many existing injected vaccines in a single dose. In the case of certain vaccines, such as influenza, alum is not effectively used as an adjuvant because of the potential for allergic or other reactions. Accordingly, we believe that there is a significant need for a new adjuvant that is safe, works with a wide variety of antigens, and induces a protective immune response with only one or two injections. These attributes could result in certain benefits, including cost savings and improved patient compliance.

Our nanoparticles (we refer to our nanoparticles as CAP) when combined with vaccines have been shown in animal studies conducted by us to possess an ability to elicit a higher immune response than non-adjuvanted vaccines and an immune response of the same magnitude as alum-formulated vaccines but up to 100 times lower concentrations of adjuvant. These preclinical studies also have shown that our CAP nanoparticles also may sustain higher antibody levels over a longer time period than both alum-formulated vaccines and non-adjuvanted vaccines. Based on these preclinical results, we believe that our CAP nanoparticles may offer a means of preparing new improved formulations of current vaccines that are equal or better in their immunogenicity, that is, in their capacity to elicit an immune response, to alum-formulated and non-adjuvanted vaccines but may be injected in lower concentrations and less often which could result in certain benefits, including cost savings and improved patient compliance.

**DRUG DELIVERY SYSTEMS.** The third field of use in which we are exploring applying our proprietary nanoparticle technology is the creation of inhaled forms of drugs that currently must be given by injection (E.G., insulin). Many therapeutic drugs, including insulin, are currently delivered by injection. Injections are undesirable for numerous reasons, including patient discomfort, inconvenience and risk of infection. Poor patient acceptance of, and compliance with, injectable therapies can lead to increased incidence of medical complications and higher disease management costs. Alternatives to injection, such as oral, transdermal (through the skin) and nasal delivery, have to date been shown generally to be commercially unattractive due to low natural bioavailability. Bioavailability is the amount of drug absorbed from the delivery site into the bloodstream. As an alternative to the invasiveness of injection, we believe our nanoparticle technology can assist in the creation of inhaled forms of drugs that currently must be given by injection.

The first market in which we are targeting our development efforts for an inhaled form of drug incorporating our nanoparticle technology is the diabetes market. Diabetes is a chronic disease in which the body's metabolism of glucose is ineffective due to inadequate production of insulin. Over time, high blood glucose levels can lead to eye, kidney and nerve diseases. It is estimated that there are as many as 120 million people with diabetes worldwide, and according to the Centers for Disease Control and Prevention, more than 16 million people in the United States have diabetes, of which 10.3 million have been diagnosed with diabetes and 5.4 million have undiagnosed diabetes. There are two primary classes of diabetes, type I and type II. It is estimated that there are over one million type I diabetics in the United States, and about 45,000 new cases are diagnosed each year. Virtually all of the type I diabetics require daily insulin injections and most are currently monitoring their own blood glucose levels. According to the Centers for Disease Control and Prevention, as of 1997, approximately eight to nine million Americans have been diagnosed with type II diabetes. Although most patients with type II diabetes do not require insulin as part of their therapy, in aggregate, they consume the majority of insulin in the United States due to their larger numbers. According to the Medical & Healthcare Market Place Guide, the insulin market in the United States exceeded \$2.7 billion in 1998.

Various manufacturers, including Eli Lilly and Company, Novo-Nordisk A/S and Hoechst Marion Roussel AG supply insulin. Insulin is currently marketed only in injectable form. Several companies, however, are working to develop an insulin pulmonary delivery system to allow for delivery of insulin into the lungs thereby eliminating the need for at least a portion of injectable insulin. These companies include the combined

efforts of Inhale Therapeutic Systems, Inc., Pfizer, Inc. and Hoechst Marion Roussel AG; Dura Pharmaceuticals Inc. and Eli Lilly and Company; and Aradigm Corporation and Novo Nordisk A/S. We believe that we have created an improved formulation for the inhaled delivery of insulin that could be used in conjunction with the combined efforts of these companies.

#### DESCRIPTION OF OUR CORE TECHNOLOGY

Research and development involving our core technology originated in a project set up under an agreement dated April 6, 1989 between the University of California and our predecessor company, Structured Biologicals, relating to viral protein surface adsorption studies. The discovery research was performed by Structured Biologicals at UCLA School of Medicine and was based, in essence, on the use of extremely small, solid, uniform particles as components that could increase the stability of drugs and act as systems to deliver drugs into the body. These ultrafine particles are made from inert, biologically acceptable materials, such as ceramics, pure crystalline carbon or a biodegradable calcium phosphate compound. The size of the particles is in the nanometer range. A nanometer is one millionth of a millimeter and typically particles measure less than 1,000 nanometers (nm). For comparison, a polio virus particle is about 27 nm in diameter, a herpes virus particle has a central core measuring 100 nm in diameter, contained in an envelope measuring 150-200 nm, while a tuberculosis bacterium is rod-shaped, about 1,200 nm long by 300 nm across. Because the size of these particles is measured in nanometers, we use the term "nanoparticles" to describe them.

We use the nanoparticles as the basis of a delivery system by applying a layer of a "bonding" coating of cellobiose or another carbohydrate derivative. The critical property of these coated nanoparticles is that biologically active molecules, proteins, peptides or pharmacological agents, for example, vaccine components like bacterial or viral antigens or proteins like insulin, attached to them retain their activity and can be protected from natural alterations to their molecular structure by adverse environmental conditions. It has been shown in studies conducted by us that, when these combinations are injected into animals, the attachment can actually enhance the biological activity as compared to injection of the molecule alone in solution.

A major immune response that is triggered by these combination particles is the creation of antibody molecules, which can then specifically counteract an invading virus or bacterium. Similarly, a drug will produce an effect on an organ system only if it can attach to specific receptors on the surface of target cells (E.G., tumor cells). The stabilizing and slow release capabilities of a drug carrier and delivery system based on this discovery can lead to significant advances towards finding more effective and less toxic or harmful molecules to seek out and attach to such receptors.

We believe our core technology has a number of benefits, including the following:

- it is biodegradable (capable of being decomposed by natural biological processes) and non-toxic and therefore potentially safe to use and introduce into the human body;
- it is fast, easy and inexpensive to manufacture which will keep our costs down and potentially improve our profit margins;
- the nanometer (one-millionth of a millimeter) size range makes it ideal for delivering drugs through aerosol sprays or inhalation instead of using painful injections; and
- it has excellent "loading" capacity - the amount of molecules that can bond with the nanoparticles - thereby potentially decreasing the dose needed to be taken by patients.

Research in these areas has resulted in the issuance of a number of patents that we license from the University of California. For more information of these patents, we refer you to the information under the heading "Patents, Licenses and Proprietary Rights."

#### PROPOSED PRODUCTS AND PRODUCT DEVELOPMENT

We plan to develop commercial applications of our core technology and any proprietary technology developed as a result of our ongoing research and development efforts. Initially, we plan to pursue the development of (1) vaccine adjuvants, (2) new virus vaccines, including vaccines to treat or prevent disease caused by Herpes viruses and (3) drug delivery systems, including a method of delivering insulin through inhalation. Our research and development team is currently pursuing these objectives in our laboratory in Smyrna, Georgia.

**VACCINE ADJUVANTS.** Our nanoparticles when combined with vaccine antigens have been shown in animal studies conducted by us to possess an ability to elicit a higher immune response than non-adjuvanted vaccines and an immune response of the same magnitude as alum-formulated vaccines but up to 100 times lower concentrations. These preclinical studies also have shown that our CAP nanoparticles also may sustain higher antibody levels over a longer time period than both alum-formulated vaccines and non-adjuvanted vaccines. Because our CAP nanoparticles are made of calcium phosphate, which has a chemical nature similar to normal bone material and therefore is natural to the human body, as opposed to aluminum hydroxide, or alum, which is not natural to the human body, we believe that our nanoparticles may be safer to use than alum. In our animal studies, we observed no material adverse reactions when our CAP nanoparticles were administered at effective levels.

Based on these preclinical results, we believe that our CAP nanoparticles may offer a means of preparing new improved formulations of current vaccines that are equal or better in their immunogenicity, that is, in their capacity to elicit an immune response, to alum-formulated and non-adjuvanted vaccines but may be injected in lower concentrations and less often which could result in certain benefits, including cost savings and improved patient compliance. We hope to file an investigational new drug (IND) application with the FDA before the end of 2000 to commence a Phase I human clinical trial. As discussed in more detail under the heading "Government Regulation," the purpose of a Phase I trial is to evaluate the metabolism and safety of the experimental product in humans, the side effects associated with increasing doses, and, if possible, to gain early evidence of possible effectiveness. The Phase I trial of our CAP specifically will look at safety parameters, including local irritation and blood chemistry changes. In anticipation of commencing the Phase I trial, we have made arrangements with the University of Iowa to assist us in manufacturing our CAP nanoparticles for use in our proposed Phase I human clinical trial.

In addition to continuing our own research and development in this area, we intend to seek opportunities to enter into business collaborations or joint ventures with vaccine companies and others interested in co-development and co-marketing arrangements with respect to our nanoparticle adjuvants. These arrangements also could include out-licenses of our core technology to vaccine companies and others for further development in their on-going vaccine development.

Our outlicensing activities with respect to our adjuvant for use in other companies' vaccines have to date included meeting with target companies and, in some cases, agreeing that the target company will test our adjuvant in their animal models. Thereafter, the target company may send to us its vaccine antigen or DNA which we will then formulate with our nanoparticles and return for use in the target company's animal models. Once this is completed, if the results are positive, we would hope to sign an out-license agreement with the target company. To date, we have not entered into any out-license agreements.

**NEW VACCINES.** We believe our nanoparticle technology presents a new, and more effective and safer, approach to vaccine preparation. As with our vaccine adjuvant technology, we are continuing our own research and development in this area, but we also intend to seek opportunities to enter into business collaborations or joint ventures with vaccine companies and others interested in co-development and co-marketing arrangements. We believe these collaborations may enable us to accelerate the development of potential improved vaccines for any products developed from our core technology. These arrangements also could include out-licenses of our core technology to vaccine companies and others for further development and marketing. We have begun discussions with other companies to out-license our adjuvant for use in those companies' new vaccine development.

Based on animal tests to date, we hope to develop a vaccine using our proprietary nanoparticle technology to prevent or treat genital herpes. Herpes is the family name of over 50 related viruses that share common characteristics. The viruses that cause oro-facial (affecting the lips, mouth and face and sometimes called "cold sores") and genital herpes are two members of this group and are classified as herpes simplex virus type I and herpes simplex virus type II, respectively. To date, there is no currently approved vaccine for genital herpes.

**DRUG DELIVERY SYSTEMS.** The third field of use in which we are exploring applying our core technology involves creating novel and improved forms of delivery of drugs, including hormones (E.G., insulin). The attachment of drugs to nanoparticles may enhance their stability in the body or enable the addition of further protective coatings to permit oral, delayed-release and mucosal (through mucous membranes) applications. Currently, insulin is given by frequent, inconvenient and often painful injections. However, several companies are in the process of developing and testing products that will deliver insulin orally or through inhalation. We believe we may have successfully created a formulation for the inhaled delivery of insulin. Our research and development efforts in this area are on going. We are in the process of contacting several insulin manufacturers and companies with devices for inhalation of drugs to pursue collaborations for this development.

#### FUTURE PRODUCT DEVELOPMENT

We intend to explore other applications of our nanoparticle technology. Such applications may include the development of additional vaccines, including DNA vaccines, and the treatment of diseases or conditions other than diabetes in which inhaled delivery of drugs may be useful. We believe that our nanoparticle technology has potentially major applications as an alternative approach to vaccines and for drug delivery. The results obtained in our animal studies indicate that similar combinations could be made using key antigens, or molecules that can stimulate antibodies, extracted from the surface membranes of pathogenic bacteria. Several biotechnology companies are pursuing the bacterial extract approach and may offer future opportunities for us to develop collaborations. On November 1, 1999, we announced that we formed a collaborative research alliance with Medi-Ject Corporation to evaluate the efficacy of continuing our nanoparticle drug delivery and adjuvant system with Medi-Ject's needle-free pressure injection. This research alliance will evaluate the ability of the combined systems to deliver DNA vaccines as part of a DNA vaccine program at a major U.S. university. Other than the area of DNA vaccines, we currently are not pursuing, however, any of these programs or collaborations, and we cannot assure you that we will have the personnel or resources to develop them in the future.

#### BUSINESS STRATEGY

Our goal is to leverage our core technology to become a pharmaceutical company that develops and commercializes a wide range of pharmaceutical products. Our strategy to obtain this goal is to (1) develop commercial applications of our core technology or enter into business collaborations or joint ventures with vaccine companies and others interested in either co-development and co-marketing arrangements or out-license arrangements with respect to our core technology, (2) further enhance our pharmaceutical portfolio by in-licensing or otherwise acquiring products in the late-stage development phase or products already on the market and (3) enter into business collaborations or joint ventures with complementary firms outside the scope of our core technology.

- Enter into business collaborations or joint ventures to further develop and commercialize products incorporating our core technology. We intend to seek opportunities to enter into business collaborations or joint ventures with entities that have businesses or technologies complementary to our business, such as vaccine and pharmaceutical companies. We are particularly interested in entering into product co-development and co-marketing arrangements with respect to our core technology or out-licensing our core technology to others for further development and marketing.

We believe that this partnering strategy will enable us to capitalize on our partner's strengths in products development, manufacturing and commercialization and thereby enable us to introduce into the market products incorporating our core technology sooner than which we otherwise would be able. In addition, such collaborations would significantly reduce our cash requirements for developing and commercializing our core technology and thereby permit us to spend cash on in-licensing or otherwise acquiring products in the late-stage development phase or products already on the market.

- IN-LICENSE OR OTHERWISE ACQUIRE PRODUCTS IN THE LATE-STAGE DEVELOPMENT PHASE. We intend to seek opportunities to in-license or otherwise acquire products in the late-stage development phase. In seeking such opportunities, we intend to target products that cover therapeutic areas treated by a limited number of physicians and drugs that are in or require human clinical trials that involve a limited number of patients and not a significant amount of time and cost needed to complete them. We believe that targeting these products that are currently in or ready for human clinical trials would decrease the risk associated with product development and would likely shorten the time before we can introduce the products into the market.
- IN-LICENSE OR OTHERWISE ACQUIRE PRODUCTS ALREADY ON THE MARKET. In addition to late-stage development products, we intend to seek opportunities to in-license or otherwise acquire products that (1) have FDA approval, (2) have been or are about to be commercially introduced into the U.S. markets, (3) have a concentrated physician prescriber audience, and (4) have the potential to generate significant sales.
- ENTER INTO BUSINESS COLLABORATIONS OR JOINT VENTURES WITH COMPLEMENTARY FIRMS OUTSIDE THE SCOPE OF OUR CORE TECHNOLOGY. We intend to seek opportunities to enter into business collaborations or joint ventures with entities that have businesses or technology complementary to our business. We are particularly interested in entering into product co-development and co-marketing arrangements.

#### PATENTS, LICENSES AND PROPRIETARY RIGHTS

Our success depends and will continue to depend in part on our ability to maintain patent protection for our products and processes, to preserve our proprietary information and trade secrets and to operate without infringing the proprietary rights of third parties. Our policy is to attempt to protect our technology by, among other things, filing patent applications or obtaining license rights for technology that we consider important to the development of our business. The validity and breadth of claims covered in medical technology patents involve complex legal and factual questions and, therefore, may be highly uncertain. We cannot assure you that any of our pending or future applications will result in patents being issued or, if issued, that these patents, or the patents we license from University of California, will provide us a competitive advantage, or that our competitors will not design around any patents issued to or licensed by us.

UNIVERSITY OF CALIFORNIA. In June 1997, we entered into a licensing agreement with the Regents of the University of California pursuant to which the University has granted us an exclusive license to nine United States patents owned by the University, including rights to sublicense such patents, in fields of use pertaining to: (1) vaccine adjuvants; (2) vaccine constructs or combinations for use in immunization against herpes virus; (3) drug delivery systems; and (4) red blood cell surrogates. The University of California has filed patent applications for this licensed technology in certain foreign jurisdictions, including Canada, Europe and Japan. Some of these foreign patents have issued but we cannot assure you that any others will issue. Even if these foreign patents are obtained, they may not provide the level of protection provided by United States patents.

The license agreement with the University of California requires us to undertake various obligations, including:

- payment of a \$100,000 license issue fee, \$75,000 of which we have already paid and \$25,000 of which is due in June 2000;
- payment of royalties to the University based on a percentage of the net sales of any products incorporating the licensed technology;
- payment of minimum annual royalties on February 28 of each year beginning in the year 2004 in the amounts set forth below, to be credited against earned royalties, for the life of the agreement;

Year -----	Minimum Annual Royalty Due -----
2004	\$ 50,000
2005	\$ 100,000
2006	\$ 150,000
2007	\$ 200,000
2008	\$ 400,000
2009	\$ 600,000
2010	\$ 800,000
2011	\$1,500,000
Each year after 2011	\$1,500,000

- maintaining an annual minimum amount of available capital for development and commercialization of products incorporating the licensed technology until a product is introduced to the market;
- payment of the costs of patent prosecution and maintenance of the patents included in the agreement which as of September 30, 1999 have amounted to \$57,000 and which we estimate will equal approximately \$70,000 per year;
- meeting performance milestones relating to:
  - hiring or contracting with personnel to perform research and development, regulatory and other activities relating to the commercial launch of a proposed product;
  - testing proposed products;
  - obtaining government approvals;
  - conducting clinical trials; and
  - introducing products incorporating the licensed technology into the market; and
- entering into partnership or alliance arrangements or agreements with other entities regarding commercialization of the technology covered by the license.

The license agreement further provides that we have the right to abandon any project in any field of use without abandoning our license to pursue other projects in that or other fields of use covered by the agreement. In May 1999, we notified the University of California that we would not pursue the red blood cell surrogate use because we do not believe this will be proven an effective use of CAP. On October 26, 1999, we signed an amendment to our license agreement with the University of California. The amendment removes the red-blood

cell surrogate use from the agreement. In addition, under the terms of the amendment, the University agreed to make other changes we suggested to the license agreement, including delaying minimum royalty payments until 2004 and limiting the University of California's rights to terminate the agreement in cases where we do not perform under the agreement.

We believe we are in substantial compliance with all of the material terms of the license agreement. If we violate or fail to perform any term or covenant of the license agreement and fail to cure this default within 60 days after written notice from the University of California, the University of California may terminate some projects included in the agreement. The termination of the agreement, however, will not relieve us of our obligation to pay any royalty or license fees owing at the time of termination.

**PATENTS AND PATENT APPLICATIONS.** Although we do not own any United States patents or foreign patents, on February 3, 2000, we filed a patent application with the U.S. Trademark and Patent Office relating to our development work with vaccine adjuvants, conventional, DNA and RNA vaccines and drug delivery including aerosol delivery into the lungs.

**TRADEMARKS AND TRADEMARK APPLICATIONS.** We have filed an intent-to-use application for the mark BioSante. On November 10, 1999, our shareholders approved our name change from Ben-Abraham Technologies Inc. to BioSante Pharmaceuticals, Inc. We currently do not have any registered trademarks.

**CONFIDENTIALITY AND ASSIGNMENT OF INVENTIONS AGREEMENTS.** We require our employees, consultants and advisors having access to our confidential information to execute confidentiality agreements upon commencement of their employment or consulting relationships with us. These agreements generally provide that all confidential information we develop or make known to the individual during the course of the individual's employment or consulting relationship with us must be kept confidential by the individual and not disclosed to any third parties. We also require all of our employees and consultants who perform research and development for us to execute agreements that generally provide that all inventions conceived by these individuals will be our property.

**LIMITATIONS OF OUR SAFEGUARDS.** We cannot assure you, however, that our confidentiality and assignment of inventions agreements and other safeguards will protect our proprietary information and know-how or provide adequate remedies for us in the event of unauthorized use or disclosure of this information, or that others will not be able to independently develop this information. In addition, to the extent, our strategic partners or consultants apply technical information developed independently by them or others to our projects or apply our technology to other projects, disputes may arise as to the ownership of proprietary rights to this technology.

The issuance of a patent to us or of one of our licensed patents to the University of California is not conclusive evidence as to the validity or as to the enforceable scope of claims covered by the patent. The validity and enforceability of a patent can be challenged by a request for re-examination or litigation after its issuance, and, if the outcome of this litigation is adverse to the owner of the patent, other parties may be free to use the subject matter covered by the patent.

#### RESEARCH AND DEVELOPMENT

We expect to spend a significant amount of our financial resources on research and development activities. We spent approximately \$1,400,000 in 1998 and approximately \$336,000 in 1997 on research and development activities. Since we are not yet engaged in the commercial distribution of any products and we have no revenues, other than interest revenues earned on available cash balances, these research and development costs must be financed by us. We estimate that we are currently spending approximately \$80,000

to \$100,000 per month on research and development activities. These expenditures, however, may fluctuate from quarter-to-quarter and year-to-year depending on the resources available and our development schedule. Results of preclinical studies, clinical trials, regulatory decisions and competitive developments may significantly influence the amount of our research and development activities. In addition, we expect that our spending on product development will increase if we are successful at in-licensing or otherwise acquiring other late-stage development products.

#### GOVERNMENT REGULATION

Pharmaceutical products intended for therapeutic use in humans are governed by extensive Food and Drug Administration regulations in the United States and by comparable regulations in foreign countries. Any products developed by us will require FDA approvals in the United States and comparable approvals in foreign markets before they can be marketed. The process of seeking and obtaining FDA approval for a previously unapproved new human pharmaceutical product generally requires a number of years and involves the expenditure of substantial resources.

Following drug discovery, the steps required before a drug product may be marketed in the United States include:

- preclinical laboratory and animal tests;
- the submission to the FDA of an investigational new drug application, commonly known as an IND application;
- clinical and other studies to assess safety and parameters of use;
- adequate and well-controlled clinical trials to establish the safety and effectiveness of the drug product;
- the submission to the FDA of a new drug application, commonly known as an NDA; and
- FDA approval of the NDA prior to any commercial sale or shipment of the product.

Typically, preclinical studies are conducted in the laboratory and in animals to gain preliminary information on a proposed product's uses and physiological effects and harmful effects, if any, and to identify any potential safety problems that would preclude testing in humans. The results of these studies, together with the general investigative plan, protocols for specific human studies and other information, are submitted to the FDA as part of the IND application. The FDA regulations do not, by their terms, require FDA approval of an IND. Rather, they allow a clinical investigation to commence if the FDA does not notify the sponsor to the contrary within 30 days of receipt of the IND. As a practical matter, however, FDA approval is often sought before a company commences clinical investigations. That approval may come within 30 days of IND receipt but may involve substantial delays if the FDA requests additional information.

The initial phase of clinical testing, which is known as Phase I, is conducted to evaluate the metabolism, uses and physiological effects of the experimental product in humans, the side effects associated with increasing doses, and, if possible, to gain early evidence of possible effectiveness. Phase I studies can also evaluate various routes, dosages and schedules of product administration. These studies generally involve a small number of healthy volunteer subjects, but may be conducted in people with the disease the product is intended to treat. The total number of subjects is generally in the range of 20 to

80. A demonstration of therapeutic benefit is not required in order to complete Phase I trials successfully. If acceptable product safety is demonstrated, Phase II trials may be initiated.

Phase II trials are designed to evaluate the effectiveness of the product in the treatment of a given disease and involve people with the disease under study. These trials often are well controlled, closely monitored studies involving a relatively small number of subjects, usually no more than several hundred. The optimal routes, dosages and schedules of administration are determined in these studies. If Phase II trials are successfully completed, Phase III trials are often commenced, although Phase III trials are not always required.

Phase III trials are expanded, controlled trials that are performed after preliminary evidence of the effectiveness of the experimental product has been obtained. These trials are intended to gather the additional information about safety and effectiveness that is needed to evaluate the overall risk/benefit relationship of the experimental product and provide the substantial evidence of effectiveness and the evidence of safety necessary for product approval. Phase III trials usually include from several hundred to several thousand subjects.

A clinical trial may combine the elements of more than one Phase and typically two or more Phase III studies are required. A company's designation of a clinical trial as being of a particular Phase is not necessarily indicative that this trial will be sufficient to satisfy the FDA requirements of that Phase because this determination cannot be made until the protocol and data have been submitted to and reviewed by the FDA. In addition, a clinical trial may contain elements of more than one Phase notwithstanding the designation of the trial as being of a particular Phase. The FDA closely monitors the progress of the Phases of clinical testing and may, at its discretion, reevaluate, alter, suspend or terminate the testing based on the data accumulated and its assessment of the risk/benefit ratio to patients. It is not possible to estimate with any certainty the time required to complete Phase I, II and III studies with respect to a given product.

Upon the successful completion of clinical testing, an NDA is submitted to the FDA for approval. This application requires detailed data on the results of preclinical testing, clinical testing and the composition of the product, specimen labeling to be used with the drug, information on manufacturing methods and samples of the product. The FDA typically takes from six to 18 months to review an NDA after it has been accepted for filing. Following its review of an NDA, the FDA invariably raises questions or requests additional information. The NDA approval process can, accordingly, be very lengthy. Further, there is no assurance that the FDA will ultimately approve an NDA. If the FDA approves that NDA, the new product may be marketed. The FDA often approves a product for marketing with a modification to the proposed label claims or requires that post-marketing surveillance, or Phase IV testing, be conducted.

All facilities and manufacturing techniques used to manufacture products for clinical use or sale in the United States must be operated in conformity with current "good manufacturing practice" regulations, commonly referred to as "GMP" regulations, which govern the production of pharmaceutical products. We currently do not have manufacturing capability. In the event we undertake any manufacturing activities or contract with a third-party manufacturer to perform our manufacturing activities, we intend to establish a quality control and quality assurance program to ensure that our products are manufactured in accordance with the GMP regulations and any other applicable regulations.

Products marketed outside of the United States are subject to regulatory approval requirements similar to those in the United States, although the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary widely from country to country. No action can be taken to market any product in a country until an appropriate application has been approved by the regulatory authorities in that country. The current approval process varies from country to country, and the time spent in gaining approval varies from that required for FDA approval. In certain European countries, the sales price of a product must also be approved. The pricing review period often begins after market approval is granted. We intend to seek and utilize foreign partners to apply for foreign approvals of our products.

### THIRD PARTY REIMBURSEMENT

Our ability to successfully commercialize our proposed products may depend in part on the extent to which coverage and reimbursement for our products will be available from government health care programs, private health insurers and other third party payors or organizations. Significant uncertainty exists as to the reimbursement status of new therapeutic products and there can be no assurance that third party insurance coverage and reimbursement will be available for any products we might develop. In the United States, health care reform is an area of increasing national attention and a priority of many governmental officials. Recent legislation, for example, imposes limitations on the amount of reimbursement available for specific drug products under some governmental health care programs. We cannot assure you that future additional limitations will not be imposed in the future on drug coverage and reimbursement.

### COMPETITION

Competition in the biopharmaceutical industry is intense both in the development of products for prevention and/or treatment of the same infectious diseases we target and in the acquisition of products in the late-stage development phase or already on the market. Potential competitors in the United States are numerous and include major pharmaceutical and specialized biotechnology companies, universities and other institutions. In general, competition in the pharmaceutical industry can be divided into four categories: (1) corporations with large research and developmental departments that develop and market products in many therapeutic areas; (2) companies that have moderate research and development capabilities and focus their product strategy on a small number of therapeutic areas; (3) small companies with limited development capabilities and only a few product offerings; and (4) university and other research institutions.

All of our competitors in categories (1) and (2) and some of our competitors in category (3) have longer operating histories, greater name recognition, substantially greater financial resources and larger research and development staffs than we do, as well as substantially greater experience than us in developing products, obtaining regulatory approvals, and manufacturing and marketing pharmaceutical products. We cannot assure you that our competitors will not succeed in developing technologies and products that are more effective than any of which we are developing or which we may develop or which would render our technology and products obsolete and noncompetitive. In addition, we cannot assure you that our products under development will be able to compete successfully with existing products or products under development by other companies, universities and other institutions or that they will attain regulatory approval in the United States or elsewhere. A significant amount of research in the field is also being carried out at academic and government institutions. These institutions are becoming increasingly aware of the commercial value of their findings and are becoming more aggressive in pursuing patent protection and negotiating licensing arrangements to collect royalties for use of technology that they have developed. These institutions may also market competitive commercial products on their own or in collaboration with competitors and will compete with us in recruiting highly qualified scientific personnel. We expect our products, if and when approved for sale, to compete primarily on the basis of product efficacy, safety, patient convenience, reliability and patent position. In addition, the first product to reach the market in a therapeutic or preventative area is often at a significant competitive advantage relative to later entrants in the market.

We are aware of certain programs and products under development by others which may compete with our programs and proposed products. The international vaccine industry is dominated by three companies: SmithKline Beecham plc, Rhone-Poulenc S.A. (through its subsidiaries, including Institut Merieux International, Pasteur Merieux Serums et Vaccins, Connaught Laboratories Limited and Connaught Laboratories, Inc.) and Merck & Co., Inc. The larger, better known pharmaceutical companies have generally focused on a traditional synthetic drug approach, although some have substantial expertise in biotechnology. During the last decade, however, significant research activity in the biotechnology industry has been completed by smaller research and development companies, like us, formed to pursue new technologies. Competitive or comparable companies to us include ID Biomedical Inc., which develops sub-unit vaccines from mycobacteria and other organisms, ANTEX Inc., which is similar to ID Biomedical Inc., and RIBI Pharmaceuticals, Inc., which develop new vaccine adjuvants. The existence of products developed by these and other competitors, or other products of which we are not aware or which may be developed in the future, may adversely affect the marketability of our products. In addition, our competitive position will depend upon our ability to enter into business collaborations or joint ventures to further develop and commercialize products incorporating our core technology, in-license or otherwise acquire products in the late-stage development phase or products already on the market and obtain additional financing when needed.

#### MANUFACTURING

We currently do not have any facilities suitable for manufacturing on a commercial scale basis any of our proposed products nor do we have any experience in volume manufacturing. If, and when we are ready to commercially launch a product, we will either find our own manufacturing facilities, hire additional personnel with manufacturing experience and comply with the extensive GMP regulations of the FDA and other regulations applicable to such a facility or we will more likely rely upon contractors to manufacture our proposed products in accordance with these regulations. In September 1999, we entered into an arrangement with the University of Iowa to manufacture our CAP nanoparticles for use in our proposed Phase I human clinical trial. Under the arrangement, the University of Iowa agreed to manufacture both a trial batch of our CAP nanoparticles and a clinical batch we can use in the clinical trial. We agreed to pay the University approximately \$50,000, approximately \$10,000 of which we have already paid, a portion to be paid upon completion of the trial batch and the remainder upon completion of the clinical batch. In the event the University of Iowa is unable to perform under the agreement or terminates the agreement at any time, we believe we will be able to find another suitable manufacturer.

#### SALES AND MARKETING

We currently do not have any sales and marketing personnel to sell on a commercial basis any of our proposed products. If and when we are ready to commercially launch a product, we will either hire qualified sales and marketing personnel or seek a joint marketing partner to assist us with this function.

#### EMPLOYEES

We had six full-time employees as of March 1, 2000, including four in research and development and two in management or administrative positions. None of our employees is covered by a collective bargaining agreement. We consider our relationships with our employees to be good.

#### FORWARD-LOOKING STATEMENTS

This registration statement contains forward-looking statements. In addition, from time to time, our representatives or we may make forward-looking statements orally or in writing. We base these forward-looking statements on our expectations and projections about future events, which we derive from the

information currently available to us. These forward-looking statements relate to future events or our future performance, including:

- our financial performance;
- the timing of product development; and
- the timing of regulatory approvals.

You can identify forward-looking statements by those that are not historical in nature, particularly those that use terminology, such as "may," "will," "should," "expects," "anticipates," "contemplates," "estimates," "believes," "plans," "projected," "predicts," "potential" or "continue" or the negative of these or similar terms. In evaluating these forward-looking statements, you should consider various factors, including the risk factors listed below. These factors may cause our actual results to differ materially from any forward-looking statement.

Forward-looking statements are only predictions. The forward-looking events discussed in this registration statement and other statements made from time to time by us or our representatives, may not occur, and actual events and results may differ materially and are subject to risks, uncertainties and assumptions about us. We are not obligated to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise. In light of these risks, uncertainties and assumptions, the forward-looking events discussed in this registration statement and other statements made from time to time by our representatives, or us might not occur.

#### RISKS RELATING TO OUR COMPANY

WE HAVE A HISTORY OF OPERATING LOSSES, EXPECT CONTINUING LOSSES AND MAY NEVER ACHIEVE PROFITABILITY.

We have incurred losses in each year since our amalgamation in 1996 and expect to incur substantial and continuing losses for the foreseeable future. We incurred a net loss of approximately \$1,000,000 for the nine months ended September 30, 1999, and as of September 30, 1999, our accumulated deficit was approximately \$11,800,000.

All of our revenue to date has been derived from interest earned on invested funds. We have not commercially introduced any products. We expect to incur substantial and continuing losses for the foreseeable future as we seek to in-license or otherwise acquire new products and as our own product development programs expand and various preclinical and clinical trials commence. The amount of these losses may vary significantly from year-to-year and quarter-to-quarter and will depend on, among other factors:

- the costs of licensure or acquisition of new products;
- the timing and cost of product development;
- the progress and cost of preclinical and clinical development programs;
- the timing and cost of obtaining necessary regulatory approvals; and
- the timing and cost of obtaining third party reimbursement.

In order to generate revenues, we must successfully develop and commercialize our own proposed products or products in the late-stage human clinical development phase or already on the market that we may in-license or otherwise acquire or enter into collaborative agreements with others who can successfully develop and commercialize them. Even if our proposed products and the products we may license or otherwise acquire are commercially introduced, they may never achieve market acceptance and we may never generate revenues or achieve profitability.

WE ARE A DEVELOPMENT STAGE COMPANY WITH A SHORT OPERATING HISTORY, MAKING IT DIFFICULT FOR YOU TO EVALUATE OUR BUSINESS AND YOUR INVESTMENT.

We are in the development stage and our operations and the development of our proposed products are subject to all of the risks inherent in the establishment of a new business enterprise, including:

- the absence of an operating history;
- the lack of commercialized products;
- insufficient capital;
- expected substantial and continual losses for the foreseeable future;
- limited experience in dealing with regulatory issues;
- the lack of manufacturing experience and limited marketing experience;
- an expected reliance on third parties for the development and commercialization of our proposed products;
- a competitive environment characterized by numerous, well-established and well-capitalized competitors; and
- reliance on key personnel.

Because we are subject to these risks, you may have a difficult time evaluating our business and your investment in our company.

OUR PROPOSED PRODUCTS ARE IN THE RESEARCH STAGES AND WILL LIKELY NOT BE COMMERCIALY INTRODUCED FOR SEVERAL YEARS, IF AT ALL.

Our proposed products are in the research stages and will require further research and development, preclinical and clinical testing and investment prior to commercialization in the United States and abroad. We cannot assure you that any of our proposed products will:

- be successfully developed;
- prove to be safe and efficacious in clinical trials;
- meet applicable regulatory standards;
- demonstrate substantial protective or therapeutic benefits in the prevention or treatment of any disease;
- be capable of being produced in commercial quantities at reasonable costs; or
- be successfully marketed.

We do not anticipate that any of our proposed products will receive the requisite regulatory approvals for commercialization in the United States or abroad for a number of years, if at all, and we cannot assure you

that any of our proposed products, if approved and marketed, will generate significant product revenue and provide an acceptable return on our investment.

WE WILL NEED TO RAISE SUBSTANTIAL ADDITIONAL CAPITAL IN THE FUTURE TO FUND OUR OPERATIONS AND WE MAY BE UNABLE TO RAISE SUCH FUNDS WHEN NEEDED AND ON ACCEPTABLE TERMS.

We currently do not have sufficient resources to complete the commercialization of any of our proposed products. Therefore, we may need to raise substantial additional capital to fund our operations sometime in the future. We cannot be certain that any financing will be available when needed. If we fail to raise additional financing as we need it, we may have to delay or terminate our own product development programs or pass on opportunities to in-license or otherwise acquire new products that we believe may be beneficial to our business. We expect to continue to spend capital on:

- research and development programs;
- preclinical studies and clinical trials;
- regulatory processes;
- establishment of our own commercial scale manufacturing and marketing capabilities or a search for third party manufacturers and marketing partners to manufacture and market our products for us; and
- the licensure or acquisition of new products.

The amount of capital we may need will depend on many factors, including the:

- progress, timing and scope of our research and development programs;
- progress, timing and scope of our preclinical studies and clinical trials;
- time and cost necessary to obtain regulatory approvals;
- time and cost necessary to build our own manufacturing facilities and obtain the necessary regulatory approvals for those facilities or to seek third party manufacturers to manufacture our products for us;
- time and cost necessary to establish our own sales and marketing capabilities or to seek marketing partners to market our products for us;
- time and cost necessary to respond to technological and market developments;
- changes made or new developments in our existing collaborative, licensing and other commercial relationships; and
- new collaborative, licensing and other commercial relationships that we may establish.

In addition, our principal asset, a license agreement with the University of California, requires us to have available minimum amounts of funds each year for research and development activities relating to our licensed technology and to achieve research and development milestones. Moreover, our fixed expenses, such as rent, license payments and other contractual commitments, may increase in the future, as we may:

- enter into additional leases for new facilities and capital equipment;
- enter into additional licenses and collaborative agreements; and
- incur additional expenses associated with being a public company.

Our cash on hand as of September 30, 1999 was \$5,648,796. We believe this cash will be sufficient to fund our operations through June 2002. We have based this estimate on assumptions that may prove to be wrong. As a result, we may need to obtain additional financing prior to that time. In addition, we may need to raise additional capital at an earlier time to fund our ongoing research and development activities, acquire new products or take advantage of other unanticipated opportunities. Any additional equity financings may be dilutive to our existing shareholders, and debt financing, if available, may involve restrictive covenants on our business. In addition, insufficient funds may require us to delay, scale back or eliminate some or all of our programs designed to facilitate the commercial introduction of our proposed products, prevent commercial introduction of our products altogether or restrict us from acquiring new products that we believe may be beneficial to our business.

OUR STRATEGY TO ACQUIRE PRODUCTS IN THE LATE-STAGE DEVELOPMENT PHASE OR PRODUCTS ALREADY ON THE MARKET IS RISKY AND THE MARKET FOR ACQUIRING THESE PRODUCTS IS COMPETITIVE.

We intend to acquire, through outright purchase, license, joint venture or other methods, products in the late-stage development phase or products already on the market, and assist in the final development and commercialization of those products. There are a number of companies that have similar strategies to ours, many of whom have substantially greater resources than us. It is difficult to determine the value of a product that has not been fully developed or commercialized, and the possibility of significant competition for these products may tend to increase the cost to us of these products beyond the point at which we will experience an acceptable return on our investment. We cannot assure you that we will be able to acquire any products on commercially acceptable terms or at all, that any product we may acquire will be approved by the FDA or if approved, will be marketable, or that even if marketed, that we will be able to obtain an acceptable return on our investment.

While we have no current agreements or negotiations underway, if we purchase any products, we could issue stock that would dilute existing shareholders' percentage ownership, incur substantial debt or assume contingent liabilities. These purchases also involve numerous other risks, including:

- problems assimilating the purchased products;
- unanticipated costs associated with the purchase;
- incorrect estimates made in the accounting for acquisitions; and
- risks associated with entering markets in which we have no or limited prior experience.

IF WE FAIL TO OBTAIN REGULATORY APPROVAL TO COMMERCIALLY MANUFACTURE OR SELL ANY OF OUR FUTURE PRODUCTS, OR IF APPROVAL IS DELAYED, WE WILL BE UNABLE TO GENERATE REVENUE FROM THE SALE OF OUR PRODUCTS.

We must obtain regulatory approval to sell any of our products in the United States and abroad. In the United States, we must obtain the approval of the FDA for each vaccine or drug that we intend to commercialize. The FDA approval process is typically lengthy and expensive, and approval is never certain. Products distributed abroad are subject to similar foreign government regulation.

Generally, only a very small percentage of newly discovered pharmaceutical products that enter preclinical development are approved for sale. Because of the risks and uncertainties in biopharmaceutical development, our proposed products could take a significantly longer time to gain regulatory approval than we expect or may never gain approval. If regulatory approval is delayed or never obtained, our management's credibility, the value of our company and our operating results would be adversely affected.

Moreover, even if the FDA approves a product, such approval may be conditioned upon commercially unacceptable limitations on the indications for which a product may be marketed, and further studies may be required to provide additional data on safety or effectiveness. The FDA may also require post-marketing surveillance programs to monitor the product's side effects. The later discovery of previously unknown problems with a product or manufacturer may result in restrictions or sanctions on the product or manufacturer, including the withdrawal of the product from the market.

TO OBTAIN REGULATORY APPROVAL TO MARKET OUR PRODUCTS, COSTLY AND LENGTHY PRECLINICAL STUDIES AND CLINICAL TRIALS MAY BE REQUIRED, AND THE RESULTS OF THE STUDIES AND TRIALS ARE HIGHLY UNCERTAIN.

As part of the FDA approval process, we must conduct, at our own expense, preclinical studies on animals and clinical trials on humans on each of our proposed products. We expect the number of preclinical studies and clinical trials that the FDA will require will vary depending on the product, the disease or condition the product is being developed to address and regulations applicable to the particular product. We may need to perform multiple preclinical studies using various doses and formulations before we can begin clinical trials, which could result in delays in our ability to market any of our products. Furthermore, even if we obtain favorable results in preclinical studies on animals, the results in humans may be different.

After we have conducted preclinical studies in animals, we must demonstrate that our products are safe and effective for use on the target human patients in order to receive regulatory approval for commercial sale. The data obtained from preclinical and clinical testing are subject to varying interpretations that could delay, limit or prevent regulatory approval. Adverse or inconclusive clinical results would prevent us from filing for regulatory approval of our products. Additional factors that can cause delay or termination of our clinical trials include:

- slow patient enrollment;
- longer treatment time required to demonstrate efficacy;
- adverse medical events or side effects in treated patients; and
- lack of effectiveness of the product being tested.

IF WE FAIL TO OBTAIN AN ADEQUATE LEVEL OF REIMBURSEMENT FOR OUR PRODUCTS BY THIRD PARTY PAYORS, THERE WOULD BE NO COMMERCIALLY VIABLE MARKETS FOR OUR PRODUCTS.

Our ability to commercialize our products successfully will depend in part on the price we may be able to charge for our products and on the extent to which reimbursement for the cost of our products and related treatment will be available from government health administration authorities, private health insurers and other third party payors. Third party payors, such as government or private health care insurers, carefully review and increasingly challenge the price charged for products. Reimbursement rates from private companies vary depending on the third party payor, the insurance plan and other factors. Reimbursement systems in international markets vary significantly by country and by region, and reimbursement approvals must be obtained on a country-by-country basis. We cannot be certain that third party payors will pay for the costs of

our products. We currently have limited expertise obtaining reimbursement. We will need to seek additional reimbursement expertise unless we enter into collaborations with other companies with the necessary expertise.

Even if we are able to obtain reimbursement from third party payors, we cannot be certain that reimbursement rates will be high enough to allow us to profit from sales of our products and realize an acceptable return on our investment in product development. Certain payors may attempt to further control costs by selecting exclusive providers of their pharmaceutical products. If these types of arrangements were made with our competitors, these payors would not reimburse patients for purchases of our competing products.

We expect that in the future reimbursement will be increasingly restricted both in the United States and internationally. The escalating cost of health care has led to increased pressure on the health care industry to reduce costs. Governmental and private third party payors have proposed health care reforms and cost reductions. A number of federal and state proposals to control the cost of health care, including the cost of drug treatments, have been made in the United States. In some foreign markets, the government controls the pricing of products which would affect our profitability on these products. Current government regulations and possible future legislation regarding health care may affect our future revenues and profitability from sales of our products and may adversely affect our business and prospects.

WE DO NOT HAVE ANY FACILITIES APPROPRIATE FOR CLINICAL TESTING, WE LACK MANUFACTURING EXPERIENCE AND WE HAVE NO SALES AND MARKETING PERSONNEL. WE WILL, THEREFORE, BE DEPENDENT UPON OTHERS FOR OUR CLINICAL TESTING, MANUFACTURING, SALES AND MARKETING.

Our current facilities do not include accommodation for the testing of our proposed products in animals to determine their harmful effects and uses and physiological effects or in humans for the clinical testing required by the FDA. We do not have a manufacturing facility that can be used for full-scale production of our products. In addition, at this time, we do not have any sales and marketing personnel. In the course of our development program, we will therefore be required to enter into arrangements with other companies or universities for our animal testing, human clinical testing, manufacturing, and sales and marketing activities. If we are unable to retain third parties for these purposes on acceptable terms, we may be unable to successfully develop, manufacture and market our proposed products. In addition, any failures by third parties to adequately perform their responsibilities may delay the submission of our proposed products for regulatory approval, impair our ability to deliver our products on a timely basis or otherwise impair our competitive position. Our dependence on third parties for the development, manufacture, sale and marketing of our products may also adversely affect our profit margins.

WE WILL NOT BE ABLE TO SELL OUR PRODUCTS IF WE OR OUR THIRD PARTY MANUFACTURERS FAIL TO COMPLY WITH MANUFACTURING REGULATIONS.

Before we can begin selling our products, we must obtain regulatory approval of our manufacturing facility and process or the manufacturing facility and process of the third party or parties with whom we may outsource our manufacturing activities. In addition, the manufacture of our products must comply with the FDA's current Good Manufacturing Practices regulations, commonly known as GMP regulations. The GMP regulations govern quality control and documentation policies and procedures. Our manufacturing facilities, if any in the future, and the manufacturing facilities of our third party manufacturers will be continually subject to inspection by the FDA and other state, local and foreign regulatory authorities, before and after product approval. We cannot guarantee that we, or any potential third party manufacturer of our products, will be able to comply with the GMP regulations or other applicable manufacturing regulations.

WE LICENSE OUR CORE TECHNOLOGY FROM A THIRD PARTY AND MAY LOSE THE RIGHT TO LICENSE IT.

We license our core technology from the University of California and may lose the right to license some portions of it if we breach some of our obligations under the license agreement.

Under the license agreement, we are required to:

- pay a \$100,000 license issue fee, \$75,000 of which we have already paid and \$25,000 of which is due in June 2000;
- pay royalties to the University based on a percentage of the net sales of any products incorporating the licensed technology;
- pay minimum annual royalties beginning in the year 2004, to be credited against earned royalties, for the life of the agreement;
- maintain an annual minimum amount of available capital for development and commercialization of products incorporating the licensed technology until a product is introduced to the market;
- pay the costs of patent prosecution and maintenance of the patents included in the agreement;
- meet performance milestones relating to:
  - hiring or contracting with personnel to perform research and development, regulatory and other activities relating to the commercial launch of a proposed product;
  - testing proposed products;
  - obtaining government approvals;
  - conducting clinical trials; and
  - introducing products incorporating the licensed technology into the market; and
- enter into partnership or alliance arrangements or agreements with other entities regarding commercialization of the technology covered by the license.

For more information on the license agreement, we refer you to "--Patents, Licenses and Proprietary Rights--University of California." Although we intend to use our reasonable best efforts to meet these obligations, if we violate or fail to perform any term or covenant of the license agreement and fail to cure this default within 60 days after written notice from the University of California, the University of California may terminate certain projects contained in the agreement. The termination of the agreement, however, will not relieve us of our obligation to pay any royalty or license fees owing at the time of termination. Our failure to retain the right to license our core technology could harm our business and future operating results. For example, if we were to enter into an outlicense agreement with a third party under which we agree to outlicense our core technology for a license fee, the termination of the license agreement could either, depending on the terms of the outlicense agreement, cause us to break our obligations under the outlicense agreement or

give the other party a right to terminate that agreement, thereby causing us to lose the revenue generated by the outlicense fees.

IF WE ARE UNABLE TO PROTECT OUR PROPRIETARY TECHNOLOGY, WE MAY NOT BE ABLE TO COMPETE AS EFFECTIVELY.

The pharmaceutical industry places considerable importance on obtaining patent and trade secret protection for new technologies, products and processes. Our success will depend, in part, on our ability to obtain, enjoy and enforce protection for any products we develop or acquire under United States and foreign patent laws and other intellectual property laws, preserve the confidentiality of our trade secrets and operate without infringing the proprietary rights of third parties.

Where appropriate, we seek patent protection for certain aspects of our technology. In February 2000, we filed a patent application relating to our technology. However, our owned and licensed patents and patent applications will not ensure the protection of our intellectual property for a number of other reasons:

- We do not know whether our patent applications will result in actual patents. For example, we may not have developed a method for treating a disease before others developed similar methods.
- Competitors may interfere with our patent process in a variety of ways. Competitors may claim that they invented the claimed invention before us or may claim that we are infringing on their patents and therefore cannot use our technology as claimed under our patent. Competitors may also contest our patents by showing the patent examiner that the invention was not original or novel or was obvious.
- We are in the research and development stage and are in the process of developing proposed products. Even if we receive a patent, it may not provide much practical protection. If we receive a patent with a narrow scope, then it will be easier for competitors to design products that do not infringe on our patent. Even if the development of our proposed products is successful and approval for sale is obtained, there can be no assurance that applicable patent coverage, if any, will not have expired or will not expire shortly after this approval. Any expiration of the applicable patent could have a material adverse effect on the sales and profitability of our proposed product.
- Enforcing patents is expensive and may require significant time by our management. In litigation, a competitor could claim that our issued patents are not valid for a number of reasons. If the court agrees, we would lose that patent.
- We may also support and collaborate in research conducted by government organizations or universities. We cannot guarantee that we will be able to acquire any exclusive rights to technology or products derived from these collaborations. If we do not obtain required licenses or rights, we could encounter delays in product development while we attempt to design around other patents or we may be prohibited from developing, manufacturing or selling products requiring these licenses. There is also a risk that disputes may arise as to the rights to technology or products developed in collaboration with other parties.

It is also unclear whether our trade secrets will provide useful protection. While we use reasonable efforts to protect our trade secrets, our employees or consultants may unintentionally or willfully disclose our proprietary information to competitors. Enforcing a claim that someone else illegally obtained and is using our trade secrets, like patent litigation, is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets. Our competitors may independently develop equivalent knowledge, methods and know-how.

CLAIMS BY OTHERS THAT OUR PRODUCTS INFRINGE THEIR PATENTS OR OTHER INTELLECTUAL PROPERTY RIGHTS COULD ADVERSELY AFFECT OUR FINANCIAL CONDITION.

The pharmaceutical industry has been characterized by frequent litigation regarding patent and other intellectual property rights. Patent applications are maintained in secrecy in the United States until the patents are issued and are also maintained in secrecy for a period of time outside the United States. Accordingly, we can conduct only limited searches to determine whether our technology infringes any patents or patent applications of others. Any claims of patent infringement would be time-consuming and could likely:

- result in costly litigation;
- divert the time and attention of our technical personnel and management;
- cause product development delays;
- require us to develop non-infringing technology; or
- require us to enter into royalty or licensing agreements.

Although patent and intellectual property disputes in the pharmaceutical industry have often been settled through licensing or similar arrangements, costs associated with these arrangements may be substantial and often require the payment of ongoing royalties, which could hurt our gross margins. In addition, we cannot be sure that the necessary licenses would be available to us on satisfactory terms, or that we could redesign our products or processes to avoid infringement, if necessary. Accordingly, an adverse determination in a judicial or administrative proceeding, or the failure to obtain necessary licenses, could prevent us from developing, manufacturing and selling some of our products, which could harm our business, financial condition and operating results.

BECAUSE WE ARE DEVELOPING NEW PRODUCTS, WE MAY FAIL TO GAIN MARKET ACCEPTANCE FOR OUR PRODUCTS AND OUR BUSINESS COULD SUFFER.

None of the products we propose to develop or are developing have yet been approved for marketing by regulatory authorities in the United States or elsewhere. Even if our proposed products are ultimately approved for sale, there can be no assurance that they will be commercially successful.

WE ARE DEPENDENT ON KEY PERSONNEL, MANY OF WHOM WOULD BE DIFFICULT TO REPLACE.

Our success will be largely dependent upon the efforts of Stephen M. Simes, our President and Chief Executive Officer, Phillip B. Donenberg, our Chief Financial Officer, Treasurer and Secretary, and other key employees. We do not have key person life insurance on any of our key personnel, and with the exception of Messrs. Simes and Donenberg, we generally do not have written employment or noncompetition agreements with our employees. Our future success also will depend in large part on our ability to identify, attract and retain other highly qualified managerial, technical and sales and marketing personnel. Competition for these individuals is intense. The loss of the services of any of our key personnel, the inability to identify, attract or retain qualified personnel in the future or delays in hiring qualified personnel, could make it more difficult for us to manage our business and meet key objectives, such as the timely introduction of our proposed products, which would harm our business, financial condition and operating results.

## RISKS RELATING TO OUR INDUSTRY

BECAUSE OUR INDUSTRY IS VERY COMPETITIVE AND OUR COMPETITORS HAVE SUBSTANTIALLY GREATER CAPITAL RESOURCES AND MORE EXPERIENCE IN RESEARCH AND DEVELOPMENT, MANUFACTURING AND MARKETING THAN US, WE MAY NOT SUCCEED IN DEVELOPING OUR PROPOSED PRODUCTS AND BRINGING THEM TO MARKET.

Competition in the pharmaceutical industry is intense. Potential competitors in the United States are numerous and include pharmaceutical, chemical and biotechnology companies, most of which have substantially greater capital resources and more experience in research and development, manufacturing and marketing than us. Academic institutions, hospitals, governmental agencies and other public and private research organizations are also conducting research and seeking patent protection and may develop and commercially introduce competing products or technologies on their own or through joint ventures. We cannot assure you that our competitors will not succeed in developing similar technologies and products more rapidly than we do or that these competing technologies and products will not be more effective than any of those that we are currently developing or will develop.

IF WE DO NOT KEEP PACE WITH TECHNOLOGICAL CHANGE, OUR PRODUCTS MAY BE RENDERED OBSOLETE AND OUR OPERATING RESULTS MAY SUFFER.

The pharmaceutical industry has experienced rapid and significant technological change. We expect that pharmaceutical technology will continue to develop rapidly, and our future success will depend, in large part, on our ability to develop and maintain a competitive position. Rapid technological development may result in our products or processes becoming obsolete before they are marketed or before we can recover a significant portion of the development and commercialization expenses we incurred in developing and commercially introducing the products. In addition, innovations in drug delivery systems, alternative therapies or new medical treatments that alter existing treatment regimes, reduce the need for therapy or cure certain chronic diseases could harm our business.

IF PRODUCT LIABILITY LAWSUITS ARE SUCCESSFULLY BROUGHT AGAINST US, WE MAY INCUR SUBSTANTIAL LIABILITIES.

We are exposed to the potential product liability risks inherent in the testing, manufacturing and marketing of human drug treatments. We currently do not maintain insurance against product liability lawsuits. Although we intend to obtain product liability insurance shortly before initiating clinical trials for our products, we cannot be certain that we will be able to obtain adequate insurance coverage. The pharmaceutical industry has experienced increasing difficulty in maintaining product liability insurance coverage at reasonable levels, and substantial increases in insurance premium costs in many cases have rendered coverage economically impractical. We cannot be certain that if any of our products receive FDA approval, the product liability insurance we will need to obtain in connection with the commercial sales of this product will be available at a reasonable cost. In addition, we cannot be certain that we can successfully defend any product liability lawsuit brought against us. If we are the subject of a successful product liability claim which exceeds the limits of any insurance coverage we may obtain, we may incur substantial liabilities which would adversely affect our operating results and financial condition.

## RISKS RELATING TO OUR COMMON STOCK

BECAUSE OUR COMMON STOCK IS TRADED ON THE CANADIAN VENTURE EXCHANGE AND THE "PINK SHEETS," YOUR ABILITY TO SELL YOUR SHARES IN THE SECONDARY TRADING MARKET MAY BE LIMITED.

Our common stock is currently traded on the Canadian Venture Exchange and the National Quotation Bureau's "Pink Sheets" and we expect that after the effectiveness of this registration statement, our common stock will also be traded in the over-the-counter market on the OTC Electronic Bulletin

Board. Consequently, the liquidity of our common stock is impaired, not only in the number of shares that are bought and sold, but also through delays in the timing of transactions, and coverage by security analysts and the news media, if any, of our company. As a result, prices for shares of our common stock may be lower than might otherwise prevail if our common stock was traded on Nasdaq or a national securities exchange.

BECAUSE OUR SHARES ARE "PENNY STOCKS," YOU MAY HAVE DIFFICULTY SELLING THEM IN THE SECONDARY TRADING MARKET.

Federal regulations under the Securities Exchange Act of 1934 regulate the trading of so-called "penny stocks," which are generally defined as any security not listed on a national securities exchange or Nasdaq, priced at less than \$5.00 per share and offered by an issuer with limited net tangible assets and revenues. Since our common stock currently trades on the "Pink Sheets" at less than \$5.00 per share, our shares are "penny stocks" and may not be traded unless a disclosure schedule explaining the penny stock market and the risks associated therewith is delivered to a potential purchaser prior to any trade.

In addition, because our common stock is not listed on Nasdaq or any national securities exchange and currently trades at less than \$5.00 per share, trading in our common stock is subject to Rule 15c-9 under the Exchange Act. Under this rule, broker-dealers must take certain steps prior to selling a "penny stock," which steps include:

- obtaining financial and investment information from the investor;
- obtaining a written suitability questionnaire and purchase agreement signed by the investor; and
- providing the investor a written identification of the shares being offered and the quantity of the shares.

If these penny stock rules are not followed by the broker-dealer, the investor has no obligation to purchase the shares. The application of these comprehensive rules will make it more difficult for broker-dealers to sell our common stock and our shareholders, therefore, may have difficulty in selling their shares in the secondary trading market.

OUR STOCK PRICE MAY BE VOLATILE AND YOUR INVESTMENT IN OUR COMMON STOCK COULD SUFFER A DECLINE IN VALUE.

Prior to being listed on the "Pink Sheets," there was no public market for our common stock in the United States. Our common stock has been listed on the Canadian Venture Exchange since December 20, 1996. The market price of our common stock may fluctuate significantly in response to a number of factors, some of which are beyond our control. These factors include:

- progress of our products through the regulatory process;
- results of preclinical studies and clinical trials;
- announcements of technological innovations or new products by us or our competitors;
- government regulatory action affecting our products or our competitors' products in both the United States and foreign countries;
- developments or disputes concerning patent or proprietary rights;
- general market conditions for emerging growth and pharmaceutical companies;

- economic conditions in the United States or abroad;
- actual or anticipated fluctuations in our operating results;
- broad market fluctuations; and
- changes in financial estimates by securities analysts.

In addition, the value of our common stock may fluctuate because it is listed on both the "Pink Sheets" (and eventually on the OTC Bulletin Board) and the Canadian Venture Exchange. We do not know what effect, if any, the dual listing will have on the price of our common stock in either market. Listing on both the Canadian Venture Exchange and the Pink Sheets may increase our stock price volatility due to:

- trading in different time zones;
- different ability to buy or sell our stock; and
- different trading volume.

WE MAY INCUR SIGNIFICANT COSTS FROM CLASS ACTION LITIGATION DUE TO OUR EXPECTED STOCK VOLATILITY.

In the past, following periods of large price declines in the public market price of a company's stock, holders of that stock have occasionally instituted securities class action litigation against the company that issued the stock. If any of our shareholders were to bring this type of lawsuit against us, even if the lawsuit is without merit, we could incur substantial costs defending the lawsuit. The lawsuit could also divert the time and attention of our management, which would hurt our business. Any adverse determination in litigation could also subject us to significant liabilities.

THE SALE OF 40,929,800 RESTRICTED SHARES OF OUR COMMON STOCK, OR 77.8% OF OUR TOTAL OUTSTANDING SHARES, IN THE PUBLIC MARKET IN SEPTEMBER 2000 COULD CAUSE THE MARKET PRICE OF OUR COMMON STOCK TO DECLINE SIGNIFICANTLY, EVEN IF OUR BUSINESS IS DOING WELL.

Our current shareholders hold 52,642,686 shares, which they will be able to sell in the public market in the near future. Holders of an aggregate of approximately 40,929,800 shares have entered into lock-up agreements under which they have agreed that they will not offer, sell or otherwise dispose of any shares until September 2000. On February 22, 2000, the date this registration statement became effective, approximately 15,000,000 shares became eligible for immediate resale in the public market pursuant to Rule 144(k). Beginning May 22, 2000, approximately 15,000,000 shares will become eligible for resale in the public market subject to the limitations of Rule 144. The remaining shares will become eligible for resale in the public market at various later times. Public sales of our common stock may include an aggregate of 15,845,625 shares currently issuable upon the exercise of outstanding options and warrants. Sales of a substantial number of shares of our common stock could cause our stock price to decline significantly, even if our business is doing well. In addition, the sale of these shares could limit our ability to raise capital through the sale of additional stock. We refer you to the information under the heading "--Market Information" beginning on page 46.

PROVISIONS IN OUR CORPORATE DOCUMENTS AND WYOMING LAW COULD DISCOURAGE OR PREVENT A TAKEOVER, EVEN IF AN ACQUISITION WOULD BE BENEFICIAL TO OUR SHAREHOLDERS.

Provisions of our articles of incorporation and bylaws, as well as provisions of Wyoming law, could make it more difficult for a third party to acquire us, even if doing so would be beneficial to our shareholders. These provisions include:

- authorizing the issuance of "blank check" preferred that could be issued by our board of directors to increase the number of outstanding shares and thwart a takeover attempt; and
- prohibiting cumulative voting in the election of directors, which would otherwise allow less than a majority of shareholders to elect director candidates.

In addition, the laws of the State of Wyoming, our state of incorporation, contain certain provisions that could have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from attempting to acquire, control of our company. Such provisions could limit the price that certain investors might be willing to pay in the future for shares of our common stock. These provisions could also make it more difficult for shareholders to change the management of our company or to effect certain transactions.

OUR DIRECTORS AND EXECUTIVE OFFICERS OWN A SUFFICIENT NUMBER OF SHARES OF OUR COMMON STOCK TO CONTROL OUR COMPANY, WHICH COULD DISCOURAGE OR PREVENT A TAKEOVER, EVEN IF AN ACQUISITION WOULD BE BENEFICIAL TO OUR SHAREHOLDERS.

Our directors and executive officers own or control approximately 50.4% of our outstanding voting power. Accordingly, these shareholders, individually and as a group, may be able to influence the outcome of shareholder votes, involving votes concerning the election of directors, the adoption or amendment of provisions in our articles of incorporation and bylaws and the approval of certain mergers or other similar transactions, such as sales of substantially all of our assets. Such control by existing shareholders could have the effect of delaying, deferring or preventing a change in control of our company. In addition, under a shareholders agreement entered into in connection with our May 1999 private placement, several of our shareholders entered into a voting agreement with respect to the election of directors.

WE DO NOT INTEND TO PAY ANY CASH DIVIDENDS IN THE FORESEEABLE FUTURE AND, THEREFORE, ANY RETURN ON YOUR INVESTMENT IN OUR CAPITAL STOCK MUST COME FROM INCREASES IN THE FAIR MARKET VALUE AND TRADING PRICE OF THE CAPITAL STOCK.

We do not intend to pay any cash dividends in the foreseeable future and, therefore, any return on your investment in our capital stock must come from increases in the fair market value and trading price of the capital stock.

WE WILL LIKELY ISSUE ADDITIONAL EQUITY SECURITIES WHICH WILL DILUTE YOUR SHARE OWNERSHIP.

We will likely issue additional equity securities to raise capital and through the exercise of options and warrants that are outstanding or may be outstanding. These additional issuances will dilute your share ownership.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OR PLAN OF OPERATION.

GENERAL

We are a development stage biopharmaceutical company engaged in the development and commercialization of vaccine adjuvants, proprietary novel vaccines and drug delivery systems. Our core technology, which we license on an exclusive basis from the University of California, is based on the use of extremely small, solid, uniform particles, which we call "nanoparticles," as immune system boosters and for drug delivery. We have identified three potential initial applications for our core technology:

- the creation of improved versions of current vaccines by the "adjuvant" activity of our proprietary nanoparticles;
- the development of new, unique vaccines against diseases for which there currently are few or no effective methods of prevention (E.G., genital herpes); and
- the creation of inhaled forms of pharmaceutical compounds that currently must be given by injection (E.G., insulin).

Our goal is to leverage our core technology to become a pharmaceutical company that develops and commercializes a wide range of pharmaceutical products. Our strategy to obtain this goal is to :

- enter into business collaborations or joint ventures to further develop and commercialize products incorporating our core technology;
- in-license or otherwise acquire products in the late-stage development phase;
- in-license or otherwise acquire products already on the market; and
- enter into business collaborations or joint ventures with complementary firms outside the scope of our core technology.

Our strategy over the next 12 months is to continue development of our core technology and to actively seek collaborators and licensees to accelerate the development and commercialization of products incorporating our core technology. We hope to file an investigational new drug application with the FDA before the end of 2000 to commence a Phase I human clinical trial with respect to our CAP nanoparticles. In addition, during the next 12 months, we intend to seek opportunities to in-license or otherwise acquire products in the late-stage development phase or products already on the market.

We currently do not expect any significant changes in the number of our employees unless we are able to enter into a business collaboration or joint venture to further develop and commercialize products incorporating our core technology or in-license or otherwise acquire products in the late-stage human clinical development phase or products already on the market. Alternatively, if we are able to enter into business collaborations or joint ventures, in lieu of hiring additional employees, we may elect to enter into arrangements with third parties to accomplish the similar tasks of hired employees.

Since our inception, we have experienced significant operating losses, and we expect to incur substantial and continuing losses for the foreseeable future. We incurred a net loss of approximately \$1,000,000 for the nine months ended September 30, 1999, and as of September 30, 1999, our accumulated deficit was approximately \$11,800,000.

All of our revenue to date has been derived from interest earned on invested funds. We have not commercially introduced any products. We expect to incur substantial and continuing losses for the foreseeable future as we seek to in-license or otherwise acquire new products and as our own product development programs expand and various preclinical and clinical trials commence. The amount of these losses may vary significantly from year-to-year and quarter-to-quarter and will depend on, among other factors:

- the costs of licensure or acquisition of new products;
- the timing and cost of product development;
- the progress and cost of preclinical and clinical development programs;
- the timing and cost of obtaining necessary regulatory approvals; and
- the timing and cost of obtaining third party reimbursement.

In order to generate revenues, we must successfully develop and commercialize our own proposed products or products in the late-stage human clinical development phase or already on the market that we may in-license or otherwise acquire or enter into collaborative agreements with others who can successfully develop and commercialize them. Even if our proposed products and the products we may license or otherwise acquire are commercially introduced, they may never achieve market acceptance and we may never generate revenues or achieve profitability.

On December 6, 1996, we acquired all of the issued and outstanding shares of capital stock of Structured Biologicals Inc. We accounted for this transaction under the purchase method of accounting. The relationship between Structured Biologicals and the University of California prior to our acquisition of Structured Biologicals, was one in which Structured Biologicals funded research work in a laboratory of the University of California. Such research work became the basis of our License Agreement with the University of California that was signed in June 1997. In connection with our acquisition of Structured Biologicals, BioSante acquired the rights to negotiate with the Regents of the University of California for licenses of specific technologies and products relating to investigative research that Structured Biologicals had funded at the University of California. This research became the basis of our license agreement with the University of California. At the time of our acquisition of Structured Biologicals, the technologies and products had not yet been approved for human clinical research. The value ascribed to these rights, based on an independent evaluation, was \$5,377,000. This amount was immediately expensed as the technologies and products did not have their technological feasibility established and had no identified future alternative use.

As of the date of our acquisition, the technology related to the development of products for six indications [i.e. applications of the technology]. We determined the value of the in process research and development related to the acquired rights based on an independent valuation using discounted cash flows.

BioSante is continuing to develop the technology related to five of the six indications.

In June 1997, BioSante exercised its option and entered into a license agreement with the University of California for the technology that it had previously supported.

#### LIQUIDITY AND CAPITAL RESOURCES

To date, we, as well as our predecessor, Structured Biologicals, have consistently raised equity financing to fund our activities, and we expect to continue this practice to fund our ongoing activities. From inception through October 1, 1999, we have raised net proceeds of \$9.1 million from private equity financings, class A and class B stock conversions and warrant exercises. In May 1999, we sold an aggregate of 23,125,000 shares of common stock and warrants to purchase 11,562,500 shares of common stock at an exercise price of \$0.30 per share to 31 accredited investors in a private placement. Several current members of our board of directors and an executive officer participated in this private placement. Stephen M. Simes, our President and Chief Executive Officer, purchased 250,000 shares of common stock; Victor Morgenstern, a member of our board of directors, and a trust and partnership affiliated with Mr. Morgenstern purchased an aggregate of 2,500,000 shares of common stock; Fred Holubow, a member of our board of directors, purchased 250,000 shares of common stock and a company affiliated with Ross Mangano, a member of our board of directors, purchased 7,500,000 shares of common stock. The net proceeds to us from this private placement was approximately \$4.4 million, thereby increasing our cash balance to approximately \$5.6 million as of September 30, 1999.

Our cash and cash equivalents were \$5,648,796 and \$2,841,250 at September 30, 1999 and December 31, 1998. The increase in our cash balance is due to the net proceeds from our private placement completed in May 1999.

We used cash in operating activities of \$1,413,578 in the nine month period ended September 30, 1999 versus cash used in operating activities of \$2,494,828 in the nine month period ended September 30, 1998. This change was driven by a reduction in general and administrative expenses during the nine month period ended September 30, 1999. Net cash used in investing activities was \$4,219 for the nine month period ended September 30, 1999 versus \$120,124 for the nine month period ended September 30, 1998. The significant uses of cash in investing activities for the nine month period ended September 30, 1999 were capital expenditures for the purchase of office furniture and a computer. The significant uses of cash in investing activities for the nine month period ended September 30, 1998 included capital expenditures for laboratory equipment and laboratory office furniture. Net cash provided by financing activities was \$4,225,343 for the nine month period ended September 30, 1999 compared to \$4,257,328 for the nine month period ended September 30, 1998. Net cash provided in the nine month period ended September 30, 1999 was primarily the result of our private placement completed in May 1999. Net cash provided in the nine month period ended September 30, 1998 was primarily the result of the conversion of class A and class C stock into shares of common stock.

We used cash in operating activities of \$3,041,425 in 1998 versus cash used in operating activities of \$1,244,698 in 1997. This change was driven by the scale-up of our laboratory facility and various research and development programs. Net cash used in investing activities was \$124,984 for 1998 versus \$723,649 for 1997. The significant uses of cash in investing activities for 1998 included capital expenditures for the purchase of laboratory equipment and laboratory office furniture. The significant uses of cash in investing activities for the 1997 included capital expenditures for the construction of a laboratory. Net cash provided by financing activities was \$4,257,328 for 1998 compared to \$244,402 for 1997. This change resulted from an increase in the number of class A and class C stock that were converted into shares of common stock in 1998 compared to 1997.

We expect to continue to incur significant expenses, primarily relating to our research and development activities. Management estimates that it is currently expending approximately \$80,000 to \$100,000 per month on research and development activities and approximately \$125,000 to \$150,000 per month in total expenses,

including research and development activities. Our research and development expenditures, however, may fluctuate from quarter-to-quarter and year-to-year depending on the resources available and our development schedule. Results of studies, clinical trials, regulatory decisions and competitive developments also may influence our expenditures. We are required under the terms of our license agreement with the University of California to have available certain amounts of funds for research and development activities. In the event, however, we are able to in-license or otherwise acquire drugs in the late-stage development phase or drugs already on the market, it is likely that our research and development and total expenses would increase significantly.

We incurred cash expenditures of \$1 million in the nine months ended September 30, 1999. The capital equipment expenditures of \$4,200 were principally for the acquisition of office furniture and a computer. We expect to spend approximately \$10,000 to \$20,000 in capital expenditures during the next 12 months.

We have several financial commitments, including the following minimum annual lease payments:

YEAR ----	MINIMUM ANNUAL LEASE PAYMENTS -----
2000	\$101,341
2001	\$ 98,520
2002	\$ 87,944
2003	\$ 48,051

Under our license agreement with the University of California, we are required to:

- pay a \$100,000 license issue fee, \$75,000 of which we have already paid and \$25,000 of which is due in June 2000;
- pay royalties to the University based on a percentage of the net sales of any products incorporating the licensed technology;
- pay the following minimum annual royalties on February 28 of each year beginning in the year 2004, to be credited against earned royalties, for the life of the agreement:

YEAR	MINIMUM ANNUAL ROYALTY DUE
-----	-----
2004	\$ 50,000
2005	\$ 100,000
2006	\$ 150,000
2007	\$ 200,000
2008	\$ 400,000
2009	\$ 600,000
2010	\$ 800,000
2011	\$1,500,000
Each year after 2011	\$1,500,000

- maintain an annual minimum amount of available capital for development and commercialization of products incorporating the licensed technology until a product is introduced to the market;
- pay the costs of patent prosecution and maintenance of the patents included in the agreement;
- meet performance milestones relating to:
  - hiring personnel to perform research and development, regulatory and other activities relating to the commercial launch of a proposed product;
  - testing proposed products;
  - obtaining government approvals;
  - conducting clinical trials; and
  - introducing products incorporating the licensed technology into the market; and
- enter into partnership or alliance arrangements or agreements with other entities regarding commercialization of the technology covered by the license.

Our fixed expenses, such as rent, license payments and other contractual commitments, may increase in the future, as we may:

- enter into additional leases for new facilities and capital equipment;
- enter into additional licenses and collaborative agreements; and
- incur additional expenses associated with being a public company.

We currently do not have sufficient resources to complete the commercialization of any of our proposed products or to carry out our business strategy or to meet the financial commitments described above. Therefore, we will likely need to raise substantial additional capital to fund our operations sometime in the future. We expect that our cash balance of approximately \$5.6 million as of September 30, 1999 will be sufficient to fund our operations through at least June 2002. We have based this estimate, however, on

assumptions that may prove to be wrong. As a result, we may need to obtain additional financing prior to that time. In addition, we may need to raise additional capital at an earlier time to fund our ongoing research and development activities, acquire new products or take advantage of other unanticipated opportunities. We cannot be certain that any financing will be available when needed. Any additional equity financings may be dilutive to our existing shareholders, and debt financing, if available, may involve restrictive covenants on our business. In addition, if we fail to raise additional financing as we need it, we may have to delay or terminate our own product development programs or pass on opportunities to in-license or otherwise acquire new products that we believe may be beneficial to our business.

We expect to continue to spend capital on:

- research and development programs;
- preclinical studies and clinical trials;
- regulatory processes;
- establishment of our own commercial scale manufacturing and marketing capabilities or a search for third party manufacturers and marketing partners to manufacture and market our products for us; and
- the licensure or acquisition of new products.

The amount of capital we may need will depend on many factors, including the:

- progress, timing and scope of our research and development programs;
- progress, timing and scope of our preclinical studies and clinical trials;
- time and cost necessary to obtain regulatory approvals;
- time and cost necessary to build our own manufacturing facilities and obtain the necessary regulatory approvals for those facilities or to seek third party manufacturers to manufacture our products for us;
- time and cost necessary to establish our own sales and marketing capabilities or to seek marketing partners to market our products for us;
- time and cost necessary to respond to technological and market developments;
- changes made or new developments in our existing collaborative, licensing and other commercial relationships; and
- new collaborative, licensing and other commercial relationships that we may establish.

#### IMPACT OF YEAR 2000

During 1999, we conducted a comprehensive review of our computer systems to identify the systems that could be affected by the year 2000 issue. To date, we have experienced no problems with respect to year 2000 issues. The only expenses we incurred in preparing our business for the year 2000 were consulting fees in the amount of less than \$200.

#### ITEM 3. DESCRIPTION OF PROPERTY.

Our principal executive office is located in Lincolnshire, Illinois. We lease approximately 700 square feet of office space for approximately \$1,000 per month, which lease expires in June 2000. We plan to renew our lease for a one-year term. Our research and development operations are located in Smyrna, Georgia where we lease approximately 11,840 square feet of laboratory space for approximately \$5,100 per month, which lease expires in October 2003. We also lease approximately 2,600 square feet of office space in Atlanta, Georgia for approximately \$3,500 per month, which lease expires in September 2002. Effective September 16, 1999, we entered into a sublease agreement for the Atlanta office space under which we receive approximately \$3,500 per month from the sub-tenant through September 14, 2002. Management of our company considers our leased properties suitable and adequate for our current needs and adequately covered by insurance.

ITEM 4. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT.

The following table sets forth information known to us with respect to the beneficial ownership of our capital stock as of October 1, 1999 for (1) each person known by us to beneficially own more than 5% of any class of our voting securities, (2) each of the executive officers named in the Summary Compensation Table under the heading "Item 6. Executive Compensation" beginning on page 38, (3) each of our current directors, and (4) all of our executive officers and directors as a group. Except as otherwise indicated, we believe that the beneficial owners of our capital stock listed below, based on information provided by these owners, have sole investment and voting power with respect to such shares, subject to community property laws where applicable.

NAME	COMMON STOCK		CLASS C STOCK		COMMON STOCK AND COMMON STOCK EQUIVALENTS(1)	PERCENT OF TOTAL VOTING POWER(2)
	NUMBER	PERCENT	NUMBER	PERCENT		
Stephen M. Simes (3).....	1,621,110 (4)	3.0%	--	--	1,621,110	2.6%
Louis W. Sullivan, M.D. (3).....	--	--	1,000,000	20.8%	1,000,000	1.7%
Edward C. Rosenow III, M.D. (3)....	100,000 (5)	*	--	--	100,000	*
Victor Morgenstern (3).....	3,750,000 (6)	7.0%	--	--	3,750,000	6.4%
Fred Holubow (3).....	375,000 (7)	*	--	--	375,000	*
Ross Mangano (3).....	11,250,000 (8)	19.9%	--	--	11,250,000	18.4%
Angela Ho (3).....	700,000 (9)	1.3%	1,000,000	20.8%	1,700,000	3.1%
Peter Kjaer (3).....	--	--	--	--	--	--
Avi Ben-Abraham, M.D. (3).....	12,467,300 (10)	23.6%	--	--	12,467,300	21.6%
JO & Co.....	11,250,000 (11)	19.9%	--	--	11,250,000	18.4%
Hans Michael Jebsen.....	3,750,000 (12)	7.0%	1,000,000	20.8%	4,750,000	8.2%
King Cho Fung.....	3,187,500 (13)	6.0%	625,000	13.0%	3,812,500	6.6%
All executive officers and directors as a group (10 persons)..	30,582,498 (14)	51.1%	2,000,000	41.6%	32,582,498	50.4%

\* less than 1%.

- (1) In calculating an individual's percentage ownership, conversion of any shares of our class C stock owned by such individual is assumed for purposes of such calculation.
- (2) In calculating the percent of total voting power, the voting power of shares of our class C stock and our common stock is aggregated.
- (3) Address: 175 Olde Half Day Road, Suite 123, Lincolnshire, IL 60069.
- (4) Mr. Stephen M. Simes' beneficial ownership includes 1,246,110 shares of common stock issuable under currently exercisable options and 125,000 shares of common stock issuable under a warrant.
- (5) Dr. Edward C. Rosenow's beneficial ownership includes 100,000 shares of common stock issuable under currently exercisable options.
- (6) Mr. Victor Morgenstern's beneficial ownership includes 750,000 shares of common stock issuable under a currently exercisable warrant, 250,000 shares of common stock issuable under a currently exercisable warrant and 500,000 shares of common stock held by Mr. Morgenstern's wife as trustee of the Morningstar Trust and 250,000 shares of common stock issuable under a currently exercisable warrant and 500,000 shares of common stock held by Resolute Partners. Victor Morgenstern is a partner of Resolute Partners.
- (7) Mr. Fred Holubow's beneficial ownership includes 125,000 shares of common stock issuable under a currently exercisable warrant.
- (8) Mr. Ross Mangano's beneficial ownership includes 3,750,000 shares of common stock issuable under a currently exercisable warrant and 7,500,000 shares of common stock held by JO & Co. to which Mr. Mangano has sole voting power. See note (12) below.
- (9) Ms. Angelo Ho's beneficial ownership includes 100,000 shares of common stock issuable under currently exercisable options.
- (10) Dr. Ben-Abraham's beneficial ownership includes 200,000 shares of common stock issuable under currently exercisable options. Dr. Ben-Abraham has entered into an agreement limiting voting rights with respect to his or her shares of class C stock and common stock in certain circumstances. See "Item 8 - Description of Securities." The percentage has been calculated without taking these restrictions into account.
- (11) Includes 3,750,000 shares of common stock issuable under a currently exercisable warrant. Ross Mangano, a director of BioSante, has sole voting power over these shares. The address for JO & Co. is 112 West Jefferson Boulevard, Suite 613, South Bend, Indiana 46634.
- (12) Mr. Hans Michael Jebesen's beneficial ownership includes 750,000 shares of common stock issuable under a currently exercisable warrant. Mr. Jebesen's address is c/o Jebesen & Co. Ltd., 28/F Caroline Center, 28 Yun Ping Road, Causeway Bay, Hong Kong.
- (13) Mr. King Cho Fung's beneficial ownership includes 750,000 shares of common stock issuable under a currently exercisable warrant. Mr. Fung's address is Room 2101, Lyndhurst Tower, One Lyndhurst Terrace, Central Hong Kong.

- (14) The amount beneficially owned by all current directors and executive officers as a group includes the aggregate of 2,965,198 shares issuable under currently exercisable warrants and exercisable options. Also includes an aggregate of 4,250,000 shares issuable under currently exercisable warrants held by Resolute Partners, Morningstar Trust and JO & Co., respectively. See notes (6), (8) and (11) above.

ITEM 5. DIRECTORS, EXECUTIVE OFFICERS, PROMOTERS AND CONTROL PERSONS.

Set forth below are our directors and executive officers and their ages and positions as of February 15, 2000:

Name	Age	Position
----	---	-----
Louis W. Sullivan, M.D. (1)(2)(3).....	66	Chairman of the Board
Stephen M. Simes.....	48	Vice Chairman, President and Chief Executive Officer
Victor Morgenstern (2).....	56	Director
Fred Holubow (3).....	60	Director
Ross Mangano (1).....	53	Director
Edward C. Rosenow III, M.D. (3).....	64	Director
Angela Ho (2).....	46	Director
Peter Kjaer (1).....	38	Director
Avi Ben-Abraham, M.D.....	41	Director
Phillip B. Donenberg.....	39	Chief Financial Officer, Treasurer and Secretary

- (1) Member of the Audit and Finance Committee
- (2) Member of the Compensation Committee
- (3) Member of the Scientific Review Committee

THE HONORABLE LOUIS W. SULLIVAN, M.D. has been our Chairman of the Board since March 1998 and has been a director of our company since its formation. Dr. Sullivan served as Secretary of Health and Human Services in the cabinet of President George Bush from 1989 to 1993. Since retiring from the Bush Administration, Dr. Sullivan has been President of the Morehouse School of Medicine in Atlanta, Georgia. He had previously served as President and Dean of the School from 1981 to 1985. Since 1993, Dr. Sullivan has served and continues to serve on the boards of several large U.S. corporations including 3M Corp., Bristol-Myers Squibb, Cigna, General Motors Corporation, Georgia Pacific Corp. and Household International Inc.

STEPHEN M. SIMES has served as our Vice Chairman, President and a director of our company since January 20, 1998 and Chief Executive Officer since March 1998. From October 1994 to January 1997, Mr. Simes was President, Chief Executive Officer and a Director of Unimed Pharmaceuticals, Inc., a company with a product focus on infectious diseases, AIDS, endocrinology and oncology. From 1989 to 1993, Mr. Simes was Chairman, President and Chief Executive Officer of Gynex Pharmaceuticals, Inc., a company which concentrated on the AIDS, endocrinology, urology and growth disorders markets. In 1993, Gynex was acquired by Bio-Technology General Corp., and from 1993 to 1994, Mr. Simes served as Senior Vice President and Director of Bio-Technology General Corp. Mr. Simes' career in the pharmaceutical industry started in 1974 with G.D. Searle & Co.

VICTOR MORGENSTERN was elected a director of our company in July 1999 in connection with the May 1999 private placement. Mr. Morgenstern has more than 31 years of investment experience and is a partner and chairman of Harris Associates L.P., a Chicago, Illinois-based investment management firm since 1976. He is a director of Nvest Companies, L.P. and a trustee of the Illinois Institute of Technology.

FRED HOLUBOW was elected a director of our company in July 1999 in connection with the May 1999 private placement. Mr. Holubow has been a Vice President of Pegasus Associates, a registered investment advisement firm since he founded Pegasus in 1982. He specializes in analyzing and investing in pharmaceutical and biotechnology companies. Mr. Holubow serves on the board of directors for ThermoRetec and has served on the Board of Directors for Bio-Technology General Corp. and Unimed Pharmaceuticals.

ROSS MANGANO was elected a director of our company in July 1999 in connection with the May 1999 private placement. Mr. Mangano has been the President and a director of Oliver Estate, Inc., a management company specializing in investments in public and private companies since 1971. He has been the Chairman of Cerprobe Corporation, and serves as a director for Blue Chip Casino, Inc.; Orchard Software Corporation; Tower Federal Savings Bank; and U.S. RealTel Inc.

EDWARD C. ROSENOW, III, M.D. has been a director of our company since November 1997. Dr. Rosenow was the Arthur M. and Gladys D. Gray Professor of Medicine at the Mayo Clinic from 1988 until his recent retirement. Beginning with his residency in 1960, Dr. Rosenow has worked at the Mayo Clinic in many professional capacities including as a Consultant in Internal Medicine (Thoracic Diseases) from 1966 to 1996, an Assistant Professor, Associate Professor and Professor of Medicine at the Mayo Clinic Medical School, President of the Mayo Clinic Staff in 1986, and Chair of the Division of Pulmonary and Critical Care Medicine from 1987 to 1994. Dr. Rosenow has also served as a consultant to NASA, space station FREEDOM at the Johnson Space Center in Houston, Texas from 1989 to 1990 and as the President of the American College of Chest Physicians from 1989 to 1990.

ANGELA HO has been a director of our company since June 1998. Ms. Ho was elected to our Board of Directors as a representative of our major investors in Hong Kong. Ms. Ho has been the Vice Chairman and Chief Managing Officer of Jet Asia Ltd., a Hong Kong-based aircraft and management company, since April 1996. From June 1996 to June 1998, Ms. Ho was the President of Ho Galleries Ltd., a New York art gallery. She specializes in investments in small and microcap companies.

PETER KJAER has been a director of our company since July 1999. Mr. Kjaer has been President and Chief Executive Officer of Jet Asia Ltd., a Hong Kong-based aircraft and management company, since April 1996 and a representative of our major investors in that province. From April 1989 to July 1996, Mr. Kjaer was the General Manager and a director of the Gallery of Contemporary Living Ltd., a Hong Kong-based art gallery.

AVI BEN-ABRAHAM, M.D. founded our company and has been a director of our company since inception. Dr. Ben-Abraham was the Chairman of the Board and Chief Executive Officer of our company from inception to March 1998. Dr. Ben-Abraham was a trustee of the Morehouse School of Medicine in Atlanta, Georgia until December 1998. From July 1995 to March 1998, Dr. Ben-Abraham served as Chairman, Chief Executive Officer and Director of Structured Biologicals, Inc.

PHILLIP B. DONENBERG has served as our Chief Financial Officer, Treasurer and Secretary since July 1998. Before joining our company, Mr. Donenberg was Controller of Unimed Pharmaceuticals, Inc. from January 1995 to June 1998. From May 1993 to December 1994, Mr. Donenberg was Controller of Molecular Geriatrics Corporation, a bio-tech corporation. Prior to this, Mr. Donenberg held similar positions with other pharmaceutical companies: Gynex Pharmaceuticals, Inc. and Xtramedics, Inc.

ITEM 6. EXECUTIVE COMPENSATION.

EXECUTIVE COMPENSATION

The following table provides information concerning cash and non-cash compensation paid to or earned by our Chief Executive Officer and the only other executive officer whose salary and bonus exceeded \$100,000 for the fiscal year ended December 31, 1998:

NAME AND PRINCIPAL POSITION	YEAR	SUMMARY COMPENSATION TABLE		LONG-TERM	ALL OTHER
		COMPENSATION		COMPENSATION	
		SALARY (\$)	BONUS (\$)	SECURITIES UNDERLYING OPTIONS (#)	COMPENSATION (\$)
Stephen M. Simes (1)..... PRESIDENT AND CHIEF EXECUTIVE OFFICER	1998	\$218,795	\$0	1,000,000	\$16,333 (2)
Claus G.J. Wagner-Bartak, D.Sc. (3)..... EXECUTIVE VICE PRESIDENT AND CHIEF SCIENTIFIC OFFICER	1998	\$105,000	\$0	500,000	\$65,000 (4)

- (1) Mr. Simes became our President in January 1998 and Chief Executive Officer in March 1998.
- (2) Represents an auto allowance (\$11,333) and a 401(k) matching contribution (\$5,000).
- (3) Effective February 28, 1999, Dr. Wagner-Bartak's employment with our company was terminated and his options to purchase 500,000 shares of common stock were cancelled.
- (4) Represents amounts paid to a corporation controlled by Dr. Wagner-Bartak (\$60,000) and a 401(k) matching contribution (\$5,000) to Dr. Wagner-Bartak.

OPTION GRANTS IN LAST FISCAL YEAR

The following table summarizes stock option grants during 1998 to each of our Named Executive Officers.

NAME	INDIVIDUAL GRANTS (1)			
	NUMBER OF SECURITIES UNDERLYING OPTIONS GRANTED (#)	PERCENT OF TOTAL OPTIONS GRANTED TO EMPLOYEES IN FISCAL YEAR	EXERCISE PRICE PER SHARE	EXPIRATION DATE
Stephen M. Simes.....	600,000 (2)	27.5%	\$0.29	04/20/03
	400,000 (3)	18.3%	\$0.28	10/06/03
Claus G.J. Wagner-Bartak, D.Sc.....	165,000 (4)	7.6%	\$0.29	04/20/03
	335,000 (4)	15.3%	\$0.28	10/06/03

(1) All of the options granted to the Named Executive Officers were initially granted under our 1997 Stock Option Plan. These options, however, were subsequently transferred to our 1998 Stock Option Plan. We refer you to the information under the heading "- Stock Option Plan" on page 41 for a discussion of the material terms of our 1998 Stock Option Plan.

(2) These options become exercisable as follows: (1) 100,000 shares are immediately exercisable, and (2) the remaining shares become exercisable in as nearly equal as possible quarterly installments over a three-year period, so long as the executive remains employed by us or one of our subsidiaries at that date. To the extent not already exercisable, these options become immediately exercisable in full upon certain changes in control of our company and remain exercisable for the remainder of their term. We refer you to the information under the heading "- Employment Agreements" on page 40 and "- Stock Option Plan" on page 41.

(3) These options become exercisable as follows: (1) 33,333 shares are immediately exercisable, and (2) the remaining shares become exercisable in as nearly equal as possible quarterly installments over a three-year period, so long as the executive remains employed by us or one of our subsidiaries at that date. To the extent not already exercisable, these options become immediately exercisable in full upon certain changes in control of our company and remain exercisable for the remainder of their term. We refer you to the information under the heading "- Employment Agreements" on page 40 and "- Stock Option Plan" on page 41.

(4) These options were exercisable annually over a three-year period, so long as the executive remains employed by us or one of our subsidiaries at that date. Dr. Wagner-Bartak's employment with our company was terminated effective as of February 28, 1999, at which time all of his options were cancelled.

AGGREGATE OPTION EXERCISES IN LAST FISCAL YEAR AND FISCAL YEAR-END OPTION VALUES

The following table summarizes the number and value of options exercised during 1998 and the value of options held by the Named Executive Officers at December 31, 1998.

NAME	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS AT DECEMBER 31, 1998		VALUE OF UNEXERCISED IN-THE-MONEY OPTIONS AT DECEMBER 31, 1998 (1)	
	EXERCISABLE	UNEXERCISABLE	EXERCISABLE	UNEXERCISABLE
Stephen M. Simes.....	325,000	675,000	\$0	\$0
Claus G.J. Wagner-Bartak, D.Sc. (2).....	0	500,000	\$0	\$0

(1) Value based on the difference between the fair market value of one share of our common stock at December 31, 1998 (\$0.18), the closing sale price on that date as reported by the Canadian Venture Exchange, and the exercise price of the options ranging from \$0.28 to \$1.07 per share. Options are in-the-money if the market price of the shares exceeds the option exercise price.

(2) Dr. Wagner-Bartak's employment with our company was terminated effective as of February 28, 1999, at which time all of his options were cancelled.

EMPLOYMENT AGREEMENTS

On January 21, 1998, we entered into a letter agreement with Stephen M. Simes pursuant to which Mr. Simes serves as our President, Chief Executive Officer and Executive Vice Chairman. The initial term of this agreement continues until December 31, 2000, after which time the term will be automatically extended for three additional years unless on or before October 1 of the preceding year, either party gives written notice to the other of the termination of the agreement. Mr. Simes' base salary is \$250,000 per year, and he is entitled to receive an annual performance bonus of up to 50% of his then base salary if certain performance criteria are met. Under the terms of this agreement, Mr. Simes was granted a five-year option to purchase 600,000 shares of common stock at an exercise price of \$0.29 per share. This option is immediately exercisable with respect to 100,000 shares and will become exercisable with respect to the remaining 500,000 shares in 12 equal quarterly installments over the initial three-year term of the agreement. Mr. Simes was also granted an option to purchase an additional 400,000 shares of common stock at an exercise price of \$0.28 per share. This option is immediately exercisable with respect to 33,333 shares and will become exercisable with respect to the remaining 366,666 shares in 12 equal quarterly installments over the initial three-year term of the agreement. In the event Mr. Simes is terminated without cause or upon a change in control or in the event he terminates his employment for good reason, all of his options will become immediately exercisable and will remain exercisable for a period of one year (for the remainder of their term in the event of a change in control), and he will be entitled to a minimum severance payment of 12 months base salary. Mr. Simes is also subject to assignment of inventions, confidentiality and non-competition provisions. The company and Mr. Simes amended this agreement in connection with our May 1999 private placement, to clarify that the anti-dilution rights held by Mr. Simes apply only in the context of a stock dividend, stock split or exchange or other similar change in capital and to waive any rights Mr. Simes may have under the agreement in the event the May 1999 private placement would have resulted in a change in control of our company, including the acceleration of the exercisability of his stock options. In connection with the amendment, we granted Mr. Simes an option to purchase 5% of the number of shares of common stock sold in the May 1999 private placement (excluding any shares issuable pursuant to the warrants).

On June 11, 1998, we entered into a letter agreement with Phillip B. Donenberg pursuant to which Mr. Donenberg serves our Chief Financial Officer. Mr. Donenberg's base salary is \$110,000 per year, and he is

entitled to receive an annual performance bonus of up to 30% of his then base salary if certain performance criteria are met. Under the terms of this agreement, Mr. Donenberg was granted a five-year option to purchase 340,000 shares of common stock at an exercise price of \$0.28 per share. This option is immediately exercisable with respect to 34,000 shares and will become exercisable with respect to the remaining 306,000 shares in 12 equal quarterly installments with the first installment vesting on October 1, 1998. In the event Mr. Donenberg is terminated without cause or upon a change in control or in the event he terminates his employment for good reason, all of his options will become immediately exercisable and will remain exercisable for a period of one year (for the remainder of their term in the event of a change in control), and he will be entitled to a minimum severance payment of 12 months base salary. Mr. Donenberg is also subject to assignment of inventions, confidentiality and non-competition provisions. The company and Mr. Donenberg amended this agreement in connection with our May 1999 private placement, among other things, to clarify that the anti-dilution rights held by Mr. Donenberg apply only in the context of a stock dividend, stock split or exchange or other similar change in capital and to waive any rights Mr. Donenberg may have under the agreement in the event the May 1999 private placement would have resulted in a change in control of our company, including the acceleration of the exercisability of his stock options. In connection with the amendment, we granted Mr. Donenberg an option to purchase 1.5% of the number of shares of common stock sold in the May 1999 private placement (excluding any shares issuable pursuant to the warrants).

#### STOCK OPTION PLAN

From time to time we grant options under our 1998 Stock Option Plan. The 1998 Plan was approved by our Board of Directors on December 8, 1998 and approved by shareholders on July 13, 1999. The 1998 Plan provides for the grant to employees, officers, directors, consultants and independent contractors of our company and our subsidiaries of options to purchase shares of common stock that qualify as "incentive stock options" within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended, as well as non-statutory options that do not qualify as incentive stock options. This plan is administered by the Compensation Committee of our Board of Directors, which determines the persons who are to receive awards, as well as the type, terms and number of shares subject to each award.

We have reserved an aggregate of 5,000,000 shares of common stock for awards under the 1998 Plan. As of October 1, 1999, options to purchase an aggregate of 4,283,125 shares of common stock were outstanding under the 1998 Plan, of which 2,026,865 were fully vested, and a total of 716,875 shares of common stock remained available for grant. As of October 1, 1999, the outstanding options under the plan were held by an aggregate of nine individuals and were exercisable at prices ranging from \$0.23 to \$1.07 per share of common stock.

Incentive stock options granted under the plans may not have an exercise price less than the fair market value of the common stock on the date of the grant (or, if granted to a person holding more than 10% of our voting stock, at less than 110% of fair market value). Non-statutory stock options granted under the plans may not have an exercise price less than 85% of fair market value on the date of grant. Aside from the maximum number of shares of common stock reserved under the plans, there is no minimum or maximum number of shares that may be subject to options under the plans. However, the aggregate fair market value of the stock subject to incentive stock options granted to any optionee that are exercisable for the first time by an optionee during any calendar year may not exceed \$100,000. Options generally expire when the optionee's employment or other service is terminated with us. Options generally may not be transferred, other than by will or the laws of descent and distribution, and during the lifetime of an optionee, may be exercised only by the optionee. The term of each option, which is fixed by our Board of Directors at the time of grant, may not exceed 5 years from the date the option is granted if our common stock is then listed on the Canadian Venture Exchange and we have not been exempted from the Canadian Venture Exchange requirements in this regard (except that an incentive stock option may be exercisable only for 10 years and an incentive stock option granted to a person holding

more than 10% of our voting stock may be exercisable only for five years regardless of the availability of such exemption).

The 1998 Plan contains provisions under which options would become fully exercisable following certain changes in control of our company, such as (1) the sale, lease, exchange or other transfer of all or substantially all of the assets of our company to a corporation that is not controlled by us, (2) the approval by our shareholders of any plan or proposal for the liquidation or dissolution of our company, (3) certain merger or business combination transactions, (4) more than 50% of our outstanding voting shares are acquired by any person or group of persons who did not own any shares of common stock on the effective date of the plan, or (5) certain changes in the composition of our Board of Directors.

Payment of an option exercise price may be made in cash, or at the Compensation Committee's discretion, in whole or in part by tender of a broker exercise notice, a promissory note or previously acquired shares of our common stock having an aggregate fair market value on the date of exercise equal to the payment required.

#### BOARD COMPOSITION AND STRUCTURE

In connection with our May 1999 private placement, we entered into a Shareholders Agreement with the investors, which included Stephen Simes, Victor Morgenstern, including an affiliated trust and a partnership, Fred Holubow, JO & Co. and several of our major investors located in Hong Kong, including Hans Michael Jebson, Marcus Jebson and King Cho Fung. This agreement contains, among other things, a voting agreement with respect to the election of directors. Under the Shareholders Agreement, our Board of Directors will consist of not less than three nor more than 12 directors. So long as Avi Ben-Abraham, M.D. holds at least 10% of our outstanding capital stock, he will be entitled to be nominated as a director and, at the next two general elections for directors, some of our major investors located in Hong Kong, including Hans Michael Jebson, Marcus Jebson and King Cho Fung, must, subject to certain exceptions, vote all of the shares of capital stock held by them to elect Dr. Ben-Abraham as a director. The holders of a majority of the shares of capital stock held by the Starbow Investors (the lead investors in the May 1999 private placement) will be entitled to nominate three members of our Board of Directors, and all of the parties to the Shareholders Agreement must vote their shares of our capital stock to elect the Starbow Investors' nominees to our Board of Directors. In addition, the holders of a majority of the shares of capital stock held by our major investors located in Hong Kong, including Hans Michael Jebson, Marcus Jebson and King Cho Fung, will be entitled to nominate three members of our Board of Directors and all parties to the Shareholders Agreement must vote their shares of our capital stock to elect their nominees to the Board of Directors. The right to nominate three directors held by the Starbow Investors and our major investors located in Hong Kong, including Hans Michael Jebson, Marcus Jebson and King Cho Fung, will terminate immediately prior to the later of the third general election of directors subsequent to the date of the closing of the May 1999 private placement or March 31, 2001.

#### BOARD COMMITTEES

Our Board has created a Compensation Committee, an Audit and Finance Committee and a Scientific Review Committee. The Compensation Committee reviews general programs of compensation and benefits for all our employees and makes recommendations to the Board concerning such matters as compensation to be paid to our officers and directors. The Compensation Committee consists of Dr. Sullivan (Chairman), Mr. Morgenstern and Ms. Ho. The Audit and Finance Committee provides assistance to the Board in satisfying our fiduciary responsibilities relating to our accounting, auditing, operating and reporting practices, and reviews our annual financial statements, the selection and work of our independent auditors and the adequacy of internal

controls for compliance with corporate policies and directives. The Audit and Finance Committee consists of Mr. Kjaer (Chairman), Dr. Sullivan and Mr. Mangano. The Scientific Review Committee helps to evaluate our potential licenses or new products. The Scientific Review Committee consists of Dr. Rosenow (Chairman), Dr. Sullivan and Mr. Holubow.

#### DIRECTOR COMPENSATION

We do not pay fees to the members of the Board of Directors. We do, however, periodically compensate our directors through the granting of stock options. On November 7, 1997 and October 7, 1998, respectively, our board of directors granted Dr. Rosenow two options to purchase an aggregate of 100,000 shares of our common stock at an exercise price of \$1.04 and \$.28, respectively. Such options vested immediately with respect to 50,000 shares and vested on October 7, 1999 for the remaining 50,000 shares.

On October 7, 1998, Ms. Angelo Ho was granted an option to purchase 100,000 shares of our common stock at an exercise price of \$.28. Such option vested on October 7, 1999.

#### ITEM 7. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS.

##### DIRECTOR RELATIONSHIPS

Angela Ho, a director of our company, owns approximately 3.0% of our outstanding voting securities and was elected to our Board of Directors as a representative of our major investors located in Hong Kong, including Hans Michael Jebsen, Marcus Jebsen and King Cho Fung. Ms. Ho has not entered into any voting agreements with these investors nor does she otherwise have any control over the voting of shares held by these investors.

Our operations were located at the Morehouse School of Medicine from November 1996 until June 1997, when our laboratory facilities were completed and we paid rent during such period to the Morehouse School of Medicine. Louis W. Sullivan, M.D., our Chairman, is the President, and Avi Ben-Abraham, a director and a principal shareholder of our company, was a trustee of Morehouse School of Medicine during this time. We believe that the lease payments reflected payments that would have been made by an arm's length lessee.

Avi Ben-Abraham, M.D., a director and a founder of our company and our former Chief Executive Officer and Chairman of the Board, entered into an agreement with us in May 1998 pursuant to which, among other things, he agreed to convert shares of our former class A stock held by him into shares of common stock at \$0.25 per share and to transfer shares of common stock held by him to certain third parties. In addition, Dr. Ben-Abraham agreed, subject to certain exceptions, not to sell any shares of common stock or any other securities of our company for a period of 15 months. He also agreed to transfer certain shares of class A and class C stock held by him to us. In addition, under the agreement, we agreed to indemnify Dr. Ben-Abraham for certain actions, and he agreed to indemnify us upon the occurrence of certain events.

Claus Wagner-Bartak, a current shareholder, was directly employed by our company on a full time basis from June 1, 1998 until February 28, 1999 when his employment was terminated. Dr. Bartak was a member of our Board of Directors until June 30, 1999. Prior to June 1998, Dr. Bartak's services as a member of our management were provided to us under an agreement with a consulting company controlled by Dr. Bartak. Management fees of \$94,200 and \$185,000 were paid to the company controlled by Dr. Bartak in 1998 and 1997, respectively. Also, financing fees of \$44,019 were paid to the company controlled by Dr. Bartak for financing services provided to us.

At December 31, 1998, \$133,901 was included in accounts payable composed of \$130,000 accrued for bonuses payable to Stephen M. Simes and Phillip Donenberg, both members of our management, for

contributions to our company in 1998, and \$3,901 was included for outstanding expenses due to Stephen M. Simes and Claus Wagner Bartak, both members of our management at December 31, 1998. At December 31, 1997, \$156,412 was included in accounts payable which reflected accrued management fees payable to a company controlled by Dr. Bartak for services provided to us in 1997.

Messrs. Morgenstern, Holubow and Mangano were elected to our Board of Directors in July 1999 as representatives of the new investors (Starbow investors) in the May 1999 private placement. In May 1999, the Starbow investors entered into a shareholders agreement, which contains a voting agreement, with respect to the election of these directors. We refer you to the information on page 42 under the heading "Item 6. Executive Compensation--Board Composition and Structure" for a description of this voting agreement. This right terminates immediately prior to the later of May 6, 2002, three years from the closing of the May 1999 private placement or March 31, 2001.

Mr. Kjaer was elected to our Board of Directors in 1999 as a representative of our major investors located in Hong Kong, including Hans Michael Jebsen, Marcus Jebsen and King Cho Fung. Mr. Kjaer has not entered into any voting agreements with these investors nor does he otherwise have any control over the voting of shares held by these investors.

#### EMPLOYMENT AGREEMENTS

For a discussion of the employment agreements we have entered into with our executive officers, we refer you to "Item 6. Executive Compensation--Employment Agreements."

#### ITEM 8. DESCRIPTION OF SECURITIES.

##### AUTHORIZED SHARES

We are authorized to issue an unlimited number of shares of common stock, no par value per share, and an unlimited number of shares of preference stock, no par value per share. The following is a summary of the material terms and provisions of our capital stock. Because it is a summary, it does not include all of the information that is included in our Articles of Continuance. The text of our Articles of Continuance, which is attached as an exhibit to this registration statement, is incorporated into this section by reference.

##### COMMON STOCK

We are authorized to issue an unlimited number of shares of common stock, of which 52,642,686 shares were issued and outstanding as of October 1, 1999. Each share of our common stock entitles its holder to one vote per share. Holders of our common stock are entitled to receive dividends as and when declared by our Board of Directors from time to time out of funds properly applicable to the payment of dividends. Subject to the liquidation rights of any outstanding preferred stock, the holders of our common stock are entitled to share pro rata in the distribution of the remaining assets of our company upon a liquidation, dissolution or winding up of our company. The holders of our common stock have no cumulative voting, preemptive, subscription, redemption or sinking fund rights. The holders of shares of our common stock purchased in connection with our May 1999 private placement offering and issuable upon exercise of warrants issued in connection with this private placement are entitled to preemptive rights under a shareholders' agreement. The investors, which included Stephen Simes, Victor Morgenstern, including an affiliated trust and a partnership, Fred Holubow, JO & Co. and several of our major investors located in Hong Kong, including Hans Michael Jebsen, Marcus Jebsen and King Cho Fung, were granted a right of first offer for a two year period to which, subject to certain exceptions, we must give the investors written notice prior to selling any securities. The preemptive rights expire on May 6, 2001.

CLASS C SPECIAL STOCK

We are authorized to issue an unlimited number of shares of class C special stock, of which 4,807,865 shares were issued and outstanding as of October 1, 1999. Each share of class C special stock entitles its holder

to one vote per share. Each share of our class C special stock is exchangeable, at the option of the holder, for one share of common stock, at an exchange price of \$.25 per share, subject to adjustment upon certain capitalization events. Holders of our class C special stock are not entitled to receive dividends. Holders of our class C special stock are not entitled to participate in the distribution of our assets upon any liquidation, dissolution or winding-up of our company. The holders of our class C special stock have no cumulative voting, preemptive, subscription, redemption or sinking fund rights.

#### PREFERRED STOCK

We are authorized to issue an unlimited number of shares of preferred stock, none of which are issued and outstanding. Our Board of Directors is authorized to issue one or more series of preferred stock with such rights, privileges, restrictions and conditions as our Board may determine. The preferred stock, if issued, may be entitled to rank senior to our common stock with respect to the payment of dividends and the distributions of assets in the event of a liquidation, dissolution or winding-up of our company.

#### OPTIONS AND WARRANTS

As of October 1, 1999, we had outstanding options to purchase an aggregate of 4,283,125 shares of common stock at a weighted average exercise price of \$0.30 per share. All outstanding options provide for antidilution adjustments in the event of certain mergers, consolidations, reorganizations, recapitalizations, stock dividends, stock splits or other similar changes in our corporate structure and shares of our capital stock. We typically grant options with a five-year term. We have outstanding warrants to purchase an aggregate of 11,562,500 shares of common stock at an exercise price of \$0.30 per share with a five-year term. The warrants provide for antidilution adjustments in the event of certain mergers, consolidations, reorganizations, recapitalizations, stock dividends, stock splits or other changes in our corporate structure of our company and, subject to certain exceptions, the issuance by our company of any securities for a purchase price of less than \$0.20 per share.

#### REGISTRATION RIGHTS

The holders of the common stock and warrants purchased in our May 1999 private placement are entitled to certain registration rights under the Securities Act. If at any time after we become listed on Nasdaq, the holders of a specified amount of these registrable shares request that we file a registration statement covering the shares, we will use commercially reasonable efforts to cause these shares to be registered. We are not required to file more than two registration statements under these demand rights, or more than one registration statement in any twelve-month period. In addition, the holders of these registrable shares are entitled to have their shares included in a registration statement under the Securities Act in connection with the public offering of our securities. In any underwritten public offering, the registration rights are limited to the extent that the managing underwriter has the right to (1) limit the number of registrable shares to be included in the registration statement; (2) prohibit the sale of any of our securities other than those registered and included in the underwritten offering for a period of 180 days; and (3) require holders of registrable shares not to sell or otherwise dispose of any securities of our company (other than securities included in the registration) without the prior written consent of the underwriters for a period of up to 180 days from the effective date of such registration. These registration rights will terminate as to any registrable shares when such registrable shares are effectively registered and sold by the holder thereof or when such registrable shares are sold pursuant to Rule 144(k) or are sold pursuant to Rule 144 under the Securities Act.

TRANSFER AGENTS AND REGISTRARS

The transfer agents and registrars for our common stock in Canada is Montreal Trust Company of Canada and in the United States is American Securities Transfer.

PART II

ITEM 1. MARKET PRICE OF AND DIVIDENDS ON THE REGISTRANT'S COMMON EQUITY AND OTHER SHAREHOLDER MATTERS.

MARKET INFORMATION

Our common stock has been traded in the United States on the National Quotation Bureau, commonly referred to as the "Pink Sheets," under the symbol "BTPH" since September 10, 1999 and on the Canadian Venture Exchange, formerly known as the Alberta Stock Exchange under the symbol "BAI" since December 20, 1996.

The following table sets forth, in U.S. dollars and in dollars and cents (in lieu of fractions), the high and low sales prices for each of the calendar quarters indicated, as reported by the Canadian Venture Exchange. The prices in the table may not represent actual transactions.

CANADIAN VENTURE EXCHANGE

1997 ----	HIGH ----	LOW ---
First Quarter.....	\$2.41	\$1.11
Second Quarter.....	\$1.38	\$0.95
Third Quarter.....	\$1.31	\$0.98
Fourth Quarter.....	\$1.28	\$0.94
1998 ----		
First Quarter.....	\$0.98	\$0.55
Second Quarter.....	\$0.84	\$0.26
Third Quarter.....	\$0.65	\$0.33
Fourth Quarter.....	\$0.48	\$0.10
1999 ----		
First Quarter.....	\$0.24	\$0.15
Second Quarter.....	\$0.50	\$0.21
Third Quarter.....	\$0.37	\$0.23
Fourth Quarter.....	\$0.48	\$0.45

The following table sets forth, in U.S. dollars and in dollars and cents (in lieu of fractions), the high and low sales prices for each of the calendar quarters indicated, as reported by the National Quotation Bureau ("Pink Sheets"). The prices in the table may not represent actual transactions.

NATIONAL QUOTATION BUREAU ("PINK SHEETS")

1999

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Third Quarter.....	\$ .51	\$ .27
Fourth Quarter.....	\$1.125	\$ .175

As of October 1, 1999, 52,642,686 shares of our common stock were issued and outstanding held by approximately 1,600 holders of record and 4,807,865 shares of our class C special stock were issued and outstanding held by approximately 11 holders of record.

As of October 1, 1999, we had outstanding options and warrants to purchase an aggregate of 15,845,625 shares of our common stock.

As of October 1, 1999, holders of approximately 40,929,800 shares of our common stock, have entered into lock-up arrangements under which they have agreed that they will not, offer, sell or otherwise dispose of, any shares of our common stock, owned by them until September 6, 2000. Approximately 14,334,000 shares of our common stock are eligible to be sold in compliance with Rule 144(k) without regard to the volume and manner of sale limitations in Rule 144 and approximately 15,103,686 shares of our common stock are eligible to be sold in compliance with the limitations of Rule 144 under the Securities Act, although certain holders have been granted registration rights which, if exercised, would cause their shares to be registered and eligible for sale. We refer to the information under the heading "Item 8. Description of Securities--Registration Rights."

In general, under Rule 144 as currently in effect, a person ( or persons whose shares are aggregated), including an affiliate, who has beneficially owned shares for at least one year, within any three-month period commencing 90 days after the date of this registration statement, may sell a number of shares that does not exceed the greater of (1) one percent of the number of shares of common stock then outstanding (approximately 526,427 shares) or (2) the average weekly trading volume of the common stock during the four calendar weeks preceding such sale. Sales under Rule 144 are generally subject to certain manner of sale provisions and notice requirements and to the availability of our current public information. Under Rule 144(k), a person who is not deemed to have been an affiliate of BioSante at any time during the 90 days preceding a sale, and who has beneficially owned the shares proposed to be sold for at least two years, is entitled to sell such shares without having to comply with the manner of sale, public information, volume limitation or notice provisions of Rule 144. Under Rule 701 under the Securities Act, persons who purchase shares upon exercise of options granted prior to the effective date of this registration statement in reliance on Rule 144, without having to comply with the holding period requirements of Rule 144 and, in the case of non-affiliates, without having to comply with the public information, volume limitation or notice provisions of Rule 144.

DIVIDEND POLICY

To date, we have neither declared nor paid any cash dividends on our common stock. We currently intend to retain any future earnings, if any, to fund the development and growth of our business and, therefore, do not anticipate paying any cash dividends in the foreseeable future.

ITEM 2. LEGAL PROCEEDINGS.

We are not a party to any material legal proceedings.

ITEM 3. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS

None.

ITEM 4. RECENT SALES OF UNREGISTERED SECURITIES.

Since our formation on August 29, 1996, we have issued the following securities in transactions not registered under the Securities Act of 1933 (all information is presented in U.S. dollars and reflects the reverse split which occurred as part of the Amalgamation):

1. Prior to the Amalgamation on December 6, 1996, we issued 20,000,000 shares of our former class A stock (17,000,000 of such shares to Dr. Ben-Abraham) for \$0.0001 per share for an aggregate payment of \$2,000 and 3,000,000 shares to three accredited investors for \$0.0001 per share for an aggregate payment of \$300, 4,150,000 shares of class C stock (1,050,000 of such shares to Dr. Ben-Abraham to be held by him in trust for the benefit of others; 500,000 of such shares to Wagner-Bartak Holdings Inc.; 1,000,000 of such shares to Dr. Louis Sullivan; 1,000,000 of such shares to Angela Ho; and the remainder to an accredited investor) for \$0.0001 per share for an aggregate

payment of \$415 and 4,100,000 shares of our common stock to eight accredited investors for \$1.00 per share for an aggregate payment of \$4,100,000.

2. In December 1996, we issued: (1) an aggregate of 1,429 shares of our common stock pursuant to the exercise of warrants issued prior to the Amalgamation, at an exercise price of \$1.79 per share, for an aggregate payment of \$2,557.91; and (2) an aggregate of 87,143 shares of our common stock pursuant to the exercise of warrants issued prior to the Amalgamation, at an exercise price of \$1.28 per share, for an aggregate payment of \$111,543.04.
3. In connection with the Amalgamation, we issued 7,434,322 shares of our common stock to the shareholders of SBI in exchange for their common shares of SBI at a ratio of 1 share of common stock for every 3.5 common shares of SBI.
4. In January 1997, we issued: (1) an aggregate of 24,000 shares of common stock pursuant to the exercise of warrants issued prior to the Amalgamation, at an exercise price of \$1.53 per share, for an aggregate payment of \$36,720; (2) 377,135 shares of common stock (94,285 of such shares to Wagner-Bartak Holdings Inc. and 282,850 of such shares to an unaffiliated accredited investor) pursuant to the conversion of an aggregate of 377,135 class C stock, at a conversion price of \$0.25 per share, for an aggregate payment of \$94,283.75 to us; and (3) an aggregate of 28,571 shares of common stock pursuant to the exercise of warrants issued prior to the Amalgamation, at an exercise price of \$1.28 per share, for an aggregate payment of \$36,570.88.
5. In July 1997, we issued an aggregate of 20,000 shares of common stock pursuant to the exercise of warrants issued prior to the Amalgamation, at an exercise price of \$1.28 per share, for an aggregate payment of \$25,500.
6. In December 1997, we issued an aggregate of 206,386 shares of common stock (106,386 of such shares to Wagner-Bartak Holdings Inc. and 100,000 of such shares to Marblegate Holdings Limited) pursuant to the conversion of an aggregate of 206,386 class C stock at a conversion price of \$0.25 per share, for an aggregate payment of \$51,596.50.
7. In March 1998, we issued 30,000 shares of common stock to one accredited investor pursuant to the conversion of class C stock, at a conversion price of \$0.25 per share for an aggregate payment of \$7,500.
8. In May 1998, we issued 15,000,000 shares of common stock to Dr. Ben-Abraham pursuant to his conversion of class A stock at a conversion price of \$0.25 per share for a payment of \$3,750,000. In addition, Dr. Ben-Abraham returned 1,468,614 class A stock and 250,000 class C stock to our treasury for no consideration.
9. In June 1998, we issued an aggregate of 2,000,000 shares of common stock pursuant to the conversion of class A stock to two accredited investors, at a conversion price of \$0.25 per share for an aggregate payment of \$500,000.
10. In February 1999, we issued 10,000 shares of common stock to an accredited investor pursuant to the conversion of class C stock, at a conversion price of \$0.25 per share, which was satisfied by the settlement of claims.

11. In May 1999, we issued an aggregate of 23,125,000 shares of common stock and warrants to purchase 11,562,500 shares of common stock at an exercise price of \$0.30 per share to 31 accredited investors pursuant to a private placement of our stock for an aggregate payment of \$4,372,500. Stephen Simes purchased 250,000 shares of common stock, Victor Morgenstern, including an affiliated Trust and a Partnership, purchased an aggregate of 2,500,000 shares of common stock, Fred Holubow purchased 250,000 shares of common stock and JO & Co. purchased 7,500,000 shares of common stock to which Ross Mangano has sole voting power.
12. In August 1999, an outstanding liability of \$25,000 was converted into 70,000 shares of common stock to an accredited investor at approximately \$.36 per share for executive placement services.

No underwriting commissions or discounts were paid with respect to the sales of the unregistered securities described above. All of the above sales were made to accredited investors and we have disclosed any related party sales. In addition, all of the above sales were made to accredited investors in reliance on Rule 506 of Regulation D and Section 4(2) under the Securities Act and to persons outside the United States within the meaning of Regulation S of the Securities Act. With regard to the reliance by us upon the exemptions set forth in the previous sentence, certain inquiries were made by us to establish that such sales qualified for such exemptions from the registration requirements. In particular, we confirmed that (1) all offers of sales and sales were made by personal contact from our officers or directors or other persons closely associated with us; (2) each investor made representations that he or she was sophisticated in relation to this investment (and we have no reason to believe such representations were incorrect); (3) each purchaser gave assurance of investment intent and the certificates for the shares bear a legend accordingly; and (4) offers and sales within any offering were made to a limited number of persons.

#### ITEM 5. INDEMNIFICATION OF OFFICERS AND DIRECTORS.

##### LIMITATION ON LIABILITY OF DIRECTORS AND INDEMNIFICATION

Our Articles of Continuance limit the liability of our directors and officers to the fullest extent permitted by the Wyoming Business Corporation Act. Specifically, our directors will not be personally liable for monetary damages for breach of fiduciary duty as our directors, except liability for (1) the amount of financial benefit received by our director to which our director is not entitled, (2) an intentional infliction of harm to us or our shareholders, (3) a violation of Section 17-16-833 of the Wyoming Business Corporation Act, and (4) an intentional violation of criminal law. Liability under federal securities law is not limited by our Articles of Continuance.

We also maintain an insurance policy for our directors and executive officers pursuant to which our directors and executive officers are insured against liability for certain actions in their capacity as our directors and executive officers.

The Wyoming Business Corporation Act requires that we indemnify any director, made or threatened to be made a party to a proceeding, by reason of the former or present official capacity of the person, against reasonable expenses incurred in connection with the proceeding if certain statutory standards are met. "Proceeding" means a threatened, pending or completed civil, criminal, administrative, arbitration or investigative proceeding, including a derivative action by us. Reference is made to the detailed terms of the Wyoming indemnification statute, Section 17-16-852 of the Wyoming Business Corporation Act, for a complete statement of such indemnification rights. Section 15 of our Articles of Continuance also require us to provide indemnification beyond the mandatory indemnification in Section 17-16-852 for our officers and directors.

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

PART F/S

FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

INDEX TO FINANCIAL STATEMENTS

Description	Page
Independent Auditors' Report.....	F-1
Balance Sheets as of December 31, 1998 and 1997.....	F-2
Statements of Operations for the year ended December 31, 1998 and 1997.....	F-3
Statements of Stockholders' Equity as of December 31, 1998 and 1997.....	F-4
Statements of Cash Flows for the year ended December 31, 1998 and 1997 and the cumulative period from August 29, 1996 to December 31, 1998.....	F-5
Notes to the Financial Statements for the year ended December 31, 1998 and 1997 and the cumulative period from August 29, 1996 to December 31, 1998.....	F-6 - F-18
Unaudited Balance Sheet as of September 30, 1999 and Audited Balance Sheet as of December 31, 1998.....	F-19
Unaudited Statements of Operations for the nine and three months ended September 30, 1999 and 1998 and the cumulative period from August 29, 1996 to September 30, 1999.....	F-20
Unaudited Statement of Stockholders' Equity for the cumulative period from August 29, 1996 to September 30, 1999.....	F-21
Unaudited Statements of Cash Flows for the nine months ended September 30, 1999 and 1998 and the cumulative period from August 29, 1996 to September 30, 1999.....	F-22
Notes to Financial Statements for the nine months ended September 30, 1999.....	F-23 - F-27

PART III

ITEM 1. EXHIBITS.

Reference is made to the Exhibit Index included in this Registration Statement at pages 57 through 58.

Listed below are all exhibits filed as part of this Registration Statement:

- Exhibit 2.1\*\* Arrangement Agreement, dated October 23, 1996, between Structured Biologicals Inc. and BioSante Pharmaceuticals, Inc.
- Exhibit 3.1\*\* Articles of Continuance of BioSante Pharmaceuticals, Inc.
- Exhibit 3.2\*\* Bylaws of BioSante Pharmaceuticals, Inc.
- Exhibit 4.1\*\* Form of Warrant issued in connection with the May 1999 Private Placement
- Exhibit 10.1\* License Agreement, dated June 18, 1997, between BioSante Pharmaceuticals, Inc. and the Regents of the University of California
- Exhibit 10.2\* Amendment to License Agreement, dated October 26, 1999, between BioSante Pharmaceuticals, Inc. and the Regents of the University of California
- Exhibit 10.3\*\* 1998 Stock Option Plan
- Exhibit 10.4\*\* Stock Option Agreement, dated July 6, 1995, between BioSante Pharmaceuticals, Inc. and Avi Ben-Abraham, M.D.
- Exhibit 10.5\*\* Stock Option Agreement, dated December 7, 1997, between BioSante Pharmaceuticals, Inc. and Edward C. Rosenow, III, M.D.
- Exhibit 10.6\*\* Stock Option Agreement, dated December 8, 1998, between BioSante Pharmaceuticals, Inc. and Stephen M. Simes
- Exhibit 10.7\*\* Stock Option Agreement, dated December 8, 1998, between BioSante Pharmaceuticals, Inc. and Stephen M. Simes
- Exhibit 10.8\*\* Stock Option Agreement, dated March 30, 1999, between BioSante Pharmaceuticals, Inc. and Stephen M. Simes
- Exhibit 10.9\*\* Escrow Agreement, dated December 5, 1996, among BioSante Pharmaceuticals, Inc., Montreal Trust Company of Canada, as Escrow Agent, and certain shareholders of BioSante Pharmaceuticals, Inc.
- Exhibit 10.10\*\* Voting Rights Limitation Agreement, dated November 28, 1996, by Avi Ben-Abraham, M.D. to the Canadian Venture Exchange

- Exhibit 10.11\*\* Voting Agreements, dated May 6, 1999, between BioSante Pharmaceuticals, Inc., Avi Ben-Abraham, M.D. and certain shareholders of BioSante Pharmaceuticals, Inc.
- Exhibit 10.12\*\* Shareholders' Agreement, dated May 6, 1999, between BioSante Pharmaceuticals, Inc., Avi Ben-Abraham, M.D. and certain shareholders of BioSante Pharmaceuticals, Inc.
- Exhibit 10.13\*\* Registration Rights Agreement, dated May 6, 1999, between BioSante Pharmaceuticals, Inc. and certain shareholders of BioSante Pharmaceuticals, Inc.
- Exhibit 10.14\*\* Securities Purchase Agreement, dated May 6, 1999, between BioSante Pharmaceuticals, Inc. and certain shareholders of BioSante Pharmaceuticals, Inc.
- Exhibit 10.15\*\* Lease, dated September 15, 1997, between BioSante Pharmaceuticals, Inc. and Highlands Park Associates
- Exhibit 10.16\*\* Employment Agreement, dated January 21, 1998, between BioSante Pharmaceuticals, Inc. and Stephen M. Simes, as amended
- Exhibit 10.17\*\* Employment Agreement, dated June 11, 1998, between BioSante Pharmaceuticals, Inc. and Phillip B. Donenberg, as amended
- Exhibit 24.1\*\* Power of Attorney (included on signature page of registration statement)
- Exhibit 27.1\*\* Financial Data Schedule

-----  
\* Confidential treatment has been requested with respect to designated portions of this document. Such portions have been omitted and filed separately with the Secretary of the Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

\*\* Previously Filed.

SIGNATURES

In accordance with Section 12 of the Securities Exchange Act of 1934, the Registrant caused this Amendment No. 2 to Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: March 23, 2000      BIOSANTE PHARMACEUTICALS, INC.

By /s/ Stephen M. Simes  
-----  
Stephen M. Simes  
Vice Chairman, President and Chief Executive  
Officer

By /s/ Phillip B. Donenberg  
-----  
Phillip B. Donenberg  
Chief Financial Officer, Treasurer and Secretary

Pursuant to the requirements of the Securities Exchange Act of 1934, this Amendment No. 2 to Registration Statement has been signed by the following persons in the capacities indicated, on March 23, 2000.

NAME AND SIGNATURE	TITLE
/s/ Stephen M. Simes ----- Stephen M. Simes	Vice Chairman, President and Chief Executive Officer (Principal Executive Officer)
/s/ Phillip B. Donenberg ----- Phillip B. Donenberg	Chief Financial Officer, Treasurer and Secretary (Principal Financial Officer)

* ----- Louis W. Sullivan, M.D.	Chairman of the Board
* ----- Avi Ben-Abraham, M.D.	Director
* ----- Victor Morgenstern	Director
* ----- Edward C. Rosenow, III, M.D.	Director
* ----- Fred Holubow	Director
* ----- Ross Mangano	Director
* ----- Angela Ho	Director
* ----- Peter Kjaer	
/s/ Stephen M. Simes ----- Stephen M. Simes	*Attorney-in-fact
/s/ Phillip B. Donenberg ----- Phillip B. Donenberg	*Attorney-in-fact

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

-----  
EXHIBIT INDEX  
TO  
FORM 10-SB  
-----

BIOSANTE PHARMACEUTICALS, INC.  
-----

EXHIBIT NO. -----	EXHIBIT -----	METHOD OF FILING -----
2.1	Arrangement Agreement, dated October 23, 1996, between Structured Biologicals Inc. and BioSante Pharmaceuticals, Inc.....	(1)
3.1	Articles of Continuance of BioSante Pharmaceuticals, Inc., as amended.....	(1)
3.2	Bylaws of BioSante Pharmaceuticals, Inc.....	(1)
4.1	Form of Warrant issued in connection with May 1999 Private Placement.....	(1)
10.1*	License Agreement, dated June 18, 1997, between BioSante Pharmaceuticals, Inc. and The Regents of the University of California.....	Filed herewith electronically
10.2*	Amendment to License Agreement, dated October 26, 1999, between BioSante Pharmaceuticals, Inc. and the Regents of the University of California.....	Filed herewith electronically
10.3	1998 Stock Option Plan.....	(1)
10.4	Stock Option Agreement, dated July 6, 1995, between BioSante Pharmaceuticals, Inc. and Avi Ben-Abraham, M.D.....	(1)
10.5	Stock Option Agreement, dated December 7, 1997, between BioSante Pharmaceuticals, Inc. and Edward C. Rosenow, III, M.D.....	(1)

10.6	Stock Option Agreement, dated December 8, 1998, between BioSante Pharmaceuticals, Inc. and Stephen M. Simes.....	(1)
10.7	Stock Option Agreement, dated December 8, 1998, between BioSante Pharmaceuticals, Inc. and Stephen M. Simes.....	(1)
10.8	Stock Option Agreement, dated March 30, 1999, between BioSante Pharmaceuticals, Inc. and Stephen M. Simes.....	(1)
10.9	Escrow Agreement, dated December 5, 1996, among BioSante Pharmaceuticals, Inc., Montreal Trust Company of Canada, as Escrow Agent, and certain shareholders of BioSante Pharmaceuticals, Inc....	(1)
10.10	Voting Rights Limitation Agreement, dated November 28, 1996, by Avi Ben-Abraham, M.D. to the Canadian Venture Exchange.....	(1)
10.11	Voting Agreements, dated May 6, 1999, between BioSante Pharmaceuticals, Inc., Avi Ben-Abraham, M.D. and certain shareholders of BioSante Pharmaceuticals, Inc.....	(1)
10.12	Shareholders' Agreement, dated May 6, 1999, between BioSante Pharmaceuticals, Inc., Avi Ben-Abraham, M.D. and certain shareholders of BioSante Pharmaceuticals, Inc.....	(1)
10.13	Registration Rights Agreement, dated May 6, 1999, between BioSante Pharmaceuticals, Inc. and certain shareholders of BioSante Pharmaceuticals, Inc.....	(1)
10.14	Securities Purchase Agreement, dated May 6, 1999, between BioSante Pharmaceuticals, Inc. and certain shareholders of BioSante Pharmaceuticals, Inc.....	(1)
10.15	Lease, dated September 15, 1997, between BioSante Pharmaceuticals, Inc. and Highlands Park Associates.....	(1)

10.16	Employment Agreement, dated January 21, 1998, between BioSante Pharmaceuticals, Inc. and Stephen M. Simes, as amended.....	(1)
10.17	Employment Agreement, dated June 11, 1998, between BioSante Pharmaceuticals, Inc. and Phillip B. Donenberg, as amended.....	(1)
24.1	Power of Attorney (included on signature page of registration statement).....	(1)
27.1	Financial Data Schedule.....	(1)

-----  
\* Confidential treatment has been requested with respect to designated portions of this document. Such portions have been omitted and filed separately with the Secretary of the Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

(1) Previously Filed.

INDEPENDENT AUDITORS' REPORT

Board of Directors  
Ben-Abraham Technologies Inc.

We have audited the accompanying balance sheets of Ben-Abraham Technologies Inc. (a development stage company) as of December 31, 1998 and 1997 and the related statements of operations, stockholders' equity and cash flows for the years ended December 31, 1998 and 1997, and for the period from August 29, 1996 (date of incorporation) to December 31, 1998. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, such financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 1998 and 1997 and the results of its operations and its cash flows for the years ended December 31, 1998 and 1997, and for the period from August 29, 1996 (date of incorporation) to December 31, 1998 in conformity with generally accepted accounting principles.

As discussed in Note 1 to the financial statements, the Company is in the development stage.

/s/ Deloitte & Touche LLP

Chartered Accountants

Toronto, Ontario  
February 19, 1999

BEN-ABRAHAM TECHNOLOGIES INC.  
(A DEVELOPMENT STAGE COMPANY)  
BALANCE SHEETS  
DECEMBER 31, 1998 AND 1997

	1998	1997
<b>ASSETS</b>		
<b>CURRENT ASSETS</b>		
Cash and cash equivalents	\$2,841,250	\$1,750,331
Prepaid expenses and other sundry assets	75,266	21,890
	2,916,516	1,772,221
<b>CAPITAL ASSETS (Note 4)</b>	<b>532,829</b>	<b>677,545</b>
	<b>\$3,449,345</b>	<b>\$2,449,766</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
<b>CURRENT LIABILITIES</b>		
Accounts payable (Note 11)	\$ 202,696	\$1,207,804
Accrued expenses	487,902	81,128
Due to licensor	127,317	127,317
	817,915	1,416,249
<b>COMMITMENTS (Note 10)</b>		
<b>STOCKHOLDERS' EQUITY (Note 6)</b>		
Capital stock		
Issued		
1,531,386 (1997 - 20,000,000) Class A special shares	153	2,000
3,286,479 (1997 - 3,566,479) Class C special shares	329	357
29,437,686 (1997 - 12,407,686) Subordinate voting shares	13,427,166	9,167,963
	13,427,648	9,170,320
Deficit accumulated during the development stage	(10,796,218)	(8,136,803)
	2,631,430	1,033,517
	<b>\$3,449,345</b>	<b>\$2,449,766</b>

See accompanying notes to the financial statements.

BEN-ABRAHAM TECHNOLOGIES INC.  
(A DEVELOPMENT STAGE COMPANY)  
STATEMENTS OF OPERATIONS  
YEARS ENDED DECEMBER 31, 1998 AND 1997 AND  
THE CUMULATIVE PERIOD FROM AUGUST 29, 1996 (DATE OF INCORPORATION) TO  
DECEMBER 31, 1998

	YEAR ENDED DECEMBER 31, 1998	YEAR ENDED DECEMBER 31, 1997	CUMULATIVE PERIOD FROM AUGUST 29, 1996 (DATE OF INCORPORATION) TO DECEMBER 31, 1998
REVENUE			
Interest income	\$ 123,061	\$ 143,718	\$ 320,135
EXPENSES			
Research and development	1,400,129	335,823	1,735,952
General and administration	1,112,647	1,618,436	3,278,268
Depreciation and amortization	139,769	51,938	192,369
Loss on disposal of capital assets	129,931	27,614	157,545
Costs of acquisition of Structured Biologicals Inc.	--	--	375,219
Purchased in-process research and development	--	--	5,377,000
	2,782,476	2,033,811	11,116,353
NET LOSS	\$ (2,659,415)	\$ (1,890,093)	\$ (10,796,218)
BASIC AND DILUTED NET LOSS PER SHARE (Note 8)	\$ (0.08)	\$ (0.05)	\$ (0.32)
WEIGHTED AVERAGE NUMBER OF SHARES OUTSTANDING	34,858,243	35,961,528	33,886,262

See accompanying notes to the financial statements.

BEN-ABRAHAM TECHNOLOGIES INC.  
(A DEVELOPMENT STAGE COMPANY)  
STATEMENTS OF STOCKHOLDERS' EQUITY  
DECEMBER 31, 1998, 1997 AND 1996

	Class A Special Shares		Class C Special Shares	
	Shares	Amount	Shares	Amount
BALANCE, AUGUST 29, 1996, DATE OF INCORPORATION	-	\$ -	-	\$ -
Issuance of Class "C" shares August 29, 1996 (\$0.0001 per share)	-	-	4,150,000	415
Issuance of Class "A" shares September 23, 1996 (\$0.0001 per share)	20,000,000	2,000	-	-
Issuance of Subordinate voting shares				
September 23, 1996	-	-	-	-
Financing fees accrued	-	-	-	-
November 27, 1996 - issued as consideration upon acquisition of SBI (Note 3)	-	-	-	-
Exercise of Series "X" warrants (Note 6)	-	-	-	-
Exercise of Series "Z" warrants (Note 6)	-	-	-	-
Net loss	-	-	-	-
BALANCE, DECEMBER 31, 1996	20,000,000	2,000	4,150,000	415
Conversion of shares				
January 13, 1997	-	-	(282,850)	(28)
January 13, 1997	-	-	(94,285)	(9)
December 2, 1997	-	-	(106,386)	(11)
December 2, 1997	-	-	(100,000)	(10)
Exercise of Series "V" warrants (Note 6)	-	-	-	-
Exercise of Series "X" warrants (Note 6)	-	-	-	-
Exercise of Series "W" warrants (Note 6)	-	-	-	-
Adjustment for partial shares issued upon amalgamation	-	-	-	-
Financing fees reversed	-	-	-	-
Net loss	-	-	-	-
BALANCE, DECEMBER 31, 1997	20,000,000	2,000	3,566,479	357
Conversion of shares				
March 4, 1998	-	-	(20,000)	(2)
March 16, 1998	-	-	(10,000)	(1)
May 8, 1998	(15,000,000)	(1,500)	-	-
June 1, 1998	(1,000,000)	(100)	-	-
June 1, 1998	(1,000,000)	(100)	-	-
Return of shares to treasury				
May 8, 1998	(1,468,614)	(147)	-	-
May 8, 1998	-	-	(250,000)	(25)
Net loss	-	-	-	-
BALANCE, DECEMBER 31, 1998	1,531,386	\$ 153	3,286,479	\$ 329

	Subordinate Voting Shares		Deficit Accumulated During the Development Stage	Total
	Shares	Amount		
BALANCE, AUGUST 29, 1996, DATE OF INCORPORATION	-	\$ -	\$ -	\$ -
Issuance of Class "C" shares August 29, 1996 (\$0.0001 per share)	-	-	-	415
Issuance of Class "A" shares September 23, 1996 (\$0.0001 per share)	-	-	-	2,000
Issuance of Subordinate voting shares				
September 23, 1996	4,100,000	4,100,000	-	4,100,000
Financing fees accrued	-	(410,000)	-	(410,000)
November 27, 1996 - issued as consideration upon acquisition of SBI (Note 3)	7,434,322	4,545,563	-	4,545,563
Exercise of Series "X" warrants (Note 6)	215,714	275,387	-	275,387
Exercise of Series "Z" warrants (Note 6)	1,428	2,553	-	2,553
Net loss	-	-	(6,246,710)	(6,246,710)
BALANCE, DECEMBER 31, 1996	11,751,464	8,513,503	(6,246,710)	2,269,208
Conversion of shares				
January 13, 1997	282,850	70,741	-	70,713
January 13, 1997	94,285	23,580	-	23,571
December 2, 1997	106,386	26,607	-	26,596
December 2, 1997	100,000	25,010	-	25,000

Exercise of Series "V" warrants (Note 6)	24,000	36,767	-	36,767
Exercise of Series "X" warrants (Note 6)	28,571	36,200	-	36,200
Exercise of Series "W" warrants (Note 6)	20,000	25,555	-	25,555
Adjustment for partial shares issued upon amalgamation	130	-	-	-
Financing fees reversed	-	410,000	-	410,000
Net loss	-	-	(1,890,093)	(1,890,093)
-----				
BALANCE, DECEMBER 31, 1997	12,407,686	\$ 9,167,963	(8,136,803)	1,033,517
-----				
Conversion of shares				
March 4, 1998	20,000	5,002	-	5,000
March 16, 1998	10,000	2,501	-	2,500
May 8, 1998	15,000,000	3,751,500	-	3,750,000
June 1, 1998	1,000,000	250,100	-	250,000
June 1, 1998	1,000,000	250,100	-	250,000
Return of shares to treasury				
May 8, 1998	-	-	-	(147)
May 8, 1998	-	-	-	(25)
Net loss	-	-	(2,659,415)	(2,659,415)
-----				
BALANCE, DECEMBER 31, 1998	29,437,686	\$13,427,166	\$(10,796,218)	\$ 2,631,430
-----				

See accompanying notes to the financial statements.

BEN-ABRAHAM TECHNOLOGIES INC.  
(A DEVELOPMENT STAGE COMPANY)  
STATEMENTS OF CASH FLOWS  
YEARS ENDED DECEMBER 31, 1998 AND 1997  
AND THE CUMULATIVE PERIOD FROM AUGUST 29, 1996 (DATE OF INCORPORATION) TO  
DECEMBER 31, 1998

	YEAR ENDED DECEMBER 31, 1998	YEAR ENDED DECEMBER 31, 1997	CUMULATIVE PERIOD FROM AUGUST 29, 1996 (DATE OF INCORPORATION) TO DECEMBER 31, 1998
<b>CASH FLOWS USED IN OPERATING ACTIVITIES</b>			
Net loss	\$ (2,659,415)	\$ (1,890,093)	\$ (10,796,218)
Adjustments to reconcile net loss to net cash used in operating activities			
Depreciation and amortization	139,769	51,938	192,369
Purchased in-process research and development	-	-	5,377,000
Loss on disposal of equipment	129,931	27,614	157,545
Changes in other assets and liabilities affecting cash flows from operations			
Prepaid expenses	(53,376)	(10,831)	(72,298)
Accounts payable and accrued expenses	(598,334)	712,306	(49,589)
Due to licensor	-	(135,632)	127,317
Due from SBI	-	-	(128,328)
<b>NET CASH USED IN OPERATING ACTIVITIES</b>	<b>(3,041,425)</b>	<b>(1,244,698)</b>	<b>(5,192,202)</b>
<b>CASH FLOWS USED IN INVESTING ACTIVITIES</b>			
Purchase of capital assets	(124,984)	(723,649)	(848,633)
<b>CASH FLOWS PROVIDED BY FINANCING ACTIVITIES</b>			
(Conversion) issuance of Class "A" shares	(1,847)	-	153
(Conversion) issuance of Class "C" shares	(28)	(58)	329
Proceeds from sale or conversion of shares	4,259,203	244,460	8,881,603
<b>NET CASH PROVIDED BY FINANCING ACTIVITIES</b>	<b>4,257,328</b>	<b>244,402</b>	<b>8,882,085</b>
<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>	<b>1,090,919</b>	<b>(1,723,945)</b>	<b>2,841,250</b>
<b>CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD</b>	<b>1,750,331</b>	<b>3,474,276</b>	<b>-</b>
<b>CASH AND CASH EQUIVALENTS AT END OF PERIOD</b>	<b>\$ 2,841,250</b>	<b>\$ 1,750,331</b>	<b>\$ 2,841,250</b>
<b>SUPPLEMENTAL SCHEDULE OF CASH FLOW INFORMATION</b>			
Acquisition of SBI			
Purchased in-process research and development	\$ -	\$ -	\$ 5,377,000
Other net liabilities assumed	-	-	(831,437)
			4,545,563
Less: subordinate voting shares issued therefor	-	-	4,545,563
	\$ -	\$ -	\$ -
Income tax paid	\$ -	\$ -	\$ -
Interest paid	\$ -	\$ -	\$ -

See accompanying notes to the financial statements.

1. ORGANIZATION

On December 19, 1996, Ben-Abraham Technologies Inc. ("the Company") was continued under the laws of the State of Wyoming, U.S.A. Previously, the Company had been incorporated under the laws of the Province of Ontario effective August 29, 1996. Effective December 6, 1996, the Company acquired Structured Biologicals Inc. and its wholly-owned subsidiary 923934 Ontario Inc. ("SBI"), a Canadian public company listed on the Alberta Stock Exchange. The "acquisition" was effected by a statutory amalgamation wherein the stockholders of the Company were allotted a significant majority of the shares of the amalgamated entity. Upon amalgamation, the then existing stockholders of SBI received 7,434,322 subordinate voting shares of the Company (1 such share for every 3 1/2 shares held in SBI). The shareholders meeting to approve this arrangement was held on November 27, 1996. The articles of arrangement were not actually filed until December 6, 1996.

The Company was established to develop prescription pharmaceutical products, vaccines and vaccine adjuvants using its core nanoparticle technology licensed from the University of California. Research on this technology was conducted by a predecessor company and as a result the Company is continuing its efforts to develop several different potential products using this core technology.

The Company has been in the development stage since its inception. The Company's successful completion of its development program and its transition to profitable operations is dependent upon obtaining regulatory approval from the United States Food and Drug Administration ("FDA") prior to selling its products within the U.S., and foreign regulatory approval must be obtained to sell its products internationally. There can be no assurance that the Company's products will receive regulatory approvals, and a substantial amount of time may pass before the achievement of a level of sales adequate to support the Company's cost structure. Obtaining marketing approval will be directly dependent on the Company's ability to implement the necessary regulatory steps required to obtain marketing approval in the United States and in other countries. It is not possible at this time to predict with assurance the outcome of these activities.

The research and development on the Company's CAP technology is conducted in the Company's Atlanta, Georgia laboratory facility. The business office is located in Lincolnshire, Illinois.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

BASIS OF PRESENTATION

These financial statements are expressed in U.S. dollars.

The financial statements have been prepared in accordance with generally accepted accounting principles in the United States and SFAS No. 7 "Accounting and Reporting by Development Stage Enterprises". The preparation of financial statements, in conformity with generally accepted accounting principles, requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

CASH AND CASH EQUIVALENTS

For purposes of reporting cash flows, the Company considers all instruments with original maturities of three months or less to be cash equivalents.

CAPITAL ASSETS

Capital assets are stated at cost less accumulated depreciation and amortization. Depreciation of computer, office and laboratory equipment is computed primarily by accelerated methods over estimated useful lives of seven years. Leasehold improvements are amortized on a straight-line basis over the terms of the leases, plus option renewals.

RESEARCH AND DEVELOPMENT

Research and development costs are charged to expense as incurred.

BASIC AND DILUTED NET LOSS PER SHARE

The Company implemented the provisions of SFAS No. 128, "Earnings Per Share", which requires presentation of basic and diluted earnings (loss) per share, as of December 31, 1997. Basic earnings (loss) per share is computed by dividing income (loss) available to common stockholders by the weighted average number of shares outstanding for the reporting period. Diluted earnings (loss) per share reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock. All prior period weighted average and per share information has been restated in accordance with SFAS No. 128. The computation of diluted earnings (loss) per share does not include stock options and warrants with dilutive potential that would have an antidilutive effect on earnings (loss) per share.

STOCK-BASED COMPENSATION

The Company follows the provisions of APB Opinion No. 25, which requires compensation cost for stock-based employee compensation plans be recognized based on the difference, if any, between the quoted market price of the stock and the amount the employee must pay to acquire the stock. As a result of the Company continuing to apply APB No. 25, SFAS No. 123, "Accounting for Stock-Based Compensation" requires increased disclosure of the compensation expense arising from the Company's fixed and performance stock compensation plans. The expense is measured as the fair value of the award at the date it was granted using an option-pricing model that takes into account the exercise price and the expected term of the option, the current price of the underlying stock, its expected volatility, expected dividends on the stock and the expected risk-free rate of return during the term of the option. The compensation cost is recognized over the service period, usually the period from the grant date to the vesting date. The company has disclosed the required pro forma net loss and loss per share data in Note 8 as if the Company has applied the SFAS No. 123 method.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

COMPREHENSIVE INCOME

The Company has implemented SFAS No. 130, REPORTING COMPREHENSIVE INCOME as of December 31, 1998. The statement establishes standards for the reporting and display of comprehensive income and its components (revenues, expenses, gains and losses) is a full set of general-purpose financial statements. The statement requires all items that are required to be recognized under accounting standards as components of comprehensive income be reported separately from the Company's accumulated deficit balance in a financial statement that is displayed with the same prominence as other financial statements. The Company has determined that there is no impact as a result of the implementation of this statement.

SEGMENT REPORTING

The Company has implemented SFAS No. 131, DISCLOSURE ABOUT SEGMENTS OF AN ENTERPRISE AND RELATED INFORMATION, as of December 31, 1998. The Statement establishes standards for the way that a public business enterprise reports information about operating segments in annual financial statements and interim financial reports issued to shareholders. It also established standards for related disclosures about products and services, geographic areas, and major customers. The Company has determined that, at present, it does not have any reportable segments.

PENSIONS AND OTHER POSTRETIREMENT BENEFITS

The Company has implemented SFAS No. 132, EMPLOYERS' DISCLOSURES ABOUT PENSIONS AND OTHER POSTRETIREMENT BENEFITS, as of December 31, 1998. The Statement standardizes the disclosure requirements for pensions and other postretirement benefits. No additional disclosures were required as a result of the implementation of this statement.

NEW STATEMENTS OF FINANCIAL ACCOUNTING STANDARDS

In June 1998, and subsequently amended, the FASB issued SFAS No. 133, ACCOUNTING FOR DERIVATIVES INSTRUMENTS AND HEDGING ACTIVITIES. This Statement establishes accounting and reporting standards for derivative instruments, including certain derivative instruments embedded in other contracts, and for hedge activities. It requires that an entity recognize all derivatives as either assets or liabilities in the statement of financial position and measure those instruments at fair value. The statement is effective for the fiscal quarters of the Company's fiscal year ending December 31, 2001. The Company is in the process of evaluating the effect of this Statement on its financial statements.

3. ACQUISITION

Effective November 27, 1996, the Company completed the acquisition of 100% of the outstanding shares of SBI. The acquisition was effected by a statutory amalgamation wherein the stockholders of the Company were allotted a significant majority of the shares of the amalgamated entity. Upon amalgamation, the then existing shareholders of SBI received 7,434,322 subordinate voting shares of the Company, (1 such share for every 3 1/2 shares they held in SBI). SBI's results of operations have been included in these financial statements from the date of acquisition. The acquisition was accounted for by using the purchase method of accounting, as follows:

ASSETS	
In-process research and development	\$ 5,377,000
Other	37,078
	-----
	5,414,078
-----	
LIABILITIES	
Current liabilities	679,498
Due to directors	60,689
Due to the Company	128,328
	-----
	868,515
	-----
Net Assets Acquired	\$ 4,545,563
	-----
CONSIDERATION	
Subordinate voting shares	\$ 4,545,563
	-----

In connection with the acquisition of SBI, accounted for under the purchase method, the Company acquired the rights to negotiate with the Regents of the University of California for licenses of specific technologies and products. The specific technologies and products relate to investigative research funded by SBI. At the time of acquisition, the technologies and products had not yet been approved for human clinical research. The value ascribed to the rights, based on an independent evaluation, was \$5,377,000. This amount was immediately expensed as the technologies and products did not have their technological feasibility established and had no identified future alternative use.

As of the date of acquisition, the technology related to the development of products for six indications [i.e. applications of the technology.]. The Company determined the value of the in process research and development related to the acquired rights based on an independent valuation using discounted cash flows. Principal assumptions used in the valuation were as follows:

- FDA approval for the products for the six indications was expected to be received at various dates between 2002 and 2004, however, there are many competitive products in development. There are also many requirements that must be met before FDA approval is secured. There is no assurance that the products will be successfully developed, proved to be safe in clinical trials and meet applicable regulatory standards or demonstrate substantial benefits in the treatment or prevention of any disease.
- The estimated additional research and development expenditures required before FDA approval was \$26.5 million, to be incurred over 8 to 10 years.
- Future cash flows were estimated based on estimated market size, with costs determined based on industry norms, an estimated annual growth rate of 3%.
- The cash flows were discounted at 25%. The rate was preferred due to the high risk nature of the biopharmaceutical business.
- The Company is continuing to develop the technology related to five of the six indications.
- In June 1997, the Company exercised its option and entered into a license agreement with UCLA for the technology that it had previously supported.

BEN-ABRAHAM TECHNOLOGIES INC.  
(A DEVELOPMENT STAGE COMPANY)  
NOTES TO THE FINANCIAL STATEMENTS  
FOR THE YEARS ENDED DECEMBER 31, 1998 AND 1997, AND THE CUMULATIVE PERIOD  
FROM AUGUST 29, 1996 (DATE OF INCORPORATION) TO DECEMBER 31, 1998

4. CAPITAL ASSETS

	1998	1997
Computer equipment	\$ 22,976	\$ 3,321
Office equipment	29,619	27,301
Laboratory equipment	103,012	211,455
Leasehold improvements - Laboratory	470,094	481,096
	625,701	723,173
Accumulated depreciation and amortization	(92,872)	(45,628)
	\$ 532,829	\$ 677,545

5. INCOME TAXES

The components of the Company's net deferred tax asset at December 31, 1998 and 1997 were as follows:

	1998	1997
Net operating loss carryforwards	\$ 1,778,246	\$ 768,277
Amortization of intangibles	1,759,186	1,904,429
Research & development credits	144,310	29,478
Other	16,594	421
	3,698,336	2,702,605
Valuation allowance	(3,698,336)	(2,702,605)
Net deferred tax asset	\$ --	\$ --

The Company has no current tax provision due to its accumulated losses, which result in net operating loss carryforwards. At December 31, 1998, the Company had approximately \$5,230,000 of net operating loss carryforwards that are available to reduce future taxable income for a period up to 15 years. The net operating loss carryforwards expire in the years 2011-2013. The net operating loss carryforwards as well as amortization of various intangibles, principally acquired in process research and development, generate deferred tax benefits, which have been recorded as deferred tax assets and entirely offset by a tax valuation allowance. The valuation allowance has been provided at 100% to reduce the deferred tax assets to zero, the amount that management believes is more likely than not to be realized. Additionally, the Company has approximately \$144,000 of research and development credits available to reduce future income taxes through the year 2012.

The provision for income taxes differs from the amount computed by applying the U.S. statutory federal income tax rate of 34% to pre-tax income as follows:

5. INCOME TAXES (CONTINUED)

	1998	1997
Tax at U.S.federal statutory rate	\$ (904,201)	\$ (642,632)
State taxes, net of federal benefit	(90,810)	(55,284)
Change in valuation allowance	986,730	641,025
Other, net	8,281	56,891
	\$ -	\$ -

6. STOCKHOLDERS' EQUITY

a) AUTHORIZED

PREFERENCE SHARES

An unlimited number of preference shares issuable in series subject to limitation, rights, and privileges as determined by the directors. No preference shares have been issued as of December 31, 1998.

SPECIAL SHARES

An unlimited number of Class A special shares without par value, convertible to Class B special shares or subordinate voting shares on the basis of one Class A share and U.S. \$0.25. These shares are not entitled to a dividend and carry ten votes per share.

An unlimited number of Class B special shares without par value convertible to subordinate voting shares on the basis of one subordinate voting share for each Class B share. These shares are entitled to dividends as declared by the directors not to exceed the dividends per share declared on the subordinate voting shares, and carry ten votes per share. No Class B special shares have been issued as of December 31, 1998.

An unlimited number of Class C special shares without par value, convertible to subordinate voting shares on the basis of one Class C share and U.S. \$0.25. These shares are not entitled to a dividend and carry one vote per share.

SUBORDINATE VOTING SHARES

An unlimited number of subordinate voting shares without par value, and carry one vote per share.

6. STOCKHOLDERS' EQUITY (CONTINUED)

Significant equity transactions since the date of the Company's incorporation are as follows:

- Prior to the Amalgamation on December 6, 1996, the Company issued 20,000,000 shares of the Company's class A stock for \$0.0001 per share, 4,150,000 shares of class C stock for \$0.0001 per share and 4,100,000 shares of the Company's subordinate voting shares for \$1.00 per share.
- Pursuant to the shareholders meeting to approve the arrangement held on November 27, 1996 and the subsequent filing of articles of arrangement on December 6, 1996, the Company completed the acquisition of 100% of the outstanding shares of SBI. Upon the effectiveness of this Amalgamation, the then existing stockholders of SBI received 7,434,322 subordinate voting shares of the Company (1 subordinate voting share of the Company for every 3 1/2 shares of SBI). The deemed fair value of this stock was \$4,545,563.
- In May 1998, the Company and Avi Ben-Abraham, M.D., a director and a founder of the Company and the Company's then Chief Executive Officer and Chairman of the Board, entered into an agreement pursuant to which Dr. Ben-Abraham would relinquish his executive position and remain as a director of the Company. Pursuant to the agreement, Dr. Ben-Abraham converted shares of the Company's class A stock held by him into 15,000,000 shares of subordinate voting stock at \$0.25 per share for proceeds to the Company of \$3,750,000. In addition, Dr. Ben-Abraham agreed to return to the Company 1,468,614 shares of class A stock and 250,000 shares of class C stock to the Company, and also agreed not to sell any of his shares of subordinate voting stock or any other securities of the Company for a period of 15 months. The Company and Dr. Ben-Abraham agreed to cross-indemnify each other upon the occurrence of certain events.
- In June 1998, the Company issued an aggregate of 2,000,000 shares of subordinate voting shares pursuant to the conversion of class A stock at a conversion price of \$0.25 per share.

b) WARRANTS

The Company upon the acquisition of SBI assumed the following warrants, all of which were exercisable, to purchase subordinate voting shares. The warrants were fully vested at the time of the acquisition, accordingly, no pro forma compensation expense, as required for disclosure by SFAS No. 123, "Accounting for Stock-Based Compensation," would have been recorded in the 1998 or 1997 financial statements. As of December 31, 1998, no warrants were outstanding.

Series	Number of Warrants	Exercise Price per share		Expiry Date
		Actual Cdn. \$	Actual US. \$	
V	171,829	\$ 2.10	\$1.37	March 28, 1997
W	114,286	\$ 1.75	\$1.14	June 30, 1997
X	1,651,014	\$ 1.75	\$1.14	September 30, 1997
Z	640,000	\$ 2.45	\$1.59	February 28, 1998

6. STOCKHOLDERS' EQUITY (CONTINUED)

As of December 31, 1998, per the OANDA Currency Converter (which utilizes a sample of 435 prices) 1.5368 Canadian dollars is equal to 1 US dollar.

A summary of the status of the Company's warrants is as follows:

	SERIES			
	V	W	X	Z
Balance, December 31, 1996	171,829	114,286	1,435,300	638,572
Warrants exercised				
January 13, 1997	(24,000)	-	-	-
January 23, 1997	-	-	(28,571)	-
June 30, 1997	-	(20,000)	-	-
Warrants expired	(147,829)	(94,286)	(1,406,729)	-
Balance, December 31, 1997	-	-	-	638,572
Warrants expired	-	-	-	(638,572)
Balance, December 31, 1998	-	-	-	-

7. STOCK OPTIONS

The Company has a stock option plan for certain officers, directors, employees and consultants whereby 2,465,000 shares of subordinate voting stock have been reserved for issuance. Options for 2,465,000 shares of subordinate voting stock have been granted as of December 31, 1998 at prices equal to the ten-day weighted average closing price of the stock at the date of the grant and are exercisable and vest in a range substantially over a three year period. The options expire five years from the date of the grants.

The Company applies APB Opinion No. 25 and related interpretations in accounting for its plan. Accordingly, no compensation cost has been recognized for the plan. Had the compensation cost for the Company's plan been determined based on the fair value of the rates of award under the plan consistent with the method of SFAS No. 123 "Accounting for Stock-Based Compensation" the Company's net loss, cumulative net loss, and basic net loss per common share would have been increased to the pro forma amounts indicated below:

	1998	1997
Net loss		
As reported	\$ (2,659,415)	\$ (1,890,093)
Pro forma	\$ (2,771,391)	\$ (1,953,587)
Basic and diluted net loss per share		
As reported	\$ (0.08)	\$ (0.05)
Pro forma	\$ (0.08)	\$ (0.05)
Cumulative net loss		
As reported	\$ (10,796,218)	\$ (8,136,803)
Pro forma	\$ (11,159,995)	\$ (8,388,604)
Cumulative basic and diluted net loss per share		
As reported	\$ (0.32)	\$ (0.25)
Pro forma	\$ (0.32)	\$ (0.25)

7. STOCK OPTIONS (CONTINUED)

The weighted average fair value of the options at the date of the grant for options granted during 1998 and 1997 was \$0.44 and \$0.19, respectively, and was estimated using the Cox Rubinstien binomial model and the Black-Scholes option-pricing model with following weighted average assumptions:

	1998	1997
	-----	-----
Expected option life (years)	5	5
Risk free interest rate	5.05%	5.44%
Expected stock price volatility	350.00%	105.81%
Dividend yield	-	-

Changes for the stock option plan during the years ended December 31, 1998 and 1997 were as follows:

	1998	Weighted Average Exercise Price		1997	Weighted Average Exercise Price	
		(Cdn.\$)	(US \$)		(Cdn.\$)	(US \$)
Options outstanding, Beginning of period	250,000	\$ 1.64	\$ 1.07	200,000	\$ 1.65	\$ 1.07
Options granted	2,225,000	\$ 0.45	\$ 0.29	50,000	\$ 1.60	\$ 1.04
Options cancelled/expired	(10,000)	\$ 0.44	\$ 0.29			
Options exercised	-	-	-	-	-	-
Options outstanding, end of period	2,465,000	\$ 0.57	\$ 0.37	250,000	\$ 1.64	\$ 1.07
Options exercisable, end of year	674,500	\$ 0.92	\$ 0.60	250,000	\$ 1.64	\$ 1.07

As of December 31, 1998, per the OANDA Currency Converter (which utilizes a sample of 435 prices) 1.5368 Canadian dollars is equal to 1 US dollar.

7. STOCK OPTIONS (CONTINUED)

The following table summarizes information about stock options outstanding and exercisable at December 31, 1998:

Range of Exercise Prices (Cdn. \$)	Range of Exercise Prices (US. \$)	Number Outstanding	Weighted Average Remaining Contractual Life	Outstanding Options	
				Weighted Average Exercise Price (Cdn. \$)	Weighted Average Exercise Price (US \$)
\$0.43-0.44	\$0.28-0.29	2,175,000	4.5 years	\$ 0.434	\$ 0.28
\$1.10	\$0.72	40,000	0.75 years	\$ 1.10	\$ 0.72
\$1.645-1.845	\$1.04-1.07	250,000	2.0 years	\$ 1.636	\$ 1.06
		2,465,000			

Range of Exercise Prices (Cdn. \$)	Range of Exercise Prices (US. \$)	Number Outstanding	Options Exercisable	
			Weighted Average Exercise Price (Cdn. \$)	Weighted Average Exercise Price (US \$)
\$0.43-0.44	\$0.28-0.29	384,500	\$ 0.436	\$ 0.28
\$1.10	\$0.72	40,000	\$ 1.10	\$ 0.72
\$1.60-1.845	\$1.04-1.07	250,000	\$ 1.636	\$ 1.06
		674,500		

8. BASIC AND DILUTED NET LOSS PER SHARE

The basic and diluted net loss per share is computed based on the weighted average number of the aggregate of subordinate voting shares, Class A shares and Class C shares outstanding, all being considered as equivalent of one another. The computation of diluted loss per share does not include stock options and warrants with dilutive potential that would have an antidilutive effect on loss per share.

9. RETIREMENT PLAN

In July 1998, the company began offering a discretionary 401(k) Plan (the Plan) to all of its employees. Under the Plan, employees may defer income on a tax-exempt basis, subject to IRS limitation. Under the Plan the Company can make discretionary matching contributions. Company contributions expensed in 1998 totaled \$21,799.

10. COMMITMENTS

The Company has entered into lease commitments for rental of its office space and laboratory facilities. The minimum lease payments are:

1999	\$	110,891
2000		101,341
2001		98,520
2002		87,944
2003		48,051
THEREAFTER		-
	\$	446,747

Rent expense amounted to \$134,788 and \$36,755 for the year ended December 31, 1998 and 1997, respectively.

The license agreement with the University of California requires us to undertake various obligations, including:

- payment of a \$100,000 license issue fee, \$75,000 of which we have already paid and \$25,000 of which is due in June 2000;
- payment of royalties to the University based on a percentage of the net sales of any products incorporating the licensed technology;
- payment of minimum annual royalties on February 28 of each year beginning in the year 2004 in the amounts set forth below, to be credited against earned royalties, for the life of the agreement;

10. COMMITMENTS (CONTINUED)

Year	Minimum Annual Royal Due
2004	\$ 50,000
2005	\$ 100,000
2006	\$ 150,000
2007	\$ 200,000
2008	\$ 400,000
2009	\$ 600,000
2010	\$ 800,000
2011	\$1,500,000
Each year after 2011	\$1,500,000

- maintaining an annual minimum amount of available capital for development and commercialization of products incorporating the licensed technology until a product is introduced to the market;
- payment of the costs of patent prosecution and maintenance of the patents included in the agreement which as of September 30, 1999 have amounted to \$57,000 and which we estimate will equal approximately \$70,000 per year;
- meeting performance milestones relating to:
  - hiring or contracting with personnel to perform research and development, regulatory and other activities relating to the commercial launch of a proposed product;
  - testing proposed products;
  - obtaining government approvals;
  - conducting clinical trials; and
- introducing products incorporating the licensed technology into the market; and
- entering into partnership or alliance arrangements or agreements with other entities regarding commercialization of the technology covered by the license.

11. RELATED PARTY TRANSACTIONS

	1998	1997
	-----	-----
Management fees paid to a company controlled by a member of management, who is also a shareholder and member of the Board of Directors	\$ 94,200	\$ 185,000
Financing expenses paid to a company controlled by a member of management, who is also a shareholder and member of the Board of Directors	\$ -	\$ 44,019

Included in accounts payable is an amount of \$133,901 (1997 - \$156,412) due to directors and officers of the Company.

Prior to the Amalgamation on December 6, 1996, the Company issued 20,000,000 shares of class A stock and 4,150,000 shares of class C stock for \$0.0001 per share. 17,000,000 of the class A shares were sold to a director of the Company. 1,050,000 of the class C shares were sold to the same director of the Company to be held by him in trust for the benefit of others: 500,000 of the class C shares were sold to a separate company controlled by a then officer of the Company; and 2,000,000 of the class C shares were sold to other directors of the Company.

The 20,000,000 class A shares and 4,150,000 class C shares were founder's shares and the terms under the authorization of these classes of shares, provided for their conversion to subordinate voting shares at \$0.25 per share.

In May 1998, the Company and Avi Ben-Abraham, M.D., a director and a founder of the Company and the Company's then Chief Executive Officer and Chairman of the Board, entered into an agreement pursuant to which Dr. Ben-Abraham would relinquish his executive position and remain as a director of the Company. See Note 6.

12. UNCERTAINTY DUE TO THE YEAR 2000 ISSUE

The Year 2000 Issue arises because many computerized systems use two digits rather than four to identify a year. Date sensitive systems may recognize the Year 2000 as 1900 or some other date, resulting in errors when information using Year 2000 dates is processed. In addition, similar problems may arise in some systems which use certain dates in 1999 to represent something other than a date. The effects of the Year 2000 Issue may be experienced before, on, or after January 1, 2000, and, if not addressed, the impact on operations and financial reporting may range from minor errors to significant systems failure which could affect the Company's ability to conduct normal business operations. It is not possible to be certain that all aspects of the Year 2000 Issue affecting the Company, including those related to the efforts of customers, suppliers, or other third parties, will be fully resolved.

BEN-ABRAHAM TECHNOLOGIES INC.  
(A DEVELOPMENT STAGE COMPANY)  
BALANCE SHEETS  
SEPTEMBER 30, 1999 AND DECEMBER 31, 1998

	SEPTEMBER 30, 1999	DECEMBER 31, 1998
	----- (UNAUDITED)	-----
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	\$ 5,648,796	\$ 2,841,250
Prepaid expenses and other sundry assets	93,891	75,266
	-----	-----
	5,742,687	2,916,516
CAPITAL ASSETS, net of depreciation		
	469,068	532,829
	-----	-----
	\$ 6,211,755	\$ 3,449,345
	-----	-----
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts payable	\$ 144,299	\$ 202,696
Accrued and other liabilities	86,374	487,902
Due to licensor	127,317	127,317
	-----	-----
	357,990	817,915
	-----	-----
STOCKHOLDERS' EQUITY		
Capital stock		
Issued		
4,807,865 (1998 - 4,817,865) Class C	481	482
52,642,686 (1998 - 29,437,686) Common	17,652,510	13,427,166
	-----	-----
	17,652,991	13,427,648
Deficit accumulated during the development stage		
	(11,799,226)	(10,796,218)
	-----	-----
	5,853,765	2,631,430
	-----	-----
	\$ 6,211,755	\$ 3,449,345
	-----	-----

See accompanying notes to financial statements.

BEN-ABRAHAM TECHNOLOGIES INC.  
(A DEVELOPMENT STAGE COMPANY)  
STATEMENTS OF OPERATIONS  
THREE MONTH AND NINE MONTH PERIODS ENDED SEPTEMBER 30, 1999 AND 1998 AND THE  
CUMULATIVE PERIOD FROM AUGUST 29, 1996 (DATE OF INCORPORATION) TO  
SEPTEMBER 30, 1999  
(UNAUDITED)

	THREE MONTHS ENDED SEPTEMBER 30, 1999	THREE MONTHS ENDED SEPTEMBER 30, 1998	NINE MONTHS ENDED SEPTEMBER 30, 1999
REVENUE			
Interest income	\$ 62,022	\$ 45,659	\$ 134,538
EXPENSES			
Research and development	160,671	309,696	477,202
General and administration	232,932	163,276	592,364
Depreciation and amortization	23,160	29,783	67,980
	416,763	502,755	1,137,546
LOSS BEFORE OTHER EXPENSES	(354,741)	(457,096)	(1,003,008)
OTHER EXPENSES			
Loss on disposal of equipment	-	-	-
Costs of acquisition of Structured Biologicals Inc.	-	-	-
Purchased in-process research and development	-	-	-
NET LOSS	\$ (354,741)	\$ (457,096)	\$ (1,003,008)
BASIC AND DILUTED NET LOSS PER SHARE	\$ (0.01)	\$ (0.01)	\$ (0.02)
WEIGHTED AVERAGE NUMBER OF SHARES OUTSTANDING	57,415,551	34,255,551	46,719,269

	NINE MONTHS ENDED SEPTEMBER 30, 1998	CUMULATIVE PERIOD FROM AUGUST 29, 1996 (DATE OF INCORPORATION) TO SEPTEMBER 30, 1999
REVENUE		
Interest income	\$ 88,599	\$ 454,673
EXPENSES		
Research and development	623,673	2,213,154
General and administration	912,401	3,870,632
Depreciation and amortization	90,081	260,349
	1,626,155	6,344,135
LOSS BEFORE OTHER EXPENSES	(1,537,556)	(5,889,462)
OTHER EXPENSES		
Loss on disposal of equipment	-	157,545
Costs of acquisition of Structured Biologicals Inc.	-	375,219
Purchased in-process research and development	-	5,377,000
	-	5,909,764
NET LOSS	\$ (1,537,556)	\$ (11,799,226)
BASIC AND DILUTED NET LOSS PER SHARE	\$ (0.04)	\$ (0.32)
WEIGHTED AVERAGE NUMBER OF SHARES OUTSTANDING	35,061,348	36,989,372

The accompanying notes are an integral part of these statements.

BEN-ABRAHAM TECHNOLOGIES INC.  
(A DEVELOPMENT STAGE COMPANY)  
STATEMENTS OF STOCKHOLDERS' EQUITY  
FOR THE NINE MONTHS ENDED SEPTEMBER 30, 1999 AND THE YEARS ENDED DECEMBER 31,  
1998 AND 1997

	CLASS A SPECIAL SHARES		CLASS C SPECIAL SHARES	
	SHARES	AMOUNT	SHARES	AMOUNT
BALANCE, DECEMBER 31, 1996	20,000,000	2,000	4,150,000	415
Conversion of shares				
January 13, 1997	-	-	(282,850)	(28)
January 13, 1997	-	-	(94,285)	(9)
December 2, 1997	-	-	(106,386)	(11)
December 2, 1997	-	-	(100,000)	(10)
Exercise of Series "V" warrants	-	-	-	-
Exercise of Series "X" warrants	-	-	-	-
Exercise of Series "W" warrants	-	-	-	-
Adjustment for partial shares issued upon amalgamation	-	-	-	-
Financing Fees	-	-	-	-
Net loss	-	-	-	-
BALANCE, DECEMBER 31, 1997	20,000,000	2,000	3,566,479	357
Conversion of shares				
March 4, 1998	-	-	(20,000)	(2)
March 16, 1998	-	-	(10,000)	(1)
May 8, 1998	(15,000,000)	(1,500)	-	-
June 1, 1998	(1,000,000)	(100)	-	-
June 1, 1998	(1,000,000)	(100)	-	-
Return of shares to treasury				
May 8, 1998	(1,468,614)	(147)	-	-
May 8, 1998	-	-	(250,000)	(25)
Net loss	-	-	-	-
BALANCE, DECEMBER 31, 1998	1,531,386	\$ 153	3,286,479	\$ 329
Conversion of shares				
February 2, 1999	-	-	(10,000)	(1)
Private placement of shares				
May 6, 1999	-	-	-	-
Share redesignation				
July 13, 1999	(1,531,386)	(153)	1,531,386	153
Issuance of shares				
August 15, 1999	-	-	-	-
Net loss	-	-	-	-
BALANCE, SEPTEMBER 30, 1999 (UNAUDITED)	-	\$ -	4,807,865	\$ 481

	COMMON STOCK		DEFICIT ACCUMULATED DURING THE DEVELOPMENT STAGE	TOTAL
	SHARES	AMOUNT		
BALANCE, DECEMBER 31, 1996	11,751,464	8,513,503	(6,246,710)	2,269,208
Conversion of shares				
January 13, 1997	282,850	70,741	-	70,713
January 13, 1997	94,285	23,580	-	23,571
December 2, 1997	106,386	26,607	-	26,596
December 2, 1997	100,000	25,010	-	25,000
Exercise of Series "V" warrants	24,000	36,767	-	36,767
Exercise of Series "X" warrants	28,571	36,200	-	36,200
Exercise of Series "W" warrants	20,000	25,555	-	25,555
Adjustment for partial shares issued upon amalgamation	130	-	-	-
Financing Fees	-	410,000	-	410,000
Net loss	-	-	(1,890,093)	(1,890,093)
BALANCE, DECEMBER 31, 1997	12,407,686	9,167,963	(8,136,803)	1,033,517
Conversion of shares				
March 4, 1998	20,000	5,002	-	5,000
March 16, 1998	10,000	2,501	-	2,500
May 8, 1998	15,000,000	3,751,500	-	3,750,000
June 1, 1998	1,000,000	250,100	-	250,000
June 1, 1998	1,000,000	250,100	-	250,000
Return of shares to treasury				
May 8, 1998	-	-	-	(147)
May 8, 1998	-	-	-	(25)
Net loss	-	-	(2,659,415)	(2,659,415)
BALANCE, DECEMBER 31, 1998	29,437,686	\$ 13,427,166	\$ (10,796,218)	\$ 2,631,430
Conversion of shares				

February 2, 1999	10,000	2,501	-	2,500
Private placement of shares				
May 6, 1999	23,125,000	4,197,843	-	4,197,843
Share redesignation				
July 13, 1999	-	-	-	-
Issuance of shares				
August 15, 1999	70,000	25,000	-	25,000
Net loss	-	-	(1,003,008)	(1,003,008)
-----				
BALANCE, SEPTEMBER 30, 1999 (UNAUDITED)	52,642,686	\$ 17,652,510	\$ (11,799,226)	\$ 5,853,765
-----				

The accompanying notes are an integral part of these statements.

BEN-ABRAHAM TECHNOLOGIES INC.  
(A DEVELOPMENT STAGE COMPANY)  
STATEMENTS OF CASH FLOWS  
NINE MONTHS ENDED SEPTEMBER 30, 1999 AND 1998 AND THE CUMULATIVE PERIOD  
FROM AUGUST 29, 1996 (DATE OF INCORPORATION) TO SEPTEMBER 30, 1999  
(UNAUDITED)

	NINE MONTHS ENDED SEPTEMBER 30,		CUMULATIVE PERIOD
	1999	1998	FROM AUGUST 29, 1996 (DATE OF INCORPORATION) TO SEPTEMBER 30, 1999
CASH FLOWS USED IN OPERATING ACTIVITIES			
Net loss	\$ (1,003,008)	\$ (1,537,556)	\$ (11,799,226)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	67,980	90,081	260,350
Purchased in-process research & development	-	-	5,377,000
Loss on disposal of equipment	-	-	157,545
Changes in other assets and liabilities impacting cash flows from operations:			
Prepaid expenses	(18,625)	(13,410)	(90,924)
Accounts payable, accrued expenses & other liabilities	(459,925)	(877,531)	(509,514)
Due to other	-	-	127,317
Due to the Company	-	-	(128,328)
Due to directors and officers	-	(156,412)	-
NET CASH USED IN OPERATING ACTIVITIES	(1,413,578)	(2,494,828)	(6,605,780)
CASH FLOWS USED IN INVESTING ACTIVITIES			
Purchase of capital assets	(4,219)	(120,124)	(852,852)
CASH FLOWS PROVIDED BY FINANCING ACTIVITIES			
(Conversion) Issuance of Class "A" & "C" stock	-	(175)	482
Issuance of common stock	4,225,343	4,257,503	13,106,946
NET CASH PROVIDED BY FINANCING ACTIVITIES	4,225,343	4,257,328	13,107,428
NET INCREASE IN CASH AND CASH EQUIVALENTS	2,807,546	1,642,376	5,648,796
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	2,841,250	1,750,331	-
CASH AND CASH EQUIVALENTS AT END OF PERIOD	\$ 5,648,796	\$ 3,392,707	\$ 5,648,796
SUPPLEMENTAL SCHEDULE OF CASH FLOW INFORMATION			
Acquisition of SBI			
Purchased in-process research & development	\$ -	\$ -	\$ 5,377,000
Other net liabilities assumed	-	-	(831,437)
Less: subordinate voting shares issued therefor	-	-	4,545,563
	\$ -	\$ -	\$ -
Income tax paid	\$ -	\$ -	\$ -
Interest paid	\$ -	\$ -	\$ -

The accompanying notes are an integral part of these statements.

SEPTEMBER 30, 1999

1. ORGANIZATION

On December 19, 1996, Ben-Abraham Technologies Inc. (the "Company") was continued under the laws of the State of Wyoming, U.S.A. Previously, the Company had been incorporated under the laws of the Province of Ontario effective August 29, 1996. Effective December 6, 1996, the Company acquired Structured Biologicals Inc. and its wholly-owned subsidiary 923934 Ontario Inc. ("SBI"), a Canadian public company listed on the Alberta Stock Exchange. The "acquisition" was effected by a statutory amalgamation wherein the stockholders of the Company were allotted a significant majority of the shares of the amalgamated entity. Upon amalgamation, the then existing stockholders of SBI received 7,434,322 subordinate voting shares of the Company (one such share for every 3 1/2 shares held in SBI). The shareholders meeting to approve this arrangement was held on November 27, 1996. The articles of arrangement were not filed until December 6, 1996.

The Company was established to develop prescription pharmaceutical products, vaccines and vaccine adjuvants using its core nanoparticle technology licensed from the University of California. Research on this technology was conducted by a predecessor company and as a result the Company is continuing its efforts to develop several different potential products using this core technology.

The Company intends to in-license other products in order to expand its portfolio of potential pharmaceutical products in the next several years.

The Company has been in the development stage since its inception. The Company's successful completion of its development program and its transition to profitable operations is dependent upon obtaining regulatory approval from the United States Food and Drug Administration ("FDA") prior to selling its products within the U.S., and foreign regulatory approval must be obtained to sell its products internationally. There can be no assurance that the Company's products will receive regulatory approvals, and a substantial amount of time may pass before the achievement of a level of sales adequate to support the Company's cost structure. Obtaining marketing approval will be directly dependent on the Company's ability to implement the necessary regulatory steps required to obtain marketing approval in the United States and in other countries. It is not possible at this time to predict with assurance the outcome of these activities.

The research and development on the Company's CAP technology is conducted in the Company's Atlanta, Georgia laboratory facility. The business office is located in Lincolnshire, Illinois.

2. SUMMARY OF ACCOUNTING POLICIES

A summary of the significant accounting policies consistently applied in the preparation of the accompanying financial statements follows.

BASIS OF PRESENTATION

The financial statements are expressed in United States dollars and have been prepared in accordance with generally accepted accounting principles in the United States and SFAS No. 7 "Accounting and Reporting by Development Stage Enterprises".

SEPTEMBER 30, 1999

2. SUMMARY OF ACCOUNTING POLICIES (CONTINUED)

RESEARCH AND DEVELOPMENT

Research and development costs are expensed as incurred.

DEPRECIATION

Depreciation of computer, office and laboratory equipment is computed primarily by accelerated methods over estimated useful lives of five to seven years.

USE OF ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect amounts reported in the financial statements and notes. Actual results may differ from these estimates.

BASIC AND DILUTED NET LOSS PER SHARE

The basic and diluted net loss per share is computed based on the weighted average number of the aggregate of common stock and Class C shares outstanding, all being considered as equivalent of one another. The computation of diluted loss per share does not include stock options and warrants with dilutive potential that would have an antidilutive effect on loss per share.

NEW STATEMENT OF FINANCIAL ACCOUNTING STANDARDS

In June 1998, and subsequently amended, the FASB issued SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities". The Statement establishes accounting and reporting standards for derivative instruments, including certain derivative instruments embedded in other contracts, and hedging activities. It requires that an entity recognize all derivatives as either assets or liabilities in the statement of financial position and measure those instruments at fair value. This Statement is effective for the fiscal quarters of the Company's year ended December 31, 2001. The Company does not anticipate that the implementation of this Statement will have a material impact on the financial statements.

3. INCOME TAXES

The Company estimates that as of September 30, 1999 it has a loss carryforward of approximately \$6,700,000. This amount may be carried forward up to 15 taxation years to be claimed against future income. Additionally, the Company had approximately \$175,000 of research and development credits available to reduce future income taxes through year 2013.

The resulting deferred tax asset of approximately \$4,200,000 has been fully reserved and accordingly is not recorded in these financial statements. When realized, the income tax benefit relating to this item will be reflected in the current operations as a reduction of income tax expense.

BEN-ABRAHAM TECHNOLOGIES INC.

NOTES TO THE FINANCIAL STATEMENTS

SEPTEMBER 30, 1999

4. STOCKHOLDERS' EQUITY

Effective July 13, 1999, and by articles of amendment dated July 20, 1999, the subordinate voting shares of the Corporation were redesignated as common stock, the Class A special shares, which carry 10 votes per share, were reclassified as Class C special shares and the Class B special shares were eliminated. There were no changes in number of shares outstanding.

AUTHORIZED

PREFERENCE SHARES - An unlimited number of preference shares issuable in series subject to limitations, rights and privileges as determined by the directors. No preference shares have been issued as of September 30, 1999.

SPECIAL SHARES - An unlimited number of Class C special shares without par value convertible to common stock on the basis of one Class C share and U.S. \$0.25. These shares are not entitled to a dividend and carry one vote per share.

COMMON STOCK - An unlimited number of common stock without par value, and carry one vote per share.

CAPITAL STOCK ISSUED AND OUTSTANDING

	NUMBER OF SHARES	VALUE
	-----	-----
Class C special shares	4,807,865	\$ 481
Common Stock	52,642,686	17,652,510
	-----	-----
	57,450,551	\$17,652,991

In May 1999, the Company issued an aggregate of 23,125,000 shares of common stock and warrants to purchase 11,562,500 shares of common stock at an exercise price of \$0.30 per share for net proceeds of \$4,197,843.

MATERIAL CONVERSION OF SHARES

During the third quarter of 1999, an outstanding liability of \$25,000 was converted into 70,000 shares of common stock.

WARRANTS

Pursuant to the Company's private placement financing which closed on May 6, 1999, warrants to purchase an aggregate of 11,562,500 shares of common stock were issued at an exercise price of US\$ 0.30 (CDN\$ 0.436) per share with a term of five years. These warrants represent the total number of warrants outstanding as of September 30, 1999.

SEPTEMBER 30, 1999

5. STOCK OPTIONS

The Company has reserved an aggregate of 5,000,000 shares of common stock for awards under the 1998 Plan. As of September 30, 1999, options to purchase an aggregate of 4,283,125 shares of common stock were outstanding under the 1998 Plan, of which 2,026,865 were fully vested, and a total of 716,875 shares of common stock remained available for grant. The rules of the Alberta Stock Exchange restrict the aggregate number of our shares of common stock reserved for issuance pursuant to any stock options up to 10% of the number of our common stock on a non-diluted basis. As of September 30, 1999, the outstanding options under the plan were held by an aggregate of nine individuals and were exercisable at prices ranging from \$0.23 to \$1.07 per share of common stock.

Incentive stock options granted under the plan may not have an exercise price less than the fair market value of the common stock on the date of the grant (or, if granted to a person holding more than 10% of our voting stock, at less than 110% of fair market value). Non-statutory stock options granted under the plan may not have an exercise price less than 85% of fair market value on the date of grant. The options are exercisable and vest in a range substantially over a three-year period and expire five years from the date of the grants.

6. RELATED PARTY TRANSACTIONS

No remuneration has been paid to directors for acting in this capacity.

In connection with the May 1999 private placement of 23,125,000 shares of common stock and warrants to purchase 11,562,500 shares of common stock, the Company's Chief Executive officer purchased 250,000 shares of the common stock sold and warrants to purchase 125,000 shares of common stock. Three other individuals, who purchased either individually or through affiliated entities, an aggregate 10,250,000 shares of common stock and warrants to purchase 5,125,000 shares of common stock, became directors of the Corporation upon their acquisition of the shares.

7. YEAR 2000 PROGRAM

The Company will continue to conduct a comprehensive review of its computer systems to identify the systems that could be affected by the "Year 2000" issue. The Company presently believes that, with modifications to existing software and converting to new software, the Year 2000 problem will not pose significant operational problems for the Company's computer systems as so modified and converted. However, if such modifications and conversions are not completed in a timely manner, the Year 2000 problem may have a material impact on the operations of the Company.

8. SUBSEQUENT EVENTS

In the Company's License Agreement with the University of California, as amended October 26, 1999, assuming the Company continues its product development efforts under the agreement, the Company is obligated to pay minimum annual royalties beginning in the year 2004. Under the original license agreement, this obligation began in the year 2003. Minimum annual royalties in 2004 equal \$50,000 rising each year until 2011 when the minimum annual royalty is \$1.5 million. Under the original agreement, the minimum annual royalty in 2003 equaled \$100,000 rising each year until 2007 when the minimum annual royalty equaled \$1.5

BEN-ABRAHAM TECHNOLOGIES INC.  
NOTES TO THE FINANCIAL STATEMENTS  
SEPTEMBER 30, 1999

8. SUBSEQUENT EVENTS (CONTINUED)

million. Under the amended agreement, the total minimum royalty obligation for the years 2004 through 2013 is \$6.8 million. Under the original agreement, the total minimum royalty obligation for the years 2003 through 2013 would have been \$12.4 million. Furthermore, the amended agreement removed the red blood cell surrogate from the agreement and limited the University's right to terminate the agreement in cases where the Company does not perform under the agreement.

On November 10, 1999, our shareholders approved our name change from Ben-Abraham Technologies Inc. to BioSante Pharmaceuticals, Inc.

PORTIONS OF THIS EXHIBIT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIALITY UNDER RULE 24b-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED. A COPY OF THIS AGREEMENT WITH THIS EXHIBIT INTACT HAS BEEN FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION.

EXCLUSIVE LICENSE AGREEMENT

BETWEEN

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

AND

BEN-ABRAHAM TECHNOLOGIES, INC.

FOR

SELECTED APPLICATIONS OF COATED NANOCRYSTALLINE PARTICLES

CASE NO. 89-204

TABLE OF CONTENTS

ARTICLE NO.	TITLE	PAGE
	RECITALS . . . . .	1
1.	DEFINITIONS . . . . .	2
2.	GRANT . . . . .	6
3.	LICENSE ISSUE FEE . . . . .	8
4.	ROYALTIES . . . . .	8
5.	DUE DILIGENCE . . . . .	11
6.	PROGRESS AND ROYALTY REPORTS. . . . .	16
7.	BOOKS AND RECORDS . . . . .	18
8.	LIFE OF THE AGREEMENT . . . . .	18
9.	TERMINATION BY THE REGENTS. . . . .	19
10.	TERMINATION BY LICENSEE. . . . .	20
11.	DISPOSITION OF PATENT PRODUCTS ON HAND UPON TERMINATION. . . . .	20
12.	USE OF NAMES AND TRADEMARKS. . . . .	21
13.	LIMITED WARRANTY . . . . .	21
14.	PATENT PROSECUTION AND MAINTENANCE . . . . .	23
15.	PATENT MARKING . . . . .	25
16.	PATENT INFRINGEMENT. . . . .	25
17.	INDEMNIFICATION. . . . .	27
18.	NOTICES. . . . .	29
19.	ASSIGNABILITY. . . . .	29
20.	LATE PAYMENTS. . . . .	29
21.	WAIVER . . . . .	30
22.	FAILURE TO PERFORM . . . . .	30
23.	GOVERNING LAWS . . . . .	30
24.	GOVERNMENT APPROVAL OR REGISTRATION. . . . .	31
25.	EXPORT CONTROL LAWS. . . . .	31
26.	FORCE MAJEURE. . . . .	31
27.	CONFIDENTIALITY. . . . .	32
28.	MISCELLANEOUS. . . . .	33

Exclusive License Agreement  
for  
Selected Applications of Coated Nanocrystalline Particles

This license agreement ("Agreement") is effective this 18th day of June, 1997 by and between The Regents of the University of California ("The Regents"), a California corporation, having its statewide administrative offices at 300 Lakeside Drive, 22nd Floor, Oakland, California 94612-3550 and Ben-Abraham Technologies, Inc. ("Licensee"), a Wyoming corporation, having a principal place of business at 372 Bay Street, Suite 302, Toronto, Canada, M5H 2W9.

RECITALS

Whereas, certain inventions, characterized as "Applications of Coated Nanocrystalline Particles" ("Invention"), useful in the development of vaccine adjuvants, virus vaccine constructs, drug delivery systems, and a red blood cell surrogate, were made at the University of California, Los Angeles by Dr. Nir Kossovsky et al. and are claimed in Patent Rights defined below;

Whereas, the Licensee is a "small entity" as defined in 37 C.F.R. Section 1.9 and a "small-business concern" defined in 15 U.S.C. Section 632;

Whereas, both parties recognize that royalties due under this Agreement will be paid on pending patent applications and issued patents;

Whereas, Licensee requested certain rights from The Regents to commercialize the Invention; and

Whereas, The Regents responded to the request of Licensee by granting the following rights to Licensee so that the products and other benefits derived from the Invention can be enjoyed by the general public.

The parties agree as follows:

#### 1. DEFINITIONS

As used in this Agreement, the following terms will have the meaning set forth below:

1.1 "Patent Rights" means all U.S. patents and patent applications and foreign patents and patent applications assigned to The Regents, and in the case of foreign patents and patent applications those requested under Paragraph 14.4 herein, including any reissues, extensions, substitutions, continuations, divisions, and continuations-in-part applications (only to the extent, however, that claims in the continuations-in-part applications are supported in the specification of the parent patent application) based on and including any subject matter claimed in or covered by the following:

- 1.1a U.S. Patent No. 5,178,882 entitled "Viral Decoy Vaccine," issued January 12, 1993 by Dr. Nir Kossovsky et al., and assigned to The Regents;
- 1.1b U.S. Patent No. 5,219,577 entitled "Biologically Active Composition Having a Nanocrystalline Core," issued June 15, 1993 by Dr. Nir Kossovsky et al., and assigned to The Regents;
- 1.1c U.S. Patent No. 5,306,508 entitled "Red Blood Cell Surrogate," issued April 26, 1994 by Dr. Nir Kossovsky et al., and assigned to The Regents;
- 1.1d U.S. Patent No. 5,334,394 entitled "Human Immunodeficiency Virus Decoy," issued August 2, 1994 by Dr. Nir Kossovsky et al., and assigned to The Regents;

- 1.1e U.S. Patent No. 5,460,830 entitled "Biochemically Active Agents for Chemical Catalysis and Cell Receptor Activation," issued October 24, 1995 by Dr. Nir Kossovsky et al., and assigned to The Regents;
  - 1.1f U.S. Patent No. 5,460,831 entitled "Targeted Transfection Nanoparticles," issued October 24, 1995 by Dr. Nir Kossovsky et al., and assigned to The Regents;
  - 1.1 g U.S. Patent No. 5,462,750 entitled "Biologically Active Compositions Having a Nanocrystalline Core," issued October 31, 1995 by Dr. Nir Kossovsky et al., and assigned to The Regents;
  - 1.1h U.S. Patent No. 5,462,751 entitled "Biological and Pharmaceutical Agents Having a Nanomeric Biodegradable Core," issued October 31, 1995 by Dr. Nir Kossovsky et al., and assigned to The Regents; and
  - 1.1i U.S. Patent No. 5,464,634 entitled "Red Blood Cell Surrogate," issued November 7, 1995 by Dr. Nir Kossovsky et al., and assigned to The Regents.
- 1.2 "Patent Products" means:
- i any kit, composition of matter, material, or product;
  - ii any kit, composition of matter, material, or product to be used in a manner requiring the performance of the Patent Method; or
  - iii any kit, composition of matter, material, or product produced by the Patent Method;

to the extent that the manufacture, use, or sale of such kit, composition of matter, material, or product, in a particular country, would be covered by or infringe, but for the license granted to Licensee pursuant to this Agreement, an unexpired claim of a patent or pending claim of a patent application were it issued as a claim in a patent under Patent Rights in that country in which such patent has issued or application is pending. This definition of Patent Products also includes a service either used by Licensee or provided by Licensee to its customers when such service requires the practice of the Patent Method.

1.3 "Patent Method" means any process or method covered by the claims of a patent application or patent within Patent Rights or the use or practice of which would constitute, in a particular country, but for the license granted to Licensee pursuant to this Agreement, an infringement of an unexpired claim of a patent or pending claim of a patent application were it issued as a claim in a patent within Patent Rights in that country in which the Patent Method is used or practiced.

1.4 "Vaccine Adjuvant" means coated nanocrystalline particles used to improve, augment or potentiate the biological activity, and especially the immunogenicity, of a pharmaceutical preparation intended for the immunization of humans or other animals against diseases.

1.5 "Virus Vaccine Construct" means nanocrystalline particles coated with viral antigens intended for use in the immunization of humans against HIV, Epstein Barr virus, or herpes virus infections.

1.6 "Drug Delivery System" means coated nanocrystalline particles used in pharmaceutical preparations to facilitate the therapeutic delivery of 5-fluorouracil, taxol, or insulin in humans.

1.7 "Red Blood Cell Surrogate" means coated nanocrystalline particles used to serve as a substitute for human or animal red blood cells.

1.8 "Field" means vaccine Adjuvant, Virus Vaccine Construct, Drug Delivery System and Red Blood Cell Surrogate.

1.9 "Excluded Field" means any application or use of coated nanocrystalline particles in pharmaceutical preparations intended for use in human or animal contraception, human or

animal diagnostic application, human or animal antibiotic therapy, or human or animal hormone therapy and any other field of use not expressly included in Paragraphs 1.4, 1.5, 1.6 and 1.7, above.

1.10 "Net Sales" means the gross invoice prices from the sale of Patent Products by Licensee, an Affiliate, a Joint Venture, or a sublicensee to independent third parties for cash or other forms of consideration in accordance with generally accepted accounting principles limited to the following deductions (if not already deducted from the gross invoice price and at rates customary within the industry): (a) allowances (actually paid and limited to rejections, returns, and prompt payment and volume discounts granted to customers of Patent Products, whether in cash or Patent Products in lieu of cash); (b) freight, transport packing, insurance charges associated with transportation; and (c) taxes, tariffs or import/export duties based on sales when included in gross sales, but not value-added taxes or taxes assessed on income derived from such sales. Where Licensee distributes Patent Products for end use to itself, an Affiliate, a Joint Venture, or a sublicensee, then such distribution will be considered a sale at the price normally charged to independent third parties, and The Regents will be entitled to collect a royalty on such sale in accordance with Article 4 (Royalties).

1.11 "Affiliate(s)" of Licensee means any entity which, directly or indirectly, controls Licensee, is controlled by Licensee, or is under common control with Licensee ("control" for these purposes being defined as the actual, present capacity to elect a majority of the directors of such affiliate, or if not, the capacity to elect the members that control forty percent (40%) of the outstanding stock or other voting rights entitled to elect directors) provided, however, that in any country where the local law will not permit foreign equity participation of a majority, then an

"Affiliate" will include any company in which Licensee will own or control, directly or indirectly, the maximum percentage of such outstanding stock or voting rights permitted by local law. Each reference to Licensee herein will be meant to include its Affiliates.

1.12 "Joint Venture" means any separate entity established pursuant to an agreement between a third party and Licensee to constitute a vehicle for a joint venture, in which the separate entity manufactures, uses, purchases, sells, or acquires Patent Products from Licensee. Each reference to Licensee herein will be meant to include its Joint Venture(s).

## 2. GRANT

2.1 Subject to the limitations set forth in this Agreement, The Regents hereby grants to Licensee exclusive licenses under Patent Rights to make, use, sell, offer for sale, and import Patent Products in the Field and to practice the Patent Method in the Field.

2.2 The licenses granted hereunder expressly prohibit the right to make, use, sell, offer for sale, and import Patent Products in the Excluded Field and to practice the Patent Method in the Excluded Field.

2.3 The manufacture of Patent Products in the Field and the practice of the Patent Method in the Field will be subject to applicable government importation laws and regulations of a particular country on Patent Products made outside the particular country in which such Patent Products are used or sold.

2.4 The Regents also grants to Licensee the right to issue sublicenses to third parties to make, use, sell, offer for sale, and import Patent Products in the Field and to practice the Patent Method in the Field, provided Licensee retains current exclusive rights thereto under this Agreement. If the exclusive licenses granted to Licensee in any Field are reduced to nonexclu-

sive licenses for any reason, then Licensee will be entitled to retain any sublicenses in that Field granted by Licensee prior to the date on which the reduction to nonexclusive licenses became effective. Licensee, however, is prohibited from granting any additional sublicenses in the Field in which the exclusive licenses were reduced to non-exclusive licenses. To the extent applicable, such sublicenses will include all of the rights of and obligations due to The Regents that are contained in this Agreement including payment to The Regents of royalties at the rates provided for in Article 4 (Royalties).

2.5 Licensee will notify The Regents of each sublicense granted hereunder and provide The Regents with a copy of each sublicense. Licensee will collect and pay all fees and royalties due The Regents as set forth in Paragraphs 3.1 and 4.1 below (and guarantee all such payments due from sublicensees). Licensee will require sublicensees to provide it with progress and royalty reports in accordance with the provisions herein, and Licensee will collect and deliver to The Regents all such reports due from sublicensees.

2.6 Upon termination of this Agreement for any reason, The Regents, at its sole discretion, will determine whether any or all sublicenses will be assigned to The Regents, except that The Regents will not be bound by any duties or obligations contained in any sublicenses that extend beyond the duties and obligations contained in this Agreement.

2.7 Nothing in this Agreement will be deemed to limit the right of The Regents to publish any and all technical data resulting from any research performed by The Regents relating to the Invention and to make and use the Invention, Patent Product(s), Patent Method(s), and associated technology solely for educational and research purposes and for purposes not covered by this Agreement.

### 3. LICENSE ISSUE FEE

3.1 As partial consideration for all the rights and licenses granted to Licensee, Licensee will pay to The Regents a license issue fee of One Hundred Thousand Dollars (\$100,000.00) according to the following schedule:

- 3.1a Twenty-five Thousand Dollars (\$25,000) within 30 days after execution of this Agreement;
  - 3.1b Twenty-five Thousand Dollars (\$25,000) on or before the first anniversary of the effective date of this Agreement;
  - 3.1c Twenty-five Thousand Dollars (\$25,000) on or before the second anniversary of the effective date of this Agreement; and
  - 3.1d Twenty-five Thousand Dollars (\$25,000) on or before the third anniversary of the effective date of this Agreement.
- 3.2 The fees set forth in Paragraph 3.1 above are non-refundable, non-creditable, and not an advance against royalties.

### 4. ROYALTIES

4.1 As further consideration for all the rights and licenses granted to Licensee, Licensee and its sublicensees will pay to The Regents an earned royalty at the rate of four percent (4%) based on the Net Sales of Patent Products. If, however, Licensee has granted both the right to manufacture and sell a Vaccine Adjuvant to a party that also manufactures and sells a pharmaceutical product that is combined with the Vaccine Adjuvant, then Licensee may exchange the royalty rate paid to The Regents specified above for a royalty rate of two percent (2%) based on the Net Sales of the pharmaceutical product that contains the Vaccine Adjuvant.

4.2 Paragraphs 1.1, 1.2 and 1.3 define Patent Rights, Patent Products, and Patent Method so that royalties will be payable on Patent Products and Patent Method covered by both

pending patent applications and issued patents. Earned royalties will accrue in each country for the duration of Patent Rights in that country and will be payable to The Regents when Patent Products are invoiced, or if not invoiced, when delivered to a third party or to itself, an Affiliate, Joint Venture, or sublicensee in the case where such delivery of the Patent Products to Licensee, an Affiliate, Joint Venture, or sublicensee is intended for end use or for purposes other than clinical trials.

4.3 Royalties accruing to The Regents will be paid to The Regents quarterly on or before the following dates of each calendar year:

February 28 for the calendar quarter ending December 31

May 31 for the calendar quarter ending March 31

August 31 for the calendar quarter ending June 30

November 30 for the calendar quarter ending September 30

4.4 Each such payment will be for royalties which accrued up to the most recently completed calendar quarter of Licensee.

4.5 Beginning in the year 2003, Licensee will pay to The Regents a minimum annual royalty in the amounts and at the times set forth below:

2003	-	\$ 100,000
2004	-	\$ 250,000
2005	-	\$ 500,000
2006	-	\$ 1,000,000
2007	-	\$ 1,500,000

In each succeeding calendar year after the year 2007, Licensee will pay a minimum annual royalty of One Million Five Hundred Thousand Dollars (\$1,500,000) and thereafter for the life of this Agreement. This minimum annual royalty will be paid to The Regents by February 28 of the year following accrual of the royalties and will be credited against the earned royalty due and owing for the calendar year in which the minimum payment was made.

4.6 All monies due The Regents will be payable in United States funds collectible at par in San Francisco, California. When Patent Products are sold for monies other than United States dollars, the earned royalties will first be determined in the foreign currency of the country in which such Patent Products were sold and then converted into equivalent United States funds. The exchange rate will be that rate quoted in the Wall Street Journal on the last business day of the reporting period.

4.7 Earned royalties on sales of Patent Products occurring in any country outside the United States will not be reduced by any taxes, fees, or other charges imposed by the government of such country except those taxes, fees, and charges allowed under the provisions of Paragraph 1.10 (Net Sales). Licensee will also be responsible for all bank transfer charges.

4.8 Notwithstanding the provisions of Article 26 (Force Majeure), if at any time legal restrictions prevent prompt remittance of part or all royalties owed to The Regents by Licensee with respect to any country where a Patent Product is sold or distributed, Licensee will convert the amount owed to The Regents into United States funds and will pay The Regents directly from another source of funds for the amount impounded.

4.9 In the event that any patent or any claim thereof included within the Patent Rights is held invalid in a final decision by a court of competent jurisdiction and last resort and from

which no appeal has or can be taken, all obligation to pay royalties based on such patent or claim or any claim patentably indistinct therefrom will cease as of the date of such final decision. Licensee will not, however, be relieved from paying any royalties that accrued before such decision or that are based on another patent or claim that has not expired or that is not involved in such decision.

#### 5. DUE DILIGENCE

5.1 The Licensee, upon execution of this Agreement, shall diligently proceed with the development, manufacture, and sale of Patent Products and shall earnestly and diligently market the same within a reasonable time after execution of this Agreement and in quantities sufficient to meet the market demands therefor.

5.2 Licensee will be entitled to exercise prudent and reasonable business judgment in the manner in which it meets its due diligence obligations hereunder. In no case, however, will Licensee be relieved of its obligations to meet the due diligence provisions of this Article 5 (Due Diligence).

5.3 The Licensee will obtain all necessary governmental approvals in each country that Patent Products are manufactured, used, and sold.

5.4 Licensee will have available not less than \$\_\_\_\_\_ million per year for development and commercialization of Patent Products for the first three years that this Agreement is in effect and \$\_\_\_\_\_ million for every year thereafter until a Patent Product is introduced to the market. [PORTIONS OF THIS SECTION HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIALITY UNDER RULE 24b-2 OF THE SECURITIES EXCHANGE OF 1934, AS AMENDED. A

COPY OF THIS AGREEMENT WITH THIS SECTION INTACT HAS BEEN FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION.]

5.5 Licensee will not knowingly hire any person into a management or decision-making position who has been convicted or is under investigation by any governmental entity in the United States or Canada for fraud in association with the trading of securities. Licensee must diligently investigate the background of all potential management hires before hiring any person into a management or decision-making position to determine if the person has been under investigation in the United States or Canada for fraud in association with the trading of securities.

5.6 Within 6 months of the effective date of this Agreement, Licensee will acquire (by purchase, construction, rental, lease, or other means) the necessary laboratory, pilot plant, and supporting area space necessary for carrying out the projects specified in Paragraph 5.9. Within 18 months of the effective date of this Agreement, Licensee will acquire (by purchase, construction, rental, lease, or other means) the necessary laboratory, manufacturing, and supporting area space to manufacture the Patent Products specified in Paragraph 5.9 under good manufacturing practice conditions. The majority of research and development work, including animal, toxicity and product development work, will be conducted in facilities acquired (purchased, constructed, rented or leased) by Licensee.

5.7 Licensee must hire the following key employees by the designated dates:

Position Description	# Req.	Hiring Target Date
Director, Research & Development	1	December 1, 1996
Senior Vaccine Development Specialist	1	June 30, 1997
Senior Pharmaceutical Development Specialist	1	June 30, 1997
Process Development Scientist	1	April 30, 1997
Quality Control/Assurance Manager	1	December 31, 1997
Information Management Systems Specialist	1	December 31, 1997
Regulatory Specialist	1	December 31, 1998

5.8 In the hiring of key employees designated in Paragraph 5.7 above, Licensee will use the criteria set forth below to select and hire qualified candidates.

- 5.8a Director, Research and Development: Requires a Ph.D. in microbiology and 15 to 20 years' experience in the biotechnology industry. Requires a demonstrated ability to manage a development facility and guide development programs. The selection of the candidate to fill this position is subject to the approval of The Regents, whose approval will not be unreasonably withheld.
- 5.8b Senior Vaccine Development Specialist: Requires a Ph.D. in microbiology, virology, bacteriology, or immunology, with a minimum of 5 years' biotechnology industrial experience in a management position. Experience with the preparation of purified subunit vaccines by extraction of microorganisms produced through genetic engineering techniques would be beneficial. Requires familiarity with regulatory requirements for pilot plant operation. This individual must be capable of leading a team in the development of new antigen presentation and vaccine adjuvant systems.
- 5.8c Senior Pharmaceutical Development Scientist: Requires a Ph.D. with a minimum of five years' experience in the pharmaceutical industry. This position requires a thorough familiarity with drug formulation technology, preferably including the use of microcarrier formulations for drug targeting and controlled delivery. Knowledge of the relevant regulations governing such formulations is required. This individual must have the capability to lead a team in the development of novel drug delivery systems based upon the nanoparticles, concentrating initially on formulations of insulin that might be suitable for oral or nasal administration and improved delivery of taxol and other anti-tumor drugs.
- 5.8d Process Development Scientist: Requires a B.S. and 5 years' experience in process development and the demonstrated ability to scale-up protocols from the bench-top scale to production scale.
- 5.8e Quality Control & Assurance Manager: Requires a B.S. in biological sciences with 5 years' experience in the QC/QA division of a biopharmaceutical company and thorough knowledge of the United States, Canadian, and European GLP and GMP biological and pharmaceutical manufacturing and testing regulations. This individual must be capable of writing and editing Standard Operating Procedure and Batch Production Master Record documents and have experience in the validation of manufacturing and testing equipment, processes and procedures. Requires a demonstrated ability to manage all QC/QA procedures in the development facility, including the eventual quality control of operations of a GMP pilot plant for biopharmaceuticals.
- 5.8f Information Management Systems Analyst: Requires a B.S. or M.S. in computer sciences, with a minimum 3 years' experience in LAN systems management, preferably in a laboratory setting. This individual must have demonstrated the ability to set up and operate computer-based systems for company records, information retrieval and management and all laboratory records, including research manufacture and QC/QA.
- 5.8g Regulatory Specialist: Requires a B.S. degree in the biological sciences and preferably an advanced degree. This individual must have the demonstrated ability to prepare product submissions to the United States F.D.A. and a demonstrated capability to get such products approved. The selection of the candidate to fill this position is subject to the approval of The Regents, whose approval will not be unreasonably withheld.

5.9 Licensee must perform the following in the designated Fields:

5.9a Vaccine Adjuvant Project

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MILESTONES #

TARGET DATE

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1: Produce a Patent Product comprising Vaccine Adjuvant for test purposes

September 30, 1997

2: Produce a test model for a Patent Product comprising Vaccine Adjuvant	February 28, 1998
3: Complete toxicity testing for a Patent Product comprising Vaccine Adjuvant	September 30, 1998
4: Enter into strategic alliances or sublicenses for the development of a Patent Product comprising Vaccine Adjuvant	January 31, 1999
5: Submit IND in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Vaccine Adjuvant	August 31, 1999
6: Begin Phase I Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Vaccine Adjuvant	October 31, 1999
7: Begin Phases 2/3 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Vaccine Adjuvant	
8: File for marketing approval in the United States, Germany, France, England and Japan for a Patent Product comprising Vaccine Adjuvant	
9: Introduce a Patent Product comprising Vaccine Adjuvant to the market in the United States, Germany and France within 6 months from marketing approval	
10: Fill market demand in each country within 6 months of introduction for a Patent Product comprising Vaccine Adjuvant	

[PORTIONS OF THIS SECTION HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIALITY UNDER RULE 24b-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED. A COPY OF THIS AGREEMENT WITH THIS SECTION INTACT HAS BEEN FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION.]

5.9b Epstein Barr Vaccine Project

MILESTONES #	TARGET DATE
1: Produce a Patent Product comprising Virus Vaccine Construct for the Epstein Barr application	December 31, 1997
2: Test a pilot vaccine consisting of a Patent Product comprising Virus Vaccine Construct for the Epstein Barr application	June 30, 1998
3: Complete pre-clinical tests on a Patent Product comprising Virus Vaccine Construct for the Epstein Barr application	December 31, 1998
4: Submit IND in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Virus Vaccine Construct for the Epstein Barr application	February 28, 1999
5: Begin Phase I Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Virus Vaccine Construct for the Epstein Barr application	May 1, 1999
6: Begin Phase 2 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Virus Vaccine Construct for the Epstein Barr application	November 1, 1999
7: Begin Phase 3 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Virus Vaccine Construct for the Epstein Barr application	
8: File for marketing approval in the United States, Germany, France, England and Japan on a Patent Product comprising Virus Vaccine Construct for the Epstein Barr application	
9: Introduce a Patent Product comprising Virus Vaccine Construct for the Epstein Barr application to the market in the United States, Germany, France, England and Japan within 6 months from marketing approval	
10: Fill market demand in each country within 6 months of introduction for a Patent Product comprising Virus Vaccine Construct for the Epstein Barr application	

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5.9c Herpes 2 Vaccine Project

MILESTONES #	TARGET DATE
1: Produce a Patent Product comprising Virus Vaccine Construct for the Herpes 2 application	February 28, 1998
2: Test a pilot vaccine consisting of a Patent Product comprising Virus Vaccine Construct for the Herpes 2 application	August 31, 1998
3: Complete pre-clinical tests on a Patent Product comprising Virus Vaccine Construct for the Herpes 2 application	February 28, 1999
4: Submit IND in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Virus Vaccine Construct for the Herpes 2 application	April 30, 1999
5: Begin Phase I Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Virus Vaccine Construct for the Herpes 2 application	July 1, 1999
6: Begin Phase 2 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Virus Vaccine Construct for the Herpes 2 application	January 1, 2000
7: Begin Phase 3 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Virus Vaccine Construct for the Herpes 2 application	
8: File for marketing approval in the United States, Germany, France, England and Japan on a Patent Product comprising Virus Vaccine Construct for the Herpes 2 application	

9: Introduce a Patent Product comprising Virus Vaccine Construct for the Herpes 2 application to the market in the United States, Germany, France, England and Japan within 6 months from marketing approval

10: Fill market demand in each country within 6 months of introduction for a Patent Product comprising Virus Vaccine Construct for the Herpes 2 application

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#### 5.9d HIV Vaccine Project

MILESTONES #	TARGET DATE
1: Produce a Patent Product comprising Virus Vaccine Construct for the HIV vaccine application	January 31, 1998
2: Test a pilot vaccine consisting of a Patent Product comprising Virus Vaccine Construct for the HIV vaccine application	December 31, 1998
3: Complete pre-clinical tests on a Patent Product comprising Virus Vaccine Construct for the HIV vaccine application	May 31, 1999
4: Submit IND in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Virus Vaccine Construct for the HIV vaccine application	July 31, 1999
5: Begin Phase I Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Virus Vaccine Construct for the HIV vaccine application	September 30, 1999
6: Begin Phase 2 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Virus Vaccine Construct for the HIV vaccine application	
7: Begin Phase 3 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Virus Vaccine Construct for the HIV vaccine application	
8: File for marketing approval in the United States, Germany, France, England and Japan on a Patent Product comprising Virus Vaccine Construct for the HIV vaccine application	
9: Introduce a Patent Product comprising Virus Vaccine Construct for the HIV vaccine application to the market in the United States, Germany, France, England and Japan within 6 months from marketing approval	
10: Fill market demand in each country within 6 months of introduction for a Patent Product comprising Virus Vaccine Construct for the HIV vaccine application	

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5.9e Oral Insulin Project

MILESTONES #	TARGET DATE
1: Produce a Patent Product comprising Drug Delivery System for the oral insulin application	May 31, 1998
2: Test a clinical material consisting of a Patent Product comprising Drug Delivery System for the oral insulin application	May 31, 1999
3: Complete pre-clinical tests on a Patent Product comprising Drug Delivery System for the oral insulin application	October 31, 1999
4: Submit IND in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Drug Delivery System for the oral insulin application	December 31, 1999
5: Begin Phase I Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Drug Delivery System for the oral insulin application	March 1, 2000
6: Begin Phase 2 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Drug Delivery System for the oral insulin application	
7: Begin Phase 3 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Drug Delivery System for the oral insulin application	
8: File for marketing approval in the United States, Germany, France, England and Japan on a Patent Product comprising Drug Delivery System for the oral insulin application	
9: Introduce a Patent Product comprising Drug Delivery System for the oral insulin application to the market in the United States, Germany, France, England and Japan within 6 months from marketing approval	
10: Fill market demand in each country within 6 months of introduction for a Patent Product comprising Drug Delivery System for the oral insulin application	

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5.9f Taxol Delivery Project

MILESTONES #	TARGET DATE
1: Produce a Patent Product comprising Drug Delivery System for the Taxol application	January 31, 1999
2: Test a clinical material consisting of a Patent Product comprising Drug Delivery System for the Taxol application	July 31, 1999
3: Complete pre-clinical tests on a Patent Product comprising Drug Delivery System for the Taxol application	January 31, 2000
4: Submit IND in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Drug Delivery System for the Taxol application	
5: Begin Phase I Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Drug Delivery System for the Taxol application	
6: Begin Phase 2 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Drug Delivery System for the Taxol application	
7: Begin Phase 3 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Drug Delivery System for the Taxol application	
8: File for marketing approval in the United States, Germany, France, England and Japan on a Patent Product comprising Drug Delivery System for the Taxol application	

9: Introduce a Patent Product comprising Drug Delivery System for the Taxol application to the market in the United States, Germany, France, England and Japan within 6 months from marketing approval

10: Fill market demand in each country within 6 months of introduction for a Patent Product comprising Drug Delivery System for the Taxol application

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5.9g 5-Fluorouracil

MILESTONES #	TARGET DATE
1: Produce a Patent Product comprising Drug Delivery System for the 5-Fluorouracil application	March 31, 1999
2: Test a clinical material consisting of a Patent Product comprising Drug Delivery System for the 5-Fluorouracil application	September 30, 1999
3: Complete pre-clinical tests on a Patent Product comprising Drug Delivery System for the 5-Fluorouracil application	
4: Submit IND in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Drug Delivery System for the 5-Fluorouracil application	
5: Begin Phase I Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Drug Delivery System for the 5-Fluorouracil application	
6: Begin Phase 2 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Drug Delivery System for the 5-Fluorouracil application	
7: Begin Phase 3 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Drug Delivery System for the 5-Fluorouracil application	
8: File for marketing approval in the United States, Germany, France, England and Japan on a Patent Product comprising Drug Delivery System for the 5-Fluorouracil application	
9: Introduce a Patent Product comprising Drug Delivery System for the 5-Fluorouracil application to the market in the United States, Germany, France, England and Japan within 6 months from marketing approval	
10: Fill market demand in each country within 6 months of introduction for a Patent Product comprising Drug Delivery System for the 5-Fluorouracil application	

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5.9h Red Blood Cell Surrogate

MILESTONES #	TARGET DATE
1: Produce a Patent Product comprising Red Blood Cell Surrogate	November 30, 1997
2: Test a clinical material consisting of a Patent Product comprising Red Blood Cell Surrogate	June 30, 1998
3: Complete pre-clinical tests on a Patent Product comprising Red Blood Cell Surrogate	January 31, 2000
4: Submit IND in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising the Red Blood Cell Surrogate	
5: Begin Phase I Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Red Blood Cell Surrogate	

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6: Begin Phase 2 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Red Blood Cell Surrogate  
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7: Begin Phase 3 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan on a Patent Product comprising Red Blood Cell Surrogate  
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8: File for marketing approval in the United States, Germany, France, England and Japan on a Patent Product comprising Red Blood Cell Surrogate  
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9: Introduce a Patent Product comprising Red Blood Cell Surrogate to the market in the United States, Germany, France, England and Japan within 6 months from marketing approval  
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10: Fill market demand in each country within 6 months of introduction for a Patent Product comprising Red Blood Cell Surrogate  
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5.10 [PORTIONS OF THIS SECTION HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIALITY UNDER RULE 24b-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED. A COPY OF THIS AGREEMENT WITH THIS SECTION INTACT HAS BEEN FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION.]

5.11 The Regents shall have the right and option to terminate this Agreement or reduce Licensee's exclusive licenses to non-exclusive licenses in accordance with Paragraph 5.12 below, if any of the provisions of this Article 5 have not been met by Licensee. The exercise of this right and option by The Regents supersedes the rights granted in Article 2 (Grant).

5.12 To exercise either the right to terminate this Agreement or reduce the exclusive licenses granted to Licensee to non-exclusive licenses for lack of diligence required in this Article 5, The Regents will give Licensee written notice of the deficiency. Licensee thereafter has 60 (sixty) days to cure the deficiency. These notices will be subject to Article 18 (Notices).

#### 6. PROGRESS AND ROYALTY REPORTS

6.1 Beginning August 31, 1997 and semi-annually thereafter, Licensee will submit to The Regents a progress report covering activities by Licensee related to developing and testing all Patent Products and obtaining governmental approvals necessary for marketing them. These

progress reports will be provided to The Regents to cover the progress of the research and development of the Patent Products until their first commercial sale in the United States.

6.2 The progress reports submitted under Paragraph 6.1 will include, but not be limited to, the following topics so that The Regents may be able to determine the progress of the development of Patent Products and may also be able to determine whether or not Licensee has met its diligence obligations set forth in Article 5 (Due Diligence) above:

- 6.2a summary of work completed
- 6.2b key scientific discoveries
- 6.2c summary of work in progress
- 6.2d current schedule of anticipated events or milestones
- 6.2e market introduction date of Patent Products
- 6.2f raise the dollar amount to satisfy the diligence provisions specified in Paragraph 5.4
- 6.2g activities of sublicensees and strategic partners.

6.3 Licensee will also report to The Regents in its immediately subsequent progress and royalty report the date of first commercial sale of a Patent Product(s) in each country.

6.4 After the first commercial sale of a Patent Product, Licensee will provide The Regents with quarterly royalty reports to The Regents on or before each February 28, May 31, August 31, and November 30 of each year. Each such royalty report will cover the most recently completed calendar quarter of Licensee (October through December, January through March, April through June, and July through September) and will show:

- 6.4a the gross sales and Net Sales of Patent Products sold by Licensee and reported to Licensee as sold by its sublicensees during the most recently completed calendar quarter;
- 6.4b the number of Patent Products sold or distributed by Licensee and reported to Licensee as sold or distributed by its sublicensees;
- 6.4c the royalties, in U.S. dollars, payable hereunder with respect to Net Sales; and
- 6.4d the exchange rates used, if any.

6.5 If no sales of Patent Products have been made during any reporting period after the first commercial sale of a Patent Product, then a statement to this effect is required.

#### 7. BOOKS AND RECORDS

7.1 Licensee will keep books and records accurately showing all Patent Products manufactured, used, and/or sold under the terms of this Agreement. Such books and records will be preserved for at least five years after the date of the royalty payment to which they pertain and will be open to inspection by representatives or agents of The Regents upon request and at reasonable times to determine the accuracy of the books and records and to determine compliance by Licensee with the terms of this Agreement.

7.2 The fees and expenses of representatives of The Regents performing such an examination will be borne by The Regents. However, if an error in royalties of more than five percent (5%) of the total royalties due for any year is discovered, then the fees and expenses of these representatives will be borne by Licensee.

#### 8. LIFE OF THE AGREEMENT

8.1 Unless otherwise terminated by operation of law or by acts of the parties in accordance with the terms of this Agreement, this Agreement will be in force from the effective date recited on page one and will remain in effect for the life of the last-to-expire patent licensed under this Agreement, or until the last patent application licensed under this Agreement is abandoned.

8.2 Any termination of this Agreement will not affect the rights and obligations set forth in the following Articles:

Article 7	Books and Records
Article 11	Disposition of Patent Products on Hand Upon Termination
Article 12	Use of Names and Trademarks
Paragraph 14.6	Patent Prosecution and Maintenance
Article 17	Indemnification
Article 22	Failure to Perform
Article 27	Confidentiality

#### 9. TERMINATION BY THE REGENTS

9.1 If Licensee should violate or fail to perform any term or covenant of this Agreement, then The Regents may give written notice of such default ("Notice of Default") to Licensee. If Licensee should fail to repair such default within sixty (60) days after the date such notice takes effect, The Regents will have the right to terminate this Agreement and the licenses herein by a second written notice ("Notice of Termination") to Licensee. If a Notice of Termination is sent to Licensee, this Agreement will automatically terminate on the date such notice takes effect. Such termination will not relieve Licensee of its obligation to pay any royalty or

license fees owing at the time of such termination and will not impair any accrued right of The Regents. These notices will be subject to Article 18 (Notices).

#### 10. TERMINATION BY LICENSEE

10. Licensee will have the right at any time to terminate this Agreement in whole or as to any portion of Patent Rights by giving notice in writing to The Regents. Such Notice of Termination will be subject to Article 18 (Notices) and termination of this Agreement will be effective sixty (60) days after the effective date thereof. Licensee's right to terminate any portion of the Patent Rights under this Agreement in accordance with the foregoing notice requirements shall include the right to abandon a specified project within a Field without affecting Licensee's rights and obligations under this Agreement with respect to other specified projects within that Field or another Field.

10.2 Any termination pursuant to the above Paragraph will not relieve Licensee of any obligation or liability accrued hereunder prior to such termination or rescind anything done by Licensee or any payments made to The Regents hereunder prior to the time such termination becomes effective, and such termination will not affect in any manner any rights of The Regents arising under this Agreement prior to such termination.

#### 11. Disposition of Patent Products on Hand Upon Termination

11.1 Upon termination of this Agreement, Licensee will have the privilege of disposing of all previously made or partially made Patent Products, but no more, within a period of one hundred twenty (120) days, provided, however, that the sale of such Patent Products will be subject to the terms of this Agreement including, but not limited to, the payment of royalties

based on the Net Sales of Patent Products at the rates and at the times provided herein and the rendering of reports in connection therewith.

#### 12. USE OF NAMES AND TRADEMARKS

12.1 Nothing contained in this Agreement will be construed as conferring any right to use in advertising, publicity, or other promotional activities any name, trade name, trademark, or other designation of either party hereto by the other (including contraction, abbreviation or simulation of any of the foregoing). Unless required by law, the use by Licensee of the name "The Regents of the University of California" or the name of any campus of the University of California for use in advertising, publicity, or other promotional activities is expressly prohibited.

12.2 It is understood that The Regents will be free to release to the inventors and senior administrative officials employed by The Regents the terms of this Agreement upon their request. If such release is made, The Regents will request that such terms will be kept in confidence in accordance with the provisions of Article 27 (Confidentiality) and not be disclosed to others. It is further understood that should a third party inquire whether a license to Patent Rights is available, The Regents may disclose the existence of this Agreement and the extent of the grant in Article 2 (Grant) to such third party, but will not disclose the name of Licensee, except where The Regents is required to release such information under either the California Public Records Act or other applicable law.

#### 13. LIMITED WARRANTY

13.1 The Regents warrants to Licensee that it owns the Patent Rights that are the subject of this license and that it has the lawful right to grant this license.

13.2 The Regents agrees that it will inform Licensee in writing if The Regents, as represented by the actual knowledge of the Licensing Associate responsible for administration of this Agreement, receives notice or otherwise becomes aware of any claims, actions, suits or other proceedings directly involving the Patent Rights in the Fields that are the subject of this Agreement or The Regents' lawful right to grant the licenses contained in this Agreement.

13.3 This license and the associated Invention, Patent Rights, Patent Method, and Patent Products are provided WITHOUT WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED. THE REGENTS MAKES NO REPRESENTATION OR WARRANTY THAT THE INVENTION, PATENT PRODUCTS, OR PATENT METHOD WILL NOT INFRINGE ANY PATENT OR OTHER PROPRIETARY RIGHT.

13.4 IN NO EVENT WILL THE REGENTS BE LIABLE FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM EXERCISE OF THIS LICENSE OR THE USE OF THE INVENTION, PATENT RIGHTS, PATENT METHOD, OR PATENT PRODUCTS.

13.5 Nothing in this Agreement will be construed as:

- 13.5a a warranty or representation by The Regents as to the validity, enforceability, or scope of any Patent Rights; or
- 13.5b a warranty or representation that anything made, used, sold, or otherwise disposed of under any license granted in this Agreement is or will be free from infringement of patents of third parties; or
- 13.5c an obligation to bring or prosecute actions or suits against third parties for patent infringement except as provided in Article 16 (Patent Infringement); or

- 13.5d conferring by implication, estoppel, or otherwise any license or rights under any patents of The Regents other than Patent Rights as defined herein, regardless of whether such patents are dominant or subordinate to Patent Rights; or
- 13.5e an obligation to furnish any know-how not provided in Patent Rights or Patent Products.

#### 14. PATENT PROSECUTION AND MAINTENANCE

14.1 The Regents will diligently prosecute and maintain the United States and foreign patents comprising Patent Rights using counsel of its choice. The Regents will promptly provide Licensee with copies of all relevant documentation so that Licensee may be currently and promptly informed and apprised of the continuing prosecution, and may comment upon such documentation sufficiently in advance of any initial deadline for filing a response, provided, however, that if Licensee has not commented upon such documentation prior to the initial deadline for filing a response with the relevant government patent office or The Regents must act to preserve Patent Rights, The Regents will be free to respond appropriately without consideration of comments by Licensee, if any. Both parties hereto will keep this documentation in confidence in accordance with the provisions of Article 27 (Confidentiality) herein. Counsel for The Regents will take instructions only from The Regents.

14.2 The Regents will use all reasonable efforts to amend any patent application to include claims requested by Licensee and required to protect the Patent Products contemplated to be sold or Patent Method to be practiced under this Agreement.

14.3 The Regents and Licensee will cooperate in applying for an extension of the term of any patent included within Patent Rights, if appropriate, under the Drug Price Competition and Patent Term Restoration Act of 1984. Licensee will prepare all such documents, and The

Regents will execute such documents and will take such additional action as Licensee may reasonably request in connection therewith.

14.4 The Regents will, at the request of Licensee, file, prosecute, and maintain patent applications and patents covered by Patent Rights in foreign countries if available. Within nine months of the filing of the corresponding United States patent application, Licensee must request that The Regents file any foreign counterpart patent applications of interest to Licensee. This notice concerning foreign filing must be in writing and must identify the countries desired. The absence of such a notice from Licensee to The Regents within the nine (9) month period will be considered an election by Licensee not to request The Regents to secure foreign patent rights on behalf of Licensee. The Regents will have the right to file patent applications at its own expense in any country Licensee has not included in its list of desired countries, and such applications and resultant patents, if any, will not be included in the licenses granted under this Agreement.

14.5 All past, present and future costs of preparing, filing, prosecuting and maintaining all United States and foreign patent applications and all costs and fees relating to the preparation and filing of patents covered by Patent Rights in Paragraph 1.1 will be borne by Licensee. This includes patent preparation and prosecution costs for the Patent Rights incurred by The Regents prior to the execution of this Agreement. Any outstanding costs incurred by The Regents and not already reimbursed by Licensee will be due upon execution of this Agreement and will be paid at the time that the license issue fee is paid. Licensee will reimburse The Regents for all other costs and charges within thirty (30) days following receipt of an itemized invoice from The Regents for same. The costs of all interferences and oppositions will be considered prosecution expenses and also will be borne by Licensee. Notwithstanding the foregoing, if The Regents grants a

license under the Patent Rights to a licensee other than the Licensee, all patent costs associated with the patents and applications which are the subject of such license agreement will be allocated by The Regents appropriately between Licensee and such licensee.

14.6 The obligation of Licensee to underwrite and to pay patent preparation, filing, prosecution, maintenance, and related costs will continue for costs incurred until three months after receipt by either party of a Notice of Termination. Licensee will reimburse The Regents for all patent costs incurred during the term of the Agreement and for three (3) months thereafter whether or not invoices for such costs are received during the three (3) month period after receipt of a Notice of Termination. Licensee may, with respect to any particular patent application or patent, terminate its obligations to the patent application or patent in any or all designated countries upon three (3) months' written notice to The Regents. The Regents may continue prosecution and/or maintenance of such application(s) or patent(s) at its sole discretion and expense, provided, however, that Licensee will have no further right or licenses thereunder.

14.7 Licensee will notify The Regents of any change of its status as a small entity (as defined by the United States Patent and Trademark Office) and of the first sublicense granted to an entity that does not qualify as a small entity as defined therein.

#### 15. PATENT MARKING

15.1 Licensee will mark all Patent Products made, used, or sold under the terms of this Agreement, or their containers, in accordance with the applicable patent marking laws.

#### 16. PATENT INFRINGEMENT

16.1 In the event that Licensee learns of the substantial infringement of any patent licensed under this Agreement, Licensee will call the attention of The Regents thereto in writing

and will provide The Regents with reasonable evidence of such infringement. Both parties to this Agreement acknowledge that during the period and in a jurisdiction where Licensee has exclusive rights under this Agreement, neither will notify a third party of the infringement of any of Patent Rights without first obtaining consent of the other party, which consent will not be unreasonably withheld. Both parties will use their best efforts in cooperation with each other to terminate such infringement without litigation.

16.2 Licensee may request that The Regents take legal action against the infringement of Patent Rights. Such request must be made in writing and must include reasonable evidence of such infringement and damages to Licensee. If the infringing activity has not been abated within ninety (90) days following the effective date of such request, The Regents will have the right to elect to:

16.2a commence suit on its own account; or

16.2b refuse to participate in such suit and The Regents will give notice of its election in writing to Licensee by the end of the 100th day after receiving notice of such request from Licensee. Licensee may thereafter bring suit for patent infringement if and only if The Regents elects not to commence suit and if the infringement occurred during the period and in a jurisdiction where Licensee had exclusive rights under this Agreement. However, in the event Licensee elects to bring suit in accordance with this Paragraph, The Regents may thereafter join such suit at its own expense.

16.3 Such legal action as is decided upon will be at the expense of the party on account of whom suit is brought and all recoveries recovered thereby will belong to such party, provided, however, that legal action brought jointly by The Regents and Licensee and participated in by

both will be at the joint expense of the parties and all recoveries will be allocated in the following order: a) to each party reimbursement in equal amounts of the attorney's costs, fees, and other related expenses to the extent each party paid for such costs, fees, and expenses until all such costs, fees, and expenses are consumed for each party; and b) any remaining amount shared jointly by them in proportion to the share of expenses paid by each party.

16.4 Each party will cooperate with the other in litigation proceedings instituted hereunder but at the expense of the party on account of whom suit is brought. Such litigation will be controlled by the party bringing the suit, except that The Regents may be represented by counsel of its choice in any suit brought by Licensee.

#### 17. INDEMNIFICATION

17.1 Licensee will (and require its sublicensees to) indemnify, hold harmless, and defend The Regents, its officers, employees, and agents; the sponsors of the research that led to the Invention; the inventors of any invention covered by patents or patent applications in Patent Rights (including the Patent Products and Patent Method contemplated thereunder) and their employers against any and all claims, suits, losses, damage, costs, fees, and expenses resulting from or arising out of exercise of this license or any sublicense. This indemnification will include, but will not be limited to, any product liability.

17.2 Licensee, at its sole cost and expense, will insure its activities in connection with the work under this Agreement and obtain, keep in force, and maintain insurance as follows (or an equivalent program of self insurance):

17.3 Comprehensive or Commercial Form General Liability Insurance (contractual liability included) with limits as follows:

Each Occurrence .....	\$5,000,000
Products/Completed Operations Aggregate .....	\$5,000,000
Personal and Advertising Injury .....	\$5,000,000
General Aggregate (commercial form only).....	\$5,000,000

It should be expressly understood, however, that the coverages and limits referred to under the above will not in any way limit the liability of Licensee. Licensee will furnish The Regents with certificates of insurance evidencing compliance with all requirements. Such certificates will:

- 17.3a Provide for thirty (30) days' advance written notice to The Regents of any modification;
- 17.3b Indicate that The Regents has been endorsed as an additional Insured under the coverages referred to under the above; and
- 17.3c Include a provision that the coverages will be primary and will not participate with nor will be excess over any valid and collectable insurance or program of self-insurance carried or maintained by The Regents.

17.4 The Regents will promptly notify Licensee in writing of any claim or suit brought against The Regents in respect of which The Regents intends to invoke the provisions of this Article 17 (Indemnification). Licensee will keep The Regents informed on a current basis of its defense of any claims pursuant to this Article 17 (Indemnification).

18. NOTICES

18.1 Any notice or payment required to be given to either party will be deemed to have been properly given and to be effective (a) on the date of delivery if delivered in person or (b) five (5) days after mailing if mailed by first-class certified mail, postage paid, to the respective addresses given below, or to another address as it may designate by written notice given to the other party.

In the case of Licensee: Ben-Abraham Technologies, Inc.  
Suite 302, 372 Bay Street  
Toronto, Canada, M5H 2W9  
Telephone: (416) 364-9279  
Facsimile: (416) 364-6725  
Attention: Dr. Claus G. J. Wagner-Bartak

In the case of The Regents: THE REGENTS OF THE UNIVERSITY OF CALIFORNIA  
Harbor Bay Parkway, Suite 150  
Alameda, California 94502  
Tel: (510) 748-6600  
Fax: (510) 748-6639  
Attention: Executive Director;  
Research Administration and  
Technology Transfer  
Referring to: U.C. Case No. 89-204

#### 19. ASSIGNABILITY

19.1 This Agreement is binding upon and will inure to the benefit of The Regents, its successors and assigns, but will be personal to Licensee and assignable by Licensee only with the written consent and at the sole discretion of The Regents.

#### 20. LATE PAYMENTS

20.1 In the event royalty payments, fees, or patent prosecution costs are not received by The Regents when due, Licensee will pay to The Regents interest charges at a rate of ten percent (10%) simple interest per annum. Such interest will be calculated from the date payment was due until actually received by The Regents. Acceptance by The Regents of any late payment interest from Licensee under this Paragraph 20.1 will in no way affect the provision of Article 21 (Waiver) herein.

## 21. WAIVER

21.1 It is agreed that no waiver by either party hereto of any breach or default of any of the covenants or agreements herein set forth will be deemed a waiver as to any subsequent and/or similar breach or default.

## 22. FAILURE TO PERFORM

22.1 In the event of a failure of performance due under the terms of this Agreement and if it becomes necessary for either party to undertake legal action against the other on account thereof, then such legal action will take place in San Francisco, California and the prevailing party will be entitled to reasonable attorney's fees in addition to costs and necessary disbursements.

## 23. GOVERNING LAWS

23.1 THIS AGREEMENT WILL BE INTERPRETED AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, excluding any choice of law rules that would direct the application of the laws of another jurisdiction, but the scope and validity of any patent or patent application will be governed by the applicable laws of the country of such patent or patent application.

## 24. GOVERNMENT APPROVAL OR REGISTRATION

24.1 If this Agreement or any associated transaction is required by the law of any nation to be either approved or registered with any governmental agency, Licensee will assume all legal obligations to do so. Licensee will notify The Regents if it becomes aware that this Agreement is subject to a United States or foreign government reporting or approval require-

ment. Licensee will make all necessary filings and pay all costs including fees, penalties, and all other out-of-pocket costs associated with such reporting or approval process.

#### 25. EXPORT CONTROL LAWS

25.1 Licensee will observe all applicable United States and foreign laws with respect to the transfer of Patent Products and related technical data to foreign countries, including, without limitation, the International Traffic in Arms Regulations (ITAR) and the Export Administration Regulations.

#### 26. FORCE MAJEURE

26.1 The parties to this Agreement will be excused from any performance required hereunder if such performance is rendered impossible or unfeasible due to any acts of God, catastrophes, or other major events beyond their reasonable control, including, without limitation, war, riot, and insurrection; laws, proclamations, edicts, ordinances, or regulations; strikes, lock-outs, or other serious labor disputes; and floods, fires, explosions, or other natural disasters. However, any party to this Agreement will have the right to terminate this Agreement upon thirty (30) days' prior written notice if either party is unable to fulfill its obligations under this Agreement due to any of the causes mentioned above and such inability continues for a period of one year. Notices will be subject to Article 18 (Notices).

#### 27. CONFIDENTIALITY

Licensee and The Regents respectively will treat and maintain the proprietary business, patent prosecution, software, engineering drawings, process and technical information, and other proprietary information ("Proprietary Information") of the other party in confidence using at least the same degree of care as that party uses to protect its own proprietary information of a like

nature for a period from the date of disclosure until five years after the date of termination of this Agreement. This confidentiality obligation will apply to the information defined as "Data" under the Secrecy Agreement, and such Data will be treated as Proprietary Information hereunder.

27.1 All Proprietary Information will be labeled or marked confidential or as otherwise similarly appropriate by the disclosing party, or if the Proprietary Information is orally disclosed, it will be reduced to writing or some other physically tangible form, marked and labeled as set forth above by the disclosing party, and delivered to the receiving party within thirty (30) days after the oral disclosure as a record of the disclosure and the confidential nature thereof. Notwithstanding the foregoing, Licensee and The Regents may use and disclose Proprietary Information to its employees, agents, consultants, contractors, and, in the case of Licensee, its sublicensees, provided that any such parties are bound by a like duty of confidentiality.

27.2 Nothing contained herein will in any way restrict or impair the right of Licensee or The Regents to use, disclose, or otherwise deal with any Proprietary Information:

- 27.3a that recipient can demonstrate by written records was previously known to it;
- 27.3b that is now, or becomes in the future, public knowledge other than through acts or omissions of recipient;
- 27.3c that is lawfully obtained without restrictions by recipient from sources independent of the disclosing party;
- 27.3d that is required to be disclosed to a governmental entity or agency in connection with seeking any governmental or regulatory approval, or pursuant to the lawful requirement or request of a governmental entity or agency;
- 27.3e that is furnished to a third party by the recipient with similar confidentiality restrictions imposed on such third party, as evidenced in writing; or
- 27.3f that The Regents is required to disclose pursuant to the California Public Records Act or other applicable law.

27.3 Upon termination of this Agreement, Licensee and The Regents will destroy or return to the disclosing party proprietary information received from the other in its possession within fifteen (15) days following the effective date of termination. Licensee and The Regents will provide each other, within thirty (30) days following termination, with a written notice that Proprietary Information has been returned or destroyed. Each party may, however, retain one copy of Proprietary Information for archival purposes in non-working files.

#### 28. MISCELLANEOUS

28.1 The headings of the several sections are inserted for convenience of reference only and are not intended to be a part of or to affect the meaning or interpretation of this Agreement.

28.2 This Agreement will not be binding upon the parties until it has been signed below on behalf of each party, in which event, it will be effective as of the date recited on page one.

28.3 No amendment or modification hereof will be valid or binding upon the parties unless made in writing and signed on behalf of each party.

28.4 This Agreement embodies the entire understanding of the parties and will supersede all previous communications, representations or understandings, either oral or written, between the parties relating to the subject matter hereof.

28.5 In case any of the provisions contained in this Agreement are held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability will not affect any other provisions hereof, but this Agreement will be construed as if such invalid or illegal or unenforceable provisions had never been contained herein.

The Regents and Licensee execute this Agreement in duplicate originals by their respective, authorized officers on the date indicated.

Ben-Abraham Technologies, Inc.

The Regents of the University of California

By /s/ Dr. Avi Ben-Abraham  
-----  
(Signature)

By /s/ Terence A. Feuerborn  
-----  
(Signature)

Name: Dr. Avi Ben-Abraham  
-----  
(Please Print)

Name: Terence A. Feuerborn

Title: Chairman & CEO  
-----

Title: Executive Director  
Research Administration and  
Technology Transfer

Date May 30th 1977  
-----

Date -----

[PORTIONS OF THIS EXHIBIT HAVE BEEN OMITTED PURSUANT TO A REQUEST FOR CONFIDENTIALITY UNDER RULE 24b-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED. A COPY OF THIS AGREEMENT WITH THIS EXHIBIT INTACT HAS BEEN FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION.]

FIRST AMENDMENT TO  
EXCLUSIVE LICENSE AGREEMENT  
FOR  
SELECTED APPLICATIONS OF COATED NANOCRYSTALLINE PARTICLES

BETWEEN

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

AND

BEN-ABRAHAM TECHNOLOGIES INC.

UC CASE NO. 89-204

FIRST AMENDMENT TO THE EXCLUSIVE LICENSE AGREEMENT  
FOR SELECTED APPLICATIONS OF COATED NANOCRYSTALLINE PARTICLES

This amendment ("Amendment") is effective this 26th day of October, 1999, by and between The Regents of the University of California ("The Regents"), a California corporation, having its statewide administrative offices at 1111 Franklin Street, 12th Floor, Oakland, California 94607-5200, and Ben-Abraham Technologies Inc. ("Licensee"), a Wyoming corporation, having a principal place of business at 175 Olde Half Day Road, Suite 123, Lincolnshire, Illinois 60069.

RECITALS

Whereas, Licensee and The Regents entered into a license agreement entitled "Exclusive License Agreement for Selected Applications of Coated Nanocrystalline Particles," effective on June 18, 1997, having U.C. Agreement Control Number 1997-04-0671 ("License Agreement"), covering licensure to Licensee by The Regents of rights in certain inventions developed by Dr. Nir Kossovsky et al. at the University of California, Los Angeles and covered by Patent Rights (as defined in the License Agreement);

Whereas, although Licensee and The Regents both agree that the other party has substantially complied with the terms of the License Agreement, changed circumstances have necessitated that certain other provisions of the License Agreement be modified and amended;

Whereas, Licensee has requested that The Regents amend certain provisions in the License Agreement to a more financial and time feasible schedule; and

Whereas, The Regents is willing to amend the License Agreement to reflect such request.

Now, Therefore, in consideration of the foregoing and the mutual promises and covenants contained herein, the parties hereto agree as follows:

1. Paragraph 1.6 (Definitions) of the License Agreement is deleted in its entirety and replaced with the following:  

"1.6 Drug Delivery System" means coated nanocrystalline particles used in pharmaceutical preparations to facilitate the therapeutic delivery of insulin in humans."
2. Paragraph 1.7 (Definition) of the License Agreement is deleted in its entirety and replaced with the following:  

"1.7 [reserved]."
3. Paragraph 1.8 (Definitions) of the License Agreement is deleted in its entirety and replaced with the following:  

"1.8 "Field" means Vaccine Adjuvant, Virus Vaccine Construct, and Drug Delivery System."
4. Paragraph 1.13 (Definitions) is added to the License Agreement as follows:  

"1.13 "Project" means the Vaccine Adjuvant project specified in Subparagraph 5.9a, Epstein Barr Vaccine project specified in Subparagraph 5.9b, Herpes 2 Vaccine project specified in Subparagraph 5.9c, HIV Vaccine project specified in Subparagraph 5.9d, and Insulin project specified in Subparagraph 5.9e."
5. Paragraph 4.5 (Royalties) of the License Agreement is deleted in its entirety and replaced with the following:  

"4.5 Beginning in the year 2004, Licensee will pay to The Regents a minimum annual royalty in the amounts and at the times set forth below:

2004	\$ 50,000
2005	\$ 100,000
2006	\$ 150,000
2007	\$ 200,000
2008	\$ 400,000
2009	\$ 600,000
2010	\$ 800,000
2011	\$ 1,500,000

In each succeeding calendar year after the year 2011, Licensee will pay a minimum annual royalty of One Million Five Hundred Thousand Dollars (\$1,500,000) and thereafter for the life of this Agreement. This minimum annual royalty will be paid to The Regents by February 28 of the year following accrual of the royalties and will be credited against the earned royalty due and owing for the calendar year in which the minimum payment was made."

5. Paragraph 5.7 (Due Diligence) of the License Agreement is deleted in its entirety and replaced with the following:

"5.7 Licensee must hire the following key employees or independent contractors by the designated dates:

Position Description	# Req.	Hiring Target Date
Director, Research & Development	1	December 1, 1996
Senior Vaccine Development Specialist	1	June 30, 1997
Senior Pharmaceutical Development Specialist	1	June 30, 1997
Process Development Scientist	1	April 30, 1997
Quality Control/Assurance Manager	1	December 31, 1997
Information Management Systems Specialist	1	December 31, 1997
Regulatory Specialist	1	December 31, 1998

6. Paragraph 5.8 (Due Diligence) of the License Agreement is deleted in its entirety and replaced with the following:

"5.8 In the hiring of key employees or independent contractors designated in Paragraph 5.7 above, Licensee will use the criteria set forth and hire qualified candidates.

7. Sub-paragraph 5.9a (Due Diligence) of the License Agreement is deleted in its entirety and replaced with the following:

5.9a Vaccine Adjuvant Project

MILESTONES #	TARGET DATE
1: Produce a Patent Product comprising Vaccine Adjuvant for test purposes	September 30, 1997
2: Produce a test model for a Patent Product comprising Vaccine Adjuvant	February 28, 1998
3: Complete toxicity testing for a Patent Product comprising Vaccine Adjuvant	September 30, 1998
4: Enter into strategic alliances or sublicenses for the development of a Patent Product comprising Vaccine Adjuvant	January 31, 2000
5: Submit IND in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Vaccine Adjuvant	
6: Begin Phase I Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Vaccine Adjuvant	
7: Begin Phase 2/3 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Vaccine Adjuvant	
8: File for marketing approval in the United States, Germany, France, England, and Japan for a Patent Product comprising Vaccine Adjuvant	
9: Introduce a Patent Product comprising Vaccine Adjuvant to the market in the United States, Germany, and France within 6 months from marketing approval	
10: Fill market demand in each country within 6 months of introduction for a Patent Product comprising Vaccine Adjuvant	

[Portions of this Exhibit have been omitted pursuant to a request for confidentiality under Rule 24b-2 of the Securities Exchange Act of 1934, as amended. A copy of this agreement with this Exhibit intact has been filed separately with the Securities and Exchange Commission.]

8. Sub-paragraph 5.9b (Due Diligence) of the License Agreement is deleted in its entirety and replaced with the following:

5.9b Epstein Barr Vaccine Project

MILESTONES #	TARGET DATE
1: Produce a Patent Product comprising Virus Vaccine Construct for the Epstein Barr application	December 31, 1997
2: Test a pilot vaccine consisting of a Patent Product comprising Virus Vaccine Construct for the Epstein Barr application	June 30, 1998
3: Complete pre-clinical tests on a Patent Product comprising Virus Vaccine Construct for the Epstein Barr application	December 31, 1998
4: Submit IND in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Virus Vaccine Construct for the Epstein Barr application	
5: Begin Phase I Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Virus Vaccine Construct for the Epstein Barr application	
6: Begin Phase 2 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Virus Vaccine Construct for the Epstein Barr application	
7: Begin Phase 3 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Virus Vaccine Construct for the Epstein Barr application	
8: File for marketing approval in the United States, Germany, France, England, and Japan for a Patent Product comprising Virus Vaccine Construct for the Epstein Barr application	
9: Introduce a Patent Product comprising Virus Vaccine Construct for	

the Epstein Barr application to the market in the United States, Germany, France, England, and Japan within 6 months from marketing approval

10: Fill market demand in each country within 6 months of introduction for a Patent Product comprising Virus Vaccine Construct for the Epstein Barr application

[Portions of this Exhibit have been omitted pursuant to a request for confidentiality under Rule 24b-2 of the Securities Exchange Act of 1934, as amended. A copy of this agreement with this Exhibit intact has been filed separately with the Securities and Exchange Commission.]

9. Sub-paragraph 5.9c (Due Diligence) of the License Agreement is deleted in its entirety and replaced with the following:

5.9c Herpes 2 Vaccine Project

MILESTONES #	TARGET DATE
1: Produce a Patent Product comprising Virus Vaccine Construct for the Herpes 2 application	February 28, 1998
2: Test a pilot vaccine consisting of a Patent Product comprising Virus Vaccine Construct for the Herpes 2 application	August 31, 1998
3: Complete pre-clinical tests on a Patent Product comprising Virus Vaccine Construct for the Herpes 2 application	February 28, 1999
4: Submit IND in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Virus Vaccine Construct for the Herpes 2 application	
5: Begin Phase I Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Virus Vaccine Construct for the Herpes 2 application	
6: Begin Phase 2 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Virus Vaccine Construct for the Herpes 2 application	
7: Begin Phase 3 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Virus Vaccine Construct for the Herpes 2 application	
8: File for marketing approval in the United States, Germany, France, England, and Japan for a Patent Product comprising Virus Vaccine Construct for the Herpes 2 application	
9: Introduce a Patent Product comprising Virus Vaccine Construct for the Herpes 2 application to the market in the United States, Germany, France, England, and Japan within 6 months from marketing approval	
10: Fill market demand in each country within 6 months of introduction for a Patent Product comprising Virus Vaccine Construct for the Herpes 2 application	

[Portions of this Exhibit have been omitted pursuant to a request for confidentiality under Rule 24b-2 of the Securities Exchange Act of 1934, as amended. A copy of this agreement with this Exhibit intact has been filed separately with the Securities and Exchange Commission.]

10. Sub-paragraph 5.9d (Due Diligence) of the License Agreement is deleted in its entirety and replaced with the following:

5.9d HIV Vaccine Project

MILESTONES #	TARGET DATE
1: Produce a Patent Product comprising Virus Vaccine Construct for the HIV vaccine application	January 31, 1998
2: Test a pilot vaccine consisting of a Patent Product comprising Virus Vaccine Construct for the HIV vaccine application	December 31, 1998
3: Complete pre-clinical tests on a Patent Product comprising Virus Vaccine Construct for the HIV vaccine application	May 31, 1999
4: Submit IND in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Virus Vaccine Construct for the HIV vaccine application	
5: Begin Phase I Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Virus Vaccine Construct for the HIV vaccine application	
6: Begin Phase 2 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Virus Vaccine Construct for the HIV vaccine application	
7: Begin Phase 3 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Virus Vaccine Construct for the HIV vaccine application	
8: File for marketing approval in the United States, Germany, France, England, and Japan for a Patent Product comprising Virus Vaccine Construct for the HIV vaccine application	
9: Introduce a Patent Product comprising Virus Vaccine Construct for the HIV vaccine application to the market in the United States, Germany, France, England, and Japan within 6 months from marketing approval	
10: Fill market demand in each country within 6 months of introduction for a Patent Product comprising Virus Vaccine Construct for the HIV vaccine application	

[Portions of this Exhibit have been omitted pursuant to a request for confidentiality under Rule 24b-2 of the Securities Exchange Act of 1934, as amended. A copy of this agreement with this Exhibit intact has been filed separately with the Securities and Exchange Commission.]

11. Sub-paragraph 5.9e (Due Diligence) of the License Agreement is deleted in its entirety and replaced with the following:

5.9e Insulin Project

MILESTONES #	TARGET DATE
1: Produce a Patent Product comprising Drug Delivery System for the insulin application	May 31, 1998
2: Test a clinical material consisting of a Patent Product comprising Drug Delivery System for the insulin application	May 31, 1999
3: Complete pre-clinical tests on a Patent Product comprising Drug Delivery System for the insulin application	October 31, 1999
4: Submit IND for Phase 1 Clinical Trials for use of calcium phosphate nanoparticles (CAP) as adjuvant or carrier in inhaled or other insulin application	
5: Submit IND in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Drug Delivery System for the insulin application	
6: Begin Phase I Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Drug Delivery System for the insulin application	
7: Begin Phase 2 Clinical Trials in the United States and the foreign regulatory counterpart in Europe and Japan for a Patent Product comprising Drug Delivery System for the insulin application	
8: Begin Phase 3 Clinical Trials in the United States and the foreign	

regulatory counterpart in Europe and Japan for a Patent Product comprising Drug Delivery System for the insulin application

9: File for marketing approval in the United States, Germany, France, England, and Japan for a Patent Product comprising Drug Delivery System for the insulin application

10: Introduce a Patent Product comprising Drug Delivery System for the insulin application to the market in the United States, Germany, France, England, and Japan within 6 months from marketing approval

11: Fill market demand in each country within 6 months of introduction for a Patent Product comprising Drug Delivery System for the insulin application

[Portions of this Exhibit have been omitted pursuant to a request for confidentiality under Rule 24b-2 of the Securities Exchange Act of 1934, as amended. A copy of this agreement with this Exhibit intact has been filed separately with the Securities and Exchange Commission.]

12. Sub-paragraphs 5.9f, 5.9g and 5.9h (Due Diligence) are deleted in their entirety from the License Agreement.

13. Paragraph 5.11 (Due Diligence) of the License Agreement is deleted in its entirety and replaced with the following:

"5.11 The Regents shall have the right and option to either (1) terminate this Agreement when Licensee fails to meet due diligence provisions for any three of the five projects specified under Projects, as defined in Paragraph 1.13 above; or (2) reduce the exclusive license granted to non-exclusive licenses for each project specified under Projects, as defined in Paragraph 1.13 above, when Licensee fails to meet due diligence provisions for that particular project, subject to the notice and opportunity to repair provisions of Paragraph 9.1."

14. Paragraph 9.1 (Termination by the Regents) of the License Agreement is deleted in its entirety and replaced with the following:

"9.1 Subject to Paragraph 5.11, if Licensee should violate or fail to perform any term or covenant of this Agreement, then The Regents may give written notice of such default ("Notice of Default") to Licensee. If Licensee should fail to repair such default within sixty (60) days after the date such notice takes effect, The Regents will have the right to terminate this Agreement and the licenses herein by a second written notice ("Notice of Termination") to Licensee. If a Notice of Termination is sent to Licensee, this Agreement will automatically terminate on the date such notice takes effect. Such termination will not relieve Licensee of its obligation to pay any royalty or license fees owing at the time of such termination and will not impair any accrued right of The Regents. These notices will be subject to Article 18 (Notices)."

15. Paragraph 18.1 (Notices) of the License Agreement is deleted in its entirety and replaced with the following:

"18.1 Any notice or payment required to be given to either party will be deemed to have been properly given and to be effective:

- 18.1a on the date of delivery if delivered in person;
- 18.1b on the date of mailing if mailed by first-class certified mail, postage paid; or
- 18.1c on the date of mailing if mailed by any global express carrier service that requires the recipient to sign the documents demonstrating the delivery of such notice of payment;

to the respective addresses given below, or to another address as designated in writing by the party changing its prior address.

In the case of Licensee: Ben-Abraham Technologies, Inc.  
175 Olde Half Day Road, Suite 123  
Lincolnshire, Illinois 60069  
Telephone: (847) 793-2434  
Facsimile: (847) 793-2435  
Attention: Stephen M. Simes  
President & CEO

In the case of The Regents: The Regents of the University of California  
Office of the President  
Office of Technology Transfer  
1111 Franklin Street, 5th Floor  
Oakland, California 94607-5200  
Telephone: (510) 587-6000  
Facsimile: (510) 587-6090  
Attention: Executive Director  
Office of Technology Transfer  
Referring to: U.C. Case No. 89-204

In Witness Whereof, both The Regents and the Licensee have executed this Amendment, in duplicate originals, by their respective officers hereunto duly authorized, on the day and year hereinafter written.

BEN-ABRAHAM  
TECHNOLOGIES INC.  
By /s/ Stephen M. Simes  
-----  
(Signature)  
Name Stephen M. Simes  
-----  
Title President & CEO  
-----  
Date 10/22/99  
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THE REGENTS OF THE  
UNIVERSITY OF CALIFORNIA  
By /s/ Terence A. Feuerborn  
-----  
(Signature)  
Name Terence A. Feuerborn  
-----  
Title Executive Director,  
Research Administration  
and Technology Transfer  
-----  
Date 10/26/99  
-----

Approved as to legal form: /s/ Edwin H. Baker 10/22/99

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Edwin H. Baker Date  
University Counsel  
Office of General Counsel