

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549

FORM 10-SB

GENERAL FORM FOR REGISTRATION OF SECURITIES OF SMALL BUSINESS ISSUERS  
UNDER SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

BIOSANTE PHARMACEUTICALS, INC.  
(Name of Small Business Issuer in its charter)

WYOMING  
(State or other jurisdiction of incorporation or organization) 58-2301143  
(I.R.S. Employer Identification No.)

175 OLDE HALF DAY ROAD, SUITE 123  
LINCOLNSHIRE, ILLINOIS 60069  
(Address of principal executive offices) (Zip Code)

(847) 793-2458  
(Issuer's telephone number, including area code)

Securities to be registered under Section 12(b) of the Act:

NONE

Securities to be registered under Section 12(g) of the Act:

COMMON STOCK, NO PAR VALUE PER SHARE  
(Title of Class)

IN REVIEWING THIS REGISTRATION STATEMENT, YOU SHOULD CAREFULLY CONSIDER THE MATTERS DESCRIBED UNDER THE HEADINGS "RISKS RELATING TO OUR COMPANY" BEGINNING ON PAGE 14, "RISKS RELATING TO OUR INDUSTRY" ON PAGE 22 AND "RISKS RELATING TO OUR COMMON STOCK" BEGINNING ON PAGE 22.

## PART I

### ITEM 1. DESCRIPTION OF BUSINESS.

#### OVERVIEW

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.

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.

On November 10, 1999, our shareholders approved our name change from Ben-Abraham Technologies Inc. to BioSante Pharmaceuticals, Inc. Our company was continued as a corporation under the laws of the State of Wyoming on December 19, 1996, was initially formed as a corporation organized under the laws of the Province of Ontario on August 29, 1996. Our company is the continuing corporation resulting from an amalgamation 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 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, including 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, which are deliberately administered to induce the production of antibodies. When weakened pathogens are used as a vaccine, they replicate 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&M 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 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 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 pharmaceutical compounds 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 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. The insulin market in the United States exceeded \$870 million in 1997.

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 molecular stabilizing and transporting media for biopharmaceutical and other applications. 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 an active molecular transport 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 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 such constructs 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 constructs 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 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 and non-toxic;
- it is fast, easy and inexpensive to manufacture;
- the nanometer (one-millionth of a millimeter) size range makes it ideal for delivering drugs through aerosol sprays or inhalation; and
- it has excellent "loading" capacity - the amount of molecules that can bond with the nanoparticles.

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, 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 1999 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 pharmacological actions 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.

**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 such agents to nanoparticles may enhance their stability in the body or enable the addition of further protective coatings to permit oral, delayed-release and mucosal applications. Currently, insulin is given by frequent, inconvenient and often painful injections. Recent human clinical research indicates the insulin delivered through the airways can achieve the same results as injections. 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 immunization and for drug delivery. The results obtained in our virus construct program indicate that similar constructs 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 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 license fee;
- payment of royalties to the University on the net sales of any products developed pursuant to the agreement;

- payment of minimum annual royalties beginning in the year 2003, to be credited against earned royalties, for the life of the agreement or the last-to-expire patent licensed under the agreement;
- maintaining an annual minimum amount of available capital until product launch;
- payment of the costs of patent prosecution and maintenance of the patents included in the agreement;
- meeting performance milestones; 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.

**PATENTS AND PATENT APPLICATIONS.** Although we do not own any United States patents or foreign patents, nor do we have any United States or foreign patent applications pending, we have filed three provisional patents relating to our development work with adjuvants, aerosol delivery and DNA and RNA vaccines.

**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 \$120,000 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 animal model systems to gain preliminary information on a proposed product's pharmacology and toxicology 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 Phase I, which is known as, is conducted to evaluate the metabolism and pharmacological actions 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. We have recently entered into an arrangement with the University of Iowa to manufacture our CAP nanoparticles in sufficient quantities for use in our proposed Phase I human clinical trial.

#### 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 November 1, 1999, 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. For these statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.

#### 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 2001. 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 COMMERCIALY 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 toxicology and pharmacology 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 it if we breach our obligations under the license agreement or fail to meet required development milestones. Under

the license agreement, we are generally required to have available funds for research and development activities involving the licensed technology and to meet certain progress benchmarks with respect to the commercial development of products incorporating the licensed technology. If we were unable to meet these progress benchmarks, the University of California may be entitled to terminate our license rights to some or all of the licensed technology. Our failure to retain the right to license this technology could harm our business, financial condition and operating results.

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. 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 ALBERTA STOCK 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 Alberta Stock 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 Alberta Stock 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 Alberta Stock 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 Alberta Stock 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 23,125,000 RESTRICTED SHARES OF OUR COMMON STOCK, OR 40% 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 29,437,686 shares, which they will be able to sell in the public market in the near future. Beginning 90 days after the date this registration statement is declared effective, approximately 15,103,686 shares will be freely tradable and the remainder of these shares will become freely tradable at various later times. 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.

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.

We do not intend to pay any cash dividends in the foreseeable future.

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 1999 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.

#### LIQUIDITY

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 per month on research and development activities and approximately \$100,000 to \$125,000 per month in total expenses. 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 make 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.

We, as well as our predecessor, Structured Biologicals, have consistently raised equity financing to fund our activities in the past and we expect to continue this practice to fund our ongoing activities. In May 1999, we closed a private placement whereby we raised \$4.4 million, thereby increasing our cash balance to approximately \$5.6 million as of October 1, 1999. This cash balance is expected to fund our operations through at least June 2001. We have based this estimate, however, on assumptions which 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.

## CAPITAL RESOURCES

Construction of the laboratory, which was initiated in October 1997 and completed in January 1998, cost approximately \$500,000. We expect to spend approximately \$10,000 to \$20,000 in capital expenditures during the next 12 months.

### 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. 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 30, (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	PERCENT OF TOTAL VOTING POWER (3)
	NUMBER	PERCENT	NUMBER	PERCENT		
Avi Ben-Abraham, M.D. (4).....	12,467,300 (5)	23.6%	--	--	12,467,300	21.6%
Stephen M. Simes (4).....	1,621,110 (6)	3.0%	--	--	1,621,110	2.6%
Louis W. Sullivan, M.D. (4).....	--	--	1,000,000	20.8%	1,000,000	1.7%
Edward C. Rosenow III, M.D. (4)....	100,000 (7)	*	--	--	100,000	*
Victor Morgenstern (4).....	3,750,000 (8)	7.0%	--	--	3,750,000	6.4%
Fred Holubow (4).....	375,000 (9)	*	--	--	375,000	*
Ross Mangano (4).....	11,250,000 (10)	19.9%	--	--	11,250,000	18.4%
Angela Ho (4).....	700,000 (11)	1.3%	1,000,000	20.8%	1,700,000	3.1%
Peter Kjaer (4).....	--	--	--	--	--	--
JO & Co.....	11,250,000 (12)	19.9%	--	--	11,250,000	18.4%
Hans Michael Jebesen.....	3,750,000 (13)	7.0%	1,000,000	20.8%	4,750,000	8.2%
King Cho Fung.....	3,187,500 (14)	6.0%	625,000	13.0%	3,812,500	6.6%
All executive officers and directors as a group (10 persons) ..	30,582,498 (15)	51.1%	2,000,000	41.6%	32,582,498	50.4%

\* less than 1%.

- (1) In calculating the percent of total voting power, the voting power of shares of our class C stock and our common stock is aggregated.
- (2) 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.
- (3) This Shareholder 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.
- (4) Address: 175 Olde Half Day Road, Suite 123, Lincolnshire, IL 60069.
- (5) Dr. Ben-Abraham's beneficial ownership includes 200,000 shares of common stock issuable under currently exercisable options.
- (6) 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.
- (7) Dr. Edward C. Rosenow's beneficial ownership includes 100,000 shares of common stock issuable under currently exercisable options.

- (8) 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.
- (9) Mr. Fred Holubow's beneficial ownership includes 125,000 shares of common stock issuable under a currently exercisable warrant.
- (10) 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.
- (11) Ms. Angelo Ho's beneficial ownership includes 100,000 shares of common stock issuable under currently exercisable options.
- (12) Includes 3,750,000 shares of common stock issuable under a currently exercisable warrant. The address for JO & Co. is 112 West Jefferson Boulevard, Suite 613, South Bend, Indiana 46634.
- (13) Mr. Hans Michael Jebsen's beneficial ownership includes 750,000 shares of common stock issuable under a currently exercisable warrant. Mr. Jebsen's address is c/o Jebsen & Co. Ltd., 28/F Caroline Center, 28 Yun Ping Road, Causeway Bay, Hong Kong.
- (14) 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.
- (15) 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 (8), (10) and (12) 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 October 1, 1999:

NAME ----	AGE ---	POSITION -----
Louis W. Sullivan, M.D. (1)(2)(3).....	66	Chairman of the Board
Stephen M. Simes.....	47	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. 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 of Jet Asia Ltd., a Hong Kong-based transportation company since April 1996 and a representative of our major investors in that province.

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 35 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 34 and "- Stock Option Plan" on page 35.

(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 34 and "- Stock Option Plan" on page 35.

(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 Alberta Stock 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 Alberta Stock Exchange and we have not been exempted from the Alberta Stock 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 and certain existing shareholders. 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 and certain parties to the Shareholders Agreement 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 certain other of our shareholders 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 the other parties 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 vest immediately with respect to 50,000 shares and vests one year from October 7, 1998 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 vests one year from the date of grant.

#### 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 several investors located in Hong Kong. Ms. Ho has not entered into any voting agreements with these Hong Kong 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.

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 36 under the heading "Item 6. Management--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 as a representative of our Hong Kong investors in July 1999. Mr. Kjaer has not entered into any voting agreements with these Hong Kong 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. Management--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 and certain existing shareholders 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 "BNHT" since September 10, 1999 and on 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 Alberta Stock Exchange. The prices in the table may not represent actual transactions.

ALBERTA STOCK EXCHANGE -----	HIGH	LOW
1997	---	---
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

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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

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First Quarter.....	\$0.24	\$0.15
Second Quarter.....	\$0.50	\$0.21
Third Quarter.....	\$0.37	\$0.23

NATIONAL QUOTATION BUREAU ("PINK SHEETS")

1999

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Third Quarter.....	\$ .51	\$ .27
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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 36,742,300 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, 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 non-affiliated investors) for \$0.0001 per share and 4,100,000 shares of our common stock to eight individuals for \$1.00 per share.
2. In November 1996, we issued an aggregate of 128,570 shares of our common stock for \$1.28 per share to non-U.S. persons outside the U.S. within the meaning of Regulation S of the Securities Act.
3. 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; 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.
4. 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.
5. 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; (2) 377,135 shares of common stock (94,285 of such shares to Wagner-Bartak Holdings Inc. and 282,850 of such shares to Pennyworth Corporation Inc.) pursuant to the conversion of an aggregate of 377,135 class C shares, which had been previously issued at a conversion price of \$0.25 per share; 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.
6. 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.

7. 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 shares which had been previously issued at a conversion price of \$0.25 per share.
8. In March 1998, we issued an aggregate of 30,000 shares of common stock pursuant to the conversion of class C shares, which had previously issued at a conversion price of \$0.25 per share for a payment of \$7,500 to us.
9. In May 1998, we issued 15,000,000 shares of common stock to Dr. Ben-Abraham pursuant to his conversion of class A shares which had been previously issued at a conversion price of \$0.25 per share for a payment of \$3,750,000 to us. In addition, Dr. Ben-Abraham returned 1,468,614 class A shares and 250,000 class C shares to our treasury for no consideration.
10. In June 1998, we issued an aggregate of 2,000,000 shares of common stock pursuant to the conversion of class A shares, which had been previously issued at a conversion price of \$0.25 per share for a payment of \$500,000 to us.
11. In February 1999, we issued 10,000 shares of common stock pursuant to the conversion of class C shares, which had been previously issued at a conversion price of \$0.25 per share in a cashless exercise.
12. 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 a payment of \$4,372,500 to us. 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.
13. In August 1999, an outstanding liability of \$25,000 was converted into 70,000 shares of common stock at approximately \$0.36 per share.

No underwriting commissions or discounts were paid with respect to the sales of the unregistered securities described above. In addition, all of the above sales were made in reliance on Rule 701, Regulation D and Section 4(2) under 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

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PART III

ITEM 1. EXHIBITS.

Reference is made to the Exhibit Index included in this Registration Statement at pages 44 through 45.

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 Alberta Stock 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 27.1 Financial Data Schedule

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\* 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.

SIGNATURES

In accordance with Section 12 of the Securities Exchange Act of 1934, the Registrant caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: November 11, 1999 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

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Stephen M. Simes and Phillip B. Donenberg, each one of them, individually, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement and any additional Registration Statements filed pursuant to Section 12 under the Securities Exchange Act of 1934, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Registration Statement has been signed by the following persons in the capacities indicated, on November 11, 1999.

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)
/s/ Louis W. Sullivan, M.D. ----- Louis W. Sullivan, M.D.	Chairman of the Board

/s/ Avi Ben-Abraham, M.D.

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Avi Ben-Abraham, M.D. Director

/s/ Victor Morgenstern

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Victor Morgenstern Director

/s/ Edward C. Rosenow, III, M.D.

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Edward C. Rosenow, III, M.D. Director

/s/ Fred Holubow

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Fred Holubow Director

/s/ Ross Mangano

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Ross Mangano Director

/s/ Angelo Ho

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Angela Ho Director

/s/ Peter Kjaer

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Peter Kjaer Director

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

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EXHIBIT INDEX

TO

FORM 10-SB

-----  
BIOSANTE PHARMACEUTICALS, INC.  
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EXHIBIT NO. -----	EXHIBIT -----	METHOD OF FILING -----
2.1	Arrangement Agreement, dated October 23, 1996, between Structured Biologicals Inc. and BioSante Pharmaceuticals, Inc.....	Filed herewith electronically
3.1	Articles of Continuance of BioSante Pharmaceuticals, Inc., as amended	Filed herewith electronically
3.2	Bylaws of BioSante Pharmaceuticals, Inc.....	Filed herewith electronically
4.1	Form of Warrant issued in connection with May 1999 Private Placement	Filed herewith electronically
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.....	Filed herewith electronically
10.4	Stock Option Agreement, dated July 6, 1995, between BioSante Pharmaceuticals, Inc. and Avi Ben-Abraham, M.D.....	Filed herewith electronically

10.5	Stock Option Agreement, dated December 7, 1997, between BioSante Pharmaceuticals, Inc. and Edward C. Rosenow, III, M.D.	Filed herewith electronically
10.6	Stock Option Agreement, dated December 8, 1998, between BioSante Pharmaceuticals, Inc. and Stephen M. Simes.....	Filed herewith electronically
10.7	Stock Option Agreement, dated December 8, 1998, between BioSante Pharmaceuticals, Inc. and Stephen M. Simes.....	Filed herewith electronically
10.8	Stock Option Agreement, dated March 30, 1999, between BioSante Pharmaceuticals, Inc. and Stephen M. Simes.....	Filed herewith electronically
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....	Filed herewith electronically
10.10	Voting Rights Limitation Agreement, dated November 28, 1996, by Avi Ben-Abraham, M.D. to the Alberta Stock Exchange.....	Filed herewith electronically
10.11	Voting Agreements, dated May 6, 1999, between BioSante Pharmaceuticals, Inc., Avi Ben-Abraham, M.D. and certain shareholders of BioSante Pharmaceuticals, Inc.....	Filed herewith electronically
10.12	Shareholders' Agreement, dated May 6, 1999, between BioSante Pharmaceuticals, Inc., Avi Ben-Abraham, M.D. and certain shareholders of BioSante Pharmaceuticals, Inc.....	Filed herewith electronically
10.13	Registration Rights Agreement, dated May 6, 1999, between BioSante Pharmaceuticals, Inc. and certain shareholders of BioSante Pharmaceuticals, Inc.....	Filed herewith electronically
10.14	Securities Purchase Agreement, dated May 6, 1999, between BioSante Pharmaceuticals, Inc. and certain shareholders of BioSante Pharmaceuticals, Inc.....	Filed herewith electronically
10.15	Lease, dated September 15, 1997, between BioSante Pharmaceuticals, Inc. and Highlands Park Associates.....	Filed herewith electronically
10.16	Employment Agreement, dated January 21, 1998, between BioSante Pharmaceuticals, Inc. and Stephen M. Simes, as amended.....	Filed herewith electronically
27.1	Financial Data Schedule.....	Filed herewith electronically

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\* 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.

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>	532,829	677,545
	\$3,449,345	\$2,449,766
<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
	\$3,449,345	\$2,449,766

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
<b>REVENUE</b>			
Interest income	\$ 123,061	\$ 143,718	\$ 320,135
<b>EXPENSES</b>			
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
<b>NET LOSS</b>	<b>\$ (2,659,415)</b>	<b>\$ (1,890,093)</b>	<b>\$ (10,796,218)</b>
<b>BASIC AND DILUTED NET LOSS PER SHARE (Note 8)</b>			
	\$ (0.08)	\$ (0.05)	\$ (0.32)
<b>WEIGHTED AVERAGE NUMBER OF SHARES OUTSTANDING</b>			
	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 November 27, 1996 - issued as consideration upon acquisition of SBI (Note 3)	-	(410,000)	-	(410,000)
Exercise of Series "X" warrants (Note 6)	7,434,322	4,545,563	-	4,545,563
Exercise of Series "Z" 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
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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)
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. On November 27, 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 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 (the "U.S.") 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.

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, 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, 2000. 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, in 1996, the Company has expensed purchased in-process research and development of \$5,377,000.

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
	-----	-----
Accumulated depreciation and amortization	625,701 (92,872)	723,173 (45,628)
	-----	-----
	\$ 532,829	\$ 677,545
	-----	-----

5. INCOME TAXES

The Company estimates that the losses for the post-continuance period were approximately \$4,550,000 which are available to reduce future taxable income for up to 15 taxation years. Additionally, the Company had approximately \$144,000 of research and development credits available to reduce future income taxes through the year 2012.

The resulting deferred tax asset of approximately \$1,835,000 has not been recorded due to the establishment of a valuation allowance. As the deferred tax asset has been fully reserved, it 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.

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)

B) WARRANTS

The Company upon the acquisition of SBI assumed the following warrants to purchase subordinate voting shares.

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

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.

7. STOCK OPTIONS (CONTINUED)

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 proforma amounts indicated below:

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

The fair value of the options at the date of the grant 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	-	-

7. STOCK OPTIONS (CONTINUED)

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
Options outstanding, Beginning of period	250,000	Cdn. \$ 1.64	200,000	Cdn. \$ 1.65
Options granted	2,225,000	Cdn. \$ 0.45	50,000	Cdn. \$ 1.60
Options cancelled/expired	(10,000)	Cdn. \$ 0.44	-	-
Options exercised	-	-	-	-
Options outstanding, end of period	2,465,000	Cdn. \$ 0.57	250,000	Cdn. \$ 1.64
Shares exercisable, end of year	674,500		250,000	

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 \$105,396 and \$36,755 for the year ended December 31, 1998 and 1997, respectively.

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.

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
<b>REVENUE</b>			
Interest income	\$ 62,022	\$ 45,659	\$ 134,538
<b>EXPENSES</b>			
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)
<b>OTHER EXPENSES</b>			
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
<b>REVENUE</b>		
Interest income	\$ 88,599	\$ 454,673
<b>EXPENSES</b>		
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)
<b>OTHER EXPENSES</b>		
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.

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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	TOTAL
	SHARES	AMOUNT	STAGE	
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
<b>CASH FLOWS USED IN OPERATING ACTIVITIES</b>			
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)	-
<b>NET CASH USED IN OPERATING ACTIVITIES</b>	<b>(1,413,578)</b>	<b>(2,494,828)</b>	<b>(6,605,780)</b>
<b>CASH FLOWS USED IN INVESTING ACTIVITIES</b>			
Purchase of capital assets	(4,219)	(120,124)	(852,852)
<b>CASH FLOWS PROVIDED BY FINANCING ACTIVITIES</b>			
(Conversion) Issuance of Class "A" & "C" stock	-	(175)	482
Issuance of common stock	4,225,343	4,257,503	13,106,946
<b>NET CASH PROVIDED BY FINANCING ACTIVITIES</b>	<b>4,225,343</b>	<b>4,257,328</b>	<b>13,107,428</b>
<b>NET INCREASE IN CASH AND CASH EQUIVALENTS</b>	<b>2,807,546</b>	<b>1,642,376</b>	<b>5,648,796</b>
<b>CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD</b>	<b>2,841,250</b>	<b>1,750,331</b>	<b>-</b>
<b>CASH AND CASH EQUIVALENTS AT END OF PERIOD</b>	<b>\$ 5,648,796</b>	<b>\$ 3,392,707</b>	<b>\$ 5,648,796</b>
<b>SUPPLEMENTAL SCHEDULE OF CASH FLOW INFORMATION</b>			
Acquisition of SBI			
Purchased in-process research & 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	\$ -	\$ -	\$ -

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. On November 27, 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 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 (the "U.S.") 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.

September 30, 1999

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".

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.

TRANSLATION OF FOREIGN CURRENCIES

Current assets and current liabilities denominated in foreign currencies are translated into United States dollars using the exchange rate at the period end. Transactions during the period recorded in foreign currencies are translated into United States dollars using the exchange rate in effect at the date of the transaction. Gains and losses on translation of foreign currencies are charged to operations during the period. Currently an insignificant amount of the Company's business is conducted in non-U.S. currency.

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.

September 30, 1999

2. SUMMARY OF ACCOUNTING POLICIES (CONTINUED)

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 \$5,590,000. 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 \$2,235,000 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.

## NOTES TO 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
	=====	=====

## 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.

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.

September 30, 1999

8. SUBSEQUENT EVENTS

In the Company's License Agreement with the University of California, as amended, 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. Minimum annual royalties in 2004 equal \$50,000 rising each year until 2011 when the minimum annual royalty is \$1.5 million. The total minimum royalty obligation for the years 2004 through 2013 is \$6.8 million.

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

ARRANGEMENT AGREEMENT

THIS AGREEMENT made on and as of the 23rd day of October, 1996.

B E T W E E N:

STRUCTURED BIOLOGICALS INC., a corporation amalgamated under the laws of Ontario (hereinafter referred to as "SBI")

- and -

BEN-ABRAHAM TECHNOLOGIES INC., a corporation incorporated under the laws of Ontario (hereinafter referred to as "BA Tech")

WHEREAS SBI and BA Tech wish to amalgamate pursuant a Plan of Arrangement;

AND WHEREAS SBI intends to propose the Arrangement to its shareholders;

AND WHEREAS the parties hereto wish to record their agreements with respect to the Arrangement;

NOW THEREFORE THIS AGREEMENT WITNESSES that, in consideration of the premises and the respective covenants and agreements herein contained, the parties hereto covenant and agree as follows:

ARTICLE 1

INTERPRETATION

1.1 DEFINITIONS

In this Plan of Arrangement, unless there is something in the subject matter or context inconsistent therewith:

"ACT" means the Ontario BUSINESS CORPORATIONS ACT, R.S.O. 1990, c. B.16, as amended;

"AMALCO" means the corporation continuing from the Amalgamation;

"AMALCO CLASS A SHARES" means the Class A special shares in the capital of Amalco;

"AMALCO CLASS B SHARES" means the Class B special shares in the capital of Amalco;

"AMALCO CLASS C SHARES" means the Class C special shares in the capital of Amalco;

"AMALCO SV SHARES" means the subordinate voting shares in the capital of Amalco;

"AMALGAMATION" means the amalgamation of BA Tech, NCI and SBI pursuant to this Plan of Arrangement;

"ARRANGEMENT" means an arrangement under the provisions of section 182 of the Act, on the terms and conditions set forth in the Plan of Arrangement;

"BA CLASS A SHARES" means the Class A special shares of BA Tech;

"BA CLASS B SHARES" means the Class B special shares of BA Tech;

"BA CLASS C SHARES" means the Class C special shares of BA Tech;

"BA COMMON SHARES" means the common shares of BA Tech;

"BA SHARES" means the BA Class A Shares, the BA Class B Shares, the Class C Shares and the BA Common Shares;

"BA TECH" means Ben-Abraham Technologies Inc., a corporation, incorporated under the laws of Ontario;

"BUSINESS DAY" means a day other than a Saturday, Sunday or an Ontario provincial holiday or any other day when banks in Toronto, Canada, are not open for business;

"CONTINUANCE" means the continuance of Amalco as a corporation under the laws of the State of Wyoming;

"COURT" means the Ontario Court (General Division);

"DEPOSITARY" means Montreal Trust Company;

"DIRECTOR" means the Director appointed under section 278 of the Act;

"EFFECTIVE DATE" means the date shown in the certificate of arrangement giving effect to the Arrangement which is issued under the Act by the Director;

"FINAL ORDER" means the final order of the Court made in connection with approval of the Arrangement, following the application therefor contemplated in section 3.3 hereof;

"HOLDER" means a registered holder of SBI Common Shares on the Effective Date;

"INTERIM ORDER" means the interim order of the Court made in connection with approval of the Arrangement, following the application therefor contemplated in section 3.3 hereof;

"NCI" means 923934 Ontario Corporation, a corporation incorporated under the laws of Ontario, and a wholly-owned subsidiary of SBI;

"PLAN OF ARRANGEMENT" means the plan of arrangement which is annexed as Appendix 1 hereto or any amendment or variation thereto made in accordance with Section 5.1 hereof;

"SBI" means Structured Biologicals Inc., a corporation amalgamated under the laws of Ontario;

"SBI COMMON SHARES" means the common shares of SBI;

"SBI INFORMATION CIRCULAR" means the management information circular of SBI to be prepared and sent to the registered holders of SBI Common Shares in connection with the SBI Shareholders Meeting;

"SBI SHAREHOLDERS MEETING" means the annual and special meeting of shareholders of SBI (including any adjournment thereof) to be held, among other things, to consider and, if deemed advisable, to approve the Arrangement and the Continuance;

"THIS AGREEMENT", "HEREOF", "HEREIN", AND "HEREUNDER" and similar expressions refer to this Arrangement Agreement and the Schedules hereto and not to any particular article, section or other portion hereof;

"UCLA" means the University of California, Los Angeles.

#### 1.2 INTERPRETATION NOT AFFECTED BY HEADINGS, ETC.

The division of this Arrangement Agreement into articles, sections and other portions and the insertion of headings are for convenience of reference only and shall not affect the construction or interpretation of this Arrangement Agreement.

#### 1.3 CURRENCY

All sums of money which are referred to in this Plan of Arrangement are expressed in lawful money of Canada unless otherwise specified.

#### 1.4 NUMBER, ETC.

Unless the context requires the contrary, words importing the singular number only shall include the plural and vice versa; words importing the use of any gender shall include all genders; and words importing persons shall include natural persons, firms, trusts, partnerships and corporations.

## 1.5 ENTIRE AGREEMENT

This Agreement, together with the exhibits, appendices, schedules, agreements and other documents herein and therein referred to, constitutes the entire agreement between the parties pertaining to the subject matter hereof and supersedes all prior agreements, understandings, negotiations and discussions, whether oral or written, between the parties with respect to the subject matter hereof.

## ARTICLE 2

### REPRESENTATIONS AND WARRANTIES

#### 2.1 REPRESENTATIONS AND WARRANTIES OF SBI

SBI represents and warrants to and in favour of BA Tech as follows:

- (a) SBI is a corporation duly amalgamated and validly existing under the Act and is governed by the Act and has the corporate power and authority to own, operate and lease its property and assets and to carry on its business as now being conducted by it, and it is duly registered, licensed or qualified to carry on business in each jurisdiction in which a material amount of its business is conducted or where the character of its properties and assets make such registration, licensing or qualification necessary;
- (b) SBI has the corporate power and authority to enter into this Agreement and, subject to obtaining the requisite approvals contemplated hereby, to perform its obligations hereunder;
- (c) the authorized capital of SBI consists of an unlimited number of preference shares, issuable in series, and an unlimited number of SBI Common Shares, of which 26,020,128 SBI Common Shares are issued and outstanding;
- (d) no individual, firm, corporation or other person holds any securities convertible or exchangeable into any shares of SBI or of any of its subsidiaries or has any agreement, warrant, option or any right capable of becoming an agreement, warrant or option for the purchase of any unissued shares of SBI or any of its subsidiaries, except for:
  - (i) warrants to acquire 9,301,950 SBI Common Shares;
  - (ii) options to acquire 700,000 SBI Common Shares; and
  - (iii) agreements to settle claims against SBI by the issuance of an aggregate of 450,000 SBI Common Shares, subject to regulatory approval.
- (e) the execution and delivery of this Agreement by SBI and the completion of the transactions contemplated herein:

- (i) do not and will not result in a breach of, or violate any term or provision of the articles or bylaws of SBI or any of the constating documents of its subsidiaries;
  - (ii) do not and will not, as of the Effective Date, conflict with, result in the breach of, constitute a default under, or accelerate or permit the acceleration of the performance required by, any agreement, instrument, licence, permit or authority to which SBI or any of its subsidiaries is a party, or to which any material property of SBI or any of its subsidiaries is subject, or result in the creation of any lien, charge or encumbrance upon any of the material assets of SBI or any of its subsidiaries under any such agreement, instrument, licence, permit or authority or give to any person any material interest or right, including rights of purchase, termination, cancellation or acceleration, under any such agreement, instrument, licence, permit, or authority;
  - (iii) do not and will not, as of Effective Date, violate any provision of law or administrative regulation or any judicial or administrative award, judgment or decree applicable and known to SBI after due inquiry, the breach of which would have a material adverse effect on SBI and its subsidiaries taken as a whole;
- (f) the execution and delivery of this Agreement and the completion of the transactions contemplated herein have been duly approved by the Board of Directors of SBI and this Agreement has been duly executed and delivered by SBI and, upon the approval of the holders of the SBI Common Shares given by a special resolution, will constitute a valid and binding obligation to SBI enforceable against it in accordance with its terms;
- (g) NCI is a wholly-owned subsidiary of SBI;
- (h) SBI is a reporting issuer within the meaning of the securities legislation of Ontario, Alberta and British Columbia and is not in default of any filings required to be made pursuant thereto or the regulations made thereunder;
- (i) the SBI Common Shares are listed and posted for trading on The Alberta Stock Exchange and SBI is not in default of any filings required to be made with respect thereto; and
- (j) the information set forth in the SBI In formation Circular and incorporated therein by reference relating to SBI and its subsidiaries is true, correct and complete in all material respects does not contain untrue statement of any material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein not misleading in light of the circumstances in which they are made and discloses the nature and extent of the interest of each director or officer of SBI in this Agreement in reasonable detail.

## 2.2 REPRESENTATIONS AND WARRANTIES OF BA TECH

BA Tech represents and warrants to and in favour of SBI as follows:

- (a) BA Tech is a corporation duly incorporated, organized and validly existing under the Act;
- (b) BA Tech has the corporate power and authority to enter into this Agreement and, subject to obtaining the requisite approvals contemplated hereby, to perform its obligations hereunder;
- (c) immediately prior to the Effective Date, the authorized capital of BA Tech will consist of an unlimited number of BA Class A Shares, an unlimited number of BA Class B Shares, an unlimited number of BA Class C Shares and an unlimited number of BA Common Shares, of which 20,000,000 BA Class A Shares, 4,150,000 BA Class C Shares and 4,100,000 BA Common Shares are issued and outstanding;
- (d) no individual, firm, corporation or other person holds any securities convertible or exchangeable into any shares of BA Tech or of any of its subsidiaries or has any agreement, warrant, option or any right capable of becoming an agreement, warrant or option for the purchase of any unissued shares of BA Tech or any of its subsidiaries, except for:
  - (i) the issued shares described in paragraph 2.2(c); and
  - (ii) an agreement for BA Tech to issue, and for an investor to subscribe for an aggregate consideration of U.S. \$20,000,000, 10,000,000 BA Common Shares and warrants to acquire an additional 10,000,000 BA Common Shares for a period of three years at an exercise price of U.S. \$2.00 per share;
- (e) the execution and delivery of this Agreement by BA Tech and the completion of the transactions contemplated herein:
  - (i) do not and will not result in a breach of, or violate any term or provision of, the articles or by-laws of BA Tech;
  - (ii) do not and will not, as of the Effective Date, conflict with, result in the breach of, constitute a default under, or accelerate or permit the acceleration of the performance required by, any agreement, instrument, licence, permit or authority to which BA Tech or any of its subsidiaries is a party, or to which any material property of BA Tech or any of its subsidiaries is subject, or result in the creation of any lien, charge or encumbrance upon any of the material assets of BA Tech or any of its subsidiaries under any such agreement, instrument, licence, permit or authority or give to any person any material interest or right, including rights of purchase, termination, cancellation or acceleration, under any such agreement, instrument, licence, permit, or authority;

(iii) do not and will not, as of Effective Date, violate any provision of law or administrative regulation or any judicial or administrative award, judgment or decree applicable and known to BA Tech after due inquiry, the breach of which would have a material adverse effect on BA Tech and its subsidiaries taken as a whole;

- (f) the execution and delivery of this Agreement and the completion of the transactions contemplated herein have been duly approved by the Board of Directors of BA Tech and this Agreement has been duly executed and delivered by BA Tech and constitutes a valid and binding obligation to BA Tech enforceable against it in accordance with its terms; and
- (g) BA Tech is not engaged in any business nor is it a party to or bound by any contract, agreement, arrangement, instrument, licence, permit or authority, other than this Agreement and any transaction or agreement necessary or incidental to the fulfillment of its obligations under this Agreement, or is contemplated by the SBI Information Circular, nor does it have any subsidiaries or liabilities, contingent or otherwise, except as provided in or permitted by this Agreement.

### ARTICLE 3

#### COVENANTS

##### 3.1 COVENANTS OF SBI

Except as SBI and BA Tech may otherwise agree in writing, SBI hereby covenants and agrees as follows:

- (a) until the Effective Date, SBI shall carry on its business in the ordinary course and, in particular, make any payments due to UCLA in a timely fashion;
- (b) except as otherwise contemplated in this Agreement, until the Effective Date, SBI shall not merge into or with, or amalgamate, consolidate or enter into any other corporate reorganization with, any other corporation or person, or perform any act or enter into any transaction or negotiation which reasonably could be expected to, directly or indirectly, interfere or be inconsistent with the completion of the Arrangement;
- (c) SBI shall do all such acts and things as may be necessary or reasonably required in order to give effect to the Arrangement and, without limiting the generality of the foregoing, SBI shall use all reasonable efforts to apply for and obtain:
- (i) the Interim Order and the Final Order as provided in Section 3.3. hereof on terms and conditions satisfactory to SBI and BA Tech;

(ii) the approval of the Alberta Stock Exchange to the Arrangement on terms and conditions satisfactory to SBI and BA Tech;

(iii) the approval of the holders of the SBI Common Shares to the Arrangement and to the Continuance; and

(d) SBI shall provide BA Tech with a pledge of the shares of NCI owned by it to secure the amounts borrowed by SBI from BA Tech and to cause NCI to guarantee such amounts and to grant a security interest in all of its assets, including its technology rights with UCLA, in order to secure such guarantee.

### 3.2 COVENANTS OF BA TECH

Except as SBI and BA Tech may otherwise agree in writing, BA Tech hereby covenants and agrees as follows:

- (a) except as otherwise contemplated in this Agreement, until the Effective Date, BA Tech shall not merge into or with, or amalgamate, consolidate or enter into any other corporate reorganization with, any other corporation or person, or perform any act or enter into any transaction or negotiation which reasonably could be expected to, directly or indirectly, interfere or be inconsistent with the completion of the Arrangement;
- (b) BA Tech shall do all such acts and things as may be necessary or reasonably required in order to give effect to the Arrangement and, without limiting the generality of the foregoing, BA Tech shall use all reasonable efforts to:
- (i) apply for and obtain the interim Order and the Final Order as provided in Section 3.3. hereof on terms and conditions satisfactory to SBI and BA Tech;
  - (ii) assist SBI in obtaining the approval of the Alberta Stock Exchange for the Arrangement;
  - (iii) solicit and obtain the approval of the BA Class A Shares, the BA Class C Shares and the BA Common Shares to the Arrangement and the Continuance;
- (c) to lend to SBI sufficient funds to enable it to make any payments due to UCLA and any other payments necessary or desirable to permit SBI to continue to carry on business in the ordinary course and to carry out all steps necessary to consummate the Arrangement; the amount outstanding to bear interest at a rate equal to the prime rate of interest at the bank of BA Tech and to be due and payable upon demand; and
- (d) not to demand repayment of such loan until on or after the earlier of the Effective Date or the termination of this Agreement.

### 3.3 INTERIM ORDER AND FINAL ORDER

Each party covenants and agrees that it will, as soon as reasonably practicable, apply to the Court pursuant to Section 182 of the Act for the Interim Order providing for, among other things, the calling and holding of the SBI Shareholders' Meeting for the purpose of, among other matters, considering and, if deemed advisable, approving the Arrangement; and, if the approvals of the holders of SBI Common Shares and the BA Shares as set forth in the Interim Order are obtained by SBI, as soon as practicable thereafter each party will take the necessary steps to submit the Arrangement to the Court and apply for the Final Order in such fashion as the Court may direct. As soon as practicable following the grant of the Final Order, and subject to compliance with the other conditions provided for in Article 4 hereof, SBI and BA Tech shall send to the Director pursuant to subsection 183(1) of the Act articles of arrangement to give effect to the Arrangement.

## ARTICLE 4

### CONDITIONS

#### 4.1 MUTUAL CONDITIONS PRECEDENT

The respective obligations of each party hereto to complete the transactions contemplated by this Agreement shall be subject to the satisfaction on or before the Effective Date, of the following conditions, none of which may be waived by either party hereto in whole or in part:

- (a) the required approval of the shareholders of SBI and BA Tech to the Arrangement and the Continuance shall have been obtained;
- (b) the Final Order shall have been obtained in form and substance satisfactory to SBI and BA Tech, acting reasonably, and shall be unamended except with the consent of both parties.

#### 4.2 OTHER MUTUAL CONDITIONS PRECEDENT

The respective obligations of each party hereto to complete the transactions contemplated by this Agreement shall be further subject to the satisfaction or waiver by either party of the following conditions on or before the Effective Date:

- (a) the Alberta Stock Exchange shall have accepted notice of the Arrangement and shall have confirmed, prior to the Effective Date, the listing and posting for trading of the number of Amalco SV Shares issuable in the Arrangement, subject to compliance with the listing requirements thereof or any notice of issuance, as the case may be;
- (b) all of the issued and outstanding SBI Preference Shares shall have been converted into SBI Common shares;

- (c) no action shall have been instituted and be continuing on the Effective Date for an injunction to restrain, a declaratory judgment in respect of or damages on account of or relating to the Arrangement and no cease trading or similar order with respect to any securities of SBI or BA Tech shall have been issued and remain outstanding;
- (d) the other party hereto shall have performed each of its covenants contained herein that are required to be performed on or before the Effective Date and, except as affected by the transactions contemplated by this Agreement, the representations and warranties of the other party hereto shall be true and correct in all material respects as of the Effective Date, with the same effect as if such representations and warranties had been made at and as of such time.

#### 4.3 MERGER OF CONDITIONS

The conditions set out in Sections 4.1 and 4.2 shall be conclusively deemed to have been satisfied, waived or released upon the delivery to the Director pursuant to subsection 183(1) of the Act of articles of arrangement to give effect to the Arrangement.

### ARTICLE 5

#### AMENDMENT AND TERMINATION

##### 5.1 AMENDMENT

This Agreement may, at any time and from time to time before and after the holding of the SBI Shareholder Meeting, be amended by written agreement of the parties hereto without, subject to applicable law, further notice to or action on the part of the shareholders of SBI or BA Tech, provided that after the SBI Shareholder Meeting this Agreement may not be amended in a manner materially adverse to the interests of the holders of the SBI Common Shares and the holders of the SBI Preference Shares.

##### 5.2 TERMINATION

This Agreement may, at any time before or after the holding of the SBI Shareholder Meeting, be terminated by the Board of Directors of SBI or BA Tech for any reason whatsoever, acting in good faith and in its sole discretion, without further notice to, or action on the part of, the shareholders of SBI or BA Tech.

##### 5.3 EFFECT OF TERMINATION

Upon the termination of this Agreement pursuant to Section 5.2 hereof, neither party shall have any liability or further obligation to the other party hereto.

ARTICLE 6

GENERAL

6.1 NOTICES

All notices which may or are required to be given pursuant to any provision of this Agreement shall be given or made in writing and shall be deemed to be validly given if served personally or by facsimile at the following addresses or at such other addresses as shall be specified by the parties by like notice:

If to SBI:	If to BA Tech:
372 Bay Street	372 Bay Street
Suite 302	Suite 302
Toronto, Ontario	Toronto, Ontario
M5H 2W9	M5H 2W9
Attention: President	Attention: Chairman

The date of receipt of any such notice shall be deemed to be the date of delivery or facsimile transmission thereof.

6.2 ASSIGNMENT

No party may assign its rights or obligations under this Agreement or the Arrangement without the prior written consent of the other party hereto.

6.3 BINDING EFFECT

This Agreement and the Arrangement shall be binding upon and shall enure to the benefit of the parties hereto and their respective successors and permitted assigns.

6.4 WAIVER

Any waiver or release of any of the provisions of this Agreement, to be effective, must be in writing executed by the party granting the same.

6.5 GOVERNING LAW

This Agreement shall be governed by and construed in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein and shall be treated in all respects as an Ontario contract.

IN WITNESS WHEREOF the parties hereto have executed this Agreement as of the year and day first above written.

STRUCTURED BIOLOGICAL-S INC.

By: /s/ Claus G.J. Wagner-Bartak

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Name: Claus G.J. Wagner-Bartak  
Title: President

BEN-ABRAHAM TECHNOLOGIES INC.

By: /s/ Avi Ben-Abraham, M.D.

-----  
Name: Avi Ben-Abraham, M.D.  
Title: Chairman, President and Chief  
Executive Officer

APPENDIX I

PLAN OF ARRAIGNMENT UNDER SECTION 182  
OF THE ONTARIO BUSINESS CORPORATIONS ACT

ARTICLE 1

INTERPRETATION

1.1 DEFINITIONS

In this Plan of Arrangement, unless there is something in the subject matter or context inconsistent therewith:

"ACT" means the Ontario Business Corporations Act, R.S.O. 1990, c. B.16, as amended;

"ARRANGEMENT AGREEMENT" means the arrangement agreement made as of October 23, 1996 between BA Technologies, NCI and SBI;

"AMALCO" means the corporation resulting from the Amalgamation;

"AMALCO CLASS A SHARES" means the Class A special shares in the capital of Amalco;

"AMALCO CLASS B SHARES" means the Class B special shares in the capital of Amalco;

"AMALCO CLASS C SHARES" means the Class C special shares in the capital of Amalco;

"AMALCO SV SHARES" means the subordinate voting shares in the capital of Amalco;

"AMALGAMATION" means the amalgamation of BA Technologies, NCI and SBI pursuant to this Plan of Arrangement;

"ARRANGEMENT" means an arrangement under the provisions of section 182 of the Act, on the terms and conditions set forth in this Plan of Arrangement, and any amendment or variation hereto made in accordance with section 5.1 of the Arrangement Agreement;

"BA CLASS A SHARES" means the Class A special shares of BA Technologies;

"BA CLASS B SHARES" means the Class B special shares of BA Technologies;

"BA CLASS C SHARES" means the Class C special shares of BA Technologies;

"BA COMMON SHARES" means the common shares of BA Technologies;

"BA SHARES" means the BA Class A Shares, the BA Class B Shares, the BA Class C Shares and the BA Common Shares;

"BA TECH" means Ben-Abraham Technologies Inc., a corporation, incorporated under the laws of Ontario;

"BUSINESS DAY" means a day other than a Saturday, Sunday or an Ontario provincial holiday or any other day when banks in Toronto, Canada, are not open for business;

"COURT" means the Ontario Court (General Division);

"DEPOSITARY" means Montreal Trust Company;

"DIRECTOR" means the Director appointed under section 278 of the Act;

"EFFECTIVE DATE" means the date shown in the certificate of arrangement giving effect to the Arrangement which is issued under the Act by the Director;

"FINAL ORDER" means the final order of the Court made in connection with approval of the Arrangement, following the application therefor contemplated in section 3.3 of the Arrangement Agreement;

"HOLDER" means a registered holder of SBI Common Shares or SBI Preference Shares on the Effective Date;

"INTERIM ORDER" means the interim order of the Court made in connection with approval of the Arrangement, following the application therefor contemplated in section 3.3 of the Arrangement Agreement;

"NCI" means 923934 Ontario Corporation, a corporation incorporated under the laws of Ontario, and a wholly-owned subsidiary of SBI;

"PLAN OF ARRANGEMENT", "hereof", "herein", and "hereunder" and similar expressions refer to this Plan of Arrangement and the Schedules hereto and not to any particular article, section or other portion hereof;

"SBI" means Structured Biologicals Inc., a corporation incorporated under the laws of Ontario;

"SBI COMMON SHARES" means the common shares of SBI;

"SBI INFORMATION CIRCULAR" means the management information circular of SBI to be prepared and sent to the registered holders of SBI Common Shares in connection with the SBI Shareholders Meeting;

"SBI SHAREHOLDERS MEETING" means the annual and special meeting of shareholders of SBI (including any adjournment thereof) to be held, among other things, to consider and, if deemed advisable, to approve the Arrangement;

#### 1.2 INTERPRETATION NOT AFFECTED BY HEADINGS, ETC.

The division of this Plan of Arrangement into articles, sections and other portions and the insertion of headings are for convenience of reference only and shall not affect the construction or interpretation of this Plan of Arrangement.

#### 1.3 CURRENCY

All sums of money which are referred to in this Plan of Arrangement are expressed in lawful money of Canada unless otherwise specified.

#### 1.4 NUMBER, ETC.

Unless the context requires the contrary, words importing the singular number only shall include the plural and vice versa; words importing the use of any gender shall include all genders; and words importing persons shall include natural persons, firms, trusts, partnerships and corporations.

#### 1.5 BUSINESS DAYS

If any date on which any action is required to be taken hereunder by any person is not a Business Day, such action shall required to be taken on the next succeeding day which is a Business Day.

### ARTICLE 2

#### ARRANGEMENT AGREEMENT

##### 2.1 ARRANGEMENT AGREEMENT

This Plan of Arrangement is made pursuant to the Arrangement Agreement.

### ARTICLE 3

#### THE AMALGAMATION

##### 3.1 AMALGAMATION OF SBI CANADA AND BA TECH

On the Effective Date, BA Tech, NCI and SBI (sometimes referred to hereinafter as "predecessor corporations") will amalgamate to form Amalco with the same effect as if section 179 of the Act were applicable to such amalgamation and in connection with such amalgamation:

- (a) Amalco will possess all of the property, rights, privileges and franchises of each of the predecessor corporations immediately before the Amalgamation;
- (b) Amalco will be subject to all liabilities, including civil, criminal and quasi-criminal, and all contracts, disabilities and debts of each of the predecessor corporations immediately before the Amalgamation;
- (c) all convictions against, or rulings, orders or judgments in favour of or against a predecessor corporation immediately before the Amalgamation may be enforced by or against Amalco;
- (d) the articles of arrangement in respect of the Arrangement shall be deemed to be the articles of incorporation of Amalco and the certificate of arrangement in respect of the Arrangement shall be deemed to be the certificate of incorporation of Amalco;
- (e) Amalco shall be deemed to be the party plaintiff or the party defendant, as the case may be, in any civil action commenced by or against a predecessor corporation before the Amalgamation.

### 3.2 CONVERSION OF SHARES

Upon the Amalgamation becoming effective:

- (a) the issued and outstanding SBI Common Shares shall be converted into issued and fully paid Amalco SV Shares on the basis of one Amalco SV Share for each 3.5 SBI Common Shares;
- (b) the issued and outstanding BA Common Shares shall be converted into issued and fully paid Amalco SV Shares on the basis of one Amalco SV Share for each BA Common Share;
- (c) the issued and outstanding BA Class A Shares shall be converted into issued and fully paid Amalco Class A Shares on the basis of one Amalco Class A Share for each BA Class A Share;
- (d) the issued and outstanding BA Class B Shares shall be converted into issued and fully paid Amalco Class B Shares on the basis of one Amalco Class B Share for each BA Class A Share;
- (e) the issued and outstanding BA Class C Shares shall be converted into issued and fully paid Amalco Class C Shares on the basis of one Amalco Class C Share for each BA Class C Share;

(f) the issued and outstanding shares of NC! shall be cancelled without any repayment of capital in respect thereof.

### 3.3 ARTICLES AND BY-LAWS OF AMALCO

Upon the Amalgamation:

- (a) the name of Amalco shall be "Ben-Abraham Technologies Inc.;
- (b) the registered office of Amalco shall be in the City of Toronto in the Province of Ontario;
- (c) the number of directors of Amalco shall be such number not less than 3 and not more than 11 as the Board of Directors may from time to time determine;
- (d) the directors of Amalco may appoint one or more directors who shall hold office for a term expiring not later than the close of the next annual meeting of Amalco, but the total number of directors so appointed may not exceed one third of the number of directors elected at the previous annual meeting of Amalco; and
- (e) the number of the first directors shall be 3 and the first directors of Amalco shall be the persons set out below, who shall hold office until the first annual meeting of Amalco or until their successors are elected or appointed.

NAME	ADDRESS	RESIDENT CANADIAN
Dr. Avi Ben-Abraham	12 West 55th Street Suite 5B New York, New York U.S.A. 10019	No
James K. Lau	1274 Woodeden Drive Mississauga, Ontario L5H 2T6	Yes
A. Suzan Khan	110 Bloor Street West Suite 1008 Toronto, Ontario M5S 2W7	Yes
Dr. Claus G.J. Wagner-Bartak	32 Woodgreen Drive Woodbridge, Ontario L4L 3B3	Yes

(f) there shall be no restrictions on the business which Amalco is authorized to carry on or on the powers Amalco may exercise;

- (g) the authorized capital of Amalco shall consist of an unlimited number of subordinate voting shares, an unlimited number of Class A special shares, an unlimited number of Class B special shares, an unlimited number of Class C special shares and an unlimited number of Preference Shares, issuable in series;
- (h) the rights, privileges, restrictions and conditions attaching to each class of shares and directors' authority with respect to any class of shares which may be issued in series are as set out in Exhibit 1 hereto;
- (i) without limiting the powers of the Board of Directors as set out in the Act, the Board of Directors may from time to time on behalf of Amalco:
  - (i) borrow money upon the credit of Amalco;
  - (ii) issue, reissue, sell or pledge debt obligations of Amalco;
  - (iii) to the extent permitted by the Act, give, directly or indirectly, financial assistance to any person by means of a loan, a guarantee to secure the performance of an obligation or otherwise; and
  - (iv) mortgage, hypothecate, pledge or otherwise create a security interest in all or any property of Amalco owned or subsequently acquired, to secure any obligation of Amalco.

The Board of Directors may from time to time delegate to such one or more of the directors and officers of Amalco as may be designated by the Board of Directors all or any of the powers conferred on the Board of Directors in relation to the foregoing by this paragraph or by the Act to such extent and in such manner as the Board of Directors shall determine at the time of each such delegation. Nothing in this paragraph limits or restricts the borrowing of money by Amalco on bills of exchange or promissory notes made, drawn, accepted or endorsed by or on behalf of Amalco;

- (j) the by-laws of SBI shall be the by-laws of Amalco until repealed, amended, altered or added to.

#### 3.4 CONTINUANCE

As the application for continuance of Amalco as a corporation under the laws of the State of Wyoming has been approved by special resolutions of both SBI and BA Tech and as NCI is a wholly-owned subsidiary of SBI, the shareholders of Amalco shall be deemed, for the purposes of section 181 of the Act, to have authorized an application to the appropriate official or public body in the State of Wyoming requesting that Amalco be continued as if it had been incorporated under the laws of the State of Wyoming.

## ARTICLE 4

### RIGHTS OF DISSENT

#### 4.1 RIGHTS OF DISSENT

Any holder of SBI Common Shares may exercise rights of dissent pursuant to and in the manner set forth in section 185 of the Act, as such rights may have been modified by the interim Order or the Final Order, in connection with the Arrangement, and holders who duly exercise such rights of dissent and who:

- (a) are ultimately entitled to be paid fair value for their SBI Common Shares by Amalco shall have their SBI Common Shares cancelled as of the Effective Date; or
- (b) are ultimately not entitled for any reason to be paid fair value for their SBI Common Shares or withdraw their dissent in accordance with section 185 of the Act shall be deemed to have participated in the Arrangement as of and from the Effective Date on the same basis as any non-dissenting holder of SBI Common Shares.

In no case shall SBI, BA Tech or Amalco be required to recognize holders of SBI Common Shares referred to in subsection 4.1(a) as holders of SBI Common Shares at and after the Effective Date, and the names of such holders of SBI Common Shares shall be deleted from SBI's register of holders of such shares on the Effective Date.

## ARTICLE 5

### RIGHTS TO CERTIFIED AND FRACTIONAL SHARES

#### 5.1 RIGHTS TO RECEIVE NEW CERTIFICATES

Following the Effective Date, certificates for the appropriate number and class of Amalco Shares will be issued to former holders of SBI Common Shares and BA Shares, as the case may be, in accordance with the provisions of section 3.2 hereof against deposit of the certificates representing the SBI Common Shares or the BA Shares with the Depository.

#### 5.2 FRACTIONAL CERTIFICATES

No certificates representing fractional Amalco SV Shares shall be issued to holders of SBI Common Shares. Each former holder of SBI Common Shares who is otherwise entitled to a fraction of an Amalco SV Share which is less than .5 of an Amalco SV Share shall not be entitled to any compensation therefor. Each former holder of SBI Common shares who is otherwise entitled to a fraction of an Amalco SV Share which is equal to or greater than .5 of an Amalco SV Share shall be entitled to one whole Amalco SV Share.

ARTICLE 6  
STATED CAPITAL

6.1 STATED CAPITAL OF AMALCO

The amount of the stated capital account for each class of shares of Amalco shall be:

- (a) for the Amalco Class A Shares, the amount of the stated capital account for the BA Class A Shares as it existed immediately prior to the amalgamation;
- (b) for the Amalco Class C Shares, the amount of the stated capital account for the BA Class C Shares as it existed immediately prior to the amalgamation;  
and
- (c) for the Amalco SV Shares, the aggregate of \$7,084,976 for the SBI Common Shares and the BA Common Shares as they existed immediately prior to the amalgamation.

EXHIBIT I

BEN-ABRAHAM TECHNOLOGIES INC. SHARE PROVISIONS

The rights, privileges, restrictions and conditions attaching to each class of shares and directors authority with respect to any class of shares which may be issued in series:

A. PREFERENCE SHARES

The rights, privileges, restrictions and conditions attaching to the preference shares as a class are as follows:

1. DIRECTORS' RIGHT TO ISSUE IN ONE OR MORE SERIES

The preference shares may at any time or from time to time be issued in one or more series. Before any shares of a particular series are issued, the directors of the Corporation shall fix the number of shares that will form such series and shall, subject to the limitations set out herein, by resolution, determine the designation, rights, privileges, restrictions and conditions to be attached to the preference shares of such series including, but without in any way limiting or restricting the generality of the foregoing, the rate, amount or method of calculation of dividends thereon, the time and place of payment of dividends, the consideration and the terms and conditions of any purchase for cancellation, retraction or redemption thereof, conversion rights and the terms and conditions of any share purchase plan or sinking fund, the whole subject to the filing with the Director, as defined in the Business Corporations Act (Ontario), as amended from time to time (the "Act"), of articles of amendment in the form prescribed under the Act containing a description of such series including the designation, rights, privileges, restrictions and conditions as determined by the directors, and the endorsement thereon of a certificate of amendment in respect thereof. Notwithstanding the foregoing, the preference shares of a series shall not be entitled to any voting rights except as prescribed by law or except if the Corporation has failed to pay dividends on any series of preference shares.

2. RANKING

The preference shares of each series shall rank on a parity with the preference shares of every other series with respect to accumulated dividends and return of capital. The preference shares of the Corporation shall be entitled to preference over the subordinate voting shares of the Corporation and over any other shares of the Corporation ranking junior to the preference shares with respect to priority in the payment of dividends and the distribution of assets in the event of the liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary, or any other distribution of the assets of the Corporation among its shareholders for the purposes of winding up its affairs. If any accumulated dividends or amounts payable on a return of capital are not paid in full, the

preference shares of all series shall Participate rateably in respect of such dividends, including accumulations, if any, in accordance with the sums that would be payable on such shares if all such dividends were declared and paid in full, and in respect of any repayment of capital if all sums so payable were paid in full; provided however that in the event of there being insufficient assets to satisfy in full all such claims, the claims of the holders of the preference shares with respect to repayment of capital shall first be applied toward the payment and satisfaction of claims in respect of dividends.

3. VOTING

Except as hereinafter referred to or as required by law or in accordance with any voting rights which may from time to time be attached to any series of preference shares, the holders of the preference shares, as a class, shall not be entitled as such to receive notice of, to attend or to vote at any meeting of the shareholders of the Corporation. Notwithstanding the foregoing, neither the holders of any series of preference shares, nor the holders of preference shares as a class shall be entitled to vote, as a series or class, as the case may be, or to dissent pursuant to subsection 185(2) of the Act in respect of any proposal to amend the articles of the Corporation as contemplated in clauses (a), (b) and (e) of subsection 170(1) of the Act.

4. AMENDMENT WITH APPROVAL OF HOLDERS OF PREFERENCE SHARES

The rights, privileges, restrictions and conditions attaching to the preference shares as a class may be added to, changed or removed but only with the approval of the holders of the preference shares given as hereinafter specified.

5. APPROVAL OF HOLDERS OF PREFERENCE SHARES]

The approval of the holders of the preference shares to add to, change or remove any right, privilege, restriction or condition attaching to the preference shares as a class or any other matter requiring the consent of the holders of the preference shares may be given in such manner as may be required by law, subject to a minimum requirement that such approval be given by resolution passed by the affirmative vote of at least 2/3 of the votes cast at a meeting of the holders of the preference shares duly called for that purpose. Each holder of preference shares entitled to vote at such meeting shall have one vote in respect of each \$1.00 of the issue price of each preference share held by such person.

B. SUBORDINATE VOTING SHARES, CLASS A SHARES, CLASS B SHARES AND CLASS C SHARES

The rights, privileges, restrictions and conditions attaching to the subordinate voting shares, the Class A shares, the Class B shares and the Class C shares are as follows:

1. DIVIDEND RIGHTS

(a) DIVIDEND RIGHTS OF SUBORDINATE VOTING SHARES

The holders of the subordinate voting shares, shall be entitled to receive dividends as and when declared by the directors from time to time out of moneys of the Corporation properly applicable to the payment of dividends and the amount per share of each such dividend shall be determined by the directors of the Corporation at the time of declaration.

(b) DIVIDEND RIGHTS OF CLASS B SHARES

The holders of the Class B shares shall be entitled to receive dividends as and when declared by the directors from time to time out of moneys of the Corporation properly applicable to the payment of dividends and the amount per share of each such dividend shall be determined by the directors of the Corporation at the time of declaration, provided that the amount of the dividend per Class B share in any calendar year shall not exceed the amount of the dividend per subordinate voting share in such year.

(c) DIVIDEND RIGHTS OF CLASS A AND CLASS C SPECIAL SHARES

The holders of the Class A shares and the Class C shares shall not be entitled to receive any dividends.

2. VOTING RIGHTS

(a) VOTING OF SUBORDINATE VOTING SHARES

Subject to the provisions of the Business Corporations Act, the holders of the subordinate voting shares shall be entitled to receive notice of and to attend all meetings of the shareholders of the Corporation and shall be entitled to vote at all meetings of shareholders, except meetings at which only holders of another class of shares are entitled to vote. Each subordinate voting share shall entitle the holder thereof to one vote.

(b) VOTING OF CLASS A SHARES

Subject to the provisions of the Business Corporations Act, the holders of the Class A shares shall be entitled to receive notice of and to attend all meetings of the shareholders of the Corporation and shall be entitled to vote at all meetings of the shareholders, except meetings at which only holders of another class of shares are entitled to vote. Each Class A share shall entitle the holder thereof to ten votes.

(c) VOTING OF CLASS B SHARES

Subject to the provisions of the Business Corporations Act, the holders of the Class B shares shall be entitled to receive notice of and to attend all meetings of the shareholders of the Corporation and shall be entitled to vote at all meetings of the shareholders, except meetings at which only holders of another class of shares are entitled to vote. Each Class B share shall entitle the holder thereof to ten votes.

(d) VOTING OF CLASS C SHARES

Subject to the provisions of the Business Corporations Act, the holders of the Class C shares shall be entitled to receive notice of and to attend all meetings of the shareholders of the Corporation and shall be entitled to vote at all meetings of the shareholders, except meetings at which only holders of another class of shares are entitled to vote. Each Class C share shall entitle the holder thereof to one vote.

3. PURCHASE RIGHTS

(a) SUBORDINATE VOTING SHARE PURCHASE RIGHTS OF CLASS A SHARES

A holder of Class A shares shall be entitled, in accordance with the provisions hereof, to acquire subordinate voting shares of the Corporation as the same may then be constituted by tendering any of the Class A shares held and registered in his name together with U.S. \$0.25 per share (the "Subordinate Voting Share Purchase Price") on the basis of one subordinate voting share for each Class A share and U.S. \$0.25. The purchase right herein provided shall be exercised by notice in writing given to the Corporation which notice shall specify the number of Class A shares that the holder desires to have applied to the purchase price of subordinate voting shares. If any Class A shares are applied to the purchase of subordinate voting shares pursuant to this paragraph, the holder of such Class A shares shall surrender the certificate or certificates representing the Class A shares so applied to the registered office of the Corporation, or to the transfer agent of the Corporation at the time of purchase together with cash or a certified cheque in the amount of U.S. \$0.25 per subordinate voting share being acquired, and the Corporation shall thereupon issue to such holder certificates representing the number of subordinate voting shares to which the holder became entitled upon such purchase.

(b) CLASS B SHARE PURCHASE RIGHTS OF CLASS A SHARES

A holder of Class A shares shall be entitled, in accordance with the provisions hereof, to acquire, Class B shares of the Corporation as the same may then be constituted by tendering any of the Class A shares held and registered in his name

together with U.S. \$0.25 (the "Class B Share Purchase Price") per share on the basis of one Class B share for each Class A share and U.S. \$0.25. The purchase right herein provided shall be exercised by notice in writing given to the Corporation which notice shall specify the number of Class A shares that the holder desires to have applied to the purchase price of Class B shares. If any Class A shares are applied to the purchase of subordinate voting shares pursuant to this paragraph, the holder of such Class A shares shall surrender the certificate or certificates representing the Class A shares so applied to the registered office of the Corporation, or to the transfer agent of the Corporation at the time of purchase together with cash or a certified cheque in the amount of U.S. \$0.25 per Class B share being acquired, and the Corporation shall thereupon issue to such holder certificates representing the number of Class B shares to which the holder became entitled upon such purchase.

(c) SUBORDINATE VOTING SHARE PURCHASE RIGHTS OF CLASS C SHARES

A holder of Class C shares shall be entitled, in accordance with the provisions hereof, to acquire subordinate voting shares of the Corporation as the same may then be constituted by tendering any of the Class C shares held and registered in his name together with U.S. \$0.25 per share on the basis of one subordinate voting share for each Class C share and U.S. \$0.25. The purchase right herein provided shall be exercised by notice in writing given to the Corporation which notice shall specify the number of Class C shares that the holder desires to have applied to the purchase price of subordinate voting shares. If any Class C shares are applied to the purchase of subordinate voting shares pursuant to this paragraph, the holder of such Class C shares shall surrender the certificate or certificates representing the Class C shares so applied to the registered office of the Corporation, or to the transfer agent of the Corporation at the time of purchase together with cash or a certified cheque in the amount of U.S. \$0.25 per subordinate voting share being acquired, and the Corporation shall thereupon issue to such holder certificates representing the number of subordinate voting shares to which the holder became entitled upon such purchase.

4. CONVERSION RIGHTS

(a) CONVERSION RIGHTS OF CLASS B SHARES

A holder of Class B shares shall be entitled, in accordance with the provisions hereof, to have any of the Class B shares held and registered in his name converted into subordinate voting shares of the Corporation as the same may be constituted at the time of the conversion on the basis of one subordinate voting share for each Class B share converted. The conversion right herein provided shall be exercised by notice in writing given to the Corporation which notice shall specify the number of Class B shares that the holder desires to have converted into subordinate voting shares. If any Class B shares are converted into subordinate

voting shares pursuant to this paragraph, the holder of such Class B shares shall surrender the certificate or certificates representing the Class B shares which were converted to the registered office of the Corporation, or to the transfer agent of the Corporation at the time of conversion, and the Corporation shall thereupon issue to such holder certificates representing the number of subordinate voting shares to which the holder became entitled upon the conversion.

5. ADJUSTMENT OF PURCHASE RIGHTS AND CONVERSION RIGHTS

(a) SUBORDINATE VOTING SHARES

- (i) In case of any reclassification or redesignation of the subordinate voting shares (hereinafter referred to in this subsection 5(a) as the "Shares") or change of the Shares into other shares, or in case of the consolidation, amalgamation or merger of the Corporation with or into any other body corporate (other than a consolidation, amalgamation or merger which does not result in any reclassification or redesignation of the outstanding Shares or a change of the Shares into other shares), or in the case of any transfer of the undertaking or assets of the Corporation as an entirety or substantially as an entirety to another corporation, the holder of any Class A shares or Class C shares who thereafter shall exercise his right to purchase Shares pursuant to section 3 hereof and the holder of any Class B shares who thereafter shall exercise his right to convert any Class B shares into Shares pursuant to section 4 hereof shall be entitled to receive, and shall accept, in lieu of the number of Shares to which he was theretofore entitled upon such exercise of such right to purchase or convert, as the case may be, the kind and amount of shares which such holder would have been entitled to receive as a result of such reclassification, redesignation, change, consolidation, amalgamation, merger or transfer if, on the effective date thereof, he had been the registered holder of the number of Shares to which he was theretofore entitled upon exercising his right to purchase or convert, as the case may be. The subdivision or consolidation of Shares at anytime outstanding into a greater or lesser number of Shares shall be deemed not to be a reclassification of the capital of the Corporation for the purposes of this paragraph 5(a)(i).
- (ii) If and whenever the Shares shall be subdivided into a greater or consolidated into a lesser number of Shares, or the Corporation shall issue Shares (or securities exchangeable for or convertible into Shares) to the holders of all or substantially all of the outstanding Shares by way of a dividend or other distribution of Shares (or securities exchangeable for or convertible into Shares), any holder of Class A shares or Class C shares who has not exercised his right of purchase pursuant to section 3 hereof and any holder of Class B shares who has not exercised his right to convert pursuant to section 4 hereof on or prior to the effective date or

record date, as the case may be, of such subdivision, consolidation, dividend or other distribution, upon the exercise of such right thereafter, shall be entitled to receive, and shall accept, in lieu of the number of Shares to which he was theretofore entitled upon such exercise of such right to purchase or convert (and, in the case of a purchase of Shares pursuant to section 3 hereto, at the Subordinate Voting Share Purchase Price adjusted in accordance with subsection 6(a) hereof), the aggregate number of Shares that such holder would have been entitled to receive as a result of such subdivision, consolidation, dividend or other distribution as if, on such record date or effective date, as the case may be, he had been the registered holder of the number of Shares to which he was theretofore entitled upon such exercise of such right to purchase or convert, as the case may be.

(b) CLASS B SHARES

- (i) In case of any reclassification or redesignation of the Class B shares (hereinafter referred to in this subsection 5(b) as the "Shares") or change of the Shares into other shares, or in case of the consolidation, amalgamation or merger of the Corporation with or into any other body corporate (other than a consolidation, amalgamation or merger which does not result in any reclassification or redesignation of the outstanding Shares or a change of the Shares into other shares), or in the case of any transfer of the undertaking or assets of the Corporation as an entirety or substantially as an entirety to another corporation, the holder of any Class A shares who thereafter shall exercise his right to purchase Shares pursuant to section 3 hereof shall be entitled to receive, and shall accept, in lieu of the number of Shares to which he was theretofore entitled upon such exercise of such right to purchase, the kind and amount of shares which such holder would have been entitled to receive as a result of such reclassification, redesignation, change, consolidation, amalgamation, merger or transfer if, on the effective date thereof, he had been the registered holder of the number of Shares to which he was theretofore entitled upon exercising his right to purchase. The subdivision or consolidation of Shares at any time outstanding into a greater or lesser number of Shares shall be deemed not to be a reclassification of the capital of the Corporation for the purposes of this paragraph 5(b)(i).
- (ii) If and whenever the Shares shall be subdivided into a greater or consolidated into a lesser number of Shares, any holder of Class A shares who has not exercised his right of purchase on or prior to the effective date of such subdivision or consolidation upon the exercise of such right thereafter, shall be entitled to receive, and shall accept, in lieu of the number of Shares to which he was theretofore entitled upon such exercise of such right to purchase (at the Class B Share Purchase Price adjusted in

accordance with subsection 6(b) hereof) the aggregate number of Shares that such holder would have been entitled to receive as a result of such subdivision or consolidation as if, on such the effective date, he had been the registered holder of the number of Shares to which he was theretofore entitled upon such exercise of such right to purchase.

6. ADJUSTMENT OF PURCHASE PRICE

(a) SUBORDINATE VOTING SHARES

If the Corporation shall:

- (i) subdivide its outstanding subordinate voting shares (hereinafter referred to in this paragraph 6(a) as the "Shares") into a greater number of shares,
- (ii) consolidate the outstanding Shares into a lesser number of shares, or
- (iii) issue Shares or securities exchangeable for or convertible into Shares ("convertible securities") to the holders of all or substantially all of the outstanding Shares by way of a dividend or distribution of Shares or securities convertible into Shares (other than the issue of Shares or convertible securities as dividends paid in the ordinary course), the Subordinate Voting Share Purchase Price shall, on the effective date of such subdivision or consolidation or on the record date of such dividend or other distribution, as the case may be, be adjusted by multiplying the Subordinate Voting Share Purchase Price in effect immediately prior to such subdivision, consolidation, dividend or other distribution by a fraction, the numerator of which is the number of outstanding Shares before giving effect to such subdivision, consolidation or stock dividend and the denominator of which is the number of outstanding Shares after giving effect to such subdivision, consolidation, dividend or other distribution (including in the case where convertible securities are distributed, the number of Shares that would have been outstanding had such securities been exchanged for or converted into Shares on such record date). Such adjustment shall be made successively whenever any event referred to in this paragraph 6(a) shall occur.

(b) CLASS B SHARES

If the Corporation shall:

- (i) subdivide its outstanding Class B shares (hereinafter referred to in this paragraph 6(b) as the "Shares") into a greater number of shares, or
- (ii) consolidate the outstanding Shares into a lesser number of shares, or

the Class B Share Purchase Price shall, on the effective date of such subdivision or consolidation, be adjusted by multiplying the Class B Share Purchase Price in effect immediately prior to such subdivision or consolidation, by a fraction, the numerator of which is the number of outstanding Shares before giving effect to such subdivision or consolidation and the denominator of which is the number of outstanding Shares after giving effect to such subdivision or consolidation. Such adjustment shall be made successively whenever any event referred to in this paragraph 6(b) shall occur.

#### 7. DISTRIBUTION RIGHTS OF ON LIQUIDATION

If the Corporation is liquidated, dissolved or wound-up or its assets are otherwise distributed among the shareholders by way of repayment of capital, whether voluntary or involuntary and subject to the rights, privileges, and conditions attaching to any series of preference shares of the Corporation:

- (a) the holders of the subordinate voting shares shall be entitled to share, equally share for share, in the distribution of the remaining assets of the Corporation; and
- (b) the holders of the Class A shares, the Class B shares and the Class C shares shall not be entitled to share in the remaining assets of the Corporation.

STATE OF WYOMING  
OFFICE OF THE  
SECRETARY OF STATE

United States of America,     )  
State of Wyoming             ) ss.

I, DIANA J. OHMAN, Secretary of State of the State of Wyoming, do hereby certify

BEN-ABRAHAM TECHNOLOGIES INC.

a corporation originally organized under the laws of the ONTARIO, CANADA, did on DECEMBER 19, 1996, apply for a Certificate of Registration and filed Articles of Continuance in the office of the Secretary of State of Wyoming.

I FURTHER CERTIFY that BEN-ABRAHAM TECHNOLOGIES INC. has renounced its original COUNTRY of incorporation, and is now incorporated under the laws of the state of Wyoming in accordance with W.S. 17-16-1710.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the Great Seal of the State of Wyoming. Done at Cheyenne, the Capital, this 19TH day of DECEMBER AD., 1996.

/s/ Diana J. Ohman  
-----  
Secretary of State

By  
-----

STATE OF WYOMING  
APPLICATION FOR  
CERTIFICATE OF REGISTRATION  
AND ARTICLES OF CONTINUANCE

Pursuant to Wyo. Stat. 17-16-1710 of the Wyoming Business Corporation Act ,  
the undersigned hereby submits the following Articles of Continuance:

1. The name of the corporation is: BEN-ABRAHAM TECHNOLOGIES INC.
2. It is incorporated under the laws of: ONTARIO, CANADA.
3. (a) The date of its incorporation is: December 6, 1996  
(b) The period of its duration is: Perpetual
4. The address of its principal office in the state/province under the laws of  
which it is incorporated is:  
  
372 Bay Street, Suite 302  
Toronto, Ontario, Canada M5H 2W9
5. The mailing address where correspondence and annual reports can be sent:  
  
372 Bay Street, Suite 302  
Toronto, Ontario, Canada M5H 2W9
6. The physical address of its proposed registered office in Wyoming and the  
name of its registered agent at that address is:  
  
CT Corporation  
1720 Carey Avenue  
Cheyenne, WY 82001
7. POWERS: The purpose or purposes of Ben-Abraham Technologies Inc. is to  
engage in any lawful business permitted under the laws of the State of  
Wyoming.
8. DIRECTORS & OFFICERS: The names and respective addresses of its officers  
and directors are:

OFFICE -----	NAME -----	ADDRESS -----
Chairman, Chief Executive Officer	Avi Ben-Abraham, M.D.	12 West 55th St. Suite 5B

OFFICE -----	NAME -----	ADDRESS -----
Chairman, Chief Executive Officer and Director	Avi Ben-Abraham, M.D.	12 West 55th St. Suite 5B New York, NY 10019
Director	James K. Lau	1274 Woodeden Dr. Mississauga, Ontario L5H 2T6
Director	A. Suzan Khan	110 Bloor Street West Suite 1008 Toronto, Canada M5S 2W7
Director	Dr. Claus G.J. Wagner-Bartak	32 Woodgreen Dr. Woodbridge, Ontario L4L 3P3
Director	Louis W. Sullivan, M.D.	Morehouse School of Medicine 720 Westview Drive S.W. Atlanta, Georgia 30310-1495
Director	Paul F. Oreffice	7740 East Gainey Ranch Road, #7 Scottsdale, AZ 85258

9. NUMBER OF DIRECTORS AND QUORUM: The Board shall consist of the number of directors provided in the Bylaws of the Corporation. The quorum for the transaction of business at any meeting of the Board shall be determined in accordance with the Bylaws.

10. SHAREHOLDER QUORUM: A quorum for the transaction of business at any meeting of shareholders shall be two shareholders represented in person or by proxy from each voting group entitled to vote on each of the matters to be voted on at the meeting, and otherwise entitled to vote at such meeting.

11. AUTHORIZED SHARES: The aggregate number of shares or other ownership units which the Corporation has the authority to issue, itemized by classes, par value of shares, shares without par value and series, if any, within a class is:

NUMBER OF SHARES -----	CLASS -----	SERIES -----	PAR VALUE PER SHARE -----
Unlimited	Class A Special	N/A	Without par value
Unlimited	Class B Special	N/A	Without par value
Unlimited	Class C Special	N/A	Without par value
Unlimited	Subordinate Voting	N/A	Without par value
Unlimited	Preference	N/A	Without par value

The preferences, limitations, and relative rights of each class of shares are as follows:

See Exhibit I attached hereto

12. ISSUED SHARES: The aggregate number of issued shares or other ownership units itemized by classes, par value of shares, shares without par value and series, if any, within a class is:

NUMBER OF SHARES -----	CLASS -----	SERIES -----	PAR VALUE PER SHARE -----
20,000,000	Class A Special	N/A	Without par value
4,150,000	Class C Special	N/A	Without par value
11,662,893	Subordinate Voting	N/A	Without par value

13. NO PREEMPTIVE RIGHTS GRANTED: The shareholders of the Corporation do not have a preemptive right to acquire the Corporation's unissued shares of any class or series.

14. CONSTITUTION: The Corporation accepts the Constitution of the State of Wyoming in compliance with the requirements of Article 10, Section 5 of the Wyoming Constitution.

15. INDEMNIFICATION: Except as may be prohibited under, and subject to the limitations contained in the Wyoming Business Corporation Act (the "Act"), the Corporation shall indemnify a director or officer, a former director or officer, or a person who acts or acted at the Corporation's request as a director or officer of a body corporate of which the Corporation is or was a shareholder or creditor (or a person who undertakes or has undertaken any liability on behalf of the Corporation or number of any such body corporate) and his heirs and legal representatives, against all costs, charges and expenses, including any amount paid to settle an

action or satisfy a judgment, reasonably incurred by him in respect of any civil, criminal or administrative action or proceeding to which he is made a party by reasons of being or having been a director or officer of the Corporation or such body corporate, if

a. he conducted himself in good faith and he reasonably believed that his conduct was in or at least not opposed to the Corporation's best interests, and

b. in the case of any criminal proceeding, he had no reasonable cause to believe that his conduct was unlawful.

16. ELIMINATION OF CERTAIN LIABILITIES OF DIRECTORS: Except as may be prohibited by the Act:

a. there shall be no personal liability, either direct or indirect, of any director of the Corporation to the Corporation or its shareholders for monetary damages for any breach or breaches of fiduciary duty as a director; and

b. no director or officer shall be liable for the acts, receipts, neglects or defaults of any other director or officer or employee, or for joining in any receipt or other act for conformity, or for any loss, damage or expense happening to the Corporation through the insufficiency or deficiency of title to any property acquired for or on behalf of the Corporation, or for the insufficiency or deficiency of any security in or upon which any of the moneys of the Corporation shall be invested, or for any loss or damage arising from the bankruptcy, insolvency or tortious acts of any person with whom any of the moneys securities or effects of the Corporation shall be deposited, or for any loss occasioned by any error of judgment or oversight on his part, or for any other loss, damage or misfortune whatever which shall happen in the execution of the duties of his office or in relation thereto, unless the same are occasioned by his own willful neglect or default; providing that nothing herein shall relieve any director or officer from the duty to act in accordance with the Act, and the regulations thereunder, or from liability for any breach thereof.

This provision shall not limit the rights of directors of the Corporation for indemnification or other assistance from the Corporation. Any repeal or modification of the foregoing provisions of this Article by the shareholders of the Corporation or any repeal or modification of the provisions of the Act that permits the elimination of liability of directors by this Article shall not affect adversely any elimination of liability, right or protection of a director of the Corporation with respect to any breach, act, omission, or transaction of such director occurring prior to the time of such repeal or modification.

Dated: December 8, 1996.

By: /s/ Avi Ben-Abraham

Title: Chairman and Chief Executive Officer

PROVINCE OF ONTARIO )  
MUNICIPALITY OF METROPOLITAN )  
TORONTO )

I, PAUL G. FINDLAY, Notary Public, do hereby certify that on this 9th day of December, 1996, personally appeared before me Avi Ben-Abraham, who, being by me first duly sworn, declared that he signed the foregoing document as the Chairman and Chief Executive Officer of the corporation, and that the statements therein contained are true.

In witness whereof, I have hereunto set my hand and seal this 9th day of December, 1996.

/s/ Paul G. Findlay  
-----  
Notary Public

(Notarial Seal)

My Commission Expires: FOR LIFE  
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EXHIBIT I

BEN-ABRAHAM TECHNOLOGIES INC. SHARE PROVISIONS

To the extent permitted by the WYOMING BUSINESS CORPORATIONS ACT (the "Act"), the rights, privileges, restrictions and conditions attaching to each class of shares and directors authority with respect to any class of shares which may be issued in series:

A. PREFERENCE SHARES

The preferences, limitations and relative rights of the preference shares as a class are as follows:

1. DIRECTORS' RIGHT TO ISSUE IN ONE OR MORE SERIES

The preference shares may at any time or from time to time be issued in one or more series. Before any shares of a particular series are issued, the directors of the Corporation shall fix the number of shares that will form such series and shall, subject to the limitations set out herein, by resolution, determine the designation, rights, privileges, restrictions and conditions to be attached to the preference shares of such series including, but without in any way limiting or restricting the generality of the foregoing, the rate, amount or method of calculation of dividends thereon, the time and place of payment of dividends, the consideration and the terms and conditions of any purchase for cancellation, retraction or redemption thereof, conversion rights and the terms and conditions of any share purchase plan or sinking fund, the whole subject to the filing with the Secretary of State, of articles of amendment in the form prescribed under the Act containing a description of such series including the designation, preferences, limitations and relative rights as determined by the directors, and the endorsement thereon of a certificate of amendment in respect thereof. Notwithstanding the foregoing, the preference shares of a series shall not be entitled to any voting rights except as prescribed by law or except if the Corporation has failed to pay dividends on any series of preference shares.

2. RANKING

The preference shares of each series shall rank on a parity with the preference shares of every other series with respect to accumulated dividends and return of capital. The preference shares of the Corporation shall be entitled to preference over the subordinate voting shares of the Corporation and over any other shares of the Corporation ranking junior to the preference shares with respect to priority in the payment of dividends and the distribution of assets in the event of the liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary, or any other distribution of the assets of the Corporation among its shareholders for the purposes of winding-up its affairs. If any accumulated dividends or amounts payable on a return of capital are not paid in full, the preference shares of all series shall participate rateably in respect of such dividends, including accumulations, if any, in accordance with the sums that would be payable on

such shares if all such dividends were declared and paid in full, and in respect of any repayment of capital if all sums so payable were paid in full; provided however that in the event of there being insufficient assets to satisfy in full all such claims, the claims of the holders of the preference shares with respect to repayment of capital shall first be applied toward the payment and satisfaction of claims in respect of dividends.

3. VOTING

Except as hereinafter referred to or as required by law or in accordance with any voting rights which may from time to time be attached to any series of preference shares, the holders of the preference shares, as a class, shall not be entitled as such to receive notice of, to attend or to vote at any meeting of the shareholders of the Corporation.

4. AMENDMENT WITH APPROVAL OF HOLDERS OF PREFERENCE SHARES

The preferences, limitations and relative rights attaching to the preference shares as a class may be added to, changed or removed but only with the approval of the holders of the preference shares given as hereinafter specified.

5. APPROVAL OF HOLDERS OF PREFERENCE SHARES

The approval of the holders of the preference shares to add to, change or remove any preference, limitation or relative right attaching to the preference shares as a class or any other matter requiring the consent of the holders of the preference shares may be given in such manner as may be required by law, subject to a minimum requirement that such approval be given by resolution passed by the affirmative vote of a majority of the votes cast at a meeting of the holders of the preference shares duly called for that purpose. Each holder of preference shares entitled to vote at such meeting shall have one vote in respect of each \$1.00 of the issue price of each preference share held by such person.

B. SUBORDINATE VOTING SHARES, CLASS A SHARES, CLASS B SHARES AND CLASS C SHARES

The rights, privileges, restrictions and conditions attaching to the subordinate voting shares, the Class A Special shares (the "Class A shares"), the Class B Special shares (the "Class B shares") and the Class C Special shares (the "Class C shares") are as follows:

1. DIVIDEND RIGHTS

(a) DIVIDEND RIGHTS OF SUBORDINATE VOTING SHARES

The holders of the subordinate voting shares, shall be entitled to receive dividends as and when declared by the directors from time to time out of moneys of the Corporation properly applicable to the payment of dividends and the amount per

share of each such dividend shall be determined by the directors of the Corporation at the time of declaration.

(b) DIVIDEND RIGHTS OF CLASS B SHARES

The holders of the Class B shares shall be entitled to receive dividends as and when declared by the directors from time to time out of moneys of the Corporation properly applicable to the payment of dividends and the amount per share of each such dividend shall be determined by the directors of the Corporation at the time of declaration, provided that the amount of the dividend per Class B share in any calendar year shall not exceed the amount of the dividend per subordinate voting share in such year.

(c) DIVIDEND RIGHTS OF CLASS A AND CLASS C SPECIAL SHARES

The holders of the Class A shares and the Class C shares shall not be entitled to receive any dividends.

2. VOTING RIGHTS

(a) VOTING OF SUBORDINATE VOTING SHARES

Subject to the provisions of the Act, the holders of the subordinate voting shares shall be entitled to receive notice of and to attend all meetings of the shareholders of the Corporation and shall be entitled to vote at all meetings of shareholders, except meetings at which only holders of another class of shares are entitled to vote. Each subordinate voting share shall entitle the holder thereof to one vote.

(b) VOTING OF CLASS A SHARES

Subject to the provisions of the Act, the holders of the Class A shares shall be entitled to receive notice of and to attend all meetings of the shareholders of the Corporation and shall be entitled to vote at all meetings of the shareholders, except meetings at which only holders of another class of shares are entitled to vote. Each Class A share shall entitle the holder thereof to ten votes.

(c) VOTING OF CLASS B SHARES

Subject to the provisions of the Act, the holders of the Class B shares shall be entitled to receive notice of and to attend all meetings of the shareholders of the Corporation and shall be entitled to vote at all meetings of the shareholders, except meetings at which only holders of another class of shares are entitled to vote. Each Class B share shall entitle the holder thereof to ten votes.

(d) VOTING OF CLASS C SHARES

Subject to the provisions of the Act, the holders of the Class C shares shall be entitled to receive notice of and to attend all meetings of the shareholders of the Corporation and shall be entitled to vote at all meetings of the shareholders, except meetings at which only holders of another class of shares are entitled to vote. Each Class C share shall entitle the holder thereof to one vote.

3. PURCHASE RIGHTS

(a) SUBORDINATE VOTING SHARE PURCHASE RIGHTS OF CLASS A SHARES

A holder of Class A shares shall be entitled, in accordance with the provisions hereof, to acquire subordinate voting shares of the Corporation as the same may then be constituted by tendering any of the Class A shares held and registered in his name together with U.S. \$0.25 per share (the "Subordinate Voting Share Purchase Price") on the basis of one subordinate voting share for each Class A share and U.S. \$0.25. The purchase right herein provided shall be exercised by notice in writing given to the Corporation which notice shall specify the number of Class A shares that the holder desires to have applied to the purchase price of subordinate voting shares. If any Class A shares are applied to the purchase of subordinate voting shares pursuant to this paragraph, the holder of such Class A shares shall surrender the certificate or certificates representing the Class A shares so applied to the registered office of the Corporation, or to the transfer agent of the Corporation at the time of purchase together with cash or a certified cheque in the amount of U.S. \$0.25 per subordinate voting share being acquired, and the Corporation shall thereupon issue to such holder certificates representing the number of subordinate voting shares to which the holder became entitled upon such purchase.

(b) CLASS B SHARE PURCHASE RIGHTS OF CLASS A SHARES

A holder of Class A shares shall be entitled, in accordance with the provisions hereof, to acquire, Class B shares of the Corporation as the same may then be constituted by tendering any of the Class A shares held and registered in his name together with U.S. \$0.25 (the "Class B Share Purchase Price") per share on the basis of one Class B share for each Class A share and U.S. \$0.25. The purchase right herein provided shall be exercised by notice in writing given to the Corporation which notice shall specify the number of Class A shares that the holder desires to have applied to the purchase price of Class B shares. If any Class A shares are applied to the purchase of subordinate voting shares pursuant to this paragraph, the holder of such Class A shares shall surrender the certificate or certificates representing the Class A shares so applied to the registered office of the Corporation, or to the transfer agent of the Corporation at the time of purchase together with cash or a certified cheque in the amount of U.S. \$0.25 per Class B

share being acquired, and the Corporation shall thereupon issue to such holder certificates representing the number of Class B shares to which the holder became entitled upon such purchase.

(c) SUBORDINATE VOTING SHARE PURCHASE RIGHTS OF CLASS C SHARES

A holder of Class C shares shall be entitled, in accordance with the provisions hereof, to acquire subordinate voting shares of the Corporation as the same may then be constituted by tendering any of the Class C shares held and registered in his name together with U.S. \$0.25 per share on the basis of one subordinate voting share for each Class C share and U.S. \$0.25. The purchase right herein provided shall be exercised by notice in writing given to the Corporation which notice shall specify the number of Class C shares that the holder desires to have applied to the purchase price of subordinate voting shares. If any Class C shares are applied to the purchase of subordinate voting shares pursuant to this paragraph, the holder of such Class C shares shall surrender the certificate or certificates representing the Class C shares so applied to the registered office of the Corporation, or to the transfer agent of the Corporation at the time of purchase together with cash or a certified cheque in the amount of U.S. \$0.25 per subordinate voting share being acquired, and the Corporation shall thereupon issue to such holder certificates representing the number of subordinate voting shares to which the holder became entitled upon such purchase.

4. CONVERSION RIGHTS

(a) CONVERSION RIGHTS OF CLASS B SHARES

A holder of Class B shares shall be entitled, in accordance with the provisions hereof, to have any of the Class B shares held and registered in his name converted into subordinate voting shares of the Corporation as the same may be constituted at the time of the conversion on the basis of one subordinate voting share for each Class B share converted. The conversion right herein provided shall be exercised by notice in writing given to the Corporation which notice shall specify the number of Class B shares that the holder desires to have converted into subordinate voting shares. If any Class B shares are converted into subordinate voting shares pursuant to this paragraph, the holder of such Class B shares shall surrender the certificate or certificates representing the Class B shares which were converted to the registered office of the Corporation, or to the transfer agent of the Corporation at the time of conversion, and the Corporation shall thereupon issue to such holder certificates representing the number of subordinate voting shares to which the holder became entitled upon the conversion.

5. ADJUSTMENT OF PURCHASE RIGHTS AND CONVERSION RIGHTS

(a) SUBORDINATE VOTING SHARES

- (i) In case of any reclassification or redesignation of the subordinate voting shares (hereinafter referred to in this subsection 5(a) as the "Shares") or change of the Shares into other shares, or in case of the consolidation, amalgamation or merger of the Corporation with or into any other body corporate (other than a consolidation, amalgamation or merger which does not result in any reclassification or redesignation of the outstanding Shares or a change of the Shares into other shares), or in the case of any transfer of the undertaking or assets of the Corporation as an entirety or substantially as an entirety to another corporation, the holder of any Class A shares or Class C shares who thereafter shall exercise his right to purchase Shares pursuant to section 3 hereof and the holder of any Class B shares who thereafter shall exercise his right to convert any Class B shares into Shares pursuant to section 4 hereof shall be entitled to receive, and shall accept, in lieu of the number of Shares to which he was theretofore entitled upon such exercise of such right to purchase or convert, as the case may be, the kind and amount of shares which such holder would have been entitled to receive as a result of such reclassification, redesignation, change, consolidation, amalgamation, merger or transfer if, on the effective date thereof, he had been the registered holder of the number of Shares to which he was theretofore entitled upon exercising his right to purchase or convert, as the case may be. The subdivision or consolidation of Shares at anytime outstanding into a greater or lesser number of Shares shall be deemed not to be a reclassification of the capital of the Corporation for the purposes of this paragraph 5(a)(i).
- (ii) If and whenever the Shares shall be subdivided into a greater or consolidated into a lesser number of Shares, or the Corporation shall issue Shares (or securities exchangeable for or convertible into Shares) to the holders of all or substantially all of the outstanding Shares by way of a dividend or other distribution of Shares (or securities exchangeable for or convertible into Shares), any holder of Class A shares or Class C shares who has not exercised his right to purchase pursuant to section 3 hereof and any holder of Class B shares who has not exercised his right to convert pursuant to section 4 hereof on or prior to the effective date or record date, as the case may be, of such subdivision, consolidation, dividend or other distribution, upon the exercise of such right thereafter, shall be entitled to receive, and shall accept, in lieu of the number of Shares to which he was theretofore entitled upon such exercise of such right to purchase or convert (and, in the case of a purchase of Shares pursuant to section 3 hereto, at the Subordinate Voting Share Purchase Price adjusted in accordance with subsection 6(a) hereof), the aggregate number of Shares that such holder would have been entitled to receive as a result of such subdivision, consolidation, dividend or other distribution as if, on such record date or effective date, as the case may be, he had been

the registered holder of the number of Shares to which he was theretofore entitled upon such exercise of such right to purchase or convert, as the case may be.

(b) CLASS B SHARES

(i) In case of any reclassification or redesignation of the Class B shares (hereinafter referred to in this subsection 5(b) as the "Shares") or change of the Shares into other shares, or in case of the consolidation, amalgamation or merger of the Corporation with or into any other body corporate (other than a consolidation, amalgamation or merger which does not result in any reclassification or redesignation of the outstanding Shares or a change of the Shares into other shares), or in the case of any transfer of the undertaking or assets of the Corporation as an entirety or substantially as an entirety to another corporation, the holder of any Class A shares who thereafter shall exercise his right to purchase Shares pursuant to section 3 hereof shall be entitled to receive, and shall accept, in lieu of the number of Shares to which he was theretofore entitled upon such exercise of such right to purchase, the kind and amount of shares which such holder would have been entitled to receive as a result of such reclassification, redesignation, change, consolidation, amalgamation, merger or transfer if, on the effective date thereof, he had been the registered holder of the number of Shares to which he was theretofore entitled upon exercising his right to purchase. The subdivision or consolidation of Shares at any time outstanding into a greater or lesser number of Shares shall be deemed not to be a reclassification of the capital of the Corporation for the purposes of this paragraph 5(b)(i).

(ii) If and whenever the Shares shall be subdivided into a greater or consolidated into a lesser number of Shares, any holder of Class A shares who has not exercised his right of purchase on or prior to the effective date of such subdivision or consolidation upon the exercise of such right thereafter, shall be entitled to receive, and shall accept, in lieu of the number of Shares to which he was theretofore entitled upon such exercise of such right to purchase (at the Class B Share Purchase Price adjusted in accordance with subsection 6(b) hereof) the aggregate number of Shares that such holder would have been entitled to receive as a result of such subdivision or consolidation as if, on such the effective date, he had been the registered holder of the number of Shares to which he was theretofore entitled upon such exercise of such right to purchase.

6. ADJUSTMENT OF PURCHASE PRICE

(a) SUBORDINATE VOTING SHARES

If the Corporation shall:

- (i) subdivide its outstanding subordinate voting shares (hereinafter referred to in this paragraph 6(a) as the "Shares") into a greater number of shares,
- (ii) consolidate the outstanding Shares into a lesser number of shares, or
- (iii) issue Shares or securities exchangeable for or convertible into Shares ("convertible securities") to the holders of all or substantially all of the outstanding Shares by way of a dividend or distribution of Shares or securities convertible into Shares (other than the issue of Shares or convertible securities as dividends paid in the ordinary course),

the Subordinate Voting Share Purchase Price shall, on the effective date of such subdivision or consolidation or on the record date of such dividend or other distribution, as the case may be, be adjusted by multiplying the Subordinate Voting Share Purchase Price in effect immediately prior to such subdivision, consolidation, dividend or other distribution by a fraction, the numerator of which is the number of outstanding Shares before giving effect to such subdivision, consolidation or stock dividend and the denominator of which is the number of outstanding Shares after giving effect to such subdivision, consolidation, dividend or other distribution (including in the case where convertible securities are distributed, the number of Shares that would have been outstanding had such securities been exchanged for or converted into Shares on such record date). Such adjustment shall be made successively whenever any event referred to in this paragraph 6(a) shall occur.

(b) CLASS B SHARES

If the Corporation shall:

- (i) subdivide its outstanding Class B shares (hereinafter referred to in this paragraph 6(b) as the "Shares") into a greater number of shares, or
- (ii) consolidate the outstanding Shares into a lesser number of shares, or

the Class B Share Purchase Price shall, on the effective date of such subdivision or consolidation, be adjusted by multiplying the Class B Share Purchase Price in effect immediately prior to such subdivision or consolidation, by a fraction, the numerator of which is the number of outstanding Shares before giving effect to such subdivision or consolidation and the denominator of which is the number of outstanding Shares after giving effect to such subdivision or consolidation. Such adjustment shall be made successively whenever any event referred to in this paragraph 6(b) shall occur.

7. DISTRIBUTION RIGHTS OF ON LIQUIDATION

If the Corporation is liquidated, dissolved or wound-up or its assets are otherwise distributed among the shareholders by way of repayment of capital, whether voluntary or involuntary and subject to the rights, privileges, and conditions attaching to any series of preference shares of the Corporation:

- (a) the holders of the subordinate voting shares shall be entitled to share, equally share for share, in the distribution of the remaining assets of the Corporation; and
- (b) the holders of the Class A shares, the Class B shares and the Class C shares shall not be entitled to share in the remaining assets of the Corporation.

SECRETARY OF STATE  
STATE OF WYOMING  
CAPITOL BUILDING  
CHEYENNE, WY 82002-0020

ARTICLES OF AMENDMENT  
BY SHAREHOLDERS OF BEN-ABRAHAM TECHNOLOGIES INC.

Pursuant to the provisions of the Wyoming Business Corporation Act, the shareholders of BEN-ABRAHAM TECHNOLOGIES INC. (the "Corporation"), a Wyoming corporation, hereby adopts these Articles of Amendment on behalf of the Corporation. The Corporation's Articles of Continuance were filed with the Wyoming Secretary of State on December 19, 1996.

1. The name of the Corporation is Ben-Abraham Technologies Inc.

2. Effective as of the date of filing of these Articles of Amendment with the Secretary of State, the Articles of Continuance of the Corporation are hereby amended as follows:

a. All of the Corporation's issued Class A Special Shares are hereby reclassified as Class C Special Shares. The unissued Class A Special Shares and the Class B Shares (none of which are issued) are hereby deleted and cancelled from the authorized capital of the Corporation. The Subordinate Voting Shares hereby are reclassified as Common shares.

To effect the foregoing reclassifications, exchanges and cancellations with respect to the authorized stock of the Corporation, Section 11 of the Articles of Continuance is hereby amended and restated in its entirety as follows:

AUTHORIZED SHARES: The aggregate number of shares or other ownership units which the Corporation has the authority to issue, itemized by classes, par value of shares, shares without par value and series, if any, within a class is:

NUMBER OF SHARES	CLASS	SERIES	PAR VALUE PER SHARE
-----	-----	-----	-----
Unlimited	Class C Special	N/A	Without par value
Unlimited	Common	N/A	Without par value
Unlimited	Preference	N/A	Without par value

The preferences, limitations, and relative rights of each class of shares are as follows:

See Exhibit I attached hereto.

b. Exhibit I of the Articles of Continuance is replaced in its entirety with Exhibit I which is attached hereto and incorporated herein by this reference.

3. The foregoing amendments were adopted at a meeting of the shareholders of the Corporation held on July 13, 1999 ("Shareholders' Meeting").

4. Effective as of the date of the Corporation's execution of these Articles of Amendment, the issued and outstanding shares of the Corporation consisted of the following: there were 1,531,386 issued and outstanding shares Class A Special shares, 3,276,479 issued and outstanding Class C Special shares, and 52,572,686 issued and outstanding Subordinate Voting shares. None of the Class B Special shares or the Preference shares are issued or outstanding.

5. The designation and number of votes entitled to be cast by each voting group entitled to vote separately on the foregoing amendments were as follows: The holders of Class A Special shares were entitled to cast 15,313,860 votes. The holders of Class C Special shares were entitled to cast 3,276,479 votes. The holders of Subordinate Voting shares were entitled to cast 52,572,686 votes.

6. The number of votes of each voting group indisputably represented at the Shareholders' Meeting were as follows: 1,322,886 votes of Class A Special shares; 2,752,829 votes of Class C Special shares; and 38,186,640 votes of Subordinate Voting shares.

7. The total number of undisputed votes cast at the Shareholders' Meeting for the foregoing amendments by each voting group was as follows: 13,228,860 Class A Special shares voted for the foregoing amendments; 2,752,829 Class C Special shares voted for the foregoing amendments; and 34,480,901 Subordinate Voting shares voted for the foregoing amendments. The total number of undisputed votes cast for the foregoing amendments by each voting group was sufficient for approval of the foregoing amendments by each voting group.

8. The provisions for implementing the reclassification, exchange and cancellation of issued shares of the Corporation are as follows:

a. Class A Special shares are hereby reclassified as Class C Special shares. Holders of share certificates evidencing Class A Special shares may submit such share certificates to the Corporation in order to exchange them for share certificates evidencing Class C Special shares, but until such exchange occurs, Class A Special share certificates shall be deemed to evidence Class C Special shares.

b. Subordinate Voting Shares are hereby reclassified as Common shares. Holders of share certificates evidencing Subordinate Voting shares may submit such share certificates to the Corporation in order to exchange them for share certificates evidencing Common shares, but until such exchange occurs, Subordinate Voting shares shall be deemed to evidence Common shares.

IN WITNESS WHEREOF, the undersigned has executed these Articles of Amendment of the Corporation on this 19th day of July, 1999.

BEN-ABRAHAM TECHNOLOGIES INC.

By: /s/ Stephen M. Simes

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Title: President and Chief Executive Officer

## EXHIBIT I

### BEN ABRAHAM TECHNOLOGIES INC. SHARE PROVISIONS

To the extent permitted by the WYOMING BUSINESS CORPORATIONS ACT (the "Act"), the rights, privileges, restrictions and conditions attaching to each class of shares and directors authority with respect to any class of shares which may be issued in series are as follows:

#### A. PREFERENCE SHARES

The preferences, limitations and relative rights of the preferences shares as a class are as follows:

##### 1. DIRECTORS' RIGHT TO ISSUE IN ONE OR MORE SERIES

The preference shares may at any time or from time to time be issued in one or more series. Before any shares of a particular series are issued, the directors of the Corporation shall fix the number of shares that will form such series and shall, subject to the limitations set out herein, by resolution, determine the designation, preferences, limitations, rights, privileges, restrictions and conditions to be attached to the preference shares of such series including, but without in any way limiting or restricting the generality of the foregoing, the rate, amount or method of calculation of dividends thereon, the time and place of payment of dividends, the consideration and the terms and conditions of any purchase for cancellation, retraction or redemption thereof, conversion rights and the terms and conditions of any share purchase plan or sinking fund, the whole subject to the filing with the Secretary of State, of articles of amendment in the form prescribed under the Act containing a description of such series including the designation, preferences, limitations and relative rights as determined by the directors, and the endorsement thereon of a certificate of amendment in respect thereof. Notwithstanding the foregoing, the preference shares of a series shall not be entitled to any voting rights except as prescribed by law or except if the Corporation has failed to pay dividends on any series of preference shares.

##### 2. RANKING

The preference shares of each series shall rank on a parity with the preference shares of every other series with respect to accumulated dividends and return of capital. The preference shares of the Corporation shall be entitled to preference over the common shares of the Corporation and over any other shares of the Corporation ranking junior to the preference shares with respect to priority in the payment of dividends and the distribution of assets in the event of liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary, or any other distribution of the assets of the Corporation among its shareholders for the purposes of winding-up its affairs. If any accumulated dividends or amounts payable on a return of capital are not paid in full, the preference shares of all series shall participate ratably in respect of such dividends, including accumulations, if any, in accordance with the sums that would be payable on such shares if all such dividends were declared and paid in full, and in respect of any

repayment of capital if all sums so payable were paid in full; provided however that in the event of there being insufficient assets to satisfy in full all such claims, the claims of the holders of the preference shares with respect to repayment of capital shall first be applied toward the payment and satisfaction of claims in respect of dividends.

### 3. VOTING

Except as hereinafter referred to or as required by law or in accordance with any voting rights which may from time to time be attached to any series of preference shares, the holders of the preference shares, as a class, shall not be entitled as such to receive notice of, to attend or to vote at any meeting of the shareholders of the Corporation.

### 4. AMENDMENT WITH APPROVAL OF HOLDERS OF PREFERENCE SHARES

The preferences, limitations and relative rights attaching to the preference shares as a class may be added to, changed or removed by the directors but only with the approval of the holders of the preference shares given as hereinafter specified.

### 5. APPROVAL OF HOLDERS OF PREFERENCE SHARES

The approval of the holders of the preference shares to add to, change or remove any preference, limitation or relative right attaching to the preference shares as a class or any other matter requiring the consent of the holders of the preference shares may be given in such manner as may be required by law, subject to a minimum requirement that such approval be given by resolution passed by the affirmative vote of a majority of the votes cast at a meeting of the holders of the preference shares duly called for that purpose. Each holder of preference shares entitled to vote at such meeting shall have one vote in respect of each \$1.00 of the issue price of each preference share held by such person.

## B. COMMON SHARES AND CLASS C SHARES

The rights, privileges, restrictions and conditions attaching to the common shares, and the Class C Special shares (the "Class C Shares") are as follows:

### 1. DIVIDEND RIGHTS

#### (a) DIVIDEND RIGHTS OF COMMON SHARES

The holders of the common shares, shall be entitled to receive dividends as and when declared by the directors from time to time out of moneys of the Corporation properly applicable to the payment of dividends and the amount per share of each such dividend shall be determined by the directors of the Corporation at the time of declaration.

#### (b) DIVIDEND RIGHTS OF CLASS C SPECIAL SHARES

The holders of the Class C shares shall not be entitled to receive any dividends.

2. VOTING RIGHTS

(a) VOTING OF COMMON SHARES

Subject to the provisions of the Act, the holders of the common shares shall be entitled to receive notice of and to attend all meetings of the shareholders of the Corporation and shall be entitled to vote at all meetings of shareholders, except meetings at which only holders of another class of shares are entitled to vote. Each common share shall entitle the holder thereof to one vote.

(b) VOTING OF CLASS C SHARES

Subject to the provisions of the Act, the holders of the Class C shares shall be entitled to receive notice of and to attend all meetings of the shareholders of the Corporation and shall be entitled to vote at all meetings of shareholders, except meetings at which only holders of another class of shares are entitled to vote. Each Class C share shall entitle the holder thereof to one vote.

3. PURCHASE RIGHTS

(a) COMMON SHARE PURCHASE RIGHTS OF CLASS C SHARES

A holder of Class C shares shall be entitled, in accordance with the provisions hereof, to acquire common shares of the Corporation as the same may then be constituted by tendering any of the Class C shares held and registered in his name together with U.S. \$0.25 per share (the "Common Share Purchase Price") on the basis of one common share for each Class C share and U.S. \$0.25. The purchase right herein provided shall be exercised by notice in writing given to the Corporation which notice shall specify the number of Class C shares that the holder desires to have applied to the purchase price of common shares. If any Class C shares are applied to the purchase of common shares pursuant to this paragraph, the holder of such Class C shares shall surrender the certificate or certificates representing the Class C shares so applied to the registered office of the Corporation, or to the transfer agent of the Corporation at the time of purchase together with cash or a certified cheque in the amount of U.S. \$0.25 per common share being acquired, and the Corporation shall thereupon issue to such holder certificates representing the number of common shares to which the holder became entitled upon such purchase.

4. ADJUSTMENT OF PURCHASE RIGHTS AND CONVERSION RIGHTS

(a) In case of any reclassification or redesignation of the common shares (hereinafter referred to in this subsection 4(a) as the "Shares") or change of the Shares into other shares, or in case of the consolidation, amalgamation or merger of the Corporation with or into any other body

corporate (other than a consolidation, amalgamation or merger which does not result in any reclassification or redesignation of the outstanding Shares or a change of the Shares into other shares), or in the case of any transfer of the undertaking or assets of the Corporation as an entirety or substantially as an entirety to another corporation, the holder of any Class C shares who thereafter shall exercise his right to purchase Shares pursuant to section 3 hereof shall be entitled to receive, and shall accept, in lieu of the number of Shares to which he was theretofore entitled upon such exercise of such right to purchase or convert, as the case may be, the kind and amount of Shares which such holder would have been entitled to receive as a result of such reclassification, redesignation, change, consolidation, amalgamation, merger or transfer if, on the effective date thereof, he had been the registered holder of the number of Shares to which he was theretofore entitled upon exercising his right to purchase or convert, as the case may be. The subdivision or consolidation of Shares at anytime outstanding into a greater or lesser number of Shares shall be deemed not to be a reclassification of the capital of the Corporation for the purposes of this paragraph 4(a).

- (b) If and whenever the Shares shall be subdivided into a greater or consolidated into a lesser number of Shares, or the corporation shall issue Shares (or securities exchangeable for or convertible into Shares) to the holders of all or substantially all of the outstanding Shares by way of a dividend or other distribution of Shares (or securities exchangeable for or convertible into Shares), any holder of Class C shares who has not exercised his right of purchase pursuant to section 3 hereof on or prior to the effective date or record date, as the case may be of such subdivision, consolidation, dividend or other distribution, upon the exercise of such right thereafter, shall be entitled to receive, and shall accept, in lieu of the number of Shares to which he was theretofore entitled upon such exercise of such right to purchase or convert (and, in the case of a purchase of Shares pursuant to section 3 hereto, at the Common Share Purchase Price adjusted in accordance with subsection 5(a) hereof), the aggregate number of Shares that such holder would have been entitled to receive as a result of such subdivision, consolidation, dividend or other distribution as if, on such record date or effective date, as the case may be, he had been the registered holder of the number of Shares to which he was theretofore entitled upon such exercise of such right to purchase or convert, as the case may be.

5. ADJUSTMENT OF PURCHASE PRICE

- (a) If the Corporation shall:
- (i) subdivide its outstanding common shares (hereinafter referred to in this paragraph 5 as the "Shares") into a greater number of shares,

- (ii) consolidate the outstanding Shares into a lesser number of shares, or
- (iii) issue Shares or securities exchangeable for or convertible into Shares ("convertible securities") to the holders of all or substantially all of the outstanding Shares by way of a dividend or distribution of Shares or securities convertible into Shares (other than the issue of Shares or convertible securities as dividends paid in the ordinary course),

the Common Share Purchase Price shall, on the effective date of such subdivision or consolidation or on the record date of such dividend or other distribution, as the case may be, be adjusted by multiplying the Common Shares Purchase Price in effect immediately prior to such subdivision, consolidation, dividend or other distribution by a fraction, the numerator of which is the number of outstanding Shares before giving effect to such subdivision, consolidation or stock dividend and the denominator of which is the number of outstanding Shares after giving effect to such subdivision, consolidation, dividend or other distribution (including in the case where convertible securities are distributed, the number of Shares that would have been outstanding had such securities been exchanged for or converted into Shares on such record date). Such adjustment shall be made successively whenever any event referred to in this paragraph 5 shall occur.

#### 6. DISTRIBUTION RIGHTS ON LIQUIDATION

If the Corporation is liquidated, dissolved or wound-up or its assets are otherwise distributed among the shareholders by way of repayment of capital, whether voluntary or involuntary and subject to the rights, privileges, and conditions attaching to any series of preference shares of the Corporation:

- (a) the holders of the common shares shall be entitled to share, equally share for share, in the distribution of the remaining assets of the Corporation; and
- (b) the holders of the Class C shares shall not be entitled to share in the remaining assets of the Corporation.

SECRETARY OF STATE  
STATE OF WYOMING  
CAPITOL BUILDING  
CHEYENNE, WY 82002-0020

ARTICLES OF AMENDMENT BY SHAREHOLDERS OF BEN-ABRAHAM TECHNOLOGIES INC.

Pursuant to the provisions of the Wyoming Business Corporation Act, the shareholders of BEN-ABRAHAM TECHNOLOGIES INC. (the "Corporation"), a Wyoming corporation, hereby adopts these Articles of Amendment on behalf of the Corporation. The Corporation's Articles of Continuance were filed with the Wyoming Secretary of State on December 19, 1996, and have been subsequently amended by the filing of Articles of Amendment with the Wyoming Secretary of State on November 10, 1999.

1. The name of the Corporation is Ben-Abraham Technologies Inc.

2. Effective as of the date of filing of these Articles of Amendment with the Secretary of State, the Articles of Continuance of the Corporation are hereby amended as follows:

The name of the Corporation is hereby changed to be: BioSante Pharmaceuticals, Inc.

3. The foregoing amendment was adopted at a meeting of the shareholders of the Corporation held on November 10, 1999 ("Shareholders' Meeting").

4. Effective as of the date of the Shareholders' Meeting, the issued and outstanding shares of the Corporation consisted of the following: there were 4,807,865 issued and outstanding Class C Special Shares and 52,642,686 issued and outstanding Common Shares.

5. The designation and number of votes entitled to be cast by each voting group entitled to vote separately on the foregoing amendments were as follows: The holders of Class C Special Shares were entitled to cast 4,807,865 votes. The holders of Common Shares were entitled to cast 52,642,686 votes.

6. The number of votes of each voting group indisputably represented at the Shareholders' Meeting were as follows: 4,700,715 votes of Class C Special Shares; and 42,973,846 votes of Common Shares.

7. The total number of undisputed votes cast at the Shareholders' Meeting for the foregoing amendments by each voting group was as follows: 4,700,715 Class C Special Shares voted for the foregoing amendments; and 42,971,016 Common Shares

voted for the foregoing amendments. The total number of undisputed votes cast for the foregoing amendments by each voting group was sufficient for approval of the foregoing amendments by each voting group.

IN WITNESS WHEREOF, the undersigned has executed these Articles of Amendment of the Corporation on this 16th day of November, 1999.

BEN-ABRAHAM TECHNOLOGIES INC.

By: /s/ Stephen M. Simes  
Title: President and Chief Executive  
Officer

2

BYLAWS  
OF  
BEN-ABRAHAM TECHNOLOGIES INC.  
(THE "COMPANY")

OFFICES

SECTION 1. PRINCIPAL EXECUTIVE OFFICE. The principal executive office of the Company will be determined from time to time by the Board of Directors.

SECTION 2. REGISTERED OFFICE. The registered office of the Company required by Section 17-16 of the Wyoming Statutes to be maintained in the State of Wyoming is as designated in the Articles of Incorporation. The Board of Directors of the Company may, from time to time, change the location of the registered office. On or before the day that such change is to become effective, a certificate of such change and of the new address of the new registered office will be filed with the Secretary of State of the State of Wyoming.

SECTION 3. OTHER OFFICE. The Company may establish and maintain such other offices, within or without the State of Wyoming, as are from time to time authorized by the Board of Directors.

MEETINGS OF SHAREHOLDERS.

SECTION 4. PLACE OF MEETINGS. Each meeting of the shareholders will be held at the principal executive office of the Company or at such other place as may be designated by the Board of Directors, the Chairman of the Board or the Chief Executive Officer and President; provided, however, that any meeting called by or at the demand of a shareholder or shareholders will be held in the county where the principal executive office of the Company is located.

SECTION 5. ANNUAL MEETINGS. Annual meetings of the shareholders will be held on an annual basis as determined by the Board of Directors. At each annual meeting, the shareholders will elect directors whose terms have expired or are due to expire within six months after the date of the meeting and may transact such other business as may properly be brought before the meeting.

SECTION 6. NOTICE OF ANNUAL MEETINGS. Unless otherwise required by law, written notice of the time and place of each annual shareholder meeting will be mailed, postage prepaid, at least 10 but not more than 60 days before such meeting, to each shareholder entitled to vote thereat at his or her address as the same appears upon the books of the Company.

SECTION 7. SPECIAL MEETINGS. A special meeting of the shareholders may be called for any purpose or purposes at any time by the Chairman of the Board or the Chief Executive Officer and President and will be called by either such officer at the request in writing of two or more members of the Board of Directors or at the request in writing of one or more shareholders holding not less than ten percent of the voting power of all shares of the Company entitled to vote. Such request which will be by registered mail or delivered in person to the Chairman of the Board or the Chief Executive Officer and President of the Company specifying the purposes of the proposed meeting.

SECTION 8. NOTICE OF SPECIAL MEETINGS. Written notice of the time, place and purpose or purposes of a special meeting will be mailed, postage prepaid, at least 10 but not more than 60 days before such meeting, to each shareholder entitled to vote at such meeting at his or her address as the same appears upon the books of the Company.

SECTION 9. BUSINESS TO BE TRANSACTED. No business will be transacted at any special meeting of shareholders except that stated in the notice of the meeting.

SECTION 10. WAIVER OF NOTICE. A shareholder may waive notice of the date, time, place and purpose or purposes of a meeting of shareholders. A waiver of notice by a shareholder entitled to notice is effective whether given before, at or after the meeting, and will be given in writing or by attendance. Attendance by a shareholder at a meeting is a waiver of notice of that meeting, unless the shareholder objects at the beginning of the meeting to the transaction of business because the meeting is not lawfully called or convened, or objects before a vote on an item of business because the item may not lawfully be considered at that meeting and does not participate in the consideration of the item at that meeting.

SECTION 11. SHAREHOLDER'S LIST. After fixing a record date for a meeting, the officer having charge of the share ledger of the Company will prepare an alphabetical list of the names of all its shareholders who are entitled to notice of a shareholders' meeting. The list will be arranged by voting group, and within each voting group by class or series of shares, and show the address of and number of shareholder held by each shareholder. The shareholders' list will be available for inspection by any shareholder, beginning two business days after notice of the meeting is given for which the list was prepared and continuing through the meeting, at the Company's principal executive office or at a place identified in the meeting notice in the city where the meeting will be held. A shareholder, his or her agent, or attorney is entitled on written demand to inspect, and subject to the requirements of Section 17-16, to copy the list, during regular business hours and at his or her expense, during the period it is available for inspection. The Company will make the shareholders' list available at the meeting, and any shareholder, his or her agent or attorney is entitled to inspect the list at any time during the meeting or any adjournment.

SECTION 12. QUORUM AND ADJOURNMENT. A quorum for the transaction of business at any meeting of shareholders shall be two shareholders represented in person or by proxy from each voting group entitled to vote on each of the matters to be voted on at the meeting, and otherwise entitled to vote at such meeting, except as otherwise provided by statute or by the Articles of Incorporation. If, however, such quorum will not be present or represented at any meeting of the shareholders, the shareholders entitled to vote thereat, present in person or represented by proxy, will have the power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum will be present or represented. At such adjourned meeting at which a quorum will be present or represented any business may be transacted which might have been transacted at the meeting as originally noticed. The shareholders present at a duly called or held meeting at which a quorum is present may continue to transact business until adjournment, even though the withdrawal of a number of shareholders originally present leaves less than the proportion or number otherwise required for a quorum.

SECTION 13. VOTING RIGHTS. A shareholder may cast his or her vote in person or by proxy. When a quorum is present at the time a meeting is convened, the affirmative vote of the holders of a majority of the shares entitled to vote on any question present in person or by proxy will decide such question unless the question is one upon which, by express provision of the

applicable statute or the Articles of Incorporation, a different vote is required, in which case such express provision will govern and control the decision of such question.

SECTION 14. PROXIES. A shareholder may cast or authorize the casting of a vote by filing a written appointment of a proxy with an officer of the Company at or before the meeting at which the appointment is to be effective. The shareholder, or his or her agent or attorney-in-fact, may sign or authorize the written appointment by telegram, cablegram or other means of electronic transmission setting forth or submitted with information sufficient to determine that the shareholder, or his or her agent or attorney-in-fact, authorized such transmission. Any copy, facsimile, telecommunication or other reproduction of the original of either the writing or transmission may be used in lieu of the original, provided that it is a complete and legible reproduction of the entire original. No proxy will be valid after 11 months from its date, unless the proxy expressly provides for a longer period.

SECTION 15. MANNER OF VOTING. Each shareholder will at every meeting of the shareholders be entitled to one vote in person or by proxy for each share of the capital stock having voting power held by such shareholder and except where the transfer books of the Company have been closed or a date has been fixed as a record date for the determination of its shareholders entitled to vote, no share of stock that has been transferred on the books of the Company within 20 days next preceding any election of directors will be voted in such election of directors.

SECTION 16. RECORD DATE. The Board of Directors may fix a date, not exceeding 70 days preceding the date of any meeting of shareholders, as a record date for the determination of the shareholders entitled to notice of and to vote at such meeting, and in such case only shareholders of record on the date so fixed, or their legal representatives, will be entitled to notice of and to vote at such meeting, notwithstanding any transfer of any shares on the books of the Company after any record date so fixed. The Board of Directors may close the books of the Company against transfers of shares during the whole or any part of such period.

SECTION 17. ORGANIZATION OF MEETINGS. The Chairman of the Board will preside at all meetings of the shareholders, in the absence of the Chairman of the Board or if the office of the Chairman of the Board is vacant, the Chief Executive Officer and President will preside at meetings of the shareholders. The Secretary will act as secretary of all meetings of the shareholders, or in his or her absence any person appointed by the presiding officer will act as secretary.

SECTION 18. ELECTRONIC CONFERENCES AND PARTICIPATION BY ELECTRONIC MEANS. A conference among shareholders conducted by any means of communication through which the shareholders may simultaneously hear each other during the conference will constitute an annual or special meeting of shareholders, provided the notice of the conference is given to every holder of shares entitled to vote pursuant to sections 3 or 5 of this Article II. A shareholder may participate in an annual or special meeting of shareholders by any means of communication through which the shareholder, other shareholders so participating, and all shareholders physically present at the meeting may simultaneously hear each other during the meeting. Such participation in a meeting will constitute presence at the meeting in person or by proxy.

SECTION 19. ACTION WITHOUT A MEETING. Any action required or permitted to be taken at a shareholders' meeting may be taken without a meeting notice if the proposed action is given to all voting shareholders and the action is taken by the holders of all shares entitled to vote on that

action. Such action will be evidenced by one or more written consents bearing the date of signature and describing the action taken, signed, either manually or in facsimile, by the holders of the requisite number of shares entitled to vote on the action, and delivered to the Company for inclusion in the minutes for filing with the corporate records. If not otherwise fixed under Section 17-16 of the Wyoming Statutes, the record date for determining shareholders entitled to take action without a meeting is the date the first shareholder signs the consent. No written consent will be effective to take the corporate action referred to therein unless, within 60 days of the earliest date appearing on a consent delivered to the Company, written consents signed by all shareholders entitled to vote on the action are received by the Company. If any action so taken requires a certificate to be filed in the office of the Secretary of State, the officer signing such certificate will state therein that the action was effected in the manner aforesaid.

#### BOARD OF DIRECTORS

SECTION 20. GENERAL POWERS. The business and affairs of the Company will be managed by or under its Board of Directors which may exercise all such powers of the Company and do all such lawful acts and things as are not by statute or by the Articles of Incorporation or by these Bylaws required to be exercised or done by the shareholders.

SECTION 21. NUMBER AND TERM OF OFFICE. The number of directors which will constitute the whole board will be at least one, or such other number as may be determined by the Board of Directors or by the shareholders at an annual or special meeting. Except as otherwise permitted by statute or by the Articles of Incorporation of the Company, the directors will be elected at each annual meeting of the Company's shareholders (or at any special meeting of the shareholders called for that purpose) by a plurality of the votes cast by the shares entitled to vote in the election at a meeting at which a quorum is present, and each director will be elected to serve until the next annual meeting of the shareholders and thereafter until a successor is duly elected and qualified, unless a prior vacancy will occur by reason of death, resignation, or removal from office. Directors will be natural persons, but need not be shareholders.

SECTION 22. RESIGNATION AND REMOVAL. Any director may resign at any time by giving written notice to the Company. Such resignation will take effect when the notice is delivered or at any later time specified therein, and, unless otherwise specified therein, the acceptance of such resignation will not be necessary to make it effective. The shareholders may remove one or more directors with or without cause unless the Company's Articles of Incorporation provide that directors may be removed only for cause. If a director is elected by a voting group of shareholders, only the shareholders of that voting group may participate in the vote to remove such director. A director may be removed by the shareholders only at a meeting called for the purpose of removing such director and the meeting notice will state that the purpose, or one of the purposes, of the meeting is removal of the director.

SECTION 23. VACANCIES. If the office of any director becomes vacant by reason of death, resignation, removal, disqualification, or otherwise, the directors then in office, although less than a quorum, by a majority vote, may choose a successor who will hold office for the unexpired term in respect of which such vacancy occurred. With respect to the initial election of a director to fill a newly created directorship resulting from an increase in the number of directors by action of the Board of Directors in the manner permitted by statute, such vacancy will be filled by the affirmative vote of a majority of the directors serving at the time of the increase.

SECTION 24. MEETINGS OF DIRECTORS. The Board of Directors of the Company may hold meetings, from time to time, either within or without the State of Wyoming, at such place as a majority of the members of the Board of Directors may from time to time appoint. If the Board of Directors fails to select a place for the meeting, the meeting will be held at the principal executive office of the Company.

SECTION 25. CALLING MEETINGS. Regular meetings of the Board of Directors may be held without notice. Special meetings of the Board of Directors may be called by (i) the Chairman of the Board or the Chief Executive Officer and President on 24 hours' notice or (ii) any director on 10 days' notice, to each director, either personally, by telephone or by mail or telegram. Every such notice will state the date, time and place of the meeting. Notice of a meeting called by a person other than the Chairman of the Board will state the purpose of the meeting.

SECTION 26. PARTICIPATION BY ELECTRONIC COMMUNICATIONS. Directors of the Company may participate in a meeting of the Board of Directors by means of conference telephone or by similar means of communication by which all persons participating in the meeting can simultaneously hear each other. A director so participating will be deemed present in person at the meeting.

SECTION 27. WAIVER OF NOTICE. A director may waive notice of a meeting of the Board of Directors. A waiver of notice by a director entitled to notice is effective whether given before, at, or after the meeting, and will be given in writing or by attendance. Attendance by a director at a meeting is a waiver of notice of that meeting, except where the director objects at the beginning of the meeting to the transaction of business because the meeting was not lawfully called or convened and does not participate thereafter in the meeting.

SECTION 28. ABSENT DIRECTORS. A director may give advance written consent or opposition to a proposal to be acted on at a meeting of the Board of Directors by actual delivery prior to the meeting of such advance written consent or opposition to the Chairman of the Board or a director who is present at the meeting. If the director is not present at the meeting, advance written consent or opposition to a proposal will not constitute presence for purposes of determining the existence of a quorum, but consent or opposition will be counted as a vote in favor of or against the proposal and will be entered in the minutes or other record of action at the meeting, if the proposal acted on at the meeting is substantially the same or has substantially the same effect as the proposal to which the director has consented or objected.

SECTION 29. QUORUM. At all meetings of the Board of Directors a majority of the directors will constitute a quorum for the transaction of business, and the act of a majority of the directors present at any meeting at which there is a quorum will be the act of the Board of Directors, except as may be otherwise specifically provided by applicable statute or by the Articles of Incorporation. If a quorum will not be present at any meeting of the Board of Directors, the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present. If a quorum is present at the call of a meeting, the directors may continue to transact business until adjournment notwithstanding the withdrawal of enough directors to leave less than a quorum.

SECTION 30. ORGANIZATION OF MEETINGS. The Chairman of the Board will preside at all meetings of the Board of Directors and in his or her absence the Chief Executive Officer and President will act as presiding officer. The Secretary will act as secretary of all meetings of the

Board of Directors, and in his or her absence any person appointed by the presiding officer will act as secretary.

SECTION 31. COMMITTEES. The Board of Directors, by a resolution approved by the affirmative vote of a majority of the directors then holding office, may establish one or more committees of one or more persons having the authority of the Board of Directors in the management of the business of the Company to the extent provided in such resolution. Such committees, however, will at all times be subject to the direction and control of the Board of Directors. Committee members will be directors and will be appointed by the affirmative vote of a majority of the directors present. A majority of the members of any committee will constitute a quorum for the transaction of business at a meeting of any such committee. In other matters of procedure the provisions of these Bylaws will apply to committees and the members thereof to the same extent they apply to the Board of Directors and directors, including, without limitation, the provisions with respect to meetings and notice thereof, absent members, written actions and valid acts. Each committee will keep regular minutes of its proceedings and report the same to the Board of Directors.

SECTION 32. ACTION WITHOUT MEETING. Unless otherwise restricted by the Articles of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors may be taken without a meeting, if a written consent thereto is signed by all members of the Board of Directors and such written consent is filed with the minutes of proceedings of the Board of Directors. If the proposed action need not be approved by the shareholders and the Articles of Incorporation so provide, action may be taken by written consent signed by the number of directors that would be required to take the same action at a meeting of the Board of Directors at which all directors were present. Such action will be effective on the date on which the last signature is placed on such writing or writings, or such other effective date as is set forth therein.

SECTION 33. COMPENSATION OF DIRECTORS. By resolution of the Board of Directors, each director may be paid his or her expenses, if any, of attendance at each meeting of the Board of Directors, and may be paid a stated amount as a director or a fixed sum for attendance at each meeting of the Board of Directors, or both. No such payment will preclude a director from serving the Company in any other capacity and receiving compensation therefor.

SECTION 34. CHAIRMAN OF THE BOARD. The Board of Directors will, from time to time, elect one of the directors to serve as the Chairman of the Board. The Chairman of the Board will be considered an officer of the Company and will have such duties as the Board of Directors will determine.

#### OFFICERS

SECTION 35. NUMBER AND QUALIFICATION. The officers of the Company will be chosen by the Board of Directors and include a Chairman of the Board, a Chief Executive Officer and President, a Chief Operating Officer, a Chief Financial Officer and a Secretary. The Board of Directors may elect or appoint such other officers or agents as it deems necessary for the operation and management of the Company, with such powers, rights, duties and responsibilities as may be determined by the Board of Directors, including, without limitation, one or more Vice Presidents, one or more Assistant Secretaries and Assistant Chief Financial Officers, each of whom will have the powers, rights duties and responsibilities set for the in these Bylaws unless

otherwise determined by the Board. Any of the offices or functions of those offices may be held or exercised by the same person.

SECTION 36. ELECTION AND TERM OF OFFICE. The initial officers of the Company will be elected by the Board of Directors at its first duly held meeting and all officers will hold office until their successors have been duly elected, unless prior thereto such officer will have resigned or been removed from office as hereinafter provided.

SECTION 37. RESIGNATION, REMOVAL AND VACANCIES. An officer may resign at any time by giving written notice to the Company. The resignation is effective without acceptance when the notice is given to the Company, unless a later effective date is specified in the notice. Any officer or agent elected or appointed by the Board of Directors will hold office at the pleasure of the Board of Directors and may be removed, with or without cause, at any time by the affirmative vote of a majority of the Board of Directors present at a duly held Board meeting. A vacancy in an office may, or in the case of a vacancy in the office of the Chief Executive Officer and President or Chief Financial Officer will, be filled for the unexpired portion of the term by action of the Board of Directors.

SECTION 38. SALARIES. The salaries of all officers of the Company will be fixed by the Board of Directors or by the Chief Executive Officer and President if authorized by the Board of Directors.

SECTION 39. CHIEF EXECUTIVE OFFICER AND PRESIDENT. The Chief Executive Officer and President will be the chief executive officer of the Company. Unless provided otherwise by a resolution adopted by the Board of Directors, the Chief Executive Officer and President will have general active management of the business of the Company, will see that all orders and resolutions of the Board of Directors are carried into effect, will sign and deliver in the name of the Company any deeds, mortgages, bonds, contracts, or other instruments pertaining to the business of the Company, except in cases in which the authority to sign and deliver is required by law to be exercised by another person or is expressly delegated by the Articles of Incorporation, these Bylaws, or the Board of Directors to some other officer or agent of the Company, will maintain records of and, whenever necessary, certify proceedings of the Board of Directors and shareholders, and will perform such other duties as may from time to time be prescribed by the Board of Directors.

SECTION 40. CHIEF OPERATING OFFICER. The Chief Operating Officer shall be the chief operating officer of the Company and shall, in the absence and disability of the Chief Executive Officer and President and with the Boards approval, perform the duties and exercise the powers of the Chief Executive Officer and President and shall perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer and President may from time to time prescribe.

SECTION 41. CHIEF FINANCIAL OFFICER. The Chief Financial Officer will be the chief financial officer of the Company. The Chief Financial Officer will keep accurate financial records for the Company, will deposit all moneys, drafts, and checks in the name of and to the credit of the Company in such banks and depositories as the Board of Directors will designate from time to time, will endorse for deposit all notes, checks, and drafts received by the Company as ordered by the Board of Directors, making proper vouchers therefor, will disburse corporate funds and issue checks and drafts in the name of the Company as ordered by the Board of Directors, will

render to the Chief Executive Officer and President and the Board of Directors, whenever requested, an account of all such officer's transactions as Chief Financial Officer and of the financial condition of the Company, and will perform such other duties as may be prescribed by the Board of Directors from time to time. If required by the Board of Directors, the Chief Financial Officer will give the Company a bond in such sum and with such surety or sureties as will be satisfactory to the Board of Directors for the faithful performance of the duties of his or her office and for the restoration to the Company, in case of his or her death, resignation, retirement or removal from office, of all books papers, vouchers, money and other property of whatever kind in his or her possession or under his or her control belonging to the Company.

SECTION 42. SECRETARY. The Secretary will attend all meetings of the Board of Directors and all meetings of the shareholders and record all the proceedings of the meetings of the Company and of the Board of Directors in a book to be kept for that purpose. He or she will give, or cause to be given, notice of all meetings of the shareholders and special meetings of the Board of Directors, and will perform such other duties as may be prescribed by the Board of Directors or the Chief Executive Officer and President, under whose supervision he or she will be.

SECTION 43. VICE PRESIDENTS. The Vice President, if any, or if there will be more than one, the Vice Presidents in the order determined by the Board of Directors, will perform such duties and have such powers as the Board of Directors or the President and Chief Executive Officer may from time to time prescribe.

SECTION 44. ASSISTANT SECRETARIES. The Assistant Secretary or, if there be more than one, the Assistant Secretaries, in the order determined by the Board of Directors, will, in the absence or disability of the Secretary, perform the duties and exercise the powers of the Secretary and will perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer and President may from time to time prescribe.

SECTION 45. AUTHORITY AND DUTIES. In addition to the foregoing authority and duties, all officers of the Company will respectively have such authority and perform such duties in the management of the business of the Company as may be designated from time to time by the Board of Directors.

#### CERTIFICATES OF STOCK

SECTION 46. CERTIFICATES OF STOCK. Every holder of stock in the Company will be entitled to have a certificate, signed by, or in the name of the Company by the Chief Executive Officer and President and the Secretary or an Assistant Secretary of the Company, if there be one, certifying the number of shares owned by him or her in the Company. The certificates of stock of each class will be numbered in the order of their issue.

SECTION 47. FACSIMILE SIGNATURES. Where a certificate is signed (1) by a transfer agent or an assistant transfer agent, or (2) by a transfer clerk acting on behalf of the Company and a registrar, the signature of any such Chief Executive Officer and President, Secretary or Assistant Secretary may be facsimile. In case any officer or officers who have signed, or whose facsimile signature or signatures have been used on any such certificate or certificates will cease to be such officer or officers of the Company before such certificate or certificates have been delivered by the Company, such certificate or certificates may nevertheless be adopted by the Company and be issued and delivered as though the person or persons who signed such certificate or certificates

or whose facsimile signature or signatures have been used thereon had not ceased to be such officer or officers of the Company.

SECTION 48. LOST OR DESTROYED CERTIFICATES. The Board of Directors may direct a new certificate or certificates to be issued in place of any certificate or certificates issued by the Company alleged to have been lost or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost or destroyed. When authorizing such issue of a new certificate or certificates, the Board of Directors may, in its discretion and as a condition precedent to the issuance thereof, require the owner of such lost or destroyed certificate or certificates, or his or her legal representative, to advertise the same in such manner as it will require and/or to give the Company a bond in such sum as it may direct as indemnity against any claim that may be made against the Company with respect to the certificate alleged to have been lost or destroyed.

SECTION 49. TRANSFERS OF STOCK. Upon surrender to the Company or the transfer agent of the Company of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignment or authority to transfer, it will be the duty of the Company to issue a new certificate to the person entitled thereto, cancel the old certificate and record the transaction upon its books.

SECTION 50. REGISTERED SHAREHOLDERS. The Company will be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and will be entitled to hold liable for calls and assessments a person so registered on its books as the owner of shares, and will not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it will have express or other notice thereof, except as otherwise provided by applicable statute.

#### INDEMNIFICATION

SECTION 51. INDEMNIFICATION. The Company shall indemnify its officers and directors to the fullest extent permissible under the provisions of Section 17-16 of the Wyoming Statutes, as amended from time to time, or as required or permitted by other provisions of law. Any repeal or modification of this Article VI will be prospective only and will not adversely affect any right to indemnification of a director or officer of the Company existing at the time of such repeal or modification.

SECTION 52. INSURANCE. The Company may purchase and maintain insurance on behalf of any person in such person's official capacity against any liability asserted against and incurred by such person in or arising from that capacity, whether or not the Company would otherwise be required to indemnify the person against the liability.

#### GENERAL PROVISIONS

SECTION 53. FISCAL YEAR. The fiscal year of the Company will be fixed by resolution of the Board of Directors.

SECTION 54. DIVIDENDS. Subject to the provisions of the applicable statute and the Articles of Incorporation, dividends upon the capital stock of the Company may be declared by the Board

of Directors at any regular or special meeting, and may be paid in cash, in property, or in shares of the capital stock.

SECTION 55. RESERVES. Before payment of any dividend, there may be set aside out of any funds of the Company available for dividends such sum or sums as the directors from time to time, in their absolute discretion, think proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the Company, or for such other purposes as the directors will think conducive to the interest of the Company, and the directors may modify or abolish any such reserve in the manner in which it was created.

SECTION 56. SEAL. The Company will not have a corporate seal.

SECTION 57. CHECKS. All checks or demands for money and notes of the Company will be signed by such officer or officers or such other person or persons as the Board of Directors may from time to time designate.

SECTION 58. AMENDMENTS. The Board of Directors will have the power to adopt, amend or repeal the Bylaws of the Company, subject to the power of the shareholders to change or repeal the same, provided, however, that the Board will not adopt, amend or repeal any Bylaw fixing a quorum for meetings of shareholders, prescribing procedures for removing directors or filling vacancies in the Board, or fixing the number of directors or their classifications, qualifications or terms of office, but may adopt or amend a Bylaw that increases the number of directors.

Date approved: December 8, 1998

THIS WARRANT AND THE SUBORDINATE VOTING SHARES TO BE SOLD UPON EXERCISE HEREOF HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR UNDER ANY STATE SECURITIES LAWS. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED, OR HYPOTHECATED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN EXEMPTION THEREFROM.

Warrant to Purchase Up To  
\_\_\_\_\_ Subordinate Voting Shares Of  
Ben-Abraham Technologies Inc.

THIS CERTIFIES that, for value received, \_\_\_\_\_ ("Investor") or any transferee of Investor (Investor or such transferee being hereinafter referred to as the "Holder"), is entitled, upon the terms and subject to the conditions hereinafter set forth, to purchase from Ben-Abraham Technologies Inc., a Wyoming corporation (the "Company"), that number of fully paid and nonassessable subordinate voting shares (the "Subordinate Shares") of the Company at the purchase price per share as set forth in Section 1 below (the "Exercise Price"). The number of Subordinate Shares purchasable and Exercise Price are subject to adjustment as provided in Section 10 hereof.

1. NUMBER OF WARRANT SHARES; EXERCISE PRICE; TERM.

(a) Subject to adjustments as provided herein, the Holder of this Warrant may, at his option, exercise this Warrant in whole at any time or in part from time to time for \_\_\_\_\_ (\_\_\_\_\_) Subordinate Shares (the "Warrant Shares") at an Exercise Price of Thirty Cents (\$0.30) per Warrant Share.

(b) Subject to the terms and conditions set forth herein, this Warrant and all rights and options hereunder shall expire at 5:00 p.m. central standard time on May 6, 2004. This Warrant and all options and rights hereunder shall be wholly void to the extent this Warrant is not exercised before it expires.

2. TITLE TO WARRANT. The Warrant and all rights hereunder are transferable, in whole or in part. Transfers shall occur at the office or agency of the Company by the Holder of the Warrant in person or by duly authorized attorney, upon surrender of the Warrant together with the Assignment Form annexed hereto properly endorsed.

3. EXERCISE OF WARRANT. The Warrant is exercisable by the Holder, in whole or in part, at any time, or from time to time, during the term hereof as described in Section 1 above, by the surrender of the Warrant and the Notice of Exercise annexed hereto duly completed and executed on behalf of the Holder hereof, at the office of the Company in Lincolnshire, Illinois (or such other office or agency of the Company as it may designate by notice in writing to the Holder hereof at the address of the Holder appearing on the books of the Company), and subject to Section 4 hereof, upon payment of the Exercise Price in cash or check, whereupon the Holder of the Warrant shall be entitled to receive a Warrant for the number of Warrant Shares so purchased

and, if the Warrant is exercised for fewer than all of the Warrant Shares, a new Warrant representing the right to acquire the number of Warrant Shares in respect of which this Warrant shall not have been exercised. Notwithstanding the foregoing, payment of the Exercise Price may also be made by (a) delivering Subordinate Shares already owned by the Holder having a total Fair Market Value (as defined in Section 4) on the date of delivery equal to the aggregate Exercise Price; (b) authorizing the Company to return Subordinate Shares which would otherwise be issuable upon exercise of this Warrant having a total Fair Market Value on the date of exercise equal to the aggregate Exercise Price; or (c) any combination of the foregoing. The Company agrees that, upon exercise of the Warrant in accordance with the terms hereof, the Warrant Shares so purchased shall be deemed to be issued to the Holder as the record owner of such Warrant Shares as of the close of business on the date on which the Warrant shall have been exercised.

Certificates for Warrant Shares purchased hereunder and, on exercise of fewer than all of the Warrant Shares purchasable hereunder, a new Warrant representing the right to acquire Warrant Shares not so purchased shall be delivered to the Holder hereof as promptly as practicable after the date on which the Warrant shall have been exercised.

The Company covenants that all Warrant Shares which may be issued upon the exercise of the Warrant shall, upon exercise of the Warrant and payment of the Exercise Price, be fully paid and nonassessable and free from all taxes, liens and charges in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously or otherwise specified herein).

4. NO FRACTIONAL WARRANT SHARES OR SCRIP. No fractional Warrant Shares or scrip representing fractional shares shall be issued upon the exercise of the Warrant. In lieu of any fractional Warrant Share to which the Holder would otherwise be entitled, such Holder shall be entitled, at its option, to receive either (a) a cash payment equal to the excess of Fair Market Value (as defined herein) for such fractional Warrant Share above the Exercise Price for such fractional share or (b) a whole share if the Holder tenders the Exercise Price for one whole Warrant Share. For purposes hereof, the term "Fair Market Value" shall mean an amount determined as follows: (A) if the Subordinated Shares is listed on a national or regional securities exchange or admitted to unlisted trading privileges on such exchange or listed for trading on the NASDAQ National Market System or the NASDAQ Small Cap Market (collectively, "NASDAQ"), the Fair Market Value on a particular day shall be the last reported sale price of the Subordinated Shares on such exchange or on NASDAQ, on the last business day prior to such day or, if no such sale is made on such business day, the average closing bid and asked prices for such day on such exchange or on NASDAQ, or (B) if the Subordinated Shares are not listed or admitted to unlisted trading privileges on an exchange or on NASDAQ, the fair market value on a particular day shall be the mean of the last reported bid and asked prices reported by the National Quotation Bureau, Inc., or the National Association of Securities Dealers, Inc. OTC Bulletin Board on the last business day prior to such day, or (C) if the Subordinated Shares are not so listed or admitted to unlisted trading privileges on an exchange or on NASDAQ and bid and asked prices are not so reported, the Fair Market Value on a particular day shall be an

amount determined in such reasonable manner as may be prescribed by the board of directors of the Company.

5. CHARGES, TAXES AND EXPENSES. Issuance of certificates for Warrant Shares upon the exercise of the Warrant shall be made without charge to the Holder hereof for any issue or transfer tax or other incidental expense in respect of the issuance of such certificates, all of which taxes and expenses shall be paid by the Company, and such certificates shall be issued in the name of the Holder of the Warrant or in such name or names as may be directed by the Holder of the Warrant; provided, however, that in the event certificates for Warrant Shares are to be issued in a name other than the name of the Holder of the Warrant, the Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the Holder and the Notice of Exercise duly completed and executed and stating in whose name the certificates are to be issued; and provided further, that such assignment shall be subject to applicable laws and regulations.

6. NO RIGHTS AS WARRANT SHAREHOLDERS. The Warrant does not entitle the Holder hereof to any voting rights, dividend rights or other rights as a shareholder of the Company prior to the exercise thereof.

7. EXCHANGE AND REGISTRY OF WARRANT. The Company shall maintain a registry showing the name and address of the Holder of the Warrant. The Warrant may be surrendered for exchange, transfer or exercise, in accordance with the terms hereof, at the office of the Company, and the Company shall be entitled to rely in all respects, prior to written notice to the contrary, upon such registry.

8. LOSS, THEFT, DESTRUCTION OR MUTILATION OF WARRANT. Upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of the Warrant, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it, and upon reimbursement to the Company of all reasonable expenses incidental thereto, and upon surrender and cancellation of the Warrant, if mutilated, the Company will make and deliver a new Warrant of like tenor and dated as of such cancellation, in lieu of the Warrant.

9. SATURDAYS, SUNDAYS, HOLIDAYS, ETC. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be a Saturday or a Sunday or shall be a legal holiday, then such action may be taken or such right may be exercised on the next succeeding day not a Saturday or a Sunday or a legal holiday.

10. ADJUSTMENTS.

(a) Subject to the exceptions referred to in Section 10(f) below, in the event the Company shall, at any time or from time to time after the date hereof, (i) sell any Subordinate Shares for a consideration per share less than U.S. \$0.20, (ii) issue any Subordinate Shares as a stock dividend to the holders of Subordinate Shares, or (iii) subdivide or combine the outstanding Subordinate Shares into a greater or lesser number of shares (any such sale, issuance, subdivision or combination being herein called a

"Change of Shares"), then, and thereafter upon each further Change of Shares, the Exercise Price in effect immediately prior to such Change of Shares shall be changed to a price (including any applicable fraction of a cent) (A) in the case of clause (i), equal to the lesser of (A) the consideration per share paid in such sale or (B) the then current Exercise Price and (ii) in the case of clause (ii) or (iii), determined by multiplying the Exercise Price in effect immediately prior thereto by a fraction, the numerator of which shall be the number of Subordinate Shares outstanding immediately prior to the issuance of such additional shares, and the denominator of which shall be the number of Subordinate Shares outstanding immediately after the issuance of such additional shares. Such adjustment shall be made successively whenever such an issuance is made.

Upon each adjustment of the Exercise Price pursuant to this Section 10, except pursuant to Section 10(a)(i) or 10(e)(iv), the total number of Subordinate Shares purchasable upon the exercise of each Warrant shall be such number of shares (calculated to the nearest tenth) purchasable at the Exercise Price immediately prior to such adjustment multiplied by a fraction, the numerator of which shall be the Exercise Price in effect immediately prior to such adjustment and the denominator of which shall be the Exercise Price in effect immediately after such adjustment.

(b) In case of any reclassification, capital reorganization or other change of outstanding Subordinate Shares, or in case of any consolidation or merger of the Company with or into another corporation (other than a consolidation or merger in which the Company is the continuing corporation and which does not result in any, reclassification, capital reorganization or other change of outstanding Subordinate Shares), or in case of any sale or conveyance to another corporation of the property of the Company as, or substantially as, an entirety (other than a sale/leaseback, mortgage or other financing transaction), the Company shall cause effective provision to be made so that the Holder of the Warrant shall have the right thereafter, by exercising such Warrant, to purchase the kind and highest number of shares of stock or other securities or property (including cash) receivable upon such reclassification, capital reorganization or other change, consolidation, merger, sale or conveyance by a holder of the number of Subordinate Shares that might have been purchased upon exercise of the Warrant immediately prior to such reclassification, capital reorganization or other change, consolidation, merger, sale or conveyance. Any such provision shall include provision for adjustments that shall be as nearly equivalent as may be practicable to the adjustments provided for in this Section 10. The Company shall not effect any such consolidation, merger or sale unless prior to or simultaneously with the consummation thereof the successor corporation (if other than the Company) resulting from such consolidation or merger or the corporation purchasing such assets or other appropriate corporation or entity shall assume in writing the obligation to deliver to the Holder such shares of stock, securities or assets as, in accordance with the foregoing provision, the Holder may be entitled to purchase and the other obligations under this Warrant. The foregoing provisions shall similarly apply to successive reclassifications, capital reorganizations and other changes of outstanding Subordinate Shares and to successive consolidations, mergers, sales or conveyances.

(c) Irrespective of any adjustments or changes in the Exercise Price or the number of Subordinate Shares purchasable upon exercise of the Warrant, this Warrant shall continue to express the Exercise Price per share, the number of shares purchasable thereunder as if the changed Exercise Price per share, and the changed number of shares purchasable were expressed in the Warrant when the same was originally issued.

(d) After each adjustment of the Exercise Price pursuant to this Section 10, the Company will promptly deliver to the Holder a certificate signed by the Chief Executive Officer of the Company setting forth: (i) the Exercise Price as so adjusted, (ii) the number of Subordinate Shares purchasable upon exercise of the Warrant after such adjustment, and (iii) a brief statement of the facts accounting for such adjustment. No failure to deliver such notice nor any defect therein or in the delivery thereof shall affect the validity thereof.

(e) For purposes of Section 10(a) hereof, the following provisions (i) through (v) shall also be applicable:

(i) The number of Subordinate Shares outstanding at any given time shall include Subordinate Shares owned or held by or for the account of the Company and the sale or issuance of such treasury shares or the distribution of any such treasury shares shall not be considered a Change of Shares for purposes of said sections.

(ii) In case of (A) the sale by the Company of any options, rights or warrants to subscribe for or purchase Subordinate Shares or any securities convertible into or exchangeable for Subordinate Shares without the payment of any further consideration other than cash, if any (such convertible or exchangeable securities being herein called "Convertible Securities"), or (B) the issuance by the Company, without the receipt by the Company of any consideration therefor, of any options, rights or warrants to subscribe for or purchase Subordinate Shares or Convertible Securities, in each case, if (and only if) the consideration payable to the Company upon the exercise of such rights, warrants or options shall consist of cash, whether or not such rights, warrants or options, or the right to convert or exchange such Convertible Securities, are immediately exercisable, and the price per share for which Subordinate Shares are issuable upon the exercise of such rights, warrants or options or upon the conversion or exchange of such Convertible Securities (determined by dividing (x) the minimum aggregate consideration payable to the Company upon the exercise of such rights, warrants or options, plus the consideration received by the Company for the issuance or sale of such rights, warrants or options, plus, in the case of such Convertible Securities, the minimum aggregate amount of additional consideration, if any, other than such Convertible Securities, payable upon the conversion or exchange thereof, by (y) the total maximum number of Subordinate Shares issuable upon the exercise of such rights, warrants or options or upon the conversion or

exchange of such Convertible Securities issuable upon the exercise of such rights, warrants or options) is less than U.S. \$0.20, then the total maximum number of Subordinate Shares issuable upon the exercise of such rights, warrants or options or upon the conversion or exchange of such Convertible Securities (as of the date of the issuance or sale of such rights, warrants or options) shall be deemed to have been sold for cash in an amount equal to such price per share.

(iii) In case of the sale by the Company for cash of any Convertible Securities, whether or not the right of conversion or exchange thereunder is immediately exercisable, and the price per share for which Subordinate Shares are issuable upon the conversion or exchange of such Convertible Securities (determined by dividing (A) the total amount of consideration received by the Company for the sale of such Convertible Securities, plus the minimum aggregate amount of additional consideration, if any, other than such Convertible Securities, payable upon the conversion or exchange thereof, by (B) the total maximum number of Subordinate Shares issuable upon the conversion or exchange of such Convertible Securities) is less than U.S. \$0.20, then the total maximum number of Subordinate Shares issuable upon the conversion or exchange of such Convertible Securities (as of the date of the sale of such Convertible Securities) shall be deemed to have been sold for cash in an amount equal to such price per share.

(iv) In case the Company shall modify the rights of conversion, exchange or exercise of any of the securities referred to in clause (iii) above or any other securities of the Company convertible, exchangeable or exercisable for Subordinate Shares, for any reason other than an event that would require adjustment to prevent dilution, such that the consideration per share received by the Company after such modification is less than U.S. \$0.20, the Exercise Price to be in effect after such modification shall be the lesser of (A) the consideration per share paid after such modification or (B) the then current Exercise Price. Such adjustment shall become effective as of the date upon which modification shall take effect. On the expiration of any such right, warrant or option or the termination of any such right to convert or exchange any such Convertible Securities, the Exercise Price then in effect hereunder shall forthwith be readjusted to such Exercise Price had no adjustment been made with respect to such right, warrant or option.

(v) In case of the sale for cash of any Subordinate Shares, any Convertible Securities, any rights or warrants to subscribe for or purchase, or any options for the purchase of, Subordinate Shares or Convertible Securities, the consideration received by the Company therefor shall be deemed to be the gross sales price therefor without deducting therefrom any expense paid or incurred by the Company or any underwriting discounts or commissions or concessions paid or allowed by the Company in connection therewith.

(f) No adjustment to the Exercise Price of the Warrant or to the number of Warrant Shares shall be made, however:

(i) upon the grant or exercise of any other options which may hereafter be granted or exercised under any stock option plan or other employee benefit plan of the Company; or

(ii) upon the issuance or sale of Subordinate Shares or Convertible Securities upon the exercise of any rights or warrants or options to subscribe for or purchase Subordinate Shares or Convertible Securities, whether or not such rights, warrants or options were outstanding on the date of the original sale of the Warrant or were thereafter issued or sold; or

(iii) upon the issuance or sale of Subordinate Shares upon conversion or exchange of any Convertible Securities, whether or not any adjustment in the Exercise Price was made or required to be made upon the issuance or sale of such Convertible Securities and whether or not such Convertible Securities were outstanding on the date of the original sale of the Warrant or were thereafter issued or sold.

(g) As used in this Section 10, the term "Subordinate Shares" shall mean and include the Company's Subordinate Shares authorized on the date of the original issue of the Warrant and shall also include any capital stock of any class of the Company thereafter authorized which shall not be limited to a fixed sum or percentage in respect of the rights of the Holders thereof to participate in dividends and in the distribution of assets upon the voluntary liquidation, dissolution or winding up of the Company; provided, however, that the shares issuable upon exercise of the Warrants shall include only shares of such class designated in the Company's Articles of Incorporation as Subordinate Shares on the date of the original issue of the Warrant or (i), in the case of any reclassification, change, consolidation, merger, sale or conveyance of the character referred to in Section 10(b) hereof, the stock, securities or property provided for in such section or (ii), in the case of any reclassification or change in the outstanding Subordinate Shares issuable upon exercise of the Warrant as a result of a subdivision or combination or consisting of a change in par value, or from par value to no par value, or from no par value to par value, such Subordinate Shares as so reclassified or changed.

(h) Any determination as to whether an adjustment in the Exercise Price in effect hereunder is required pursuant to Section 10, or as to the amount of any such adjustment, if required, shall be binding upon the Holder of the Warrant and the Company if made in good faith by the board of directors of the Company.

(i) If and whenever the Company shall grant to the holders of Subordinate Shares, as such, rights or warrants to subscribe for or to purchase, or any options for the purchase of, Subordinate Shares or securities convertible into or exchangeable for or carrying a right, warrant or option to purchase Subordinate Shares, the Company shall

concurrently therewith grant to the Holder of the Warrant all of such rights, warrants or options to which the Holder would have been entitled if, on the date of determination of stockholders entitled to the rights, warrants or options being granted by the Company, the Holder were the holder of record of the number of whole Subordinate Shares then issuable upon exercise of its Warrant. Such grant by the Company to the Holder of the Warrants shall be in lieu of any adjustment which otherwise might be called for pursuant to this Section 10.

11. MISCELLANEOUS.

(a) GOVERNING LAW. The Warrant shall be binding upon any successors or assigns of the Company. The Warrant shall constitute a contract under the laws of Illinois and for all purposes shall be construed in accordance with and governed by the laws of said state, without giving effect to the conflict of laws principles.

(b) RESTRICTIONS. THIS WARRANT AND THE SUBORDINATE VOTING SHARES TO BE SOLD UPON EXERCISE HEREOF HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR UNDER ANY STATE SECURITIES LAWS. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED, OR HYPOTHECATED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN EXEMPTION THEREFROM.

(c) ATTORNEY'S FEES. In any litigation, arbitration or court proceeding between the Company and the Holder relating hereto, the prevailing party shall be entitled to reasonable attorneys' fees and expenses incurred in enforcing the Warrant.

(d) AMENDMENTS. The Warrant may be amended and the observance of any term of the Warrant may be waived with the written consent of the Company and the Holder.

(e) SECTION HEADINGS. The section headings used herein are for convenience of reference only, are not part of this Warrant and are not to affect construction of or be taken into consideration in interpreting this Warrant.

(f) NOTICES. Any notice required or permitted hereunder shall be deemed effectively given upon personal delivery to the party to be notified upon deposit with the United States Post Office, by certified mail, postage prepaid and addressed to the party to be notified at the address: with respect to the Company, at its principal address in Lincolnshire, Illinois (or such other office or agency of the Company as it may designate by notice in writing to the Holder); and with respect to the Holder, at the address of the Holder appearing on the books of the Company.

\* \* \* \*

IN WITNESS WHEREOF, Ben-Abraham Technologies Inc. has caused this Warrant to be executed by its officer thereunto duly authorized.

Dated: May 6, 1999

BEN-ABRAHAM TECHNOLOGIES INC.

By: -----

Title: -----

WARRANT HOLDER:

-----

NOTICE OF EXERCISE

To: Ben-Abraham Technologies Inc.

1. The undersigned hereby elects to exercise the right to purchase represented by the attached Warrant for, and to purchase thereunder, \_\_\_\_\_ subordinate voting shares (the "Warrant Shares") of Ben-Abraham Technologies Inc. (the "Company") and tenders herewith payment of the purchase price and any transfer taxes payable pursuant to the terms of the Warrant.

2. The Warrant Shares to be received by the undersigned upon exercise of the Warrant are being acquired for its own account, not as a nominee or agent, and not with a view to resale or distribution of any part thereof, and the undersigned has no present intention of selling, granting any participation in, or otherwise distributing the same. The undersigned further represents that it does not have any contract, undertaking, agreement or arrangement with any person to sell, transfer or grant participation to such person or to any third person, with respect to the Warrant Shares. The undersigned believes it has received all the information it considers necessary or appropriate for deciding whether to purchase the Warrant Shares.

3. Please issue a certificate or certificates representing said Warrant Shares in the name set forth below:

-----  
[Name]

6. If said number of Warrant Shares are not all the Warrant Shares purchasable under the Warrant, please issue a new Warrant for the balance of such Warrant Shares in the name set forth below:

-----  
[Name]

Executed on \_\_\_\_\_ (date).

-----  
[NAME OF HOLDER]

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title (if applicable): \_\_\_\_\_

ASSIGNMENT FORM

(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the \_\_\_\_\_ of foregoing Warrant and all rights evidenced thereby are hereby assigned to

-----  
(Please Print)

whose address is

-----  
(Please Print)

Please issue a new Warrant certificate for the unassigned Warrant (if any) in the name set forth below:

-----  
[Name]

Dated: \_\_\_\_\_, 19 \_\_\_\_.

Holder's Signature:

Holder's Address:

NOTE: The signature to this Assignment Form must correspond with the name as it appears on the Warrant registry maintained by the Company. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant.

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

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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 \_\_\_\_\_ Dollars (\$\_\_\_\_\_) according to the following schedule:

- 3.1a Dollars (\$\_\_\_\_\_) within 30 days after execution of this Agreement;
- 3.1b Dollars (\$\_\_\_\_\_) on or before the first anniversary of the effective date of this Agreement;
- 3.1c Dollars (\$\_\_\_\_\_) on or before the second anniversary of the effective date of this Agreement; and
- 3.1d Dollars (\$\_\_\_\_\_) on or before the third anniversary of the effective date of this Agreement.

[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.]

- 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 \_\_\_\_, Licensee will pay to The Regents a minimum annual royalty in the amounts and at the times set forth below:

\_\_\_\_ - \$ \_\_\_\_\_

\_\_\_\_ - \$ \_\_\_\_\_

\_\_\_\_ - \$ \_\_\_\_\_

\_\_\_\_ - \$ \_\_\_\_\_

\_\_\_\_ - \$ \_\_\_\_\_

[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.]

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:

[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.]

5.8 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.

[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.]

5.9 Licensee must perform the following in the designated Fields:

5.9a Vaccine Adjuvant Project

[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

[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.]

5.9c Herpes 2 Vaccine Project

[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.]

5.9d HIV Vaccine Project

[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.]

5.9e Oral Insulin Project

[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.]

5.9f Taxol Delivery Project

[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.]

5.9g 5-Fluorouracil

[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.]

5.10 [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 \_\_\_\_, Licensee will pay to The Regents a minimum annual royalty in the amounts and at the times set forth below:

-----	\$
-----	\$
-----	\$
-----	\$
-----	\$
-----	\$
-----	\$
-----	\$

[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.]



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

[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

[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

[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

[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

[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  
-----

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

-----  
Edwin H. Baker Date  
University Counsel  
Office of General Counsel

## STOCK OPTION PLAN

### PART I - INTRODUCTION

#### 1.01 PURPOSE

The purpose of the Plan is to secure for BEN-ABRAHAM TECHNOLOGIES INC. (the "Company") and its shareholders the benefits of incentive inherent in share ownership by the directors, senior officers and key employees of the Company and its Affiliates who, in the judgment of the Board, will be largely responsible for its future growth and success.

#### 1.02 DEFINITIONS

(a) "AFFILIATE" has the meaning ascribed thereto in the BUSINESS CORPORATIONS ACT, (Ontario) as amended from time to time.

(b) "BOARD" means the board of directors of the Company.

(c) "COMPANY" means Ben-Abraham Technologies Inc., a corporation incorporated under the laws of Wyoming.

(d) "ELIGIBLE PERSON" shall mean a senior officer or director of the Company or of an Affiliate of the Company ("Executive") or an employee of the Company or an Affiliate of the Company ("Employee") or a personal holding company controlled by an Executive or an Employee or a Registered Retirement Savings Plan established by an Executive or an Employee. In the event that a personal holding company ceases to be controlled by an Executive or an Employee, any options granted to such personal holding company shall forthwith be terminated.

(e) "INSIDER" means;

(i) an insider as defined in the Securities Act (Ontario), other than a person who falls within the definition solely by virtue of being a director or senior officer of a subsidiary of the Company; and

(ii) an associate of any person who is an insider by virtue of the preceding sub-clause (i).

(f) "MARKET PRICE" at any date in respect of the Shares means the closing sale price of such Shares on a stock exchange in Canada on which the Shares are listed and posted for trading, as may be selected for such purpose by the Board, on the trading day immediately preceding such date; provided that if the Shares are listed on more than one Stock Exchange, then the Market Price shall be the closing sale price of such Shares on the Stock Exchange on which the greatest volume of Shares traded on such trading day. In the event that such Shares are not listed and posted for trading on any stock exchange

in Canada, the Market Price shall be the fair value of such Shares as determined by the Board in its sole discretion.

(g) "OPTION" shall mean an option granted under the terms of the Share Option Plan.

(h) "OPTION PERIOD" shall mean the period during which an option may be exercised.

(i) "OPTIONEE" shall mean an Eligible Person to whom an Option has been granted under the terms of the Share Option Plan.

(j) "OUTSTANDING ISSUE" means the number of shares of the applicable class outstanding on a non-diluted basis.

(k) "PARTICIPANT" means, in respect of the Plan, an Eligible Person who is eligible and elects to participate in the Plan.

(l) "PLAN" means, the Share Option Plan and the term "Plan" means such plan.

(m) "SHARE OPTION PLAN" means the Plan established and operated pursuant to Part 2 hereof.

(n) "SHARES" shall mean the Subordinate Voting Shares of the Company.

## PART 2 - SHARE OPTION PLAN

### 2.01 PARTICIPATION

Options shall be granted only to Eligible Persons.

### 2.02 DETERMINATION OF OPTION RECIPIENTS

The Board shall make all necessary or desirable determinations regarding the granting of Options to Eligible Persons and may take into consideration the present and potential contributions of a particular Eligible Person to the success of the Company and any other factors which it may deem proper and relevant.

### 2.03 PRICE

The exercise price per Share when Options are granted shall be determined from time to time by the Board but, in any event, shall not be lower than the Market Price.

### 2.04 GRANT OF OPTIONS

The Board may at any time authorize the granting of Options to such Eligible Persons as it may select for the number of Shares that it shall designate, subject to the provisions of the Share Option Plan. The Date of each grant of Options shall be determined by the Board when the grant is authorized.

Each option granted to an Eligible Person shall be evidenced by a stock option agreement with terms and conditions consistent with the Plan and as approved by the Board (which terms and conditions need not be the same in each case and may be changed from time to time).

A director of the Company to whom an Option may be granted shall not participate in the decision of the Board to grant such Option.

#### 2.05 TERM OF OPTIONS

The Option Period shall be for not more than ten years from the date such Option is granted, but may be reduced with respect to any such Option as provided in section 2.8 hereof covering termination of employment or death of the Optionee.

Except as set forth in section 2.8, no Option may be exercised unless the Optionee is at the time of such exercise:

(a) in the case of an Employee, in the employ of the Company or any Affiliate and shall have been continuously so employed since the grant of his or her Option, but absence on leave, having the approval of the Company or such Affiliate, shall not be considered an interruption of employment for any purpose of the Share Option Plan; or

(b) in the case of an Executive, a director or senior officer of the Company or an Affiliate and shall have been such a director or senior officer continuously since the grant of his or her Option.

The exercise of any Option will be contingent upon receipt by the Company of cash payment of the full purchase price of the Shares being purchased. No Optionee or his or her legal representative, legatees or distributees will be, or will be deemed to be, a holder of any Shares subject to an Option, unless and until certificates for such Shares are issued to him, her or them under the terms of the Share Option Plan.

#### 2.06 RESTRICTIONS ON GRANT OF OPTIONS.

The granting of Options shall be subject to the following conditions:

(c) not more than 10% of the Outstanding Issue may be reserved for the granting of Options in any one-year period;

(d) not more than 10% of the Outstanding Issue may be reserved for the grant of Options to insiders within a one-year period;

(e) within a one year period, not more than 10% of the Outstanding Issue may be issued to insiders including Shares which may be issued under the Options or which may be issued with respect to all other compensation granted by the Company to such insider;

(f) note more than 5% of the Outstanding Issue may be reserved for the granting of Options to any one insider in any one-year period; and

(g) not more than 5 % of the Outstanding Issue may be issued to any one insider in a one-year period.

#### 2.07 LAPSED OPTIONS

If Options are surrendered, terminated or expire without being exercised in whole or in part, new Options may be granted covering the Shares not purchased under such lapsed Options.

#### 2.08 EFFECT OF TERMINATION OF EMPLOYMENT OR DEATH

(h) If an Optionee shall die while employed by the Company or its Affiliate, or while a director or senior officer of the Company or its Affiliate, any Option held by the Optionee at the date of death shall become exercisable, in whole or in part, but only by the person or persons to whom the Optionee's rights under the Option shall pass by the Optionee's will or the laws of descent and distribution. All such Options shall be exercisable only to the extent that the Optionee was entitled to exercise the Option at the date of his or her death and only for six months after the date of death or prior to the expiration of the Option Period in respect thereof, whichever is sooner.

(i) If the tenure of a director or senior officer or the employment of an employee of the Company or its Affiliate is terminated ("Termination"), for cause no Option held by such Optionee may be exercised following the date upon which Termination occurred. If Termination occurs for any reason other than cause, then any Option held by such Optionee shall be exercisable, in whole or in part, for a period of six months after such Termination or prior to the expiration of the Option Period in respect thereof, whichever is sooner, or such shorter period of time as may be determined by the Board when the Option is granted.

#### 2.09 EFFECT OF AMALGAMATION, CONSOLIDATION OF MERGER

If the Company amalgamates, consolidates with or merges with or into another corporation any Shares receivable on the exercise of an Option shall be converted into the securities, property or cash which the Participant would have received upon such amalgamation, consolidation or merger if the Participant had exercised his or her option immediately prior to the record date applicable to such amalgamation, consolidation or merger, and the option price shall be adjusted appropriately by the Board and such adjustment shall be binding for all purposes of the Share Option Plan.

#### 2.10 ADJUSTMENT IN SHARES SUBJECT TO THE PLAN

If there is any change in the Shares through or by means of a declaration of stock dividends of Shares or consolidations, subdivisions or reclassifications of Shares, or otherwise, the number of Shares available under the Share Option Plan, the Shares subject to any Option,

and the purchase price thereof shall be adjusted appropriately by the Board and such adjustment shall be effective and binding for all purposes of the Share Option Plan.

### PART 3 - GENERAL

#### 3.01 NUMBER OF SHARES

The aggregate number of Shares that may be reserved for issuance under the Plan, together with the aggregate number of Shares which are reserved for issuance under options previously granted, shall not exceed 1,428,571 Shares.

#### 3.02 TRANSFERABILITY

All benefits, rights and options accruing to any Participant in accordance with the terms and conditions of the Plan shall not be transferable unless specifically provided herein. During the lifetime of a Participant, all benefits, rights and options may only be exercised by the Participant.

#### 3.03 EMPLOYMENT

Nothing contained in any Plan shall confer upon any Participant any right with respect to employment or continuance of employment with the Company or any Affiliate, or interfere in any way with the right of the Company or any Affiliate to terminate the Participant's employment at any time. Participation in any Plan by a Participant is voluntary.

#### 3.04 APPROVAL OF PLAN

The Plan shall only become effective after it has been approved by a majority of the votes cast at a meeting of the Company's shareholders called for such purpose; provided, however, nothing contained herein shall in any way affect stock options previously granted by the Company and currently outstanding or the plan (the "Former Plan") pursuant to which any of such options may have been granted. No further options shall be granted under the Former Plan which shall be replaced and superseded by the Plan when same is duly approved by shareholders of the Company.

The obligation of the Company to sell and deliver Shares in accordance with the Plan is subject to the approval of any governmental authority having jurisdiction or any stock exchanges on which the Shares are listed for trading which may be required in connection with the authorization, issuance or sale of such Shares by the Company. If an Shares cannot be issued to any Participant for any reason including, without limitation, the failure to obtain such approval, then the obligation of the Company to issue such Shares shall terminate and any Participant's option price paid to the Company shall be returned to the Participant.

### 3.05 ADMINISTRATION OF THE PLAN

The Board is authorized to interpret each Plan from time to time and to adopt, amend and rescind rules and regulations for carrying out such Plan. The interpretation and construction of any provision of any Plan by the Board shall be final and conclusive. Administration of the Plan shall be the responsibility of the appropriate officers of the Company and all costs in respect thereof shall be paid by the Company.

### 3.06 INCOME TAXES

As a condition of and prior to participation in the Plan, a Participant shall authorize the Company in written form to withhold from any remuneration otherwise payable to such Participant any amounts required by any taxing authority to be withheld for taxes of any kind as a consequence of such participation in the Plan.

### 3.07 AMENDMENTS TO PLAN

The Board reserves the right to amend, modify or terminate any Plan at any time if and when it is advisable in the absolute discretion of the Board. However, any amendment of such Plan which could at any time:

- (a) materially increase the benefits under such Plan; or
- (b) result in an increase in the number of Shares which would be issued under such Plan (except any increase resulting automatically from an increase in the number of issued and outstanding Shares); or
- (c) materially modify the requirement as to eligibility for participation in such Plan;

shall be effective only upon the approval of the shareholders of the Company. Any amendment to any provision of such Plan shall be subject to approval, if required, by any regulatory body having jurisdiction over the securities of the Company.

### 3.08 REPRESENTATION OR WARRANTY

The Company makes no representation or warranty as the future market value of any Shares issued in accordance with the provision of any Plan.

### 3.09 INTERPRETATION

The Plan will be governed by and construed in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein.

3.10 COMPLIANCE WITH APPLICABLE LAW, ETC.

If any provision of any Plan of any agreement entered into pursuant to any Plan contravenes any law or an order, policy, by-law or regulation of any regulatory body or stock exchange having authority over the Company or the Plan then such provision shall be deemed to be amended to the extent required to bring such provision into compliance therewith.

STRUCTURED BIOLOGICALS INC.

Option granted July 6, 1995 (herein called the "Date of Grant") by Ben-Abraham Technologies Inc. (herein called the "Company") to

Avi Ben-Abraham, M.D.

700,000 common shares  
Option Price: \$0.47 per share

(herein called the "Optionee"):

1. GRANT OF OPTION. The Company grants to the Optionee an option to purchase, on the terms and conditions herein set forth, 700,000 common shares (herein called the "Option Shares") of the Company's capital, at the option price of \$0.47 per share.
2. PERIOD OPTION AND CERTAIN LIMITATIONS ON RIGHT TO EXERCISE. This option will expire at 4:00 p.m., Toronto time, on June 30, 2000 (such date being herein called the "Expiration Date"), except that (a) if the Optionee ceases to be an officer and/or director and/or employee of the Company on or before the Expiration Date, for any reason other than death, this Option shall expire as provided in Section 5 below; and (b) if the Optionee dies on or before the Expiration Date, this option shall expire as provided in Section 6 below.  
  
Except as provided in Sections 5 and 6 below, none of the Option Shares may be purchased hereunder unless the Optionee, at the time he exercises this Option, is an officer and/or director and/or employee of the Company and has continuously been an officer and/or director and or employee since the date hereof.
3. METHOD OF EXERCISE OF OPTION. This Option shall be exercised in and only in the following manner: the Optionee shall give written notice to the Company, in a form satisfactory to the Company, specifying the number of Option Shares which he then elects to purchase, accompanied by payment, in cash or by certified cheque to the order of the Company, of the full option price of the shares being purchased.
4. NON-TRANSFERABILITY OF OPTION. This option shall not be transferable by the Optionee otherwise than by Will or by the laws of Descent and distribution, and it shall be exercisable, during the lifetime of the Optionee, only by him.
5. TERMINATION OF OFFICE. If the Optionee ceases on or before the Expiration Date to be an officer and/or director and/or employee for any reason other than death (a) he may, but only within the period of three (3) months next succeeding such cessation and in no event after the Expiration Date, exercise this Option if and to the extent that he was entitled to exercise it at the date of such cessation; and (b) such Option shall expire (except as provided in Section 6 below) at 4:00 p.m. Toronto time, on whichever is the earlier of (i) the last day of such three (3) months' period or (ii) the Expiration Date.

6. DEATH OF OPTIONEE. If the Optionee dies while he is an officer and/or director and/or employee of the Company, this Option shall be exercisable within, but only within the period of six (6) months next succeeding his death and in no event after the Expiration Date, and then only if and to the extent that the Optionee was entitled to exercise this Option at the date of his death; and this Option shall expire at 4:00 p.m., Toronto time, on whichever is the earlier of (i) six (6) months from the date of the Optionee's death or (ii) the Expiration Date. Except as otherwise indicated by the context, the term "Optionee", as used in this Option, shall be deemed to include any person acting under this Section 6.

7. ADJUSTMENTS UPON THE OCCURRENCE OF CERTAIN EVENTS.

(a) In case the Company shall hereafter declare or pay to the holders of its capital a dividend or dividends in stock of the Company, the Optionee, upon any exercise of this Option, shall be entitled to receive (in addition to the Option Shares purchased upon such exercise and without any payment other than the option price for such shares) such additional share or shares of stock as the Optionee would have received as such dividend or dividends if; from the date of the granting of this Option, he had been the holder of record of the Option Shares so purchased and had not, prior to the date of such exercise, disposed of any such Option Shares or any shares which he would have received as a stock dividend or dividends stemming from such holding of such Option Shares.

(b) In case of any reorganization or recapitalization of the Company (by reclassification of its outstanding capital stock or otherwise), or its consolidation or merger with or into another corporation, or the sale, conveyance, lease or other transfer by the Company of all or substantially all of its property, pursuant to any of which events the then outstanding shares of the Company's capital are split up or combined, or are changed into or become exchangeable for other shares of stock, the Optionee, upon any exercise of this Option, shall be entitled to receive, in lieu of the Option Shares which he would otherwise be entitled to receive upon such exercise and without any payment in addition to the option price therefor, the shares of stock which the Optionee would have received upon such reorganization, recapitalization, consolidation, merger, sale or other transfer, if immediately prior thereto he had owned the Option Shares to which such exercise of this Option relates and had exchanged such Option Shares in accordance with the terms of such reorganization, recapitalization, consolidation, merger, sale or other transfer.

(c) In case of any distribution by the Company of rights to stockholders, the issuance of stock options to persons other than employees, the issuance by the Company of securities convertible into the Company's capital stock shall have been changed or for which it shall have been exchanged, or any other change in the capital structure of the Company (other than as specified above in this Section 7), which, in the judgment of the Company, would effect a dilution of the Optionee's rights hereunder, the Company may make such adjustment, if any, as it shall deem appropriate in the number or kind or option price of shares then purchasable under this Option, and such adjustment shall be effective and binding for all purposes of this Option.

Notwithstanding the foregoing provisions of this Section 7, no adjustment provided for in this Section 7 shall require the Company to sell a fractional share under this Option.

8. DELIVERY OF STOCK CERTIFICATES. Upon each exercise of this Option, the Company, as promptly as practicable, shall mail or deliver to the Optionee stock certificates representing the common shares then purchased. The issuance of such shares and delivery of the certificates therefor shall, however, be subject to any delay necessary to complete (a) the admission of such shares, or any of them, to listing on any stock exchange on which the Company's capital may then be listed; and (b) such registration or other qualification of such shares, or any of them, under any law, rule or regulation as the Company may determine to be necessary or advisable.

9. NOTICES, ETC. Any notice hereunder by the Optionee shall be given to the Company in writing and such notice and any payment by the Optionee hereunder shall be deemed duly given or made only upon receipt thereof at the Company's principal office or at such other address as the Company may designate by notice to the Optionee.

Any notice or other communication to the Optionee hereunder shall be in writing and any such communication and any delivery to the Optionee hereunder shall be deemed duly given or made if mailed, delivered or given to the Optionee at such address as the Optionee may have on file with the Company or in care of the Company at its principal executive office in Toronto, Ontario.

10. WAIVER. The waiver by the Company of any provision of this Option shall not operate as or be construed to be a waiver of the same provision or any other provision hereof at any subsequent time or for any other purpose.

11. IRREVOCABILITY. This Option shall be irrevocable until it expires as herein provided.

12. VALIDITY, INTERPRETATION AND CONSTRUCTION. The interpretation and construction of this Option are vested in the Board of Directors of the Company whose interpretations and construction shall be final and conclusive. The section headings in this Option are for convenience of reference only and shall not be deemed part of, or germane to the interpretation or construction of, this Option.

IN WITNESS WHEREOF the Company has caused this Option to be executed and its corporate seal to be hereunto affixed by its proper corporate officers hereunto duly authorized.

Structured Biologicals Inc.

By: /s/

-----

President

By: /s/

-----

Secretary

AGREED to, such option to supplement any and all options heretofore granted to the undersigned by the Company or its predecessor corporations.

/s/ Avi Ben-Abraham, M.D.

-----  
AVI BEN-ABRAHAM, M.D.

BEN-ABRAHAM TECHNOLOGIES INC.

Option granted November 7, 1997 (herein called the "Date of Grant") by Ben-Abraham Technologies Inc. (herein called the "Company") to

EDWARD C. ROSENOW III

50,000 common shares  
Option Price: (Cdn)\$1.60 per share

(herein called the "Optionee"):

1. GRANT OF OPTION. The Company grants to the Optionee an option to purchase, on the terms and conditions herein set forth, 50,000 common shares (herein called the "Option Shares") of the Company's capital at the option price of (Cdn)\$1.60 per share.

2. PERIOD OPTION AND CERTAIN LIMITATIONS ON RIGHT TO EXERCISE. This option will expire at 4:00 p.m., Toronto time, on November 6, 2002 (such date being herein called the "Expiration Date"), except that (a) if the Optionee ceases to be an officer and/or director and/or employee of the Company on or before the Expiration Date, for any reason other than death, this Option shall expire as provided in Section 5 below; and (b) if the Optionee dies on or before the Expiration Date, this option shall expire as provided in Section 6 below.

Except as provided in Sections 5 and 6 below, none of the Option Shares may be purchased hereunder unless the Optionee, at the time he exercises this Option, is an officer and/or director and/or employee of the Company and has continuously been an officer and/or director and or employee since the date hereof.

3. METHOD OF EXERCISE OF OPTION. This Option shall be exercised in and only in the following manner: the Optionee shall give written notice to the Company, in a form satisfactory to the Company, specifying the number of Option Shares which he then elects to purchase, accompanied by payment, in cash or by certified cheque to the order of the Company, of the full option price of the shares being purchased.

4. NON-TRANSFERABILITY OF OPTION. This Option shall not be transferable by the Optionee otherwise than by Will or by the laws of Descent and distribution, and it shall be exercisable, during the lifetime of the Optionee, only by him.

5. TERMINATION OF OFFICE. If the Optionee ceases on or before the Expiration Date to be an officer and/or director and/or employee for any reason other than death (a) he may, but only within the period of three months next succeeding such cessation and in no event after the Expiration Date, exercise this Option if and to the extent that he was entitled to exercise it at the date of such cessation; and (b) such Option shall expire (except as provided in Section 6 below) at 4:00 p.m. Toronto time, on whichever is the earlier of (i) the last day of such three months' period or (ii) the Expiration Date.

6. DEATH OF OPTIONEE. If the Optionee dies while he is an officer and/or director and/or employee of the Company, this Option shall be exercisable within, but only within the period of six months next succeeding his death and in no event after the Expiration Date, and then only if and to the extent that the Optionee was entitled to exercise this Option at the date of his death; and this Option shall expire at 4:00 p.m., Toronto time, on whichever is the earlier of (i) six months from the date of the Optionee's death or (ii) the Expiration Date. Except as otherwise indicated by the context, the term "Optionee", as used in this Option, shall be deemed to include any person acting under this Section 6.

7. ADJUSTMENTS UPON THE OCCURRENCE OF CERTAIN EVENTS.

(a) In case the Company shall hereafter declare or pay to the holders of its capital a dividend or dividends in stock of the Company, the Optionee, upon any exercise of this Option, shall be entitled to receive (in addition to the Option Shares purchased upon such exercise and without any payment other than the option price for such shares) such additional share or shares of stock as the Optionee would have received as such dividend or dividends if; from the date of the granting of this Option, he had been the holder of record of the Option Shares so purchased and had not, prior to the date of such exercise, disposed of any such Option Shares or any shares which he would have received as a stock dividend or dividends stemming from such holding of such Option Shares.

(b) In case of any reorganization or recapitalization of the Company (by reclassification of its outstanding capital stock or otherwise), or its consolidation or merger with or into another corporation, or the sale, conveyance, lease or other transfer by the Company of all or substantially all of its property, pursuant to any of which events the then outstanding shares of the Company's capital are split up or combined, or are changed into or become exchangeable for other shares of stock, the Optionee, upon any exercise of this Option, shall be entitled to receive, in lieu of the Option Shares which he would otherwise be entitled to receive upon such exercise and without any payment in addition to the option price therefor, the shares of stock which the Optionee would have received upon such reorganization, recapitalization, consolidation, merger, sale or other transfer, if immediately prior thereto he had owned the Option Shares to which such exercise of this Option relates and had exchanged such Option Shares in accordance with the terms of such reorganization, recapitalization, consolidation, merger, sale or other transfer.

(c) In case of any distribution by the Company of rights to stockholders, the issuance of stock options to persons other than employees, the issuance by the Company of securities convertible into the Company's capital stock shall have been changed or for which it shall have been exchanged, or any other change in the capital structure of the Company (other than as specified above in this Section 7), which, in the judgment of the Company, would effect a dilution of the Optionee's rights hereunder, the Company may make such adjustment, if any, as it shall deem appropriate in the number or kind or option price of shares then purchasable under this Option, and such adjustment shall be effective and binding for all purposes of this Option.

Notwithstanding the foregoing provisions of this Section 7, no adjustment provided for in this Section 7 shall require the Company to sell a fractional share under this Option.

8. DELIVERY OF STOCK CERTIFICATES. Upon each exercise of this Option, the Company, as promptly as practicable, shall mail or deliver to the Optionee stock certificates representing the common shares then purchased. The issuance of such shares and delivery of the certificates therefor shall, however, be subject to any delay necessary to complete (a) the admission of such shares, or any of them, to listing on any stock exchange on which the Company's capital may then be listed; and (b) such registration or other qualification of such shares, or any of them, under any law, rule or regulation as the Company may determine to be necessary or advisable.

9. NOTICES, ETC. Any notice hereunder by the Optionee shall be given to the Company in writing and such notice and any payment by the Optionee hereunder shall be deemed duly given or made only upon receipt thereof at the Company's principal office or at such other address as the Company may designate by notice to the Optionee.

Any notice or other communication to the Optionee hereunder shall be in writing and any such communication and any delivery to the Optionee hereunder shall be deemed duly given or made if mailed, delivered or given to the Optionee at such address as the Optionee may have on file with the Company or in care of the Company at its principal executive office in Toronto, Ontario.

10. WAIVER. The waiver by the Company of any provision of this Option shall not operate as or be construed to be a waiver of the same provision or any other provision hereof at any subsequent time or for any other purpose.

11. IRREVOCABILITY. This Option shall be irrevocable until it expires as herein provided.

12. VALIDITY, INTERPRETATION AND CONSTRUCTION. The interpretation and construction of this Option are vested in the Board of Directors of the Company whose interpretations and construction shall be final and conclusive. The section headings in this Option are for convenience of reference only and shall not be deemed part of, or germane to the interpretation or construction of, this Option.

IN WITNESS WHEREOF the Company has caused this Option to be executed and its corporate seal to be hereunto affixed by its proper corporate officers hereunto duly authorized.

BEN-ABRAHAM TECHNOLOGIES INC.

BY: \_\_\_/s/\_\_\_\_\_

ITS: \_\_\_\_\_

AGREED to, such option to supplement any and all options heretofore granted to the undersigned by the Company or its predecessor corporations.

/s/ Edward C. Rosenow III

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EDWARD C. ROSENOW III

INCENTIVE STOCK OPTION AGREEMENT

THIS AGREEMENT is entered into and effective as of this 8TH day of DECEMBER, 1998 (the "Date of Grant"), by and between Ben-Abraham Technologies Inc., a Wyoming corporation (the "Company"), and STEPHEN M. SIMES (the "Optionee").

A. The Company has adopted the Ben-Abraham Technologies Inc. 1998 Stock Option Plan (the "Plan") authorizing the Board of Directors of the Company, or a committee as provided for in the Plan (the Board or such a committee to be referred to as the "Committee"), to grant incentive stock options to employees of the Company and its Subsidiaries (as defined in the Plan).

B. The Company desires to give the Optionee an inducement to acquire a proprietary interest in the Company and an added incentive to advance the interests of the Company by granting to the Optionee an option to purchase shares of subordinate voting stock of the Company pursuant to the Plan.

Accordingly, the parties agree as follows:

1. GRANT OF OPTION.

The Company hereby grants to the Optionee the right, privilege, and option (the "Option") to purchase 400,000 shares (the "Option Shares") of the Company's subordinate voting stock, no par value (the "Subordinate Voting Stock"), according to the terms and subject to the conditions hereinafter set forth and as set forth in the Plan. Subject to Section 10 of this Agreement, the Option is intended to be an "incentive stock option," as that term is used in Section 422 of the Internal Revenue Code of 1986, as amended (the "Code").

2. OPTION EXERCISE PRICE.

The per share price to be paid by Optionee in the event of an exercise of the Option will be \$0.28 (US\$).

3. DURATION OF OPTION AND TIME OF EXERCISE.

3.1 INITIAL PERIOD OF EXERCISABILITY. The Option will become exercisable with respect to the Option Shares IN TWELVE QUARTERLY INSTALLMENTS. The following table sets forth the initial dates of exercisability of each installment and the number of Option Shares as to which this Option will become exercisable on such dates:

Initial Date of Exercisability -----	Number of Option Shares Available for Exercise -----
04/21/98 QUARTERLY THROUGH 01/21/01	33,333

The foregoing rights to exercise this Option will be cumulative with respect to the Option Shares becoming exercisable on each such date, but in no event will this Option be exercisable after, and this Option will become void and expire as to all unexercised Option Shares at, 5:00 p.m. (Lincolnshire, Illinois time) on OCTOBER 6, 2003 (the "Time of Termination").

### 3.2 TERMINATION OF EMPLOYMENT.

#### (a) TERMINATION DUE TO DEATH, DISABILITY OR RETIREMENT.

(i) In the event the Optionee's employment with the Company and all Subsidiaries is terminated by reason of death or Disability, this Option will remain exercisable, to the extent exercisable as of the date of such termination, for a period of six months after such termination (but in no event after the Time of Termination).

(ii) In the event the Optionee's employment with the Company and all Subsidiaries is terminated by reason of Retirement, this Option will remain exercisable, to the extent exercisable as of the date of such termination, for a period of three months after such termination (but in no event after the Time of Termination).

(b) TERMINATION FOR REASONS OTHER THAN DEATH, DISABILITY OR RETIREMENT. In the event that the Optionee's employment with the Company and all Subsidiaries is terminated for any reason other than death, Disability or Retirement, or the Optionee is in the employ of a Subsidiary and the Subsidiary ceases to be a Subsidiary of the Company (unless the Optionee continues in the employ of the Company or another Subsidiary), all rights of the Optionee under the Plan and this Agreement will immediately terminate without notice of any kind, and this Option will no longer be exercisable; provided, however, that if such termination is due to any reason other than termination by the Company or any Subsidiary for "cause" (as defined in the Plan), this Option will remain exercisable to the extent exercisable as of such termination for a period of three months after such termination (but in no event after the Time of Termination).

3.3 CHANGE IN CONTROL. If a Change in Control (as defined in the Plan) of the Company occurs, this Option will become immediately exercisable in full and will remain exercisable until the Time of Termination, regardless of whether the Optionee remains in the employ of the Company or any Subsidiary.

### 4. MANNER OF OPTION EXERCISE.

4.1 NOTICE. This Option may be exercised by the Optionee in whole or in part from time to time, subject to the conditions contained in the Plan and in this Agreement, by delivery, in person, by facsimile or electronic transmission or through the mail, to the Company at its principal executive office in Lincolnshire, Illinois (Attention: Chief Financial Officer), of a written notice of exercise. Such notice must be in a form satisfactory to the Committee, must identify the Option, must specify the number of Option Shares with respect to which the Option is being exercised, and must be signed by the person or persons so exercising the Option. Such

notice must be accompanied by payment in full of the total purchase price of the Option Shares purchased. In the event that the Option is being exercised, as provided by the Plan and Section 3.2 above, by any person or persons other than the Optionee, the notice must be accompanied by appropriate proof of right of such person or persons to exercise the Option. As soon as practicable after the effective exercise of the Option, the Optionee will be recorded on the stock transfer books of the Company as the owner of the Option Shares purchased, and the Company will deliver to the Optionee one or more duly issued stock certificates evidencing such ownership.

4.2 PAYMENT. At the time of exercise of this Option, the Optionee must pay the total purchase price of the Option Shares to be purchased entirely in cash (including a check, bank draft or money order, payable to the order of the Company); provided, however, that the Committee, in its sole discretion, may allow such payment to be made, in whole or in part, by tender of a promissory note (on terms acceptable to the Committee in its sole discretion) or a Broker Exercise Notice or Previously Acquired Shares (as such terms are defined in the Plan), or by a combination of such methods. In the event the Optionee is permitted to pay the total purchase price of this Option in whole or in part with Previously Acquired Shares, the value of such shares will be equal to their Fair Market Value on the date of exercise of this Option.

## 5. RIGHTS OF OPTIONEE; TRANSFERABILITY.

5.1 EMPLOYMENT. Nothing in this Agreement will interfere with or limit in any way the right of the Company or any Subsidiary to terminate the employment of the Optionee at any time, nor confer upon the Optionee any right to continue in the employ of the Company or any Subsidiary at any particular position or rate of pay or for any particular period of time.

5.2 RIGHTS AS A SHAREHOLDER. The Optionee will have no rights as a shareholder unless and until all conditions to the effective exercise of this Option (including, without limitation, the conditions set forth in Sections 4 and 6 of this Agreement) have been satisfied and the Optionee has become the holder of record of such shares. No adjustment will be made for dividends or distributions with respect to this Option as to which there is a record date preceding the date the Optionee becomes the holder of record of such shares, except as may otherwise be provided in the Plan or determined by the Committee in its sole discretion.

5.3 RESTRICTIONS ON TRANSFER. Except pursuant to testamentary will or the laws of descent and distribution or as otherwise expressly permitted by the Plan, no right or interest of the Optionee in this Option prior to exercise may be assigned or transferred, or subjected to any lien, during the lifetime of the Optionee, either voluntarily or involuntarily, directly or indirectly, by operation of law or otherwise. The Optionee will, however, be entitled to designate a beneficiary to receive this Option upon such Optionee's death, and, in the event of the Optionee's death, exercise of this Option (to the extent permitted pursuant to Section 3.2(a) of this Agreement) may be made by the Optionee's legal representatives, heirs and legatees.

5.4 BREACH OF CONFIDENTIALITY OR NON-COMPETE AGREEMENTS. Notwithstanding anything in this Agreement or the Plan to the contrary, in the event that the Optionee materially breaches the terms of any confidentiality or non-compete agreement entered into with the Company or any Subsidiary, whether such breach occurs before or after termination of the Optionee's employment with the Company or any Subsidiary, the Committee in its sole

discretion may immediately terminate all rights of the Optionee under the Plan and this Agreement without notice of any kind.

6. SECURITIES LAW AND OTHER RESTRICTIONS.

Notwithstanding any other provision of the Plan or this Agreement, the Company will not be required to issue, and the Optionee may not sell, assign, transfer or otherwise dispose of, any Option Shares, unless (a) there is in effect with respect to the Option Shares a registration statement under the Securities Act of 1933, as amended, and any applicable state or foreign securities laws or an exemption from such registration, and (b) there has been obtained any other consent, approval or permit from any other regulatory body which the Committee, in its sole discretion, deems necessary or advisable. The Company may condition such issuance, sale or transfer upon the receipt of any representations or agreements from the parties involved, and the placement of any legends on certificates representing Option Shares, as may be deemed necessary or advisable by the Company in order to comply with such securities law or other restrictions.

7. WITHHOLDING TAXES.

The Company is entitled to (a) withhold and deduct from future wages of the Optionee (or from other amounts that may be due and owing to the Optionee from the Company), or make other arrangements for the collection of, all legally required amounts necessary to satisfy any federal, state or local withholding and employment-related tax requirements attributable to the Option, including, without limitation, the grant or exercise of this Option or a disqualifying disposition of any Option Shares, or (b) require the Optionee promptly to remit the amount of such withholding to the Company before acting on the Optionee's notice of exercise of this Option. In the event that the Company is unable to withhold such amounts, for whatever reason, the Optionee agrees to pay to the Company an amount equal to the amount the Company would otherwise be required to withhold under federal, state or local law.

8. ADJUSTMENTS.

In the event of any reorganization, merger, consolidation, recapitalization, liquidation, reclassification, stock dividend, stock split, combination of shares, rights offering, divestiture or extraordinary dividend (including a spin-off), or any other similar change in the corporate structure or shares of the Company, the Committee (or, if the Company is not the surviving corporation in any such transaction, the board of directors of the surviving corporation), in order to prevent dilution or enlargement of the rights of the Optionee, will make appropriate adjustment (which determination will be conclusive) as to the number and kind of securities or other property (including cash) subject to, and the exercise price of, this Option.

9. SUBJECT TO PLAN.

The Option and the Option Shares granted and issued pursuant to this Agreement have been granted and issued under, and are subject to the terms of, the Plan. The terms of the Plan are incorporated by reference in this Agreement in their entirety, and the Optionee, by execution of this Agreement, acknowledges having received a copy of the Plan. The provisions of this Agreement will be interpreted as to be consistent with the Plan, and any ambiguities in this

Agreement will be interpreted by reference to the Plan. In the event that any provision of this Agreement is inconsistent with the terms of the Plan, the terms of the Plan will prevail.

10. INCENTIVE STOCK OPTION LIMITATIONS.

10.1 LIMITATION ON AMOUNT. To the extent that the aggregate Fair Market Value (determined as of the date of grant) of the shares of Subordinate Voting Stock with respect to which incentive stock options (within the meaning of Section 422 of the Code) are exercisable for the first time by the Optionee during any calendar year (under the Plan and any other incentive stock option plans of the Company or any subsidiary or parent corporation of the Company (within the meaning of the Code)) exceeds \$100,000 (or such other amount as may be prescribed by the Code from time to time), such excess incentive stock options will be treated as non-statutory stock options in the manner set forth in the Plan.

10.2 LIMITATION ON EXERCISABILITY; DISPOSITION OF OPTION SHARES . Any incentive stock option that remains unexercised more than one year following termination of employment by reason of Disability or more than three months following termination for any reason other than death or Disability will thereafter be deemed to be a non-statutory stock option. In addition, in the event that a disposition (as defined in Section 424(c) of the Code) of shares of Subordinate Voting Stock acquired pursuant to the exercise of an incentive stock option occurs prior to the expiration of two years after its date of grant or the expiration of one year after its date of exercise (a "disqualifying disposition"), such incentive stock option will, to the extent of such disqualifying disposition, be treated in a manner similar to a non-statutory stock option.

10.3 NO REPRESENTATION OR WARRANTY. Section 422 of the Code and the rules and regulations thereunder are complex, and neither the Plan nor this Agreement purports to summarize or otherwise set forth all of the conditions that need to be satisfied in order for this Option to qualify as an incentive stock option. In addition, this Option may contain terms and conditions that allow for exercise of this Option beyond the periods permitted by Section 422 of the Code, including, without limitation, the periods described in Section 10.2 of this Agreement. Accordingly, the Company makes no representation or warranty regarding whether the exercise of this Option will qualify as the exercise of an incentive stock option, and the Company recommends that the Optionee consult with the Optionee's own advisors before making any determination regarding the exercise of this Option or the sale of the Option Shares.

11. MISCELLANEOUS.

11.1 BINDING EFFECT. This Agreement will be binding upon the heirs, executors, administrators and successors of the parties to this Agreement.

11.2 GOVERNING LAW. This Agreement and all rights and obligations under this Agreement will be construed in accordance with the Plan and governed by the laws of the State of Wyoming, without regard to conflicts of laws provisions. Any legal proceeding related to this Agreement will be brought in an appropriate Illinois court, and the parties to this Agreement consent to the exclusive jurisdiction of the court for this purpose.

11.3 ENTIRE AGREEMENT. This Agreement and the Plan set forth the entire agreement and understanding of the parties to this Agreement with respect to the grant and exercise of this

Option and the administration of the Plan and supersede all prior agreements, arrangements, plans and understandings relating to the grant and exercise of this Option and the administration of the Plan.

11.4 AMENDMENT AND WAIVER. Other than as provided in the Plan, this Agreement may be amended, waived, modified or canceled only by a written instrument executed by the parties to this Agreement or, in the case of a waiver, by the party waiving compliance.

The parties to this Agreement have executed this Agreement effective the day and year first above written.

BEN-ABRAHAM TECHNOLOGIES INC.

By /s/ Phillip B. Donenberg

-----  
Its CFO  
-----

By execution of this Agreement, the Optionee acknowledges having received a copy of the Plan.

OPTIONEE

/s/ Stephen M. Simes

-----  
(Signature)

1173 RFD

-----  
(Name and Address)  
-----

LONG GROVE, IL 60047  
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INCENTIVE STOCK OPTION AGREEMENT

THIS AGREEMENT is entered into and effective as of this 8TH day of DECEMBER, 1998 (the "Date of Grant"), by and between Ben-Abraham Technologies Inc., a Wyoming corporation (the "Company"), and STEPHEN M. SIMES (the "Optionee").

A. The Company has adopted the Ben-Abraham Technologies Inc. 1998 Stock Option Plan (the "Plan") authorizing the Board of Directors of the Company, or a committee as provided for in the Plan (the Board or such a committee to be referred to as the "Committee"), to grant incentive stock options to employees of the Company and its Subsidiaries (as defined in the Plan).

B. The Company desires to give the Optionee an inducement to acquire a proprietary interest in the Company and an added incentive to advance the interests of the Company by granting to the Optionee an option to purchase shares of subordinate voting stock of the Company pursuant to the Plan.

Accordingly, the parties agree as follows:

1. GRANT OF OPTION.

The Company hereby grants to the Optionee the right, privilege, and option (the "Option") to purchase 600,000 shares (the "Option Shares") of the Company's subordinate voting stock, no par value (the "Subordinate Voting Stock"), according to the terms and subject to the conditions hereinafter set forth and as set forth in the Plan. Subject to Section 10 of this Agreement, the Option is intended to be an "incentive stock option," as that term is used in Section 422 of the Internal Revenue Code of 1986, as amended (the "Code").

2. OPTION EXERCISE PRICE.

The per share price to be paid by Optionee in the event of an exercise of the Option will be \$0.29 (US\$).

3. DURATION OF OPTION AND TIME OF EXERCISE.

3.1 INITIAL PERIOD OF EXERCISABILITY. The Option will become exercisable with respect to the Option Shares IMMEDIATELY WITH RESPECT TO 10% OF THE TOTAL OPTION GRANT AND TWELVE QUARTERLY INSTALLMENTS THEREAFTER. The following table sets forth the initial dates of exercisability of each installment and the number of Option Shares as to which this Option will become exercisable on such dates:

Initial Date of Exercisability -----	Number of Option Shares Available for Exercise -----
01/21/98	100,000
04/21/98 QUARTERLY THROUGH 01/21/01	41,667

The foregoing rights to exercise this Option will be cumulative with respect to the Option Shares becoming exercisable on each such date, but in no event will this Option be exercisable after, and this Option will become void and expire as to all unexercised Option Shares at, 5:00 p.m. (Lincolnshire, Illinois time) on APRIL 20, 2003 (the "Time of Termination").

### 3.2 TERMINATION OF EMPLOYMENT.

#### (a) TERMINATION DUE TO DEATH, DISABILITY OR RETIREMENT.

(i) In the event the Optionee's employment with the Company and all Subsidiaries is terminated by reason of death or Disability, this Option will remain exercisable, to the extent exercisable as of the date of such termination, for a period of six months after such termination (but in no event after the Time of Termination).

(ii) In the event the Optionee's employment with the Company and all Subsidiaries is terminated by reason of Retirement, this Option will remain exercisable, to the extent exercisable as of the date of such termination, for a period of three months after such termination (but in no event after the Time of Termination).

(b) TERMINATION FOR REASONS OTHER THAN DEATH, DISABILITY OR RETIREMENT. In the event that the Optionee's employment with the Company and all Subsidiaries is terminated for any reason other than death, Disability or Retirement, or the Optionee is in the employ of a Subsidiary and the Subsidiary ceases to be a Subsidiary of the Company (unless the Optionee continues in the employ of the Company or another Subsidiary), all rights of the Optionee under the Plan and this Agreement will immediately terminate without notice of any kind, and this Option will no longer be exercisable; provided, however, that if such termination is due to any reason other than termination by the Company or any Subsidiary for "cause" (as defined in the Plan), this Option will remain exercisable to the extent exercisable as of such termination for a period of three months after such termination (but in no event after the Time of Termination).

3.3 CHANGE IN CONTROL. If a Change in Control (as defined in the Plan) of the Company occurs, this Option will become immediately exercisable in full and will remain exercisable until the Time of Termination, regardless of whether the Optionee remains in the employ of the Company or any Subsidiary.

### 4. MANNER OF OPTION EXERCISE.

4.1 NOTICE. This Option may be exercised by the Optionee in whole or in part from time to time, subject to the conditions contained in the Plan and in this Agreement, by delivery, in person, by facsimile or electronic transmission or through the mail, to the Company at its principal executive office in Lincolnshire, Illinois (Attention: Chief Financial Officer), of a written notice of exercise. Such notice must be in a form satisfactory to the Committee, must identify the Option, must specify the number of Option Shares with respect to which the Option is being exercised, and must be signed by the person or persons so exercising the Option. Such

notice must be accompanied by payment in full of the total purchase price of the Option Shares purchased. In the event that the Option is being exercised, as provided by the Plan and Section 3.2 above, by any person or persons other than the Optionee, the notice must be accompanied by appropriate proof of right of such person or persons to exercise the Option. As soon as practicable after the effective exercise of the Option, the Optionee will be recorded on the stock transfer books of the Company as the owner of the Option Shares purchased, and the Company will deliver to the Optionee one or more duly issued stock certificates evidencing such ownership.

4.2 PAYMENT. At the time of exercise of this Option, the Optionee must pay the total purchase price of the Option Shares to be purchased entirely in cash (including a check, bank draft or money order, payable to the order of the Company); provided, however, that the Committee, in its sole discretion, may allow such payment to be made, in whole or in part, by tender of a promissory note (on terms acceptable to the Committee in its sole discretion) or a Broker Exercise Notice or Previously Acquired Shares (as such terms are defined in the Plan), or by a combination of such methods. In the event the Optionee is permitted to pay the total purchase price of this Option in whole or in part with Previously Acquired Shares, the value of such shares will be equal to their Fair Market Value on the date of exercise of this Option.

## 5. RIGHTS OF OPTIONEE; TRANSFERABILITY.

5.1 EMPLOYMENT. Nothing in this Agreement will interfere with or limit in any way the right of the Company or any Subsidiary to terminate the employment of the Optionee at any time, nor confer upon the Optionee any right to continue in the employ of the Company or any Subsidiary at any particular position or rate of pay or for any particular period of time.

5.2 RIGHTS AS A SHAREHOLDER. The Optionee will have no rights as a shareholder unless and until all conditions to the effective exercise of this Option (including, without limitation, the conditions set forth in Sections 4 and 6 of this Agreement) have been satisfied and the Optionee has become the holder of record of such shares. No adjustment will be made for dividends or distributions with respect to this Option as to which there is a record date preceding the date the Optionee becomes the holder of record of such shares, except as may otherwise be provided in the Plan or determined by the Committee in its sole discretion.

5.3 RESTRICTIONS ON TRANSFER. Except pursuant to testamentary will or the laws of descent and distribution or as otherwise expressly permitted by the Plan, no right or interest of the Optionee in this Option prior to exercise may be assigned or transferred, or subjected to any lien, during the lifetime of the Optionee, either voluntarily or involuntarily, directly or indirectly, by operation of law or otherwise. The Optionee will, however, be entitled to designate a beneficiary to receive this Option upon such Optionee's death, and, in the event of the Optionee's death, exercise of this Option (to the extent permitted pursuant to Section 3.2(a) of this Agreement) may be made by the Optionee's legal representatives, heirs and legatees.

5.4 BREACH OF CONFIDENTIALITY OR NON-COMPETE AGREEMENTS. Notwithstanding anything in this Agreement or the Plan to the contrary, in the event that the Optionee materially breaches the terms of any confidentiality or non-compete agreement entered into with the Company or any Subsidiary, whether such breach occurs before or after termination of the Optionee's employment with the Company or any Subsidiary, the Committee in its sole

discretion may immediately terminate all rights of the Optionee under the Plan and this Agreement without notice of any kind.

6. SECURITIES LAW AND OTHER RESTRICTIONS.

Notwithstanding any other provision of the Plan or this Agreement, the Company will not be required to issue, and the Optionee may not sell, assign, transfer or otherwise dispose of, any Option Shares, unless (a) there is in effect with respect to the Option Shares a registration statement under the Securities Act of 1933, as amended, and any applicable state or foreign securities laws or an exemption from such registration, and (b) there has been obtained any other consent, approval or permit from any other regulatory body which the Committee, in its sole discretion, deems necessary or advisable. The Company may condition such issuance, sale or transfer upon the receipt of any representations or agreements from the parties involved, and the placement of any legends on certificates representing Option Shares, as may be deemed necessary or advisable by the Company in order to comply with such securities law or other restrictions.

7. WITHHOLDING TAXES.

The Company is entitled to (a) withhold and deduct from future wages of the Optionee (or from other amounts that may be due and owing to the Optionee from the Company), or make other arrangements for the collection of, all legally required amounts necessary to satisfy any federal, state or local withholding and employment-related tax requirements attributable to the Option, including, without limitation, the grant or exercise of this Option or a disqualifying disposition of any Option Shares, or (b) require the Optionee promptly to remit the amount of such withholding to the Company before acting on the Optionee's notice of exercise of this Option. In the event that the Company is unable to withhold such amounts, for whatever reason, the Optionee agrees to pay to the Company an amount equal to the amount the Company would otherwise be required to withhold under federal, state or local law.

8. ADJUSTMENTS.

In the event of any reorganization, merger, consolidation, recapitalization, liquidation, reclassification, stock dividend, stock split, combination of shares, rights offering, divestiture or extraordinary dividend (including a spin-off), or any other similar change in the corporate structure or shares of the Company, the Committee (or, if the Company is not the surviving corporation in any such transaction, the board of directors of the surviving corporation), in order to prevent dilution or enlargement of the rights of the Optionee, will make appropriate adjustment (which determination will be conclusive) as to the number and kind of securities or other property (including cash) subject to, and the exercise price of, this Option.

9. SUBJECT TO PLAN.

The Option and the Option Shares granted and issued pursuant to this Agreement have been granted and issued under, and are subject to the terms of, the Plan. The terms of the Plan are incorporated by reference in this Agreement in their entirety, and the Optionee, by execution of this Agreement, acknowledges having received a copy of the Plan. The provisions of this Agreement will be interpreted as to be consistent with the Plan, and any ambiguities in this

Agreement will be interpreted by reference to the Plan. In the event that any provision of this Agreement is inconsistent with the terms of the Plan, the terms of the Plan will prevail.

10. INCENTIVE STOCK OPTION LIMITATIONS.

10.1 LIMITATION ON AMOUNT. To the extent that the aggregate Fair Market Value (determined as of the date of grant) of the shares of Subordinate Voting Stock with respect to which incentive stock options (within the meaning of Section 422 of the Code) are exercisable for the first time by the Optionee during any calendar year (under the Plan and any other incentive stock option plans of the Company or any subsidiary or parent corporation of the Company (within the meaning of the Code)) exceeds \$100,000 (or such other amount as may be prescribed by the Code from time to time), such excess incentive stock options will be treated as non-statutory stock options in the manner set forth in the Plan.

10.2 LIMITATION ON EXERCISABILITY; DISPOSITION OF OPTION SHARES . Any incentive stock option that remains unexercised more than one year following termination of employment by reason of Disability or more than three months following termination for any reason other than death or Disability will thereafter be deemed to be a non-statutory stock option. In addition, in the event that a disposition (as defined in Section 424(c) of the Code) of shares of Subordinate Voting Stock acquired pursuant to the exercise of an incentive stock option occurs prior to the expiration of two years after its date of grant or the expiration of one year after its date of exercise (a "disqualifying disposition"), such incentive stock option will, to the extent of such disqualifying disposition, be treated in a manner similar to a non-statutory stock option.

10.3 NO REPRESENTATION OR WARRANTY. Section 422 of the Code and the rules and regulations thereunder are complex, and neither the Plan nor this Agreement purports to summarize or otherwise set forth all of the conditions that need to be satisfied in order for this Option to qualify as an incentive stock option. In addition, this Option may contain terms and conditions that allow for exercise of this Option beyond the periods permitted by Section 422 of the Code, including, without limitation, the periods described in Section 10.2 of this Agreement. Accordingly, the Company makes no representation or warranty regarding whether the exercise of this Option will qualify as the exercise of an incentive stock option, and the Company recommends that the Optionee consult with the Optionee's own advisors before making any determination regarding the exercise of this Option or the sale of the Option Shares.

11. MISCELLANEOUS.

11.1 BINDING EFFECT. This Agreement will be binding upon the heirs, executors, administrators and successors of the parties to this Agreement.

11.2 GOVERNING LAW. This Agreement and all rights and obligations under this Agreement will be construed in accordance with the Plan and governed by the laws of the State of Wyoming, without regard to conflicts of laws provisions. Any legal proceeding related to this Agreement will be brought in an appropriate Illinois court, and the parties to this Agreement consent to the exclusive jurisdiction of the court for this purpose.

11.3 ENTIRE AGREEMENT. This Agreement and the Plan set forth the entire agreement and understanding of the parties to this Agreement with respect to the grant and exercise of this

Option and the administration of the Plan and supersede all prior agreements, arrangements, plans and understandings relating to the grant and exercise of this Option and the administration of the Plan.

11.4 AMENDMENT AND WAIVER. Other than as provided in the Plan, this Agreement may be amended, waived, modified or canceled only by a written instrument executed by the parties to this Agreement or, in the case of a waiver, by the party waiving compliance.

The parties to this Agreement have executed this Agreement effective the day and year first above written.

BEN-ABRAHAM TECHNOLOGIES INC.

By /s/ Phillip B. Donenberg  
-----

Its CFO  
-----

By execution of this Agreement, the Optionee acknowledges having received a copy of the Plan.

OPTIONEE

/s/ Stephen M. Simes  
-----  
(Signature)

1173 RFD  
-----  
(Name and Address)

LONG GROVE, IL 60047  
-----

INCENTIVE STOCK OPTION AGREEMENT

THIS AGREEMENT is entered into and effective as of this 30TH day of MARCH, 1999 (the "Date of Grant"), by and between Ben-Abraham Technologies Inc., a Wyoming corporation (the "Company"), and STEPHEN M. SIMES (the "Optionee").

A. The Company has adopted the Ben-Abraham Technologies Inc. 1998 Stock Option Plan (the "Plan") authorizing the Board of Directors of the Company, or a committee as provided for in the Plan (the Board or such a committee to be referred to as the "Committee"), to grant incentive stock options to employees of the Company and its Subsidiaries (as defined in the Plan).

B. The Company desires to give the Optionee an inducement to acquire a proprietary interest in the Company and an added incentive to advance the interests of the Company by granting to the Optionee an option to purchase shares of subordinate voting stock of the Company pursuant to the Plan.

Accordingly, the parties agree as follows:

1. GRANT OF OPTION.

The Company hereby grants to the Optionee the right, privilege, and option (the "Option") to purchase 1,856,250 shares (the "Option Shares") of the Company's subordinate voting stock, no par value (the "Subordinate Voting Stock"), according to the terms and subject to the conditions hereinafter set forth and as set forth in the Plan. Subject to Section 10 of this Agreement, the Option is intended to be an "incentive stock option," as that term is used in Section 422 of the Internal Revenue Code of 1986, as amended (the "Code").

2. OPTION EXERCISE PRICE.

The per share price to be paid by Optionee in the event of an exercise of the Option will be \$0.23 (US\$).

3. DURATION OF OPTION AND TIME OF EXERCISE.

3.1 INITIAL PERIOD OF EXERCISABILITY. The Option will become exercisable with respect to the Option Shares pursuant to the following table which sets forth the initial dates of exercisability of each installment and the number of Option Shares as to which this Option will become exercisable on such dates:

Initial Date of Exercisability -----	Number of Option Shares Available for Exercise -----
3/30/99	272,059
4/21/99 QUARTERLY THROUGH 1/21/01	51,011
6/30/99 QUARTERLY THROUGH 3/30/01	98,009

The foregoing rights to exercise this Option will be cumulative with respect to the Option Shares becoming exercisable on each such date, but in no event will this Option be exercisable after, and this Option will become void and expire as to all unexercised Option Shares at, 5:00 p.m. (Lincolnshire, Illinois time) on MARCH 29, 2004 (the "Time of Termination").

### 3.2 TERMINATION OF EMPLOYMENT.

#### (a) TERMINATION DUE TO DEATH, DISABILITY OR RETIREMENT.

(i) In the event the Optionee's employment with the Company and all Subsidiaries is terminated by reason of death or Disability, this Option will remain exercisable, to the extent exercisable as of the date of such termination, for a period of six months after such termination (but in no event after the Time of Termination).

(ii) In the event the Optionee's employment with the Company and all Subsidiaries is terminated by reason of Retirement, this Option will remain exercisable, to the extent exercisable as of the date of such termination, for a period of three months after such termination (but in no event after the Time of Termination).

(b) TERMINATION FOR REASONS OTHER THAN DEATH, DISABILITY OR RETIREMENT. In the event that the Optionee's employment with the Company and all Subsidiaries is terminated for any reason other than death, Disability or Retirement, or the Optionee is in the employ of a Subsidiary and the Subsidiary ceases to be a Subsidiary of the Company (unless the Optionee continues in the employ of the Company or another Subsidiary), all rights of the Optionee under the Plan and this Agreement will immediately terminate without notice of any kind, and this Option will no longer be exercisable; provided, however, that if such termination is due to any reason other than termination by the Company or any Subsidiary for "cause" (as defined in the Plan), this Option will remain exercisable to the extent exercisable as of such termination for a period of three months after such termination (but in no event after the Time of Termination).

3.3 CHANGE IN CONTROL. If a Change in Control (as defined in the Plan) of the Company occurs, this Option will become immediately exercisable in full and will remain exercisable until the Time of Termination, regardless of whether the Optionee remains in the employ of the Company or any Subsidiary.

### 4. MANNER OF OPTION EXERCISE.

4.1 NOTICE. This Option may be exercised by the Optionee in whole or in part from time to time, subject to the conditions contained in the Plan and in this Agreement, by delivery, in person, by facsimile or electronic transmission or through the mail, to the Company at its principal executive office in Lincolnshire, Illinois (Attention: Chief Financial Officer), of a written notice of exercise. Such notice must be in a form satisfactory to the Committee, must identify the Option, must specify the number of Option Shares with respect to which the Option is being exercised, and must be signed by the person or persons so exercising the Option. Such

notice must be accompanied by payment in full of the total purchase price of the Option Shares purchased. In the event that the Option is being exercised, as provided by the Plan and Section 3.2 above, by any person or persons other than the Optionee, the notice must be accompanied by appropriate proof of right of such person or persons to exercise the Option. As soon as practicable after the effective exercise of the Option, the Optionee will be recorded on the stock transfer books of the Company as the owner of the Option Shares purchased, and the Company will deliver to the Optionee one or more duly issued stock certificates evidencing such ownership.

4.2 PAYMENT. At the time of exercise of this Option, the Optionee must pay the total purchase price of the Option Shares to be purchased entirely in cash (including a check, bank draft or money order, payable to the order of the Company); provided, however, that the Committee, in its sole discretion, may allow such payment to be made, in whole or in part, by tender of a promissory note (on terms acceptable to the Committee in its sole discretion) or a Broker Exercise Notice or Previously Acquired Shares (as such terms are defined in the Plan), or by a combination of such methods. In the event the Optionee is permitted to pay the total purchase price of this Option in whole or in part with Previously Acquired Shares, the value of such shares will be equal to their Fair Market Value on the date of exercise of this Option.

## 5. RIGHTS OF OPTIONEE; TRANSFERABILITY.

5.1 EMPLOYMENT. Nothing in this Agreement will interfere with or limit in any way the right of the Company or any Subsidiary to terminate the employment of the Optionee at any time, nor confer upon the Optionee any right to continue in the employ of the Company or any Subsidiary at any particular position or rate of pay or for any particular period of time.

5.2 RIGHTS AS A SHAREHOLDER. The Optionee will have no rights as a shareholder unless and until all conditions to the effective exercise of this Option (including, without limitation, the conditions set forth in Sections 4 and 6 of this Agreement) have been satisfied and the Optionee has become the holder of record of such shares. No adjustment will be made for dividends or distributions with respect to this Option as to which there is a record date preceding the date the Optionee becomes the holder of record of such shares, except as may otherwise be provided in the Plan or determined by the Committee in its sole discretion.

5.3 RESTRICTIONS ON TRANSFER. Except pursuant to testamentary will or the laws of descent and distribution or as otherwise expressly permitted by the Plan, no right or interest of the Optionee in this Option prior to exercise may be assigned or transferred, or subjected to any lien, during the lifetime of the Optionee, either voluntarily or involuntarily, directly or indirectly, by operation of law or otherwise. The Optionee will, however, be entitled to designate a beneficiary to receive this Option upon such Optionee's death, and, in the event of the Optionee's death, exercise of this Option (to the extent permitted pursuant to Section 3.2(a) of this Agreement) may be made by the Optionee's legal representatives, heirs and legatees.

5.4 BREACH OF CONFIDENTIALITY OR NON-COMPETE AGREEMENTS. Notwithstanding anything in this Agreement or the Plan to the contrary, in the event that the Optionee materially breaches the terms of any confidentiality or non-compete agreement entered into with the Company or any Subsidiary, whether such breach occurs before or after termination of the Optionee's employment with the Company or any Subsidiary, the Committee in its sole

discretion may immediately terminate all rights of the Optionee under the Plan and this Agreement without notice of any kind.

6. SECURITIES LAW AND OTHER RESTRICTIONS.

Notwithstanding any other provision of the Plan or this Agreement, the Company will not be required to issue, and the Optionee may not sell, assign, transfer or otherwise dispose of, any Option Shares, unless (a) there is in effect with respect to the Option Shares a registration statement under the Securities Act of 1933, as amended, and any applicable state or foreign securities laws or an exemption from such registration, and (b) there has been obtained any other consent, approval or permit from any other regulatory body which the Committee, in its sole discretion, deems necessary or advisable. The Company may condition such issuance, sale or transfer upon the receipt of any representations or agreements from the parties involved, and the placement of any legends on certificates representing Option Shares, as may be deemed necessary or advisable by the Company in order to comply with such securities law or other restrictions.

7. WITHHOLDING TAXES.

The Company is entitled to (a) withhold and deduct from future wages of the Optionee (or from other amounts that may be due and owing to the Optionee from the Company), or make other arrangements for the collection of, all legally required amounts necessary to satisfy any federal, state or local withholding and employment-related tax requirements attributable to the Option, including, without limitation, the grant or exercise of this Option or a disqualifying disposition of any Option Shares, or (b) require the Optionee promptly to remit the amount of such withholding to the Company before acting on the Optionee's notice of exercise of this Option. In the event that the Company is unable to withhold such amounts, for whatever reason, the Optionee agrees to pay to the Company an amount equal to the amount the Company would otherwise be required to withhold under federal, state or local law.

8. ADJUSTMENTS.

In the event of any reorganization, merger, consolidation, recapitalization, liquidation, reclassification, stock dividend, stock split, combination of shares, rights offering, divestiture or extraordinary dividend (including a spin-off), or any other similar change in the corporate structure or shares of the Company, the Committee (or, if the Company is not the surviving corporation in any such transaction, the board of directors of the surviving corporation), in order to prevent dilution or enlargement of the rights of the Optionee, will make appropriate adjustment (which determination will be conclusive) as to the number and kind of securities or other property (including cash) subject to, and the exercise price of, this Option.

9. SUBJECT TO PLAN.

The Option and the Option Shares granted and issued pursuant to this Agreement have been granted and issued under, and are subject to the terms of, the Plan. The terms of the Plan are incorporated by reference in this Agreement in their entirety, and the Optionee, by execution of this Agreement, acknowledges having received a copy of the Plan. The provisions of this Agreement will be interpreted as to be consistent with the Plan, and any ambiguities in this

Agreement will be interpreted by reference to the Plan. In the event that any provision of this Agreement is inconsistent with the terms of the Plan, the terms of the Plan will prevail.

10. INCENTIVE STOCK OPTION LIMITATIONS.

10.1 LIMITATION ON AMOUNT. To the extent that the aggregate Fair Market Value (determined as of the date of grant) of the shares of Subordinate Voting Stock with respect to which incentive stock options (within the meaning of Section 422 of the Code) are exercisable for the first time by the Optionee during any calendar year (under the Plan and any other incentive stock option plans of the Company or any subsidiary or parent corporation of the Company (within the meaning of the Code)) exceeds \$100,000 (or such other amount as may be prescribed by the Code from time to time), such excess incentive stock options will be treated as non-statutory stock options in the manner set forth in the Plan.

10.2 LIMITATION ON EXERCISABILITY; DISPOSITION OF OPTION SHARES . Any incentive stock option that remains unexercised more than one year following termination of employment by reason of Disability or more than three months following termination for any reason other than death or Disability will thereafter be deemed to be a non-statutory stock option. In addition, in the event that a disposition (as defined in Section 424(c) of the Code) of shares of Subordinate Voting Stock acquired pursuant to the exercise of an incentive stock option occurs prior to the expiration of two years after its date of grant or the expiration of one year after its date of exercise (a "disqualifying disposition"), such incentive stock option will, to the extent of such disqualifying disposition, be treated in a manner similar to a non-statutory stock option.

10.3 NO REPRESENTATION OR WARRANTY. Section 422 of the Code and the rules and regulations thereunder are complex, and neither the Plan nor this Agreement purports to summarize or otherwise set forth all of the conditions that need to be satisfied in order for this Option to qualify as an incentive stock option. In addition, this Option may contain terms and conditions that allow for exercise of this Option beyond the periods permitted by Section 422 of the Code, including, without limitation, the periods described in Section 10.2 of this Agreement. Accordingly, the Company makes no representation or warranty regarding whether the exercise of this Option will qualify as the exercise of an incentive stock option, and the Company recommends that the Optionee consult with the Optionee's own advisors before making any determination regarding the exercise of this Option or the sale of the Option Shares.

11. MISCELLANEOUS.

11.1 BINDING EFFECT. This Agreement will be binding upon the heirs, executors, administrators and successors of the parties to this Agreement.

11.2 GOVERNING LAW. This Agreement and all rights and obligations under this Agreement will be construed in accordance with the Plan and governed by the laws of the State of Wyoming, without regard to conflicts of laws provisions. Any legal proceeding related to this Agreement will be brought in an appropriate Illinois court, and the parties to this Agreement consent to the exclusive jurisdiction of the court for this purpose.

11.3 ENTIRE AGREEMENT. This Agreement and the Plan set forth the entire agreement and understanding of the parties to this Agreement with respect to the grant and exercise of this

Option and the administration of the Plan and supersede all prior agreements, arrangements, plans and understandings relating to the grant and exercise of this Option and the administration of the Plan.

11.4 AMENDMENT AND WAIVER. Other than as provided in the Plan, this Agreement may be amended, waived, modified or canceled only by a written instrument executed by the parties to this Agreement or, in the case of a waiver, by the party waiving compliance.

The parties to this Agreement have executed this Agreement effective the day and year first above written.

BEN-ABRAHAM TECHNOLOGIES INC.

By /s/ Phillip B. Donenberg  
-----

Its CFO  
-----

By execution of this Agreement, the Optionee acknowledges having received a copy of the Plan.

OPTIONEE

/s/ Stephen M. Simes  
-----  
(Signature)

1173 RFD  
-----  
(Name and Address)

Long Grove, IL 60047  
-----

FORM C

ESCROW AGREEMENT

(PERFORMANCE ESCROW AGREEMENT)

THIS AGREEMENT MADE IN TRIPLICATE THIS 5TH DAY OF DECEMBER, 1996.

AMONG:

BEN-ABRAHAM TECHNOLOGIES INC.  
(HEREIN CALLED THE "ISSUER")

OF THE FIRST PART

- AND -

MONTREAL TRUST COMPANY OF CANADA  
(HEREIN CALLED THE "ESCROW AGENT")

OF THE SECOND PART

- AND -

AVI BEN-ABRAHAM, M.D., AVINOAM BEN-ABRAHAM, CHAIM BEN-  
ABRAHAM, MARGALIT LIPSKY, ANGELA HO, LOUIS W. SULLIVAN,  
M.D., MARBLEGATE HOLDINGS LIMITED, WAGNER-BARTAK HOLDINGS  
INC., ISLAND INVESTMENTS (SECURITIES) LTD., BRIAN MCLEAN,  
M.D., JOSEPH ARSENAULT, HENRY KOREN, IAN CAMPBELL, CATHLEEN  
URQUHART  
(HEREIN CALLED THE "SECURITY HOLDERS")

OF THE THIRD PART

WHEREAS the Security Holders are all the holders of Class A Special Shares  
and Class C Special Shares of BA Tech;

AND WHEREAS BA Tech has entered into an arrangement agreement with  
Structured Biologicals Inc. ("SBI") whereby BA Tech and SBI will amalgamate to  
continue as called "Ben-

Abraham Technologies Inc." (the "Issuer") and BA Tech is entering into this Agreement in order that the Issuer will be bound by this Agreement;

AND WHEREAS as a result of the amalgamation, the Security Holders will receive, in exchange for their shares of BA Tech, that number and class of shares of Amalco, set out in Schedule "A" attached to and forming part of this Agreement;

AND WHEREAS in order to comply with the requirements of The Alberta Stock Exchange (the "Exchange"), the Security Holders are desirous of depositing in escrow certain securities in the Issuer owned or to be received by them;

AND WHEREAS the Escrow Agent has agreed to undertake and perform its duties according to the terms and conditions hereof:

NOW THEREFORE this Agreement witnesses that, in consideration of the sum of one dollar paid by the parties to each other, receipt of this sum being acknowledged by each of the parties, the Security Holders jointly and severally covenant and agree with BA Tech and with the Escrow Agent, and BA Tech and the Escrow Agent covenant and agree with the other and with the Security Holders jointly and severally as follows:

1. Where used in this Agreement, or in any amendment or supplement hereto, unless the context otherwise requires, the following words and phrases shall have the following ascribed to them below:
  - (a) "R&D EXPENDITURES" means expenditures made for the purpose of research and/or development activities consistent with the activities defined in the

Information Booklet of SBI dated October 23, 1996, whether made by the Issuer, its subsidiaries, affiliates or joint venture partners, including, without limitation, (i) direct research expenditures or expenditures on development of new technologies and products, (ii) the purchase of assets related to and to be used in these activities, (iii) expenditures related to the perfection and/or commercialization of these technologies, (iv) expenditures related to the seeking, obtaining or maintaining of any level of governmental or industry approvals, and (v) the direct or indirect costs of the acquisition of new technologies, or shares of corporations with developable technologies for further development by the Issuer;

- (b) "RELATED PARTY" means promoters, officers, directors, other insiders of the Issuer and any associates or affiliates of the foregoing.
2. Each of the Security Holders hereby places and deposits in escrow with the Escrow Agent those of his securities in the Issuer which are represented by the certificates described in Schedule "A" and the Escrow Agent hereby acknowledges receipt of those certificates. The Security Holders agree to deposit in escrow any further certificates representing securities in the Issuer which he may receive as a stock dividend on securities hereby escrowed, and to deliver to the Escrow Agent immediately on receipt thereof the certificates for any such further securities and any replacement certificates which may at any time be issued for any escrowed securities.
  3. The Parties hereby agree that, subject to the provisions of paragraph 6 herein, the securities and the beneficial ownership of or any interest in them and the certificate

representing them (including any replacement securities or certificates) shall not be sold, assigned, hypothecated, alienated, released from escrow, transferred within escrow, or otherwise in any manner dealt with, without the written consent of the Exchange given to the Escrow Agent or except as may be required by reason of the death or bankruptcy of any Security Holder, in which cases the Escrow Agent shall hold the said certificates subject to this Agreement, for whatever person or company shall be legally entitled to become the registered owner thereof.

4. The Security Holders direct the Escrow Agent to retain their respective securities and the certificates (including any replacement securities or certificates) representing them and not to do or cause anything to be done to release them from escrow or to allow any transfer, hypothecation or alienation thereof, without the written consent of the Exchange. The Escrow Agent accepts the responsibilities placed on it by this Agreement and agrees to perform them in accordance with the terms of this Agreement and the written consents, orders or directions of the Exchange.
5. Any Security Holder applying to the Exchange for a consent for a transfer within escrow shall, before applying, give reasonable notice in writing of his intention to the Issuer and the Escrow Agent.
6.
  - (a) Subject to subparagraph (b) the Exchange will consent to the release from escrow of one share of the Issuer for each U.S. \$0.50 of R&D Expenditures that the Issuer has incurred since the date of the amalgamation, provided that if the Subordinate

Voting Shares are listed on a recognized stock exchange or on NASDAQ and have traded at a price of more than U.S. \$3.00 the Exchange will consent to the release from escrow of one share of the Issuer for each U.S. \$0.25 of R&D Expenditures that the Issuer has incurred since the date of the amalgamation.

- (b) No shares shall be released from escrow pursuant to clause (a) unless either (i) the holder has first exercised his right to acquire Subordinate Voting Shares or Class B Shares by paying to the Issuer U.S. \$0.25 per share or (ii) the Security Holder first undertakes not to sell, assign or transfer the shares to be released from escrow without first exercising such right (or causing the transferee to do so immediately upon the transfer), unless the Exchange otherwise consents.
- (c) The Exchange will consent to the release from escrow of 500,000 shares upon the completion of the Subscription Agreement as defined in the Information Booklet of SBI dated October 23, 1996.
- (d) Releases under subparagraphs (a) and (c) shall be cumulative.
- (e) Subject to the approval of the Exchange, nothing contained herein shall prevent the Security Holders from depositing their escrowed securities into a take-over bid, as such term is defined in Part XX of the Securities Act (Ontario), as amended. The Security Holders or any one of them may direct the Escrow Agent to tender any or all of their respective escrowed securities to the offer under the take-over bid by delivery of signed acceptances to the take-over bid to the Escrow Agent in respect of any or all of the Security Holders' escrowed securities. The

Escrow Agent shall thereupon tender certificates for the specified number of Security Holders' escrowed securities to the offeror under the bid together with such signed acceptances to such take-over bid. The tender of Security Holders' escrowed securities by the Escrow Agent shall be subject to the escrow herein and, if such Escrowed Securities or any part thereof are accepted by the offeror, the Escrow Agent shall thereafter hold such shares for the offeror in accordance with this Agreement.

- (f) Any release from escrow under paragraph 6(a) shall be made pursuant to a written application on behalf of the Issuer or the Security Holders, which application shall be accompanied by evidence of the R&D Expenditures incurred in a form satisfactory to the Exchange or such other evidence of entitlement to release as is appropriate in the circumstances. Application for release may only be made twice per year.
- (g) All shares released from escrow shall, unless otherwise directed by the Exchange, be distributed as Avi Ben-Abraham shall determine, until he shall no longer have any shares held in escrow, and thereafter PRO RATA.
- (h) Notwithstanding the other provisions of this paragraph 6, the minimum number of shares to be released from escrow in any year shall be one fifth of the original number of shares held in escrow.
- (i) Notwithstanding any other provision hereof, if there is a major breakthrough in the development or commercialization of the technology of the Issuer, such that

the business or prospects of the Issuer are significantly improved, the Security Holders may apply to the Exchange for the release of additional shares from escrow.

- (j) For the purposes of determining whether the Exchange has granted its consent or approval, the Escrow Agent shall be entitled to rely exclusively on written notice from the Exchange.
- 7. A release from escrow of all or part of the escrowed securities shall terminate this Agreement only in respect to those securities so released. For greater certainty this paragraph does not apply to securities transferred within escrow.
- 8. The Security Holders shall, if a dividend is declared while the Escrowed Shares or any of them continue to be held in escrow under this Agreement, renounce and release any right to receive payment of the dividend on the shares then held in escrow.
- 9. If the Issuer is wound up and any securities remain in escrow under this Agreement at the time when a distribution of assets to holders of securities is made by the liquidator, the Security Holders shall assign their right to receive that part of the distribution which is attributable to the escrowed securities to the Escrow Agent, for the benefit of, and in trust for the persons and companies who are then holders of free securities in the Issuer rateably in proportion to their holdings.

10. If the Subordinate Voting Shares cease to be listed on the Exchange (other than as a result of suspension or involuntary delisting), this Agreement shall terminate and any shares then remaining in escrow shall be automatically released from escrow.
11. Notwithstanding paragraphs 6 and 10, any shares remaining in escrow on the fifth anniversary of the date of this Agreement, unless otherwise exempted in writing by the Exchange, shall be cancelled by the Escrow Agent within six months following the said fifth anniversary.
12. All voting rights attached to the escrowed securities shall at all times be exercised by the respective registered owners thereof.
13. The Issuer and each Security Holder hereby agree, jointly and severally, to indemnify and hold harmless the Escrow Agent from and against any liability, loss, claim, action, cost and expense, including legal fees and disbursements (collectively, the "Liabilities"), which may be asserted against the Escrow Agent arising from or out of this Agreement; provided that the Issuer and each Security Holder shall not be required to indemnify the Escrow Agent in the event that such Liabilities are a result of the gross negligence or willful misconduct of the Escrow Agent. This provision shall survive the resignation or removal of the Escrow Agent or the termination of this Agreement.
14. The Issuer hereby acknowledges the terms and conditions of this Agreement and agrees to take all reasonable steps to facilitate its performance. The Issuer agrees to pay the Escrow Agent's proper charges for its services as Escrow Agent of this escrow.

15. If the Escrow Agent should wish to resign, it shall give at least three months' notice to the Issuer which may, with the written consent of the Exchange, by writing appoint another Escrow Agent in its place and such appointment shall be binding on the Security Holders, and the new Escrow Agent shall assume and be bound by the obligations of the Escrow Agent hereunder.
16. The covenants of the Security Holders with the Issuer in this Agreement are made with the Issuer both in its own right and as Escrow Agent for the holders from time to time of free securities in the Issuer, and may be enforced not only by the Issuer but also by any holder of free securities.
17. Any notice to be given pursuant to the provisions hereof shall be deemed to have been validly given if reduced to writing and either mailed by prepaid ordinary post or delivered to the party to whom the same is to be given at the following applicable address:

(a) to the Issuer:

Ben-Abraham Technologies Inc.  
372 Bay Street  
Suite 302  
Toronto, Ontario  
M5H 2W9  
Attention: President  
Facsimile No. (416) 364-6725

(b) to the Escrow Agent:

Montreal Trust Company of Canada  
151 Front Street West  
Suite 605  
Toronto, Ontario  
M5J 2N1

Attention: Manager, Corporate Trust Services  
Facsimile No. (416) 981-9777

(c) to a Security Holder at the address shown for such Security Holder on Appendix "A"

or to such other address as the parties to whom such notice or communication is to be given shall have last designated to the party giving the same in the manner specified in this paragraph 17.

18. The Escrow Agent shall be fully protected in acting and relying reasonably upon any written notice, direction, instruction, order, certificate, confirmation, request, waiver, consent, receipt, statutory declaration or other paper or document (collectively referred to as "Documents") furnished to it and signed by any person required to or entitled to execute and deliver to the Escrow Agent any such Documents in connection with this Agreement, not only as to its due execution and the validity and effectiveness of its provisions, but also as to the truth and accuracy of any information therein contained, which it in good faith believes to be genuine. The Escrow Agent will have no responsibility for the genuineness or validity of any security, document or other thing deposited with it.
19. The Escrow Agent shall have no duties or responsibilities except as expressly provided in this Agreement and shall have no liability or responsibility arising under any other Agreement, including any Agreement referred to in this Agreement, to which the Escrow Agent is not a party.

20. The Escrow Agent may retain legal counsel and advisors as may be reasonably required for the purpose of discharging its duties or determining its rights under this Agreement, and may rely and act upon the advice of such counsel or advisor. The Issuer shall pay or reimburse the Escrow Agent for any reasonable fees, expenses and disbursements of such counsel or advisors.
21. This Agreement shall be governed by the laws of Ontario and the laws of Canada applicable therein.
22. This Agreement may be executed in several parts of the same form and the parts as so executed shall together constitute one original agreement, and the parts, if more than one, shall be read together and construed as if all the signing parties hereto had executed one copy of this Agreement.
23. Whenever the singular or masculine is used, the same shall be construed to include the plural or feminine or neuter where the context so requires.
24. This Agreement shall inure to the benefit of and be binding on the parties to this Agreement and each of their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF the Issuer and Escrow Agent have caused their respective corporate seals to be hereto affixed and the Security Holders have hereto set their respective hands and seals.

BEN-ABRAHAM TECHNOLOGIES INC.

Per: /s/ Avi Ben-Abraham, M.D.

-----  
c/s

Per: /s/

MONTREAL TRUST COMPANY OF CANADA

Per: /s/

-----  
c/s

Per: /s/ M. Brady

/s/ -----  
Witness to the signature of /s/ Avi Ben-Abraham, M.D.  
-----  
AVI-BEN-ABRAHAM, M.D.

/s/ Paul G. Findlay -----  
Witness to the signature of /s/ Avi Ben-Abraham, M.D. under Power of Attorney  
-----  
For AVINOAM BEN-ABRAHAM

/s/ Paul G. Findlay -----  
Witness to the signature of /s/ Avi Ben-Abraham, M.D. under Power of Attorney  
-----  
For CHAIM BEN-ABRAHAM

/s/ Paul G. Findlay -----  
Witness to the signature of /s/ Avi Ben-Abraham, M.D. under Power of Attorney  
-----  
For MARGALIT LIPSKY

/s/ Paul G. Findlay -----  
Witness to the signature of /s/ Avi Ben-Abraham, M.D. under Power of Attorney  
-----  
For ANGELA HO

/s/ Debra J. Francis -----  
Witness to the signature of /s/ Louis W. Sullivan, M.D.  
-----  
LOUIS W. SULLIVAN, M.D.

MARBLEGATE HOLDINGS LIMITED

By: /s/ Bryan E.W. Gransden, Sole Director

WAGNER-BARTAK HOLDINGS INC.

/s/ Avi Ben-Abraham, M.D. By: /s/ Claus G.J. Wagner-Bartak, Ph.D.

ISLAND INVESTMENTS (SECURITIES) LTD.

By: /s/ Avi Ben-Abraham under Power of Attorney

/s/ Paul G. Findlay /s/ Brian McLean  
/s/ Avi Ben-Abraham under Power of Attorney

Witness to the signature of For BRYAN MACLAIN, M.D.

/s/ Paul G. Findlay /s/ Avi Ben-Abraham under Power of Attorney

Witness to the signature of For JOSEPH ARSENAULT

/s/ Avi Ben-Abraham /s/ Henry Koren

Witness to the signature of HENRY KOREN

/s/ Avi Ben-Abraham /s/ Ian Campbell

Witness to the signature of IAN CAMPBELL

/s/ Avi Ben-Abraham /s/ Cathleen Urquhart

Witness to the signature of CATHLEEN URQUHART

SCHEDULE "A"

to agreement dated the 5th day of December, 1996 and made among Ben-Abraham Technologies Inc., Montreal Trust Company of Canada and some security holders of Ben-Abraham Technologies Inc. therein called the "Security Holders."

NAME AND ADDRESS	TYPE OF SECURITIES	NUMBER OF SECURITIES ESCROWED	CERTIFICATE NUMBERS OF SECURITIES ESCROWED
Avi Ben-Abraham, M.D.	Class A	17,000,000	CA-5
Avinoam Ben-Abraham	Class A	877,135	CA-6
Chaim Ben-Abraham	Class A	1,000,000	CA-7
Island Investments (Securities) Ltd.(4)	Class A	1,000,000	CA-9, 10, 11, 12, 13
Angela Ho	Class C	1,000,000	CC-12
Louis W. Sullivan, M.D.	Class C	1,000,000	CC-2
Avi Ben-Abraham, M.D.(1)	Class C	800,000	CC-3
Wagner-Bartak Holdings Inc.(2)	Class C	405,715	CC-4
Brian McLean, M.D.	Class C	50,000	CC-6

NAME AND ADDRESS	TYPE OF SECURITIES	NUMBER OF SECURITIES ESCROWED	CERTIFICATE NUMBERS OF SECURITIES ESCROWED
Joseph Arsenault	Class C	50,000	CC-7
Henry Koren	Class C	200,000	CC-8
Ian Campbell	Class C	10,000	CC-9
Cathleen Urquhart	Class C	7,150	CC-10
Avi Ben-Abraham, M.D. (3)	Class C	250,000	CC-11
		----- 23,650,000	

- (1) The beneficial owner is Marblegate Holdings Limited, a corporation controlled by Bryan E.W. Gransden
- (2) The beneficial owner is Dr. Claus G.J. Wagner-Bartak
- (3) The beneficial owner is George Bush
- (4) The beneficial owner is Michael Kadoorie

VOTING RIGHTS LITIGATION AGREEMENT

TO: THE ALBERTA STOCK EXCHANGE

RE: BEN-ABRAHAM TECHNOLOGIES, INC.

The undersigned, being the holder of 17,000,000 Class A Special Shares of Ben-Abraham Technologies Inc., hereby agrees that, so long as the Subordinate Voting Shares of Ben-Abraham Technologies Inc. are listed on the Alberta Stock Exchange, I will exercise the voting rights attaching to my Class A Special Shares or my Class B Special Shares into which such Class A Shares are converted, only to the extent that the holders of the Class A Special Shares and the Class B Special Shares, in the aggregate, shall not have more than four times the number of votes that may be exercised by the holders of all other classes of shares of Ben-Abraham Technologies Inc.

DATED this 28th day of November, 1996.

/s/ Avi Ben-Abraham, M.D.

-----  
Avi Ben-Abraham, M.D.

VOTING AGREEMENT

-----

THIS VOTING AGREEMENT ("AGREEMENT") is made and entered into as of the 6th day of May, 1999, by and among PETER KJAER and HANS MICHAEL JEBSEN (together, the "NOMINATORS") on the one hand and those individuals executing this Agreement (the "INVESTOR SHAREHOLDERS") on the other hand.

WITNESSETH:

WHEREAS, the Investor Shareholders have agreed to purchase securities from Ben-Abraham Technologies, Inc., a Wyoming corporation (the "COMPANY"); and

WHEREAS, as a condition to the purchase of the securities, the Company, the Investor Shareholders and certain other parties agreed to enter into a Shareholders' Agreement dated of even date herewith (the "SHAREHOLDERS' AGREEMENT"); and

WHEREAS, pursuant to Section 2.1(b)(iii) of the Shareholders' Agreement, holders of a majority of the shares held by the Investor Shareholders shall be entitled to nominate three (3) members (the "INVESTOR DIRECTORS") of the Company's Board of Directors; and

WHEREAS, the Investor Shareholders believe that it is in their best interests to appoint the Nominators, on behalf of the Investor Shareholders, to select the Investor Directors to be elected to the Board of Directors of the Company.

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and confessed, the parties hereto hereby agree as follows:

1. APPOINTMENT. Subject to the provisions of Section 2, The Investor Shareholders hereby appoint the Nominators to select the Investor Directors on behalf of the Investor Shareholders, at their sole and absolute discretion.

2. VACANCIES. Upon the death, legal incapacity or removal of or election not to serve by either Nominator, the rights of the Nominators hereunder shall be exercised by the remaining Nominator. In the event of the death, legal incapacity and/or removal or and/or election not to serve by both Nominators, the Investor Shareholders holding a majority of the Shares of all Investor Shareholders may select one or more successors as Nominators. Failure by the Investor Shareholders to select a successor Nominator within sixty (60) calendar days of receiving notice of such death, legal incapacity or Transfer shall be deemed a "TERMINATION EVENT." For the purpose hereof, a Nominator may be removed as a Nominator for any reason upon the vote of Investor Shareholders holding at least 75% of the Shares held by all Investor Shareholders.

3. TERM. This Agreement shall terminate only upon the earlier to occur of termination of Section 2.1(b)(iii) of the Shareholders' Agreement or a Termination Event.

4. SUCCESSORS AND ASSIGNS. The terms and conditions of this Agreement shall inure to the benefit of and be binding upon each Investor Shareholder's respective successors, assigns,

heirs, personal representatives, transferees and all future holders of the capital stock of the Company held by the Investor Shareholders and in no event may any Investor Shareholder transfer his Shares in any manner without such transferee becoming a party to this Agreement.

5. AMENDMENTS. Any amendments to this Agreement shall be in writing and shall be signed by all of the parties hereto.

6. REMEDIES FOR BREACH. The Investor Shareholders acknowledge that the Nominators may not have an adequate remedy at law for the material breach or threatened breach by any party of any one or more of the provisions set forth in this Agreement and agree that, in the event of any such material breach or threatened breach, in addition to the other remedies that may be available to them, any of the Nominators may file a suit in equity, without notice or bond, for specific performance or to enjoin any party from the breach or threatened breach of such terms and conditions. In addition to all other relief, the parties hereto shall be entitled to recover all costs and attorneys' fees which may be incurred by them in enforcing their rights against a party hereto that has breached or threatened to breach this Agreement.

7. PARTIAL INVALIDITY. If any term or provision of this Agreement, or the application thereof to any person or circumstance, shall to any extent be invalid or unenforceable, as finally determined by a court of competent jurisdiction, the remainder of this Agreement or the application of such term or provision to persons or circumstances other than those as to which it is invalid or unenforceable, shall not be affected thereby, and each term and provision of this Agreement shall be valid and enforced to the fullest extent permitted by applicable law.

8. COUNTERPARTS. This Agreement may be executed in counterparts, each of which shall be deemed an original but all of which together shall be deemed to constitute one and the same agreement.

9. WAIVER. The waiver of a breach of any provision of this Agreement by the Company or any Shareholder party to this Agreement or the failure of the Company or any Shareholder party to this Agreement to insist upon the strict performance of any provision hereof shall not constitute a waiver of any subsequent breach or of any subsequent failure to perform.

10. GOVERNING LAW. This Agreement shall be governed by and construed in accordance with the laws of the State of Illinois.

11. DEFINED TERMS. Capitalized terms used and not otherwise defined in this Agreement, shall have the meanings described in the Shareholders' Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

NOMINATORS:

/s/ Peter Kjaer

\_\_\_\_\_  
PETER KJAER

/s/ Hans Michael Jebsen

\_\_\_\_\_  
HANS MICHAEL JEBSEN

INVESTOR SHAREHOLDERS:

/s/ Hans Michael Jebsen

\_\_\_\_\_  
/s/ King Cho Fung

\_\_\_\_\_  
/s/ Stanley Ho

## VOTING AGREEMENT

THIS VOTING AGREEMENT ("AGREEMENT") is made and entered into as of the 6th day of May, 1999, by and among VICTOR MORGENSTERN and FRED HOLUBOW (together, the "NOMINATORS") on the one hand and those individuals executing this Agreement (the "INVESTOR SHAREHOLDERS") on the other hand.

### WITNESSETH:

WHEREAS, the Investor Shareholders have agreed to purchase securities from Ben-Abraham Technologies, Inc., a Wyoming corporation (the "COMPANY"); and

WHEREAS, as a condition to the purchase of the securities, the Company, the Investor Shareholders and certain other parties agreed to enter into a Shareholders' Agreement dated of even date herewith (the "SHAREHOLDERS' AGREEMENT"); and

WHEREAS, pursuant to Section 2.1(b)(ii) of the Shareholders' Agreement, holders of a majority of the shares held by the Investor Shareholders shall be entitled to nominate three (3) members (the "INVESTOR DIRECTORS") of the Company's Board of Directors; and

WHEREAS, the Investor Shareholders believe that it is in their best interests to appoint the Nominators, on behalf of the Investor Shareholders, to select the Investor Directors to be elected to the Board of Directors of the Company.

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and confessed, the parties hereto hereby agree as follows:

1. APPOINTMENT. Subject to the provisions of Section 2, the Investor Shareholders hereby appoint the Nominators to select the Investor Directors on behalf of the Investor Shareholders, at their sole and absolute discretion.

2. VACANCIES. Upon the death, legal incapacity or removal of or election not to serve by either Nominator, the rights of the Nominators hereunder shall be exercised by the remaining Nominator. In the event of the death, legal incapacity and/or removal or and/or election not to serve by both Nominators, the Investor Shareholders holding a majority of the Shares of all Investor Shareholders may select one or more successors as Nominators. Failure by the Investor Shareholders to select a successor Nominator within sixty (60) calendar days of receiving notice of such death, legal incapacity or Transfer shall be deemed a "TERMINATION EVENT." For purposes hereof, a Nominator may be removed as a Nominator for any reason upon the vote of Investor Shareholders holding at least 75% of the Shares held by all Investor Shareholders.

3. TERM. This Agreement shall terminate only upon the earlier to occur of termination of Section 2.1(b)(ii) of the Shareholders' Agreement or a Termination Event.

4. SUCCESSORS AND ASSIGNS. The terms and conditions of this Agreement shall inure to the benefit of and be binding upon each Investor Shareholder's respective successors, assigns, heirs, personal representatives, transferees and all future holders of the capital stock of the Company held by the Investor Shareholders and in no event may any Investor Shareholder transfer his Shares in any manner without such transferee becoming a party to this Agreement.

5. AMENDMENTS. Any amendments to this Agreement shall be in writing and shall be signed by all of the parties hereto.

6. REMEDIES FOR BREACH. The Investor Shareholders acknowledge that the Nominators may not have an adequate remedy at law for the material breach or threatened breach by any party of any one or more of the provisions set forth in this Agreement and agree that, in the event of any such material breach or threatened breach, in addition to the other remedies that may be available to them, any of the Nominators may file a suit in equity, without notice or bond, for specific performance or to enjoin any party from the breach or threatened breach of such terms and conditions. In addition to all other relief, the parties hereto shall be entitled to recover all costs and attorneys' fees which may be incurred by them in enforcing their rights against a party hereto that has breached or threatened to breach this Agreement.

7. PARTIAL INVALIDITY. If any term or provision of this Agreement, or the application thereof to any person or circumstance, shall to any extent be invalid or unenforceable, as finally determined by a court of competent jurisdiction, the remainder of this Agreement or the application of such term or provision to persons or circumstances other than those as to which it is invalid or unenforceable, shall not be affected thereby, and each term and provision of this Agreement shall be valid and enforced to the fullest extent permitted by applicable law.

8. COUNTERPARTS. This Agreement may be executed in counterparts, each of which shall be deemed an original but all of which together shall be deemed to constitute one and the same agreement.

9. WAIVER. The waiver of a breach of any provision of this Agreement by the Company or any Shareholder party to this Agreement or the failure of the Company or any Shareholder party to this Agreement to insist upon the strict performance of any provision hereof shall not constitute a waiver of any subsequent breach or of any subsequent failure to perform.

10. GOVERNING LAW. This Agreement shall be governed by and construed in accordance with the laws of the State of Illinois.

11. DEFINED TERMS. Capitalized terms used and not otherwise defined in this Agreement, shall have the meanings described in the Shareholders' Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

NOMINATORS:

/s/ Victor Morgenstern  
-----  
VICTOR MORGENSTERN

/s/ Fred Holubow  
-----  
FRED HOLUBOW

INVESTOR SHAREHOLDERS:

/s/ Irving B. Harris Revocable Trust  
-----

/s/ Virginia H. Polsky Trust  
-----

/s/ Roxanne H. Frank Trust  
-----

/s/ Couderay Partners  
-----

/s/ Jerome Kahn, Jr. Revocable Trust  
-----

/s/ Fred Holubow  
-----

/s/ Morningstar Trust by Faye Morgenstern,  
Trustee  
-----

/s/ Victor Morgenstern  
-----

/s/ Resolute Partners by Victor  
Morgenstern  
-----

/s/ Goldstein Asset Management  
-----

/s/ Lawrence Goldstein  
-----

/s/ Burton W. Ruder, Linda Ruder, Trustee  
-----

/s/ James S. Levy Trust, James S. Levy,  
Trustee  
-----

/s/ Ronald Nash  
-----

/s/ Edward S. Loeb Revocable Trust,  
-----  
Edward S. Loeb, Trustee  
-----

/s/ Steven J. Reid  
-----

/s/ Gary N. Wilner  
-----

/s/ Jarvis H. Friduss  
-----

/s/ Anita Nagler  
-----

/s/ JO & Co. by Ross J. Mangano, Partner  
-----

/s/ Sherwin Zuckerman  
-----

/s/ The Levenstein & Resnick Profit  
-----  
Sharing Plan & Trust by Gary I.  
-----  
Levenstein, Trustee  
-----

/s/ Mitchell I. Dolins Trust, Mitchell I.  
-----  
Dolins, Trustee  
-----

/s/ Sheldon M. Bulwa  
-----

/s/ Stephen M. Simes  
-----

/s/ Howard Schraub  
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## SHAREHOLDERS' AGREEMENT

THIS SHAREHOLDERS' AGREEMENT ("AGREEMENT") is made as of the 6th day of May, 1999, by and among BEN-ABRAHAM TECHNOLOGIES INC., a Wyoming corporation (the "COMPANY"), Avi Ben-Abraham ("BEN-ABRAHAM"), and those other individuals executing this agreement as set forth on the signature page hereto.

### R E C I T A L S:

A. The authorized, issued and outstanding shares of capital stock of the Company as of the date hereof are as follows: (i) an unlimited number of authorized subordinate voting shares, without par value (the "SUBORDINATE SHARES"), of which 29,447,686 shares are issued and outstanding; (ii) an unlimited number of authorized Class A special shares, without par value (the "CLASS A SHARES"), of which 1,531,386 shares are issued and outstanding; (iii) an unlimited number of Class B special shares, without par value, none of which are issued and outstanding (the "CLASS B SHARES"); (iv) an unlimited number of authorized Class C special shares, without par value (the "CLASS C SHARES"), of which 3,276,479 are issued and outstanding; and (v) an unlimited number of authorized preferred shares, without par value (the "PREFERRED SHARES"), none of which are issued and outstanding. All of the currently issued and outstanding Subordinate Shares, Class A Shares, Class B Shares, Class C Shares and Preferred Shares, and any of the foregoing issued subsequently to the date hereof, shall hereinafter collectively be referred to as the "SHARES."

B. Pursuant to a Securities Purchase Agreement dated the date hereof among the Company and the Investor Shareholders (as defined below), the Investor Shareholders have agreed to purchase from the Company on the date hereof 72.5 Units (collectively the "UNITS") (such purchase being herein referred to as the "INVESTOR TRANSACTION" and the Shares comprising part of the Units, the "INVESTOR PURCHASED SHARES"). Each Unit is comprised of (i) 250,000 Subordinate Shares of the Company and (ii) one warrant ("WARRANT") to purchase 125,000 Subordinate Shares of the Company.

C. The HK Shareholders (as defined below) (i) may acquire Units on the date hereof (the Shares comprising part of the Units, the "HK PURCHASED SHARES") from the Company pursuant to a Securities Purchase Agreement dated the date hereof between the Company and the HK Shareholders and (ii) will receive 2,525,000 Subordinate Shares from Ben-Abraham pursuant to settlement agreements dated the date hereof between each HK Shareholder and Ben-Abraham. Such transactions are hereinafter referred to together as the "HK TRANSACTIONS."

D. As of the date hereof, after giving effect to the Investor Transaction and the HK Transactions, the Shareholders (as defined below) shall beneficially own that number and type of Shares as set forth on EXHIBIT A attached hereto. The Shares owned now or in the future by the HK Shareholders and the Investor Shareholders shall hereinafter respectively be referred to as the "HK SHARES" and the "INVESTOR SHARES."

E. As a condition to the consummation of the Investor Transaction and the HK Transactions, the parties hereto have agreed to enter into this Agreement to maintain harmonious management and to govern other shareholder matters relating to the Company.

#### A G R E E M E N T

NOW, THEREFORE, in consideration of the foregoing recitals and of the mutual obligations between and among the parties contained herein, the parties hereby agree as follows:

1. DEFINITIONS. Capitalized terms used herein and not otherwise defined shall have the following meanings:

1.1 "BA SHAREHOLDER" means Ben-Abraham and any Permitted Transferee of such person.

1.2 "FAMILY BUSINESS ENTITY" means any partnership, corporation, limited liability company or other business entity of which each partner, shareholder, member or other owner of an equity interest is a Family Member, Family Trust or Original Shareholder.

1.3 "FAMILY MEMBER" means an Original Shareholder's father, mother, spouse, natural or adopted child or other lineal descendent.

1.4 "FAMILY TRUST" shall mean a trust under which the trustee has the discretion to distribute income to any one or more of an Original Shareholder's Family Members, any trust under which one or more of an Original Shareholder's Family Members has a right to the income, and any revocable trust under which an Original Shareholder is the grantor and is the principal beneficiary during the Original Shareholder's lifetime.

1.5 "HK SHAREHOLDER" means each individual identified on the signature page hereto under the caption "HK SHAREHOLDERS" and any Permitted Transferee of such person.

1.6 "INVESTOR SHAREHOLDER" means each individual identified on the signature page hereto under the caption "INVESTOR SHAREHOLDERS" and any Permitted Transferee of such person.

1.7 "ORIGINAL SHAREHOLDER" means any HK Shareholder or Investor Shareholder who is a party to this Agreement on the date hereof.

1.8 "PERMITTED TRANSFEREE" means any Family Member or Family Trust of any Original Shareholder or any Family Business Entity.

1.9 "SHAREHOLDER" means each BA Shareholder, HK Shareholder and Investor Shareholder.

1.10 "TRANSFER" means, as a noun, any voluntary or involuntary transfer, sale, gift, pledge, hypothecation, encumbrance, or other disposition and, as a verb, voluntarily or involuntarily to transfer, sell, give, pledge, hypothecate, encumber or otherwise dispose of.

2. GOVERNANCE AND OPERATIONS OF THE COMPANY.

2.1. BOARD OF DIRECTORS.

(a) NUMBER. The Board of Directors of the Company shall consist of not less than three (3) nor more than twelve (12) directors, unless otherwise consented to by the Investor Directors (as defined below) and the HK Directors (as defined below).

(b) NOMINATIONS, ELECTIONS AND VOTING OF SHARES.

(i) So long as Ben-Abraham holds at least ten percent (10%) of the Shares, Ben-Abraham shall be entitled to be nominated as a director and, at the next two (2) general elections for directors, the HK Shareholders shall vote all the HK Shares, subject to SECTION 4.4, and take or cause to be taken all such action within such Shareholders' power and authority as may be required, to elect Ben-Abraham as a director. The provisions of this SECTION 2.1(b)(i) shall terminate at any time that Ben-Abraham no longer holds at least ten percent (10%) of the Shares.

(ii) The holders of a majority of the Investor Shares shall be entitled to nominate three (3) members (each an "INVESTOR DIRECTOR") of the Company's Board of Directors (which nominees shall be reasonably acceptable to the Chairman and Vice Chairman of the Board of Directors), and all the Shareholders shall vote their Shares, subject to SECTION 4.4, and take or cause to be taken all such action within such Shareholders' power and authority as may be required, to elect such Investor Directors to the Board of Directors. In the case of any vacancy in the office of an Investor Director, including without limitation as a result of the removal of such director with or without Cause, the holders of a majority of the Investor Shares shall have the right to nominate another director to fill such vacancy, and the Shareholders shall be obligated to vote to elect such nominee. The provisions of this SECTION 2.1(b)(ii) shall terminate immediately prior to the later of the third general election of directors subsequent to the date hereof or March 31, 2001.

(iii) The holders of a majority of the HK Shares shall be entitled to nominate three (3) members (each an "HK DIRECTOR") of the Company's Board of Directors (which nominees shall be reasonably acceptable to the Chairman and Vice Chairman of the Board of Directors), and all the Shareholders shall vote their Shares, subject to SECTION 4.4, and take or cause to be taken all such action within such Shareholders' power and authority as may be required, to elect such HK Directors to the Board of Directors. In the case of any vacancy in the office of an HK Director, including without limitation as a result of the removal of such director with or without Cause, the holders of a majority of the HK Shares shall have the

right to nominate another director to fill such vacancy, and the Shareholders shall be obligated to vote to elect such nominee. The provisions of this SECTION 2.1(b)(iii) shall terminate immediately prior to the later of the third general election of directors subsequent to the date hereof or March 31, 2001.

(c) REMOVAL OF DIRECTORS. The Shareholders agree that they shall not vote their Shares to remove Ben-Abraham, an Investor Director or an HK Director other than for Cause. For purposes hereof, "CAUSE" means, with respect to any director, (i) theft, embezzlement or other acts of dishonesty; (ii) breach of his duty of loyalty as a director; (iii) gross negligence or willful and wanton misconduct; or (iv) commission of an act or acts involving a Class-A-type felony or moral turpitude.

### 3. TRANSFERS OF CAPITAL STOCK; RIGHT OF FIRST REFUSAL.

3.1 ALL CAPITAL STOCK AFFECTED. All Shares now or hereafter owned or subscribed for by the Shareholders shall be subject to the terms of this Agreement and, upon issue thereof, each certificate representing such Shares shall be endorsed with the legend set forth in SECTION 5.2.

3.2 NO RESTRICTIONS ON TRANSFER. Except as otherwise provided in SECTION 4.1, any Shareholder shall be permitted to Transfer his Shares in the Company without restriction, including, without limitation, by will or by trust; PROVIDED, HOWEVER, as a condition to such Transfer, the transferee of the Shares shall agree to be bound by the terms and conditions of this Agreement.

### 3.3 RIGHT OF FIRST OFFER.

(a) NOTICE. In the event the Company proposes to sell any additional equity securities, or any securities convertible into or exercisable for equity securities (the "PROPOSED SECURITIES"), the Company shall deliver a notice (a "COMPANY NOTICE") to each Original Shareholder stating (i) its bona fide intention to sell the Proposed Securities, (ii) a description of the Proposed Securities to be sold and (iii) the price and terms upon which it proposes to sell the Proposed Securities. Each such Company Notice shall be accompanied by a copy of any term sheets, commitment letters or letters of intent if any entered into with the proposed purchaser(s) of the Proposed Securities and a copy of any other material information supplied or made available to such proposed purchaser(s) in connection with its evaluation of such investment. Each Original Shareholder shall be responsible for transmitting the Company Notice to any Permitted Transferee to whom such Original Shareholder's shares have been Transferred.

(b) EXERCISE OF RIGHT. Within thirty (30) calendar days after receipt of the Company Notice, each Original Shareholder may by written notice elect to purchase, for himself or any Permitted Transferee to whom such Original Shareholder's Shares have been transferred, at the price and on the terms specified in the Company Notice, all or any part of such Original Shareholder's or Permitted Transferee's Proportionate Share of the Proposed Securities. If any Original Shareholder fails to deliver a written notice within the 30-day acceptance period or elects, not to purchase his or any of his Permitted

Transferees' Proportionate Share of the Proposed Securities, the Company shall give all of the other Original Shareholders written notice of such fact (the "SECOND NOTICE"), identifying the number of additional Proposed Securities as available for purchase. Each Original Shareholder receiving a Second Notice shall be responsible for transmitting the Second Notice to any Permitted Transferee to whom such Original Shareholder's Shares have been Transferred. Within ten (10) calendar days of receipt of such Second Notice, each such Original Shareholder may by written notice elect to purchase, for himself or any Permitted Transferee to whom such Original Shareholder's Shares have been transferred, his or his Permitted Transferee's Proportionate Share of such additional Proposed Securities. For purposes hereof, the term "PROPORTIONATE SHARE" means the number of applicable Proposed Securities proposed to be issued multiplied by a fraction, the numerator of which is the number of Subordinate Shares held by an Original Shareholder or his Permitted Transferee, as the case may be, the denominator of which is the total number of Subordinate Shares held by all Original Shareholders and their Permitted Transferees; provided, however, that the following Subordinate Shares shall be excluded from the calculation of Proportionate Share: (i) any Subordinate Shares acquired on or prior to the date hereof by the HK Shareholders other than the HK Purchased Shares and (ii) any Subordinate Shares received by the HK Shareholders in connection with the conversion or reclassification of any Shares referred to in clause (i) or any stock dividend to such HK Shareholders with respect to such Shares referred to in clause (i) or any shares into which such Shares are converted or reclassified.

(c) CONSUMMATION OF SALE. If the Original Shareholders or their Permitted Transferees do not elect to purchase all of the Proposed Securities, the Company may, during the ninety (90) calendar day period following the expiration of the acceptance period specified in Section 3.3(b) above, consummate the sale of the remaining unsubscribed portion of such Proposed Securities at a price not less than, and upon terms no more favorable than, those specified in the Company Notice. If the Company does not enter into an agreement for the sale of the Proposed Securities within such 90-day period, or if such agreement is not consummated within thirty (30) calendar days of the execution thereof, the Company shall not thereafter sell any of the Proposed Securities without first offering such Proposed Securities to the Original Shareholders in the manner provided above.

(d) RIGHT NOT APPLICABLE. The right of first offer in this SECTION 3.3 shall not be applicable to (i) shares issued pursuant to the restructuring described in SECTION 4.3; (ii) equity securities issued to employees, officers, directors or bona fide contractors, advisors or consultants of the Company pursuant to incentive agreements or plans approved by the Board of Directors of the Company; (iii) any securities issuable upon conversion of the Class A and Class C Shares; (iv) any securities issuable upon exercise of the warrants issued in connection with the Investor Transaction and the HK Transaction; (v) shares of the Company's capital stock issued in connection with a stock split or stock dividend; (vi) any shares of capital stock offered in a bona fide, firmly underwritten public offering registered under the Securities Act of 1933, as amended, pursuant to a registration statement on Form S-1 (or a similar successor form) (an "INITIAL

PUBLIC OFFERING"); (vii) up to \$50,000 of shares of subordinate voting stock (and/or options or warrants therefor) for each issuance to a party or parties providing the Company with equipment leases, real property leases, loans, credit lines, guaranties of indebtedness, cash price reductions or similar financing; (viii) securities issued pursuant to the acquisition of another corporation or entity by the Company, as approved by the Company's Board of Directors, by consolidation, merger, purchase of all or substantially all of the assets, or other reorganization in which the Company acquires, in a single transaction or series of related transactions, all or substantially all of the assets of such other corporation or entity or fifty percent (50%) or more of the voting power of such other corporation or entity or fifty percent (50%) or more of the equity ownership of such other entity; or (ix) securities issued with the approval of the Company's Board of Directors in connection with the acquisition or license of a product to be developed, manufactured, marketed, sold or otherwise distributed by the Company.

(e) TERM OF RIGHT. This SECTION 3.3 shall terminate after twenty-four (24) months have elapsed from the date hereof.

#### 4. OTHER AGREEMENTS AND COVENANTS.

4.1 LOCK UP OF SHARES. Notwithstanding Section 3.2, no Shareholder may voluntarily Transfer his Shares for a period of sixteen (16) months from the date hereof.

4.2 MAINTENANCE OF KEY MAN LIFE INSURANCE ON SIMES. For a period of three (3) years following the date hereof, the Company shall pay to a trust established for the benefit of the Investor Shareholders and the HK Shareholders the premiums for a key man life insurance policy on the life of Stephen Simes (the "SIMES POLICY"). The Simes Policy shall be issued by a life insurance company reasonably acceptable to the Company and trustees of the trust and shall provide for a death benefit payable to the trust in an amount equal to the amount paid to the Company by the HK Shareholders and the Investor Shareholders for the Units on the date hereof plus \$252,500.

4.3 RESTRUCTURING. Notwithstanding the termination provisions of SECTION 5, not later than July 31, 1999, the Company shall consummate, and the Shareholders hereby agree to vote to approve, a financial restructuring satisfactory to a majority of the Investor Shareholders, including, without limitation, the conversion of all of the issued and outstanding Class A Shares into Class C Shares.

4.4 VOTING OF HK SHARES. Prior to the consummation of the restructuring in accordance with SECTION 4.3, each HK Shareholder agrees that he shall abstain, except with respect to any vote in connection with the restructuring described in SECTION 4.3, from voting ninety percent (90%) of the votes attaching to the Class A Shares which he beneficially owns, it being understood that in any meeting of the Shareholders, all of the HK Shares shall be counted in determining the presence of a quorum.

5. MISCELLANEOUS

5.1 STOCK SPLITS AND CONVERSIONS. This Agreement shall apply and extend to the Shares of any class issued by the Company to the Shareholders as a stock dividend or stock split of, or in exchange for, Shares subject to this Agreement, whether by way of reorganization, reclassification, conversion or other means.

5.2. LEGEND ON CERTIFICATES. Each certificate of capital stock of the Company now or hereafter held by any Shareholder shall be endorsed on the back thereof with legends in substantially the following form:

"This certificate of stock and the shares represented hereby are held subject to restrictions contained in that certain agreement by and among certain shareholders of the Company and the Company dated May 6, 1999, and all amendments thereto. A copy of this agreement will be furnished by the Company upon request."

"The securities represented by this certificate and any securities into which they may be convertible have not been registered under U.S. and Canadian federal, state or provincial securities laws. The securities may not be sold or transferred except in compliance with the requirements of such laws."

5.3. SPECIFIC PERFORMANCE. The parties agree that they shall be irreparably damaged in the event this Agreement is not specifically enforced. In the event of any controversy concerning any right or obligation set forth in this Agreement, such right or obligation shall be enforceable in a court of equity by a decree of specific performance. The parties' remedies shall, however, be cumulative and not exclusive, and specific performance shall be in addition to any other remedies available to the parties.

5.4. NOTICES. Any and all notices, designations, consents, offers, acceptances or any other communications provided for herein shall be given in writing by overnight courier delivery or by certified or registered mail, return receipt requested, which shall be mailed: to the Company at its principal business address in Lincolnshire, Illinois and to a Shareholder at such address as set forth below his name on EXHIBIT A. Any party to this Agreement may change the address to which notice to such party shall be sent by giving written notice of such new address to all other parties to this Agreement.

5.5. ENTIRE AGREEMENT; AMENDMENTS. This Agreement contains the entire agreement and understanding of the parties with respect to the subject matter hereof and no representations, promises, agreements or understandings, written or oral, not contained herein shall be of any force or effect. No change, modification, or waiver of any provision of this Agreement shall be valid or binding unless it is in writing dated subsequent to the date hereof and signed by all parties hereto holding 75% of the Investor Purchased Shares and the HK Purchased Shares.

5.6. SEVERABILITY. If any provision of this Agreement shall be held invalid or unenforceable, the remainder nevertheless shall remain in full force and effect. If any provision is held invalid or unenforceable with respect to particular circumstances, it nevertheless shall remain in full force and effect in all other circumstances.

5.7. BENEFIT. This Agreement shall be binding upon and inure to the benefit of the each of the parties hereto, and their successors and assigns.

5.8. GENDER AND NUMBER. Wherever from the context it appears appropriate, each term stated in either the singular or the plural shall include the singular and the plural, and pronouns stated in either the masculine, feminine, or the neuter gender shall include the masculine, feminine and neuter gender.

5.9. GOVERNING LAW. This Agreement has been negotiated and executed in the State of Illinois and the parties agree that the laws of Illinois, without regard to conflict of law provisions thereof, shall govern its construction and validity.

5.10 TERMINATION. This Agreement shall terminate upon an Initial Public Offering.

[signature page attached]

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the day and date written above.

BEN-ABRAHAM TECHNOLOGIES INC.

By: /s/ Stephen M. Simes

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Its: President and Chief Executive Officer

-----  
AVI BEN-ABRAHAM

HK SHAREHOLDERS:

/s/ Hans Michael Jebsen

-----  
/s/ King Cho Fung

-----  
/s/ Stanley Ho

-----  
INVESTOR SHAREHOLDERS:

/s/ Irving B. Harris Revocable Trust

-----  
/s/ Virginia H. Polsky Trust

-----  
/s/ Roxanne H. Frank Trust

-----  
/s/ Couderay Partners

-----  
/s/ Jerome Kahn, Jr. Revocable Trust

-----  
/s/ Fred Holubow

-----  
/s/ Morningstar Trust by Faye Morgenstern, Trustee

-----  
/s/ Victor Morgenstern

-----  
/s/ Resolute Partners by Victor Morgenstern

-----  
/s/ Goldstein Asset Management

/s/ Lawrence Goldstein

-----  
/s/ Burton W. Ruder, Linda Ruder, Trustee

-----  
/s/ James S. Levy Trust, James S. Levy, Trustee

-----  
/s/ Ronald Nash

-----  
/s/ Edward S. Loeb Revocable Trust, Edward S.  
Loeb, Trustee

-----  
/s/ Steven J. Reid

-----  
/s/ Gary N. Wilner

-----  
/s/ Jarvis H. Friduss

-----  
/s/ Anita Nagler

-----  
/s/ JO & Co. by Ross J. Mangano, Partner

-----  
/s/ Sherwin Zuckerman

-----  
/s/ The Levenstein & Resnick Profit Sharing Plan &  
Trust by Gary I. Levenstein, Trustee

-----  
/s/ Mitchell I. Dolins Trust, Mitchell I. Dolins,  
Trustee

-----  
/s/ Sheldon M. Bulwa

-----  
/s/ Stephen M. Simes

-----  
/s/ Howard Schraub

## EXHIBIT A

NAMES / ADDRESSES OF SHAREHOLDERS;  
NUMBER/TYPE OF SHARES

INVESTOR	ADDRESS	SHARES	TYPE OF SHARES
Avi-Ben-Abraham		11,967,300	Subordinate Shares
INVESTOR SHAREHOLDERS:			
Irving B. Harris Revocable Trust	2 N. LaSalle Street, Suite 400 Chicago, IL 60602	750,000	Subordinate Shares
Virginia H. Polsky Trust	2 N. LaSalle Street, Suite 400 Chicago, IL 60602	375,000	Subordinate Shares
Roxanne H. Frank Trust	2 N. LaSalle Street, Suite 400 Chicago, IL 60602	500,000	Subordinate Shares
Couderay Partners	2 N. LaSalle Street, Suite 400 Chicago, IL 60602	500,000	Subordinate Shares
Jerome Kahn, Jr. Revocable Trust	2 N. LaSalle Street, Suite 400 Chicago, IL 60602	125,000	Subordinate Shares
Fred Holubow	2 N. LaSalle Street, Suite 400 Chicago, IL 60602	250,000	Subordinate Shares
Morningstar Trust by Faye Morgenstern, Trustee	106 Vine Avenue Highland Park, IL 60035	500,000	Subordinate Shares
Victor Morgenstern	106 Vine Avenue Highland Park, IL 60035	1,500,000	Subordinate Shares
Resolute Partners	106 Vine Avenue Highland Park, IL 60035	500,000	Subordinate Shares
Goldstein Asset Management	15301 Dallas Pkwy, Suite 840 Dallas, TX 75248	125,000	Subordinate Shares
Lawrence Goldstein	15301 Dallas Pkwy, Suite 840 Dallas, TX 75248	125,000	Subordinate Shares
Linda Ruder, Custodian for John Ruder	2238 Egandale Road Highland Park, IL 60035	125,000	Subordinate Shares
Joanna Ruder	2238 Egandale Road Highland Park, IL 60035	125,000	Subordinate Shares
James S. Levy Trust, James S. Levy Trustee	1349 N. Thatcher Avenue Highland Park, IL 60035	250,000	Subordinate Shares
Ronald Nash	134 Essex Drive Tenafly, NJ 07670	250,000	Subordinate Shares
Edward S. Loeb Revocable Trust, Edward S. Loeb Trustee	1935A N. Hudson Chicago, IL 60614	250,000	Subordinate Shares
Steven J. Reid	c/o Harris Associates 2 N. LaSalle Street Chicago, IL 60602	500,000	Subordinate Shares
Gary N. Wilner	2349 Wood Path Highland Park, IL 60646	250,000	Subordinate Shares

Jarvis H. Friduss	4447 W. Peterson Ave. Suite 300 Chicago, IL 60646	125,000	Subordinate Shares
Anita Nagler	2233 N. Burling Chicago, IL 60614	1,500,000	Subordinate Shares
JO & Co.	112 W. Jefferson Blvd. Suite 613 South Bend, IN 46634	7,500,000	Subordinate Shares
Sherwin and Sheri Zuckerman	1049 Bluff Rd. Glencoe, IL 60022	750,000	Subordinate Shares
The Levenstein & Resnick Profit Sharing Plan & Trust by Gary I. Levenstein	c/o Ungaretti & Harris 3500 Three First National Plaza Chicago, IL 60602	250,000	Subordinate Shares
Mitchell I. Dolins Trust, Mitchell I. Dolins Trustee	427 Briehill Rd. Deerfield, IL 60015	375,000	Subordinate Shares
Sheldon M. Bulwa	135 Arrowwood Drive Northbrook, IL 60062	125,000	Subordinate Shares
Stephen M. Simes	175 Old Half Day Rd. Lincolnshire, IL 60069	250,000	Subordinate Shares
Howard Schraub	8538 Ruelle Monte Carlo, La Jolla, CA 92037	250,000	Subordinate Shares
HK SHAREHOLDERS:			
Hans Michael Jebson	31/F. Caroline Center 28 Yon Ping Road Causeway Bay, Hong Kong	3,000,000	Subordinate Shares
		1,000,000	Class A Shares
		177,114	Class C Shares
Markus Jebson	31/F. Caroline Center 28 Yon Ping Road Causeway Bay, Hong Kong	750,000	Subordinate Shares
		322,886	Class A Shares
King Cho Fung	Room 2101 Lyndhurst Tower One Lyndhurst Terrace Central Hong Kong	1,912,500	Subordinate Shares
		208,500	Class A Shares
		416,500	Class C Shares
Stanley Ho	1 Repulse Bay Hong Kong	1,500,000	Subordinate Shares

BEN-ABRAHAM TECHNOLOGIES INC.  
REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement ("AGREEMENT") is entered into as of the 6th day of May, 1999 by and among BEN-ABRAHAM TECHNOLOGIES INC., a Wyoming corporation (the "COMPANY"), and those individuals executing this Agreement (each a "SHAREHOLDER" and collectively the "SHAREHOLDERS").

RECITALS

A. The Shareholders, pursuant to those certain Securities Purchase Agreements (the "SECURITIES PURCHASE AGREEMENTS") dated the date hereof by and among the Company and certain Shareholders, have agreed to purchase from the Company on the date hereof 92.5 Units (collectively the "UNITS"). Each Unit is comprised of (i) 250,000 Subordinate Shares (as defined below) of the Company and (ii) one warrant ("WARRANT") to purchase 125,000 Subordinate Shares of the Company.

B. As a condition to the purchase of the Units, the Company has agreed to enter into this Agreement to provide the Shareholders certain registration rights as set forth herein.

AGREEMENT

In consideration of the foregoing Recitals and the mutual promises contained herein, the parties hereto agree as follows:

1. DEFINITIONS. Capitalized terms used herein and not otherwise defined, shall have the following meanings:

(a) "COMMISSION" means the Securities and Exchange Commission and any successor thereto.

(b) "EXCHANGE ACT" means the Securities Exchange Act of 1934, as amended.

(c) "HOLDERS" means the Shareholders and any subsequent holders of Registrable Shares to whom the rights hereunder accrue pursuant to SECTION 11 hereof. "HOLDER" means any one of the Holders.

(d) "NASDAQ" means the NASDAQ Stock Market, Inc., which is comprised of the National Market System and the SmallCap Market.

(e) "REGISTRABLE SHARES" means (i) the Subordinate Shares purchased pursuant to the Securities Purchase Agreement; (ii) any Subordinate Shares issued to the Shareholders upon exercise of the Warrants; and (iii) any other shares of capital stock issued to the Shareholders (or issuable upon the conversion or exercise of any other

warrant, right or other security which is issued) as a dividend or other distribution with respect to, in exchange for or in replacement of the shares referenced in SUBSECTIONS 1(e)(i) AND 1(e)(ii) immediately above; provided, however, that outstanding Subordinate Shares shall no longer be Registrable Shares as to the Holder thereof when they (i) shall have been effectively registered under the Securities Act and sold by the Holder thereof in accordance with such registration or (ii) are eligible for sale by the Holder pursuant to paragraph (k) of Rule 144.

(f) "RULE 144" means Rule 144 as promulgated under the Securities Act.

(g) "SECURITIES ACT" means the Securities Act of 1933, as amended, and the rules and regulations of the Commission thereunder.

(h) "SUBORDINATE SHARES" means the subordinate voting shares of the Company, without par value per share.

2. REGISTRATION ON REQUEST - DEMAND REGISTRATION RIGHTS. At any time after the date that the Company becomes listed on NASDAQ, upon the written request of the Holders holding at least twenty-five (25%) of the Registrable Shares, the Company shall use commercially reasonable efforts to effect as soon as reasonably practicable the registration under the Securities Act of all Registrable Shares requested to be registered. The Company shall only be obligated to effect two registrations under this SECTION 2 pursuant to which Registrable Shares are offered and sold (the withdrawal of a registration statement at the request of a Holder shall be deemed to be a registration under this SECTION 2 unless such request for withdrawal is as a result of a material adverse change in the financial condition of the Company). In the event that the Company receives a request for registration pursuant to this SECTION 2 within 90 days of the date when it is anticipated that audited financial statements for the Company's latest fiscal year will become available, the Company may delay the filing of a required registration for a period of not more than 90 days. Any registration statement pursuant to this section may include other securities of the Company whether being offered or sold for the account of the Company or of another securityholder unless the underwriter (or managing underwriter on behalf of all of the underwriters) advises the Company in writing that, in its opinion, the inclusion of any such shares in the subject registration statement will materially and adversely affect the distribution of the Registrable Shares by such underwriter.

3. INCIDENTAL REGISTRATION - PIGGY-BACK REGISTRATION RIGHTS.

(a) If the Company at any time proposes to register (including for this purpose a registration effected by the Company for securityholders other than the Holders) any of its securities under the Securities Act in connection with the public offering of such securities (other than a registration on Form S-4, Form S-8 or any form which does not include substantially the same information as would be required to be included in a registration statement covering the sale of Registrable Shares or in which Registrable Shares cannot be included pursuant to Commission rule or practice), the Company shall, each such time, promptly give each Holder written notice of such registration (the "PIGGY-

BACK NOTICE"). Upon the written request of any Holder or Holders, given within fifteen (15) days after the Holders' receipt of such Piggy-Back Notice from the Company, the Company shall use commercially reasonable efforts to include in such registration statement filed with the Commission under the Securities Act all of the Registrable Shares requested to be included by the Holder or Holders. Notwithstanding the foregoing, the Company shall have the right to discontinue its efforts to register any Registrable Shares pursuant to this SECTION 3 if it reasonably believes such action is in the best interests of the Company.

(b) If the Company proposes to distribute shares of capital stock through an underwriting, the Holders (together with the Company and any other securityholders distributing their securities through such underwriting) shall enter into an underwriting agreement with the underwriter (or underwriters) selected for underwriting by the Company. If any of the Holders disapprove of the terms of any such underwriting, such Holder may elect to withdraw therefrom by written notice to the Company and the underwriter.

4. Notwithstanding any contrary provision of this Agreement:

(a) The Company shall not be required to effect more than one registration pursuant to SECTION 2 in any twelve-month period.

(b) If any registration pursuant to SECTION 3 shall be underwritten in whole or in part, the Company may require that the Registrable Shares requested for inclusion pursuant to SECTION 3 be included in the underwriting on the same terms and conditions as the securities otherwise being sold through the underwriters. If, in the good faith judgment of the managing underwriter of such public offering the inclusion of all of the Registrable Shares originally covered by a request for registration would reduce the number of shares to be offered by the Company or interfere with the successful marketing of the shares to be offered by the Company, the number of Registrable Shares otherwise to be included in the underwritten public offering may be reduced pro rata (by number of shares) among the holders thereof requesting such registration.

5. REGISTRATION PROCEDURES. If and whenever the Company is required by the provisions of this Agreement to use commercially reasonable efforts to effect the registration of any of its securities under the Securities Act, the Company will, as soon as practicable:

(a) prepare and file with the Commission a registration statement with respect to such Registrable Shares and use commercially reasonable efforts to cause such registration statement to become and remain effective for the period provided in this SECTION 5;

(b) prepare and file with the Commission such amendments and supplements to such registration statement and the prospectus used in connection therewith as may be necessary to keep such registration statement effective and to comply with the provisions

of the Securities Act with respect to the sale or other disposition of all securities covered by such registration statement whenever the seller or sellers of such securities shall desire to sell or otherwise dispose of the same;

(c) furnish to each Holder, or his or her duly authorized underwriter, such number of copies of a prospectus, including copies of a preliminary prospectus, prepared in conformity with the requirements of the Securities Act, and such other documents as such Holder may reasonably request in order to facilitate the public sale or other disposition of the securities to be sold by such Holder;

(d) use commercially reasonable efforts to register or qualify the securities covered by such registration statement under such state securities or "blue sky" laws of such jurisdictions as each Holder shall reasonably request, and do any and all other acts and things which may be necessary under such securities or "blue sky" laws to enable such Holder to consummate the public sale or other disposition in such jurisdictions of the securities to be sold by such Holder; provided, however, that the Company shall not for any such purpose be required to consent to the general service of process in any such jurisdiction;

(e) notify each Holder at any time when a prospectus relating to the Registrable Shares is required to be delivered under the Securities Act, of the happening of any event as a result of which the prospectus included in the registration statement, as then in effect, includes an untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances then existing;

(f) notify each Holder, promptly after the Company shall have received notice thereof, of the time when the registration statement becomes effective or any supplement to any prospectus forming a part of the registration statement has been filed;

(g) notify each Holder, promptly after it shall receive notice or obtain knowledge thereof, of the issuance of any stop order by the Commission suspending the effectiveness of such registration statement or the initiation or threatening of any proceeding for such purpose and promptly use reasonable efforts to prevent the issuance of any stop order or to obtain its withdrawal if such stop order should be issued; and

(h) provide a transfer agent and registrar for all Registrable Shares sold under the registration statement not later than the effective date of the registration statement;

provided, however, that notwithstanding any other provision of this Agreement, the Company shall not in any event be required to use commercially reasonable efforts to maintain the effectiveness of any such registration statement for a period in excess of nine (9) months after the effective date thereof or until the sellers have sold or otherwise disposed of their Registrable Shares registered under such registration statement, whichever is earlier.

6. FURTHER ASSURANCES.

(a) It shall be a condition precedent to the obligations of the Company to take any action pursuant hereto that each Holder, having chosen to have its Registrable Shares included for registration, shall furnish to the Company such information regarding such Holder, the Registrable Shares and the intended method of disposition of such securities as shall be required to effect the registration thereof. Each Holder shall be required to represent to the Company that all such information which is given is complete and accurate in all material respects. Each Holder shall deliver to the Company a statement in writing from Holder that it bona fide intends to sell, transfer or otherwise dispose of the Registrable Shares.

(b) It shall be a condition precedent to the inclusion of the Registrable Shares of any Holder in a registration effected pursuant to this Agreement that such Holder shall execute such indemnities, underwriting agreements and other documents, as the Company or the managing underwriter shall reasonably request, in order to satisfy the requirements applicable to such registration.

(c) Each Holder agrees that (i) he or she will comply with the provisions of the Securities Act with respect to the disposition of its securities covered by a registration statement required under this Agreement, (ii) he or she will cooperate with the Company to the extent required by the Securities Act and applicable "blue sky" or state securities laws in its efforts to file any registration statement required hereunder and to have it declared effective, and (iii) upon receipt of any notice from the Company pursuant to SUBSECTION 5(e), he or she will forthwith discontinue disposition of Registrable Shares until he or she receives copies of the supplemented or amended prospectus or until he or she is advised in writing by the Company that the use of the prospectus may be resumed, and has received copies of any additional or supplemental filings that are incorporated by reference in the prospectus.

7. RESTRICTIONS ON PUBLIC SALE. Each Holder agrees, if requested in a timely notice from the underwriter in an underwritten offering, not to effect any public sale or distribution of securities of the Company (except through the inclusion of Registrable Shares in such Offering), including a sale pursuant to Rule 144 under the Securities Act, during the 30-day period prior to, and during a period requested by the underwriters of up to 90 days (180 days in the case of a registration statement for an initial public offering of the Company's securities) subsequent to, the closing date of each underwritten offering made pursuant to a registration statement.

8. EXPENSES.

(a) REGISTRATION EXPENSES. All expenses incurred by the Company in effecting the registration provided for in this Agreement, including, without limitation, all registration and filing fees, printing expenses, reasonable fees and disbursements of counsel for the Company (including fees and disbursements of counsel for the Company in its capacity as counsel to the selling Holders hereunder; provided however, if the

Company counsel does not make itself available for this purpose or if such counsel is not reasonably acceptable to the selling Holders, the Company will pay up to an aggregate of \$10,000 of fees and disbursements of one counsel for selling Holders), expenses of any audits incidental to or required by any such registration, and all expenses of complying with the securities or "blue sky" laws or any state shall be paid by the Company.

(b) SELLING EXPENSES. All underwriting discounts, underwriters' expense allowance, and selling commissions applicable to Registrable Shares sold by the Holders, and all fees and disbursements of any special counsel of the Holders shall be borne by the Holders pro-rata.

9. INDEMNIFICATION. In the event that any Registrable Shares are included in a registration statement pursuant to this Agreement:

(a) To the extent permitted by law, the Company will indemnify and hold harmless the Holders, the officers, directors and members of any Holder, any underwriter (as defined in the Securities Act) for any Holder and each person, if any, who controls a Holder or underwriter within the meaning of the Securities Act or the Exchange Act against any losses, claims, damages or liabilities (joint or several) to which they may become subject under the Securities Act, the Exchange Act or other federal or state law, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any of the following statements, omissions or violations (collectively, a "VIOLATION"): (A) any untrue statement or alleged untrue statement of a material fact contained in such registration statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (B) the omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (C) any violation or alleged violation by the Company of the Securities Act, the Exchange Act, any applicable state securities law or any rule or regulation promulgated under the Securities Act, the Exchange Act or any applicable state securities law; and the Company will reimburse such specified persons for any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability or action; PROVIDED HOWEVER, that the indemnity agreement contained in this subsection shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld), nor shall the Company be liable in any such case for any such loss, claim, damage, liability or action to the extent that it arises out of or is based upon a Violation which occurs in reliance upon and in conformity with written information furnished by the Holder expressly for use in connection with such registration; and FURTHER PROVIDED HOWEVER, that the Company shall not be required to indemnify any such specified person against (A) any liability arising from any untrue or misleading statement contained in or omission from any preliminary prospectus if such deficiency is corrected in the final prospectus and such final prospectus is recirculated as required by law prior to confirmation of any sale thereunder or (B) any liability which

arises out of the failure of any such specified person to deliver a prospectus as required by the Securities Act.

(b) To the extent permitted by law, the Holders will indemnify and hold harmless the Company, its directors, its officers, any person who controls the Company within the meaning of the Securities Act or the Exchange Act, any underwriter (within the meaning of the Securities Act) for the Company and any person who controls such underwriter against any losses, claims, damages or liabilities (joint or several) to which the Company or any such director, officer, or underwriter or controlling person may become subject, under the Securities Act, the Exchange Act or other federal or state law, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any Violation, in each case to the extent (and only to the extent) that such Violation occurs in reliance upon and in conformity with written information furnished by any Holder expressly for use in connection with such registration; and the Holders will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, underwriter or controlling person thereof, in connection with investigating or defending any such loss, claim, damage, liability or action; PROVIDED HOWEVER, that the indemnity agreement contained in this subsection shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holders (which consent shall not be unreasonably withheld); and FURTHER PROVIDED, that notwithstanding anything to the contrary contained in this Agreement, the Holders' liability under this SECTION 9 shall be limited in the aggregate to the amount of net proceeds actually received by the Holders from the sale of Registrable Shares actually sold.

(c) Promptly after receipt by an indemnified party of notice of the commencement of any action (including any governmental action), such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party hereunder, notify the indemnifying party in writing of the commencement thereof and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly notified, to assume the defense thereof with counsel mutually satisfactory to the parties; PROVIDED, HOWEVER, that an indemnified party shall have the right to retain its own counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such proceeding. The failure to notify an indemnifying party within a reasonable time of the commencement of any such action, to the extent prejudicial to its ability to defend such action, shall relieve such indemnifying party of any liability to the indemnified party hereunder, but the omission so to notify the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this subsection.

(d) If the indemnification provided for in this SECTION 9 is held by a court of competent jurisdiction to be unavailable to an indemnified party with respect to any loss,

claim, damage or liability (or actions with respect thereof), then such indemnifying party, in lieu of indemnifying such indemnified party hereunder, shall contribute to the amount paid or payable by such indemnified party as a result of loss, claim, damage or liability (or actions with respect thereof) in such proportion as is appropriate to reflect the relative fault of the indemnifying party on the one hand and the indemnified party on the other in connection with the statements or omissions which resulted in such loss, claim, damage or liability (or actions with respect thereof), as well as any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission to state a material fact relates to information supplied by the indemnifying party or the indemnified party and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

10. TERMINATION OF REGISTRATION RIGHTS. Notwithstanding the foregoing provisions of this Agreement, the rights to registration granted hereunder shall terminate as to any particular Registrable Shares when such Registrable Shares shall have been effectively registered under the Securities Act or otherwise sold by the Holders thereof in a public sale in accordance with applicable law, and such shares shall cease to be Registrable Shares for purposes hereof.

11. ASSIGNABILITY OF REGISTRATION RIGHTS. Subject to SECTION 10, the registration rights set forth in this Agreement shall accrue to each subsequent holder of Registrable Shares (who has executed a written consent agreeing to be bound by the terms and conditions of this Agreement as if a party to this Agreement) and such subsequent holder shall only have such rights to the extent Shareholder would be entitled to hereunder prior to such transfer.

11. COMPLIANCE WITH RULE 144. In the event the Company (a) registers a class of securities under Section 12 of the Exchange Act, or (b) commences to file reports under Section 13 or 15(d) of the Exchange Act, then at the request of any Holder who proposes to sell Registrable Shares in compliance with Rule 144, the Company shall, to the extent necessary to enable such Holder to comply with such Rule,

(a) make and keep public information available as those terms are understood and defined in Rule 144;

(b) use its best efforts to file with the Commission in a timely manner all reports and other documents required of the Company under the Securities Act and Exchange Act; and

(c) so long as any Holders own any Registrable Shares, and is not eligible to sell such Registrable Shares under paragraph (k) of Rule 144, furnish to the Holder upon reasonable request, a written statement by the Company as to its compliance with the reporting requirements of Rule 144 and of the Securities Act and Exchange Act, a copy of its most recent annual or quarterly report, and such other reports and documents so filed

as Holder may reasonably request in availing himself of any rule or regulation of the Commission allowing the Holder to sell any such securities without registration.

12. NOTICES. All notices, requests, consents, and other communications hereunder shall be in writing and shall be deemed to have been made when personally delivered or three business days after sent by first class mail, postage prepaid, to the following address or such other address as shall be given by notice delivered hereunder: (a) to each Holder, at the address of such Holder as shown on the registry books maintained by the Company or its transfer agent; and (b) if to the Company, at 175 Olde Half Day Road, Lincolnshire, Illinois 60069, Attention: Stephen M. Simes, with a copy by like means to Ungaretti & Harris, 3500 Three First National Plaza, Chicago, Illinois 60602, Attention: Gary I. Levenstein, Esq.

13. SEVERABILITY. Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be prohibited by or invalid under applicable law, such provision will be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of this Agreement.

14. REMEDIES. In the event of a breach or a threatened breach by any party to this Agreement of his or its obligations under this Agreement, any party injured or to be injured by such breach will be entitled to specific performance of its rights under this Agreement or to injunctive relief, as the case may be, in addition to being entitled to exercise all rights provided in this Agreement and granted by law. The parties agree that the provisions of this Agreement shall be specifically enforceable, it being agreed by the parties that the remedy at law, including monetary damages, for breach of any such provision will be inadequate compensation for any loss and that any defense or objection in any action for specific performance or injunctive relief that a remedy at law would be adequate is waived.

15. COUNTERPARTS. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

16. DESCRIPTIVE HEADINGS. The descriptive headings of this Agreement are inserted for convenience only and do not constitute a part of this Agreement.

17. GOVERNING LAW. The validity, meaning and effect of this Agreement shall be determined in accordance with the laws of the State of Illinois applicable to contracts made and to be performed in that state.

18. AMENDMENT. This Agreement may only be amended or changed by the written consent of the Company and 75% in interest of the Holders.

[signature page attached]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first set forth above.

THE COMPANY:

BEN-ABRAHAM TECHNOLOGIES INC.  
a Wyoming corporation

By: /s/ Stephen M. Simes  
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Its: President & CEO  
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SHAREHOLDERS:

/s/ Irving B. Harris Revocable Trust  
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/s/ Virginia H. Polsky Trust  
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/s/ Roxanne H. Frank Trust  
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/s/ Couderay Partners  
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/s/ Jerome Kahn, Jr. Revocable Trust  
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/s/ Fred Holubow  
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/s/ Morningstar Trust by Faye Morgenstern, Trustee  
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/s/ Victor Morgenstern  
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/s/ Resolute Partners by Victor Morgenstern  
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/s/ Goldstein Asset Management  
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/s/ Lawrence Goldstein  
-----

/s/ Burton W. Ruder, Linda Ruder, Trustee  
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/s/ James S. Levy Trust, James S. Levy, Trustee  
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/s/ Ronald Nash  
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/s/ Edward S. Loeb Revocable Trust, Edward S.  
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Loeb, Trustee  
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/s/ Steven J. Reid  
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/s/ Gary N. Wilner  
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/s/ Jarvis H. Friduss  
-----

/s/ Anita Nagler  
-----

/s/ JO & Co. by Ross J. Mangano, Partner  
-----

/s/ Sherwin Zuckerman  
-----

/s/ The Levenstein & Resnick Profit Sharing Plan &  
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Trust by Gary I. Levenstein, Trustee  
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/s/ Mitchell I. Dolins Trust, Mitchell I. Dolins,  
-----  
Trustee  
-----

/s/ Sheldon M. Bulwa  
-----

/s/ Stephen M. Simes  
-----

/s/ Howard Schraub  
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/s/ Hans Michael Jebesen  
-----

/s/ King Cho Fung  
-----

/s/ Stanley Ho  
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SECURITIES PURCHASE AGREEMENT

THIS SECURITIES PURCHASE AGREEMENT (this "AGREEMENT"), dated as of May 6, 1999, by and among BEN-ABRAHAM TECHNOLOGIES INC., a Wyoming corporation (the "COMPANY"), and each other person executing this Agreement as set forth on the signature page hereto (each a "PURCHASER").

The Company wishes to sell to the Purchasers, and the Purchasers wish to purchase, on the terms and subject to the conditions set forth in this Agreement, such number of Units (collectively the "UNITS") set forth on EXHIBIT A, each Unit being comprised of (i) 250,000 subordinate voting shares of the Company (collectively the "SUBORDINATE SHARES"), and (ii) one warrant (collectively the "WARRANTS") to purchase 125,000 subordinate voting shares of the Company (collectively the "EXERCISE SHARES"). The Subordinate Shares, Warrants and Exercise Shares are collectively referred to as the "SECURITIES."

The Company has agreed to grant certain registration rights to the Purchaser under the Securities Act of 1933, as amended (the "SECURITIES ACT"), pursuant to a Registration Rights Agreement of even date herewith by and between the Company and the Purchasers (the "REGISTRATION RIGHTS AGREEMENT"). The sale of the Units by the Company to the Purchasers will be effected in reliance upon the exemption from securities registration afforded by the provisions of Regulation D ("REGULATION D"), as promulgated by the Securities and Exchange Commission (the "COMMISSION") under the Securities Act.

The Company and the Purchasers hereby agree as follows:

1. PURCHASE AND SALE OF UNITS.

1.1 AGREEMENT TO PURCHASE AND SELL. Upon the terms and subject to the satisfaction of the conditions set forth herein, the Company agrees to sell on the Closing Date (as defined below), and each Purchaser agrees to purchase, severally but not jointly, such number of Units and at the purchase price indicated opposite each Purchaser's name on EXHIBIT A hereto. Each Purchaser shall pay the respective purchase price by wire transfer of immediately available funds on the Closing Date.

1.2 CLOSING. The closing of the sale of the Units (the "CLOSING") shall take place at the offices of Ungaretti & Harris, 3500 Three First National Plaza, Chicago, Illinois 60602 at 9:00 a.m., Chicago time, on May 6, 1999, or such other location or time as shall be mutually agreed upon by the parties (the "CLOSING DATE").

2. REPRESENTATIONS AND WARRANTIES OF PURCHASER.

Each Purchaser hereby makes the following representations and warranties to the Company and agrees with the Company that, as of the date of this Agreement and as of the Closing Date:

2.1 ENFORCEABILITY. This Agreement has been duly authorized by all necessary action on the part of such Purchaser, has been duly executed and delivered by such Purchaser and constitutes Purchaser's valid and legally binding obligation, enforceable in accordance with its terms, except as such enforcement may be limited by (i) applicable bankruptcy, insolvency, reorganization or other laws of general application relating to or affecting the enforcement of creditors' rights generally and (ii) general principles of equity.

2.2 LOCATION OF PRINCIPAL OFFICE, QUALIFICATION AS AN ACCREDITED INVESTOR. The state in which the Purchaser's principal office (or domicile, if such Purchaser is an individual) is located is the state set forth in such Purchaser's address on EXHIBIT A. The Purchaser by execution of this Agreement hereby represents that he, she or it qualifies as an "accredited investor" for purposes of Regulation D promulgated under the Securities Act. The Purchaser (i) is an investor in securities of companies in the development stage and acknowledges that he, she or it is able to fend for himself, herself or itself, and bear the loss of the Purchaser's entire investment in the Securities, and (ii) has such knowledge and experience in financial and business matters that the Purchaser is capable of evaluating the merits and risks of the investment to be made by the Purchaser pursuant to this Agreement. If other than an individual, the Purchaser also represents it has not been organized solely for the purpose of acquiring the Securities.

2.3 INVESTMENT INTENT. The Purchaser is acquiring the Securities for investment purposes only and for such Purchaser's own account and not with the view to, or for resale in connection with, any distribution or public offering thereof. The Purchaser has no current plan or intention to engage in a sale, exchange, transfer, distribution, redemption, reduction in any way of such Purchaser's risk of ownership by short sale or otherwise, or other disposition, directly or indirectly of the Securities being acquired by such Purchaser pursuant to this Agreement. The Purchaser is able to bear the economic risk of his, her or its investment and has the knowledge and experience in financial and business matters that he, she or it is capable of evaluating the merits and risks of an investment in the Securities of the Company. Notwithstanding the foregoing, in making such representation, Purchaser does not agree, except as otherwise provided in the Shareholders Agreement among the Company, Avi Ben-Abraham, the Purchasers and certain other stockholders of the Company (the "SHAREHOLDERS' AGREEMENT") and in the Private Placement Questionnaire and Undertaking provided by Purchaser to the Alberta Stock Exchange, to hold the Securities for any minimum or specific term and reserves the right to sell, transfer or otherwise dispose of the Securities at any time in accordance with the provisions of this Agreement and with federal, provincial and state securities laws applicable to such sale, transfer or disposition.

2.4 LIMITATIONS ON DISPOSITION. Purchaser acknowledges that, except as provided in the Registration Rights Agreement, the Securities have not been and are not being registered under the Securities Act or any state securities laws by reason of their contemplated issuance in transactions exempt from the registration requirements of the Securities Act pursuant to Section 4(2) thereof and applicable state securities laws, and that the reliance of the Company and others upon these exemptions is predicated in part upon this representation by the Purchaser. The Purchaser further understands that the Securities may not be transferred or resold without (a)

registration under the Securities Act and any applicable state securities laws, or (b) an exemption from the requirements of the Securities Act and applicable state securities laws. The Purchaser understands that an exemption from such registration is not presently available pursuant to Rule 144 promulgated under the Securities Act by the Securities and Exchange Commission (the "Commission") and that in any event the Purchaser may not sell any Securities acquired hereunder pursuant to Rule 144 prior to the expiration of a one-year period (or such shorter period as the Commission may hereafter adopt) after the Purchaser has acquired such securities. Such Purchaser understands that any sales pursuant to Rule 144 can be made only in full compliance with the provisions of Rule 144.

2.5 LEGEND. Purchaser understands that the certificates representing the Securities may bear at issuance a restrictive legend in substantially the following form:

"The securities represented by this certificate have not been registered under the Securities Act of 1933, as amended (the "Securities Act"), or the securities laws of any state, and may not be offered or sold unless a registration statement under the Securities Act and applicable state securities laws shall have become effective with regard thereto, or an exemption from registration under the Securities Act and applicable state securities laws is available in connection with such offer or sale. The securities represented by this certificate may not be traded in Alberta until one year after issuance except as permitted by the Securities Act (Alberta) and the rules made thereunder. Such securities are issued subject to the provisions of a Securities Purchase Agreement, dated as of May \_\_\_\_\_, 1999, by and between the Company and the purchasers named therein ("Purchasers"), a Registration Rights Agreement, dated as of May \_\_\_\_\_, 1999, by and between the Company and Purchasers, and a Shareholders' Agreement, dated May \_\_\_\_, 1999, among the Company and certain stockholders of the Company."

The Company shall make a notation regarding the restrictions on transfer of the Securities in its books and the Securities shall be transferred on the books of the Company only if transferred or sold pursuant to an effective registration statement under the Securities Act covering the securities to be transferred or an opinion of counsel satisfactory to the Company that such registration is not required.

2.6 INFORMATION. The Company has provided Purchaser with a copy of the Confidential Private Placement Memorandum dated March 19, 1999 and other information regarding the business, operations and financial condition of the Company, and has granted to Purchaser the opportunity to ask questions of and receive answers from representatives of the Company, its officers, directors, employees and agents concerning the Company and materials relating to the terms and conditions of the purchase and sale of the Units hereunder. Neither such information nor any other investigation conducted by Purchaser or any of its representatives shall modify, amend or otherwise affect Purchaser's right to rely on the Company's representations and warranties contained in this Agreement.

3. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

The Company hereby makes the following representations and warranties to the Purchasers and agrees with the Purchasers that, as of the date of this Agreement and as of the Closing Date:

3.1 ORGANIZATION, GOOD STANDING AND QUALIFICATION. Each of the Company and its Subsidiaries is duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization and has all requisite corporate power and authority to carry on its business as now conducted. Each of the Company and its Subsidiaries is duly qualified to transact business and is in good standing as a foreign corporation in each jurisdiction in which the failure so to qualify would have a Material Adverse Effect.

3.2 AUTHORIZATION; CONSENTS. The Company has the requisite corporate power and authority to enter into and perform its obligations under (i) this Agreement, (ii) the Registration Rights Agreement, (iii) the Warrants, (iv) the Shareholders' Agreement and (v) all other agreements, documents, certificates or other instruments executed and delivered by or on behalf of the Company at the Closing (the instruments described in (i) through (v) inclusive being collectively referred to herein as the "TRANSACTION DOCUMENTS"), and to issue and sell the Units to the Purchasers in accordance with the terms hereof. All corporate action on the part of the Company by its officers, directors and stockholders necessary for the authorization, execution and delivery of, and the performance by the Company of its obligations under, the Transaction Documents has been taken, and, except as disclosed in SCHEDULE 3.2, no further consent or authorization of the Company, its Board, its stockholders, any governmental agency or organization (other than as may be required under the federal and applicable state securities laws in respect of the Registration Rights Agreement), or any other person or entity is required.

3.3 ENFORCEMENT. The Transaction Documents when executed and delivered will be valid and legally binding obligations of the Company, enforceable in accordance with their respective terms, except as such enforcement may be limited by (i) applicable bankruptcy, insolvency, reorganization or other laws of general application relating to or affecting the enforcement of creditors' rights generally and (ii) general principles of equity.

3.4 MINUTE BOOKS. The minute books of the Company contain in all material respects a complete and correct summary of all meetings of the Board and the Company's stockholders since the time of incorporation of the Company. The minute books of each Subsidiary contain in all material respects a complete and correct summary of all meetings of the Board of Directors of such Subsidiary and such Subsidiary's stockholders since the time of formation of such Subsidiary.

3.5 VALID ISSUANCE. The Subordinate Shares are duly authorized and, when issued, sold and delivered in accordance with the terms hereof, (i) will be duly and validly issued, fully paid and nonassessable, free and clear of any taxes, liens, claims, preemptive or similar rights or encumbrances imposed by or through the Company, (ii) based in part upon the representations of

the Purchasers in this Agreement, will be issued, sold and delivered in compliance with all applicable federal, provincial and state securities laws and (iii) will be free of restrictions on transfer other than restrictions on transfer under this Agreement and the other Transaction Documents and under applicable federal, provincial and state securities laws. The Exercise Shares are duly authorized and reserved for issuance and, when issued upon exercise of the Warrants in accordance with the terms thereof, shall be duly and validly issued, fully paid and nonassessable, free and clear of any taxes, liens, claims, preemptive or similar rights or encumbrances imposed by or through the Company, and will be free of restrictions on transfer other than restrictions on transfer under this Agreement and the other Transaction Documents and under applicable federal, provincial and state securities laws.

3.6 NO CONFLICT WITH OTHER INSTRUMENTS. Neither the Company nor any of its Subsidiaries is in violation of any provisions of its charter, By-laws or any other governing document as amended and in effect on and as of the date hereof or in default (and no event has occurred which, with notice or lapse of time or both, would constitute a default) under any provision of any instrument or contract to which it is a party or by which it is bound, or of any provision of any federal or state judgment, writ, decree, order, statute, rule or governmental regulation applicable to the Company, which would have a Material Adverse Effect. The (i) execution, delivery and performance of this Agreement and the other Transaction Documents, and (ii) consummation of the transactions contemplated hereby and thereby (including without limitation, the issuance of the Units) will not result in any such violation or be in conflict with or constitute, with or without the passage of time and giving of notice, either a default under any such provision, instrument or contract or an event which results in the creation of any lien, charge or encumbrance upon any assets of the Company or any of its subsidiaries which would have a Material Adverse Effect or the triggering of any preemptive or anti-dilution rights or rights of first refusal or first offer on the part of holders of the Company's securities.

### 3.7 CAPITALIZATION.

(a) The capitalization of the Company as of the date hereof, including its authorized capital stock, the number of shares issued and outstanding, the number of shares issuable and reserved for issuance pursuant to the Company's stock option plans, the number of shares issuable and reserved for issuance pursuant to securities exercisable for, or convertible into or exchangeable for any shares of capital stock of the Company is set forth on SCHEDULE 3.7(a) hereto. All of such outstanding shares of capital stock have been, or upon issuance will be, validly issued, fully paid and non-assessable. No shares of the capital stock of the Company are subject to preemptive rights or any other similar rights of the stockholders of the Company or any liens or encumbrances created by or through the Company. Except as disclosed on SCHEDULE 3.7(a), or as contemplated herein, there are no outstanding options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into or exercisable or exchangeable for, any shares of capital stock of the Company, or arrangements by which the Company is or may become bound to issue additional shares of capital stock of the Company.

(b) Each Subsidiary's authorized capital stock is as set forth on SCHEDULE 3.7(b). As of the Closing Date, there shall be no declared but unpaid dividends or undeclared dividend arrearages on any shares of capital stock of any of the Subsidiaries. The Company owns of record and beneficially all shares of capital stock issued and outstanding of each Subsidiary and no Subsidiary has any shares of capital stock reserved for issuance or committed to be issued. There are no outstanding preemptive, conversion or other rights, options, warrants or agreements granted or issued by or binding upon any Subsidiary for the purchase or sale of any shares of its capital stock. All outstanding securities of each Subsidiary were issued in compliance with all federal, state and foreign securities laws. None of the Subsidiaries has any stock appreciation rights, phantom stock plan or similar rights outstanding.

3.8 FINANCIAL STATEMENTS. The Company has furnished the Purchasers with (a) consolidated balance sheets (the balance sheet dated as of December 31, 1998, the "BALANCE SHEET") of the Company and its Subsidiaries as of December 31, 1997 and 1998, together with the consolidated statement of operations and consolidated statement of cash flows for the years ended December 31, 1997 and 1998 (the "FINANCIAL STATEMENTS"). The Financial Statements of the Company, together with the notes thereto, have been prepared in accordance with GAAP. The Financial Statements fairly and accurately present in all material respects the financial position of the Company and its Subsidiaries, and the results of their operations, as of, and for the periods, specified therein. The Financial Statements are accompanied by audit reports of Deloitte & Touche, which reports have been delivered to the Purchasers.

3.9 EVENTS SUBSEQUENT TO DATE OF BALANCE SHEET. Except as otherwise reflected on SCHEDULE 3.9, since the date of the Balance Sheet, the Company has not (i) issued any stock, bond or other corporate security, (ii) borrowed any amount or incurred or become subject to any liability (absolute, accrued or contingent), except as contemplated hereby, immaterial amounts and current liabilities incurred and liabilities under contracts entered into in the ordinary course of business, (iii) discharged or satisfied any lien or encumbrance or incurred or paid any obligation or liability (absolute, accrued or contingent) other than as contemplated hereby, immaterial amounts and current liabilities shown on the Balance Sheet and current liabilities incurred since the date of the Balance Sheet in the ordinary course of business, (iv) declared or made any payment or distribution to stockholders or purchased or redeemed any share of its capital stock or other security, (v) mortgaged, pledged or subjected to lien any of its assets, tangible or intangible, other than liens of current real property taxes not yet due and payable and except in the ordinary course of business, (vi) sold, assigned or transferred any of its material tangible assets except in the ordinary course of business, or canceled any debt or claim, (vii) sold, assigned, transferred or granted any exclusive license with respect to any patent, trademark, trade name, service mark, copyright, trade secret or other intangible asset, (viii) suffered any material loss of property or waived any right of substantial value whether or not in the ordinary course of business, (ix) made any material change in officer compensation except in the ordinary course of business and consistent with past practice, (x) made any material change in the manner of business or operations of the Company, (xi) entered into any material transaction except in the ordinary course of business or as otherwise contemplated hereby or (xii) entered into any material commitment (contingent or otherwise) to do any of the foregoing.

3.10 TAXES. The Company and each of its Subsidiaries has filed all foreign, federal, state and local tax reports and returns required by any law or regulation to be filed by it, and such returns are true and correct in all material aspects. The Company and each of its Subsidiaries has paid all taxes, interest and penalties, if any, reflected on such tax returns or otherwise due and payable by it. The reserves, if any, for taxes reflected on the balance sheets included in the Financial Statements are adequate in amount for the payment of all liabilities for all taxes (whether or not disputed) of the Company and its Subsidiaries accrued through the dates of such balance sheets. Any deficiencies proposed as a result of any governmental audits of such tax returns have been paid or settled, and there are no present disputes or audits as to taxes payable by the Company or any of its Subsidiaries. The Company and each of its Subsidiaries have withheld and paid over to the appropriate taxing authority all taxes which it is required to withhold and pay over from amounts paid or owing to any employee, stockholder or holder of any other type of equity interest in the Company, any Subsidiary, creditor or third party.

3.11 LITIGATION. Except as set out in SCHEDULE 3.11, there is no material claim, litigation or administrative proceeding pending, or, to the Company's knowledge, threatened or contemplated, against the Company or any of its Subsidiaries, or against any officer, director or, in connection with such person's employment therewith, employee of the Company or any Subsidiary. Neither the Company nor any of its Subsidiaries is a party to or subject to the provisions of, any order, writ, injunction, judgment or decree of any court or government agency or instrumentality which could reasonably be expected to have a Material Adverse Effect.

3.12 TITLE TO PROPERTIES. The Company has good and marketable title to all of its properties and assets. All such properties and assets are free and clear of mortgages, pledges, security interests, liens, charges, claims, restrictions and other encumbrances, except for liens for current taxes not yet due and payable and minor imperfections of title, if any, not material in nature or amount and not materially detracting from the value or impairing the use of the property subject thereto or impairing the operations or proposed operations of the Company.

3.13 LEASEHOLD INTERESTS. Each lease or agreement to which the Company is a party under which it is a lessee of any property, real or personal, is a valid agreement without any material default of the Company thereunder and, to the best of the Company's knowledge, without any material default thereunder of any other party thereto. No event has occurred and is continuing which, with due notice or lapse of time or both, would constitute a material default or event of default by the Company under any such lease or agreement or, to the best of the Company's knowledge, by any other party thereto. The Company's possession of such property has not been disturbed and, to the best of the Company's knowledge, no claim has been asserted against the Company adverse to its rights in such leasehold interests.

3.14 MATERIAL AGREEMENTS. SCHEDULE 3.14 sets forth a list of all material agreements of any nature to which the Company is a party or by which it is bound, including without limitation (a) each agreement which requires future expenditures by the Company in excess of \$25,000, (b) all employment and consulting agreements, employee benefit, bonus, pension, profit sharing, stock option, stock purchase and similar plans and arrangements, and distributor and sales representative agreements, and (c) any agreement to which any stockholder, officer or director of the Company, or

any "affiliate" or "associate" of such persons (as such terms are defined in the rules and regulations promulgated under the Securities Act), is presently a party, including without limitation any agreement or other arrangement providing for the furnishing of services by, rental of real or personal property from, or otherwise requiring payments to, any such person or entity.

Except as set forth in SCHEDULE 3.14, the Company, and to the best of the Company's knowledge, each other party thereto have in all material respects performed all the obligations required to be performed by them to date, have received no notice of default and are not in default in any material respect (with due notice or lapse of time or both) under any material lease, agreement or contract now in effect to which the Company is a party or by which it or its property may be bound. The Company has no present expectation or intention of not fully performing all its material obligations under each such material lease, contract or other agreement, and the Company has no knowledge of any breach or anticipated breach by the other party to any contract or commitment to which the Company is a party. The Company is in full compliance with all of the terms and provisions of its charter and By-laws.

3.15 PATENTS, TRADEMARKS, ETC. SCHEDULE 3.15 contains a list and brief description of all patents, patent rights, patent applications, trademarks, trademark applications, service marks, service mark applications, trade names and copyrights, and all applications for such which are in the process of being prepared, owned by or registered in the name of the Company, or of which the Company is a licensor or licensee or in which the Company has any right, and in each case a brief description of the nature of such right. The Company owns or possesses adequate licenses or other rights to use all patents, patent applications, trademarks, trademark applications, service marks, service mark applications, trade names, copyrights, manufacturing processes, formulae, trade secrets and know how (collectively, "INTELLECTUAL PROPERTY") necessary to the conduct of its business as conducted and no claim is pending or, to the best of the Company's knowledge, threatened to the effect that the operations of the Company infringe upon or conflict with the asserted rights of any other Person under any Intellectual Property, and to the best knowledge of the Company, there is no basis for any such claim (whether or not pending or threatened). No claim is pending or, to the best knowledge of the Company, threatened to the effect that any such Intellectual Property owned or licensed by the Company, or which the Company otherwise has the right to use, is invalid or unenforceable by the Company, and to the best knowledge of the Company, there is no basis for any such claim (whether or not pending or threatened). To the best of the Company's knowledge, all technical information developed by and belonging to the Company which has not been patented has been kept confidential. Except as set forth in SCHEDULE 3.15, the Company has not granted or assigned to any other person or entity any right to manufacture, have manufactured, assemble or sell the products or proposed products or to provide the services or proposed services of the Company.

3.16 EMPLOYEE SALARIES. SCHEDULE 3.16 contains a true, correct and complete list setting forth (i) the names and current salaries of the employees of the Company or any of its Subsidiaries whose current annual compensation and/or estimated annual compensation is \$50,000 or more and (ii) the names of independent contractors who render services on a regular basis to the Company or any of its Subsidiaries whose current annual compensation and/or estimated annual compensation is \$50,000 or more. The Company is not aware of any employee of the Company or any of its Subsidiaries that is obligated under any contract (including licenses, covenants or commitments of

any nature) or other agreement or arrangement, or subject to any judgment, decree or order of any court or administrative agency, that would interfere with the use of his or her best efforts to promote the interest of the Company and its Subsidiaries or that would conflict with the business of the Company or any of its Subsidiaries as conducted or as proposed to be conducted or that would prevent any such employee from assigning inventions to the Company or any of its Subsidiaries. The Company does not believe that it is or will be necessary for the Company or any of its Subsidiaries to utilize any inventions of its employees (or Persons the Company or any of its Subsidiaries currently intends to hire) made prior to their employment by the Company or any of its Subsidiaries except for inventions that have been assigned to the Company.

3.17 PERSONNEL CONTRACTS, AGREEMENTS, PLANS AND ARRANGEMENTS. Except for agreements listed in SCHEDULE 3.14 and the Company's stock option plans, neither the Company nor any of its Subsidiaries is a party to or obligated in connection with their business, with respect to any (a) material contracts with employees, agents, consultants, advisers, salesmen or agents (b) collective bargaining agreements or contracts or contracts with any labor union or other representative of employees or any employee benefits provided for by any such agreement. No strike, union organizational activity, allegation, charge or complaint of employment discrimination or other similar occurrence occurred during the past five completed fiscal years, or is pending or, to the Company's knowledge, threatened against the Company or any of its Subsidiaries that has had or may have a Material Adverse Effect, nor does the Company know any basis for any such allegation, charge or complaint. Except as set forth in SCHEDULE 3.17, the Company is not aware that any officer or key employee, or that any group of key employees, intends to terminate their employment with the Company, nor does the Company have a present intention to terminate the employment of any of the foregoing. Except as set forth on SCHEDULE 3.17, the employment of each officer and employee of the Company is terminable at the will of the Company, and no severance pay is due in connection with any such termination. To the best of its knowledge, the Company has complied in all material respects with all applicable federal and state equal employment opportunity and other laws related to employment.

3.18 RELATED-PARTY TRANSACTIONS. No employee, officer or director of the Company or member of his or her immediate family is indebted to the Company, nor is the Company indebted (or committed to make loans to or extend or guarantee credit) to any of them. Except as set forth in SCHEDULE 3.18, to the best of the Company's knowledge, none of such Persons has any direct or indirect ownership interest in any firm or company with which the Company is affiliated or with which the Company has a business relationship, or any firm or corporation that competes with the Company, except that employees, officers or directors of the Company and members of their immediate families may own stock in publicly traded companies that may compete with the Company. No member of the immediate family of any officer or director of the Company is directly or indirectly interested in any material contract with the Company.

3.19 INSURANCE. The Company and its Subsidiaries carry insurance with financially sound reputable insurance companies, in such amounts, with such deductibles and covering such risks as are customarily carried by companies engaged in similar businesses.

3.20 SOFTWARE. The Company and each of its Subsidiaries has conducted an analysis of, and developed a compliance program (the "COMPLIANCE PROGRAM") with respect to the effect of Year 2000 (including the correct processing and calculation of dates prior to, during and after the Year 2000) upon the software, tradeware, telecommunications and automated processes of the Company and its Subsidiaries. The Compliance Program adequately and fully resolves the Year 2000 issues and the Compliance Program will be implemented in a timely manner so that the Year 2000 will not have a Material Adverse Effect.

3.21 ENVIRONMENTAL AND SAFETY LAWS. To the best of its knowledge, the Company is not in violation of any applicable statute, law or regulation relating to the environment or occupational health and safety which would have a Material Adverse Effect, and to the best of its knowledge, no material expenditures are or will be required in order to comply with any such existing statute, law or regulation.

3.22 REGISTRATION RIGHTS; RIGHTS OF PARTICIPATION. Except as provided in the Transaction Documents or in SCHEDULE 3.22, the Company has not granted or agreed to grant to any person or entity any rights (including "piggy-back" registration rights) to have any securities of the Company registered with the Commission or any other governmental authority which has not been satisfied and no person or entity, including, but not limited to, current or former stockholders of the Company, underwriters, brokers, agents or other third parties, has any right of first refusal, preemptive right, right of participation, or any similar right to participate in the transactions contemplated by this Agreement or the other Transaction Documents which has not been waived.

3.23 FEES. The Company is not obligated to pay any compensation or other fee, cost or related expenditure to any underwriter, broker, agent or other representative in connection with the transactions contemplated hereby.

3.24 TRADING ON ALBERTA STOCK EXCHANGE. The subordinate voting shares of the Company are listed on the Alberta Stock Exchange and trading in such shares on such market has not been suspended. The Company is in full compliance with the continued listing criteria of the Alberta Stock Exchange, and does not reasonably anticipate that the subordinate voting shares will be delisted from the Alberta Stock Exchange, whether by reason of the transactions contemplated by this Agreement or the other Transaction Documents and is not aware of any inquiry by or received any notice from the Alberta Stock Exchange regarding any failure or alleged failure by the Company to comply with such requirements which has not been favorably resolved prior to the date hereof.

3.25 REGULATORY PERMITS. The Company and its Subsidiaries possess all material certificates, authorizations and permits issued by the appropriate federal, state or foreign regulatory authorities necessary to conduct their respective businesses, and neither the Company nor any such Subsidiary has received any notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit.

3.26 DISCLOSURE. Neither this Agreement nor any Schedule or Exhibit to this Agreement contains an untrue statement of a material fact or omits a material fact necessary to make the statements contained herein or therein not misleading. None of the statements, documents, certificates or other items prepared or supplied by the Company with respect to the transactions contemplated hereby contains an untrue statement of a material fact or omits a material fact necessary to make the statements contained therein not misleading. There is no fact which the Company has not disclosed to the Purchasers and, if applicable, their counsel in writing and of which the Company is aware which materially and adversely affects or could materially and adversely affect the business, financial condition, operations, property or affairs of the Company.

4. COVENANTS OF THE COMPANY.

Subject to the provisions of SECTION 6, the Company covenants and agrees as follows:

4.1 CORPORATE EXISTENCE. The Company shall maintain its corporate existence in good standing and shall pay all taxes owed by it when due except for taxes which the Company reasonably disputes and for which it maintains adequate reserves.

4.2 FINANCIAL STATEMENTS. The Company shall provide each Purchaser:

(i) as soon as practicable after the end of each fiscal year of the Company, and in any event within one hundred forty (140) days thereafter (provided, however, that if any Person other than the Purchasers is entitled to receive the information described in this SECTION 4.2(i) any earlier than one hundred forty (140) days from the end of each fiscal year, each Purchaser shall also be entitled to such information within such earlier period), consolidated balance sheets of the Company and its Subsidiaries, as of the end of such year, and consolidated statements of operations and cash flow of the Company and its Subsidiaries, for each such fiscal year, prepared in accordance with GAAP and setting forth in each case in comparative form the figures for the previous fiscal year, all in reasonable detail and accompanied by the audit report of the Company's independent certified public accountants; and

(ii) as soon as practicable after the end of each fiscal quarter, other than the end of the fiscal year, of the Company, and in any event within sixty (60) days thereafter (provided, however, that if any Person other than the Purchasers is entitled to receive the information described in this SECTION 4.2(ii) any earlier than sixty (60) days from the end of each fiscal quarter, each Purchaser shall also be entitled to such information within such earlier period), consolidated balance sheets of the Company and its Subsidiaries, as of the end of such quarter, and consolidated statements of operations and cash flow of the Company and its Subsidiaries, for each such fiscal quarter, prepared in accordance with GAAP (except for footnote disclosure), subject to changes resulting from normal year-end audit adjustments, all in reasonable detail.

4.3 FORM D; BLUE-SKY QUALIFICATION. The Company agrees to file a Form D with respect to the Units as required under Regulation D and to provide a copy thereof to the

Purchasers promptly after such filing. The Company shall, on or before the Closing Date, take such action as is necessary to qualify the Units for sale under applicable state or "blue-sky" laws or obtain an exemption therefrom, and shall provide evidence of any such action to the Purchasers at or prior to the Closing.

4.5 USE OF PROCEEDS. The Company shall use the proceeds from the sale of the Units for general corporate purposes only, in the ordinary course of its business and consistent with past practice.

4.6 TRANSACTIONS WITH AFFILIATES. The Company agrees that any transaction or arrangement between it or any of its subsidiaries and any affiliate or employee of the Company shall be effected on an arms' length basis in accordance with customary commercial practice and shall be approved by a majority of the Company's outside directors.

5. CONDITIONS TO CLOSING.

5.1 CONDITIONS TO PURCHASERS' OBLIGATIONS AT CLOSING. Each Purchaser's obligations at the Closing, including without limitation its obligation to purchase Units, are conditioned upon the fulfillment (or waiver by such Purchaser) of each of the following events as of the Closing Date:

5.1.1 REPRESENTATIONS AND WARRANTIES. The representations and warranties of the Company set forth in this Agreement shall be true and correct in all material respects as of such date as if made on such date.

5.1.2 PERFORMANCE. The Company shall have complied with or performed in all material respects all of the agreements, obligations and conditions set forth in this Agreement that are required to be complied with or performed by the Company on or before the Closing.

5.1.3 COMPLIANCE CERTIFICATE. The Company shall have delivered to such Purchaser a certificate, signed by an officer of the Company, certifying that the conditions specified in paragraphs 5.1.1, 5.1.2 and 5.1.11 have been fulfilled as of the Closing.

5.1.4 SECRETARY'S CERTIFICATE. The Company shall have delivered to such Purchaser a certificate, signed by the Secretary of the Company, attaching a copy of the Articles of Incorporation and By-laws of the Company currently in effect and a copy of the resolutions of the Board authorizing the transactions contemplated hereby, and certifying that such copies are true and correct as of the Closing Date and that such resolutions have not been modified or rescinded since the date of their adoption by the Company's Board.

5.1.5 LEGAL OPINION. The Company shall have delivered to Purchaser an opinion of counsel for the Company, dated as of such date, in form reasonably acceptable

to the Purchasers, and covering such additional matters as may reasonably be requested by the Purchasers.

5.1.6 CERTIFICATES. The Company shall have delivered duly executed certificates representing the Subordinate Shares being purchased by such Purchaser.

5.1.7 WARRANTS. The Company shall have executed and delivered to such Purchaser the applicable Warrant in the form of EXHIBIT B hereto.

5.1.8 REGISTRATION RIGHTS AGREEMENT. The Company shall have executed and delivered to such Purchaser the Registration Rights Agreement in the form of EXHIBIT C hereto.

5.1.9 SHAREHOLDERS AGREEMENT. The Company, Avi Ben-Abraham and the other stockholders shall have executed and delivered to such Purchaser the Shareholders' Agreement in the form of EXHIBIT D hereto.

5.1.10 ALBERTA STOCK EXCHANGE. The Alberta Stock Exchange shall have accepted notice of the issuance of the Units. The subordinate voting shares of the Company shall be quoted on the Alberta Stock Exchange and trading in such shares on such exchange shall not have been suspended.

5.1.11 NO MATERIAL ADVERSE CHANGE. There shall have been no Material Adverse Change since the date of the Balance Sheet.

5.1.12 EMPLOYMENT AGREEMENTS. The Company and each of Stephen Simes ("SIMES") and Phillip Donenberg ("DONENBERG") shall have entered into amendments to Simes' and Donenberg's Employment Agreements dated January 21, 1998 and June 11, 1998, respectively, in the forms of EXHIBIT E-1 AND E-2 hereto.

5.2 CONDITIONS TO COMPANY'S OBLIGATIONS AT CLOSING. The Company's obligations at the Closing are conditioned upon the fulfillment (or waiver by the Company) of each of the following events as of the Closing Date:

5.2.1 REPRESENTATIONS AND WARRANTIES. The representations and warranties of each Purchaser shall be true and correct in all material respects as of such date as if made on such date.

5.2.2 PERFORMANCE. The Purchasers shall have complied with or performed all of the agreements, obligations and conditions set forth in this Agreement that are required to be complied with or performed by the Purchasers on or before the Closing.

5.2.3 PRIVATE PLACEMENT QUESTIONNAIRE. Each Purchaser shall have executed and delivered to the Company a Private Placement Questionnaire and Undertaking as required by the Alberta Stock Exchange.

5.2.4 NO LITIGATION OR LEGISLATION. No statute, rule, regulations, decree, ruling or injunction shall have been enacted or entered, and no litigation, proceeding government inquiry or investigation shall be pending, which challenges, prohibits, restricts, or seeks to prohibit or restrict, the consummation of the transactions contemplated by this Agreement or other agreements referred to herein, or restricts or impairs the ability of the Purchasers to own an equity interest in the Company.

6. TERMINATION OF CERTAIN COVENANTS:

The obligations of the Company under SECTION 4 of this Agreement, notwithstanding any provisions hereof apparently to the contrary, shall terminate and shall be of no further force or effect on the closing date of a bona fide, firmly underwritten public offering of the Company's capital stock, registered under the Securities Act pursuant to a registration statement on Form S-1 (or a similar successor form). Furthermore, the obligations of the Company under SECTION 4 of this Agreement shall terminate and shall be of no further force or effect on the date that the Purchasers or any of them sell or transfer any shares of capital stock if, following such sale or transfer, the Purchasers (and any Permitted Transferees (as defined in the Shareholders' Agreement) and entities controlled by them), in the aggregate, own less than ten percent (10%) of the outstanding shares of capital stock originally issued or issuable pursuant to this Agreement and the Warrants.

7. DEFINITIONS.

7.1 DEFINITIONS. In addition to the capitalized terms defined elsewhere in this Agreement, the following capitalized terms have the following meanings when used in this Agreement:

"AFFILIATE" means, as applied to any Person, (i) any other Person, directly or indirectly controlling, controlled by, or under common control with, that Person, (ii) any other Person that owns or controls (A) ten percent (10%) or more of any class of equity securities of that Person or any of its Affiliates or (B) ten percent (10%) or more of any class of equity securities (including equity securities issuable upon the exercise of any option or convertible security) of that Person or any of its Affiliates or (iii) any director, executive officer or relative of such Person. The term "control" (including, with correlative meanings, the terms "controlling," "controlled by" and "under common control with"), as applied to any Person, means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of that Person, whether through ownership of voting securities, by contract or otherwise. For purposes of this Agreement, each Subsidiary of the Company shall be deemed an "Affiliate" of the Company.

"BOARD" means the Board of Directors of the Company.

"BUSINESS DAY" means any day on which the Alberta Stock Exchange and commercial banks in the City of Chicago, Illinois are open for business.

"GAAP" means generally accepted accounting principles, consistently applied.

"MATERIAL ADVERSE EFFECT" means a material adverse effect on the business, assets or condition (financial or otherwise) of the Company and its Subsidiaries, taken as a whole.

"PERSON" means an individual, a partnership, a corporation, a limited liability company, an association, a joint stock company, a trust, a joint venture, an unincorporated organization or a governmental entity or any department, agency or political subdivision thereof.

"SUBSIDIARY" means any corporation, association or other entity of which securities or other ownership interests representing more than fifty percent (50%) of the ordinary voting power are, at the time as of which any determination is being made, owned or controlled by the Company and/or any one or more Subsidiaries of the Company.

7.2 RULES OF CONSTRUCTION. The following provisions shall be applied wherever appropriate herein:

(a) "herein," "hereby," "hereunder," "hereof" and other equivalent words shall refer to this Agreement as an entirety and not solely to the particular portion of this Agreement in which any such word is used;

(b) all definitions set forth herein shall be deemed applicable whether the words defined are used herein in the singular or the plural;

(c) wherever used herein, any pronoun or pronouns shall be deemed to include both the singular and plural and to cover all genders;

(d) all accounting terms not specifically defined herein shall be construed in accordance with GAAP;

(e) all references herein to "Dollars" or "\$" shall refer to currency of the United States of America;

(f) neither this Agreement nor any other agreement, document or instrument referred to herein or executed and delivered in connection herewith shall be construed against either party as the principal draftsperson hereof or thereof;

(g) all references or citations in this Agreement to statutes or regulations or statutory or regulatory provisions shall generally be considered citations to such statutes, regulations or provisions as in effect on the date hereof, except that when the context otherwise requires, such references shall be considered citations to such statutes, regulations or provisions as in effect from time to time, including any successor statutes,

regulations or provisions directly or indirectly superseding such statutes, regulations or provisions;

(h) any references herein to a particular Section, Part, Exhibit or Schedule means a Section or Part of, or an Exhibit or Schedule to, this Agreement unless another agreement is specified; and

(i) the Exhibits and Schedules attached hereto are incorporated herein by reference and shall be considered part of this Agreement.

## 8. MISCELLANEOUS.

8.1 SURVIVAL; SEVERABILITY. The representations, warranties, covenants and indemnities made by the parties herein shall survive the Closing notwithstanding any due diligence investigation made by or on behalf of the party seeking to rely thereon. In the event that any provision of this Agreement becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Agreement shall continue in full force and effect without said provision; provided that in such case the parties shall negotiate in good faith to replace such provision with a new provision which is not illegal, unenforceable or void, as long as such new provision does not materially change the economic benefits of this Agreement to the parties.

8.2 SUCCESSORS AND ASSIGNS. The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement. This Agreement may not be assigned by any party hereto without the express written consent of all other parties hereto.

8.3 GOVERNING LAW; JURISDICTION. This Agreement shall be governed by and construed under the laws of the State of Illinois without regard to the conflict of laws provisions thereof. Each party hereby irrevocably submits to the non-exclusive jurisdiction of the state and federal courts sitting in the City of Chicago, Illinois, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address in effect for notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law.

8.4 COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same instrument.

8.5 HEADINGS. The headings used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

8.6 NOTICES. Any notice, demand or request required or permitted to be given by any party to any other party pursuant to the terms of this Agreement shall be in writing and shall be deemed given (i) when delivered personally or by verifiable facsimile transmission (with an original to follow) on or before 5:00 p.m., Chicago time, on a Business Day or, if such day is not a Business Day, on the next succeeding Business Day, (ii) on the next Business Day after timely delivery to a nationally-recognized overnight courier and (iii) on the third Business Day after deposit in the U.S. mail (certified or registered mail, return receipt requested, postage prepaid), addressed to the parties as follows:

If to the Company:

Ben-Abraham Technologies, Inc.  
175 Olde Half Day Road  
Lincolnshire, Illinois 60069  
Attn: Stephen M. Simes  
Tel: 847-793-2434  
Fax: 847-793-2435

with a copy to:

Borden & Elliot  
Scotia Plaza, Suite 4100  
40 King Street West  
Toronto, Canada M5H 3Y4  
Attn: Paul Findlay  
Tel: 416-367-6191  
Fax: 416-361-7083

and if a Purchaser, to such address as indicated on EXHIBIT A hereto

with a copy to:

Ungaretti & Harris  
3500 Three First National Plaza  
Chicago, Illinois 60602  
Attn: Gary I. Levenstein  
Tel: 312-977-4108  
Fax: 312-977-4405

8.8 EXPENSES. The Company and the Purchasers each shall pay all costs and expenses that they incur in connection with the negotiation, execution, delivery and performance of this

Agreement; provided, however, that the Company shall reimburse the Purchasers for all reasonable legal fees and expenses incurred by the Purchasers in connection with its due diligence investigation of the Company and the negotiation, preparation, execution, delivery and performance of this Agreement and the other Transaction Documents in an amount not to exceed (i) twenty-five thousand dollars (\$25,000) if any Purchaser does not purchase Units and (ii) seventy-five thousand dollars (\$75,000) if any Purchaser does purchase Units.

8.9 ENTIRE AGREEMENT; AMENDMENTS. This Agreement and the other Transaction Documents constitute the entire agreement between the parties with regard to the subject matter hereof and thereof, superseding all prior agreements or understandings, whether written or oral, between or among the parties. Except as expressly provided herein, neither this Agreement nor any term hereof may be amended except pursuant to a written instrument executed by the Company and the Purchasers, and no provision hereof may be waived other than by a written instrument signed by the party against whom enforcement of any such waiver is sought.

[signature page attached]

IN WITNESS WHEREOF, the undersigned have executed this Agreement as of the date first-above written.

BEN-ABRAHAM TECHNOLOGIES INC.

By: /s/ Stephen M. Simes

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Stephen M. Simes, President and  
Chief Executive Officer

/s/ Irving B. Harris Revocable Trust

-----  
/s/ Virginia H. Polsky Trust

-----  
/s/ Roxanne H. Frank Trust

-----  
/s/ Couderay Partners

-----  
/s/ Jerome Kahn, Jr. Revocable Trust

-----  
/s/ Fred Holubow

-----  
/s/ Morningstar Trust by Faye Morgenstern,  
Trustee

-----  
/s/ Victor Morgenstern

-----  
/s/ Resolute Partners by Victor Morgenstern

-----  
/s/ Goldstein Asset Management

-----  
/s/ Lawrence Goldstein

-----  
/s/ Burton W. Ruder, Linda Ruder, Trustee

-----  
/s/ James S. Levy Trust, James S. Levy,  
Trustee

-----  
/s/ Ronald Nash

-----  
/s/ Edward S. Loeb Revocable Trust,  
Edward S. Loeb, Trustee

-----  
/s/ Steven J. Reid

/s/ Gary N. Wilner  
-----

/s/ Jarvis H. Friduss  
-----

/s/ Anita Nagler  
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/s/ JO & Co. by Ross J. Mangano,  
Partner  
-----

/s/ Sherwin Zuckerman  
-----

/s/ The Levenstein & Resnick Profit  
Sharing Plan & Trust by Gary I. Levenstein,  
Trustee  
-----

/s/ Mitchell I. Dolins Trust, Mitchell  
I. Dolins, Trustee  
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/s/ Sheldon M. Bulwa  
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/s/ Stephen M. Simes  
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/s/ Howard Schraub  
-----

/s/ Hans Michael Jebesen  
-----

/s/ King Cho Fung  
-----

/s/ Stanley Ho  
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EXHIBIT A  
TO SECURITIES PURCHASE AGREEMENT

STARBOW INVESTORS	ADDRESS	UNITS	TOTAL PURCHASE PRICE
Irving B. Harris Revocable Trust	2 N. LaSalle Street, Suite 400 Chicago, IL 60602	3.0	\$141,811
Virginia H. Polsky Trust	2 N. LaSalle Street, Suite 400 Chicago, IL 60602	1.5	70,905
Roxanne H. Frank Trust	2 N. LaSalle Street, Suite 400 Chicago, IL 60602	2.0	94,541
Couderay Partners	2 N. LaSalle Street, Suite 400 Chicago, IL 60602	2.0	94,541
Jerome Kahn, Jr. Revocable Trust	2 N. LaSalle Street, Suite 400 Chicago, IL 60602	0.5	23,635
Fred Holubow	2 N. LaSalle Street, Suite 400 Chicago, IL 60602	1.0	47,270
Morningstar Trust by Faye Morgenstern, Trustee	106 Vine Avenue Highland Park, IL 60035	2.0	94,541
Victor Morgenstern	106 Vine Avenue Highland Park, IL 60035	6.0	283,622
Resolute Partners	106 Vine Avenue Highland Park, IL 60035	2.0	94,541
Goldstein Asset Management	15301 Dallas Pkwy, Suite 840 Dallas, TX 75248	0.5	23,635
Lawrence Goldstein	15301 Dallas Pkwy, Suite 840 Dallas, TX 75248	0.5	23,635
Linda Ruder, Custodian for John Ruder	2238 Egandale Road Highland Park, IL 60035	0.5	23,635
Joanna Ruder	2238 Egandale Road Highland Park, IL 60035	0.5	23,635
James S. Levy Trust, James S. Levy Trustee	1349 N. Thatcher Avenue Highland Park, IL 60035	1.0	47,270
Ronald Nash	134 Essex Drive Tenafly, NJ 07670	1.0	47,270
Edward S. Loeb Revocable Trust, Edward S. Loeb Trustee	1935A N. Hudson Chicago, IL 60614	1.0	47,270
Steven J. Reid	c/o Harris Associates 2 N. LaSalle Street, Suite 500 Chicago, IL 60602	2.0	94,541
Gary N. Wilner	2349 Wood Path Highland Park, IL 60646	1.0	47,270
Jarvis H. Friduss	4447 W. Peterson Ave. Suite 300 Chicago, IL 60646	0.5	23,635
Anita Nagler	2233 N. Burling Chicago, IL 60614	6.0	283,622
JO & Co.	112 W. Jefferson Blvd. Suite 613 South Bend, IN 46634	30.0	1,418,108
Sherwin and Sheri Zuckerman	1049 Bluff Rd. Glencoe, IL 60022	3.0	141,811
The Levenstein & Resnick Profit Sharing Plan & Trust by Gary I. Levenstein	c/o Ungaretti & Harris 3500 Three First National Plaza Chicago, IL 60602	1.0	47,270
Mitchell I. Dolins Trust, Mitchell I. Dolins Trustee	427 Brierhill Rd. Deerfield, IL 60015	1.5	70,905
Sheldon M. Bulwa	135 Arrowwood Drive Northbrook, IL 60062	0.5	23,635
Stephen M. Simes	175 Old Half Day Rd. Lincolnshire, IL 60069	1.0	47,270

Howard Schraub

8538 Ruelle Monte Carlo  
La Jolla, CA 92037

1.0

47,270

TOTAL

72.5

\$3,427.094

EXHIBIT A  
TO SECURITIES PURCHASE AGREEMENT

HONG KONG INVESTORS	ADDRESS	UNITS	TOTAL PURCHASE PRICE	
Hans Michael Jebsen	31/F. Caroline Center 28 Yon Ping Road Causeway Bay, Hong Kong	6.0	283,622	
Markus Jebsen	31/F. Caroline Center 28 Yon Ping Road Causeway Bay, Hong Kong	2.0	94,540	
King Cho Fung	Room 2101 Lyndhurst Tower One Lyndhurst Terrace Central Hong Kong	6.0	283,622	
Stanley Ho	1 Repulse Bay Hong Kong	6.0	283,622	
		TOTAL	20	\$945,406

EXHIBIT B  
TO SECURITIES PURCHASE AGREEMENT

FORM OF WARRANT

See Tab No. 9

EXHIBIT C  
TO SECURITIES PURCHASE AGREEMENT

FORM OF REGISTRATION RIGHTS AGREEMENT

See Tab No. 5

EXHIBIT D  
TO SECURITIES PURCHASE AGREEMENT

FORM OF SHAREHOLDERS' AGREEMENT

See Tab No. 4

EXHIBIT E-1 AND E-2  
TO SECURITIES PURCHASE AGREEMENT

FORM OF AMENDED EMPLOYMENT AGREEMENT  
OF  
STEPHEN SIMES  
AND  
PHILLIP DONENBERG

See Tab No. 10

HIGHLANDS PARK ASSOCIATES  
C/O BAKER-DENNARD CO.  
PLAZA SQUARE NORTH  
SUITE 450  
4360 CHAMBLEE-DUNWOODY ROAD  
ATLANTA, GEORGIA 30341

HIGHLANDS PARK ASSOCIATES  
LEASE AGREEMENT

THIS LEASE, made this 15 day of September, 1997, by and between HIGHLANDS PARK ASSOCIATES, a Georgia general partnership (hereafter called "Landlord"), and Ben-Abraham Technologies, Inc. (a Wyoming Corporation) (hereinafter called "Tenant");

WITNESSETH:

PREMISES

1. Landlord, for and in consideration of the rents, covenants, agreements, and stipulations hereinafter mentioned, provided for and contained to be paid, kept and performed by Tenant, leases and rents unto Tenant, and Tenant hereby leases and takes upon the terms and conditions which hereinafter appear, the following described property (hereinafter called the "Premises"), to wit:

Approximately 11,840 square feet of rentable space in a multi tenant business park building,

and being known as 4600-A & B Highlands Parkway, Smyrna, Georgia 30082. No easement for light or air is included in the Premises.

Except as otherwise provided in any Special Stipulations attached to this Lease, Tenant accepts the Premises in their present condition "AS IS" and as suited for the purposes intended by Tenant.

TERM

2. Tenant shall have and hold the Premises for a term beginning on the 1 day of November, 1997, and ending on the 31 day of October, 2003, at midnight, unless sooner terminated as hereinafter provided.

RENT

3. (a) Tenant agrees to pay to Landlord at the address set forth above, without demand, deduction or set off, annual rent of \$55,056.00 payable in equal monthly installments of \$4,588.00 in advance on the first day of each calendar month during the term hereof ("Minimum Base Rent"). Upon execution of this Lease, Tenant shall pay to Landlord the first full month's rent due hereunder. Monthly Minimum Base Rent for any period during the term hereof which is

for less than one month shall be a pro-rated portion of the monthly installment due. Tenant shall pay a monthly installment of Minimum Base Rent to Landlord in the amount provided herein (as such amount may be increased from time to time pursuant to Section 3(b) below).

(b) Upon each Lease Anniversary (as hereinafter defined) the amount of each monthly installment of Minimum Base Rent which shall be due from Tenant to Landlord on such Lease Anniversary and on the first day of each succeeding calendar month (prior to the next Lease Anniversary) shall increase by three and one-half percent (3.5%). For purposes of this Section 3, the term "Lease Anniversary" shall refer to the anniversary during each year of the term of this Lease of the first day of the calendar month during which the Lease hereunder commenced.

#### LATE CHARGES

4. If Landlord fails to receive any monthly installment of Minimum Base Rent within ten (10) days after it becomes due, Tenant shall pay Landlord, as additional rental, a late charge equal to ten percent (10%) of the overdue amount. The parties agree that such late charge represents a fair and reasonable estimate of the costs Landlord will incur by reason of such late payment.

#### SECURITY DEPOSIT

5. Tenant shall deposit with Landlord upon execution of this Lease \$9,176.00 as a security deposit which shall be held by Landlord, without liability to Tenant for any interest thereon, as security for the full and faithful performance by Tenant of each and every term, covenant and condition of this Lease of Tenant. If any of the rents or other charges or sums payable by Tenant to Landlord shall be over-due and unpaid or should Landlord make payments on behalf of Tenant, or should Tenant fail to perform any of the terms of this Lease, then Landlord may, at its option, appropriate and apply the security deposit, or so much thereof as may be necessary to compensate Landlord toward the payment of Minimum Base Rent, additional rents, charges or other sums due from Tenant, or towards any loss, damage or expense sustained by Landlord resulting from such default on the part of Tenant; and in such event Tenant shall upon demand restore the security deposit to the original sum deposited. In the event Tenant furnishes Landlord with proof that all utility bills have been paid through the date of Lease termination, and performs all of Tenant's other obligations under this Lease, the security deposit shall be returned in full to Tenant within thirty (30) days after the date of the expiration or sooner termination of the term of this Lease and the surrender of the Premises by Tenant in compliance with the provisions of this Lease.

#### UTILITY BILLS

6. Tenant shall pay all utility bills, including, but not limited to water, sewer, gas, electricity, fuel, light and heat bills for the Premises and Tenant shall pay all charges for garbage collection or other sanitary services. If water and sewer service for the Premises is provided through a meter which measures water provided to users in addition to Tenant, Tenant shall pay

its pro-rated share of such charges (as such amount shall be determined by Landlord) together with its monthly installment of Minimum Base Rent. If Tenant does not pay any of the same, Landlord may pay the same and such payment shall be added to the rental of the Premises as additional rent which shall become due and payable at the time the next monthly installment of Minimum Base Rent is due and payable.

#### USE OF PREMISES

7. The Premises shall be used for office/warehouse/ and laboratory research & development purposes only and no other. The Premises shall not be used for any illegal purposes, nor in any manner to create any nuisance or trespass, nor in any manner to vitiate the insurance or increase the rate of insurance on the Premises.

#### ABANDONMENT OF THE PREMISES

8. Tenant agrees not to abandon or vacate the Premises during the term of this Lease and agrees to use the Premises for the purposes herein leased until the expiration hereof.

#### COMMON AREA MAINTENANCE CHARGE ("CAM")

9. Landlord shall maintain the grounds surrounding the building in which the Premises are located, including the mowing of grass, care of shrubs and general landscaping and shall keep the parking areas, driveways and alleys clean and in good repair (including resealing and restriping from time to time). Notwithstanding the above, Tenant shall be responsible for keeping all exterior areas free of trash, scraps, or any materials and products pertaining to Tenant's business. Tenant shall pay to Landlord, on a monthly basis as additional rent, Tenant's pro rata share of the costs of illuminating the common area and of maintaining the same. Landlord shall notify Tenant of the amount of Tenant's pro rata share of such costs which shall be due from Tenant as additional monthly rent, as herein provided. After the calendar year in which the term of this Lease commences, the amount of such monthly payment which shall be due from Tenant shall not change more frequently than once each calendar year. This additional rent shall be paid in the same manner as Minimum Base Rent required in Section 3 herein and any default in such payment shall be treated in the same manner as a default in the payment of rent hereunder. The amount of the monthly payment required to be made by Tenant pursuant to this Section 9 during the calendar year in which the term of this Lease commences is \$217. 07.

#### TAX AND INSURANCE ESCALATION

10. Tenant shall pay upon demand as additional rent during the term of this Lease, and any extension or renewal thereof, the amount by which all taxes (including but not limited to, ad valorem taxes, special assessments and any other governmental charges) on the Premises for each tax year exceed all taxes on the Premises for the tax year 1997. In the event the Premises are less than the entire property assessed for such taxes for any such tax year, then the tax for any such year applicable to the Premises shall be determined by proration on the basis that the rentable floor area of the Premises bears to the rentable floor area of the entire property

assessed. If the final year of the Lease term fails to coincide with the tax year, then any excess for the tax year during which the term ends shall be reduced by the pro rata part of such tax year beyond the Lease term. If such taxes for the year in which the Lease terminates are not ascertainable before payment of the last month's installment of Minimum Base Rent and additional rent then due, then the amount of such taxes assessed against the property for the previous tax year shall be used as a basis for determining the pro rata share, if any, to be paid by Tenant for that portion of the last Lease Year. Tenant shall further pay, upon demand, its pro rata share of the excess cost of fire and extended coverage insurance including any and all public liability insurance over the cost for the first year of the Lease term for each subsequent year during the term of this Lease. Tenant's pro rata portion of increased taxes or share of excess cost of fire and extended coverage and public liability insurance, as provided herein, shall be payable within fifteen (15) days after receipt of notice from Landlord or Agent as to the amount due.

#### INDEMNITY; INSURANCE

11. Tenant agrees to and hereby does indemnify and save Landlord harmless against all claims for damages to persons or property by reason of Tenant's use or occupancy of the Premises, and all expenses incurred by Landlord because thereof, including attorney's fees and court costs. Supplementing the foregoing and in addition thereto, Tenant shall during all times of this Lease and any extension or renewal thereof, and at Tenant's sole cost and expense, maintain in full force and effect comprehensive general liability insurance with limits of \$500,000 per person and \$1,000,000.00 per accident, and property damage limits of \$100,000.00, which insurance shall contain a special endorsement recognizing and insuring any liability accruing to Tenant under the first sentence of this paragraph 11, and naming Landlord as additional insured. Tenant shall provide evidence of such insurance to Landlord prior to the commencement of the term of this Lease. Landlord and Tenant each hereby release and relieve the other, and waive their respective rights of recovery, for loss or damage arising out of or incident to the perils insured against which perils occur in, or about the Premises, whether due to the negligence of Landlord or Tenant or their agents, employees, contractors and/or invitees, to the extent that such loss or damage is within the policy limits of said comprehensive general liability insurance. Landlord and Tenant shall, upon obtaining the policies of insurance required, give notice to the insurance carrier or carriers that the foregoing mutual waiver of subrogation is contained in this Lease.

#### REPAIRS BY LANDLORD

12. Landlord agrees to keep in good repair the roof, foundations and exterior walls of the Premises (exclusive of all glass and exclusive of all exterior doors) and underground utility and sewer pipes outside the exterior walls of the building, except repairs rendered necessary by the negligence or intentional wrongful acts of Tenant, its agents, employees or invitees. Tenant shall promptly report in writing to Landlord any defective condition known to Tenant which Landlord is required to repair, and failure so to report such conditions shall make Tenant responsible to Landlord for any liability incurred by Landlord by reasons of such conditions. Landlord shall be under no obligation to inspect the Premises.

#### REPAIRS BY TENANT

13. Tenant shall, throughout the initial term of this Lease, and any extension or renewal thereof, at its expense, maintain in good order and repair the Premises, including heating and air conditioning equipment and all exterior signage located on the building forming a part of the Premises, except only for those repairs expressly required to be made by Landlord hereunder. Tenant agrees to return the Premises to Landlord at the expiration, or prior to termination of this Lease, in as good condition and repair as when first received, natural wear and tear, damage by storm, fire, lightning, earthquake or other casualty alone excepted. Prior to November 1, 1997, Landlord shall supply Tenant with a letter from Wellborn & Co., Heating & Air Contractors, stating that the existing HVAC systems are in proper working condition.

#### ALTERATIONS

14. Tenant shall not make any alterations, additions, or improvements to the Premises without Landlord's prior written consent. Tenant shall promptly remove any alterations, improvements constructed in violation of this Section 14 upon Landlord's written request. All approved alterations, additions, and improvements will be accomplished in a good and workmanlike manner, in conformity with all applicable laws and regulations, and by a contractor approved by Landlord, free of any liens or encumbrances. Landlord may require Tenant to remove any alterations, additions or improvements (whether or not made with Landlord's consent) at the termination of this Lease and to restore the Premises to its prior condition, all at Tenant's expense. All alterations, additions and improvements which Landlord has not required Tenant to remove shall become Landlord's property and shall be surrendered to Landlord upon the termination of this Lease, except that Tenant may remove any of Tenant's machinery or equipment which can be removed without material damage to the Premises. Tenant shall repair, at Tenant's expense, any damage to the Premises caused by the removal of any such machinery or equipment.

#### REMOVAL OF FIXTURES

15. Tenant may (if not in default hereunder) prior to the expiration of this Lease, or any extension or renewal thereof, remove all fixtures and equipment which Tenant has placed in the Premises, provided Tenant repairs all damage to the Premises caused by such removal.

#### DESTRUCTION OF OR DAMAGE TO PREMISES

16. If the Premises are totally destroyed by storm, fire, lightning, earthquake or other casualty, this Lease shall terminate as of the date of such destruction and Minimum Base Rent and additional rent owed for CAM, taxes, insurance and other charges in accordance with this Lease (collectively, "Rent") shall be accounted for as between Landlord and Tenant as of that date. If the Premises are damaged but not wholly destroyed by any such casualties, Rent shall abate in such proportion as use of the Premises has been destroyed and Landlord shall restore

Premises to substantially the same condition as before damage as speedily as is practicable, whereupon full rental shall recommence.

#### GOVERNMENTAL ORDERS

17. Tenant agrees, at his own expense, to comply promptly with all requirements of any legally constituted public authority made necessary by reason of Tenant's use and occupancy of the Premises. Landlord agrees to comply promptly with any such requirements if not made necessary by reason of Tenant's use and occupancy. It is mutually agreed, however, between Landlord and Tenant, that if in order to comply with such requirements, the cost to Landlord or Tenant, as the case may be, shall exceed a sum equal to one year's rent, then Landlord or Tenant, whoever is obligated to comply with such requirements hereunder, may terminate this Lease by giving written notice of termination to the other party by registered mail, which termination shall become effective sixty (60) days after receipt of such notice and which notice shall eliminate the necessity of compliance with such requirements by the party giving such notice unless the party receiving such notice of termination shall, before termination becomes effective, pay to the party giving notice all cost of compliance in excess of one year's Minimum Base Rent, or secure payment of said sum in manner satisfactory to the party giving notice.

#### CONDEMNATION

18. If the whole of the Premises, or such portion thereof as will make the Premises unusable for the purposes herein leased, are condemned by any legally constituted authority for any public use or purpose, then in either of said events, the term hereby granted shall cease from the date when possession thereof is taken by public authorities, and Rent shall be accounted for as between Landlord and Tenant as of said date. Such termination, however, shall be without prejudice to the rights of either Landlord or Tenant to recover compensation and damage caused by condemnation from the condemnor. Landlord shall be entitled to receive the entire award in any proceeding with respect to any taking provided for in this Section 18, without deduction therefrom for any estate vested in Tenant by this Lease, if any, and Tenant shall receive no part of such award. Nothing herein contained shall be deemed to prohibit Tenant from making a separate claim against the condemning authority, to the extent required by law, for the value of Tenant's movable trade fixtures, machinery, moving expenses and loss of business or business interruption, provided that the making of such claim shall not and does not adversely affect or diminish Landlord's award. It is further understood and agreed that neither the Tenant nor Landlord shall have any rights in any award made to the other by any condemnation authority notwithstanding the termination of the Lease as herein provided.

#### ASSIGNMENT AND SUBLETTING

19. Tenant shall not, without the prior written consent of Landlord, assign this Lease or any interest hereunder (by operation of law or otherwise), or sublet the Premises or any part thereof, or permit the use of the Premises by any party other than Tenant. Consent by Landlord to any assignment or sublease shall not destroy this provision, and all subsequent assignments or subleases shall be made likewise only on the prior written consent of Landlord. Assignee of

Tenant, at option of Landlord, shall become directly liable to Landlord for all obligations of Tenant hereunder.

#### EVENTS OF DEFAULT

20. (a) The occurrence of any of the following events shall be constitute an "Event of Default" of Tenant under this Lease:

(i) If Tenant fails to pay Minimum Base Rent or any additional rent hereunder as and when such rent become due and such failure shall continue for more than fourteen (14) days after receipt of written notice from Landlord of such failure;

(ii) If Tenant fails to pay Minimum Base Rent or any additional rent as required by this Lease on time more than four times in any period of twelve (12) months, notwithstanding that such payments have been made within the applicable cure period;

(iii) If the Premises become vacant, deserted or abandoned;

(iv) If Tenant permits to be done anything which creates a lien upon the Premises and fails to discharge, bond such lien or post security with Landlord acceptable to Landlord within thirty (30) days after receipt by Tenant of written notice thereof;

(v) If Tenant fails to maintain in force all policies of insurance required by this Lease and such failure shall continue for more than ten (10) days after Landlord gives Tenant notice of such failure;

(vi) If any petition is filed by or against Tenant or any guarantor of this Lease under any present or future section or chapter of the Bankruptcy Code, or under any similar laws or statute of the United States or any state thereof (which, in the case of an involuntary proceeding, is not permanently discharged, dismissed, stayed, or vacated, as the case may be, within sixty (60) days of commencement), or if any order for relief shall be entered against Tenant or any guarantor of this Lease in any such proceedings;

(vii) If Tenant or any guarantor of this Lease becomes insolvent or makes a transfer in fraud of creditors or makes an assignment of the benefit of creditors;

(viii) If a receiver, custodian, or trustee is appointed for the Premises or for all or substantially all of the assets of Tenant or of any guarantor of this Lease, which appointment is not vacated within sixty (60) days following the date of such appointment; or

(ix) If Tenant fails to perform or observe any other term of this Lease and such failure shall continue for more than thirty (30) days after the Landlord gives Tenant notice of such failure, or, if such failure cannot be corrected within such thirty (30) day period, if Tenant does not promptly commence to correct such default within said thirty (30) day period and thereafter diligently prosecute the correction of same to completion within a reasonable time.

(b) Upon the occurrence of any one or more Events of Default, Landlord may, at Landlord's option, without any demand or notice whatsoever (except as expressly required in this Section 20):

(i) Terminate this Lease by giving Tenant notice of termination, in which event this Lease shall expire and terminate on the date specified in such notice of termination and all rights of Tenant under this Lease and in and to the Premises shall terminate. Tenant shall remain liable for all obligations under this Lease arising up to the date of such termination, and Tenant shall surrender the Premises to Landlord on the date specified in such notice; or

(ii) Terminate this Lease as provided in Section 20(b)(i) hereof and recover from Tenant all damages Landlord may incur by reasons of Tenant's default, including, without limitation, a sum which, at the date of such termination, represents the value of the excess, if any, of (1) Minimum Base Rent, additional rent provided for in this Lease and all other sums which would have been payable hereunder by Tenant for the period commencing with the day following the date of such termination and ending with the expiration date had this Lease not been terminated, over (2) the aggregate reasonable rental value of the Premises for the period commencing with the day following the date of such termination and ending with the expiration date had this Lease not been terminated, plus (3) the costs of recovering possession of the Premises and all other expenses incurred by Landlord due to Tenant's default, including, without limitation, reasonable attorney's fees, plus (4) unpaid Minimum Base Rent and additional rent as provided for in this Lease earned as of the date of termination plus any interest and late fees due hereunder, plus other sums of money and damages owing on the date of termination by Tenant to Landlord under this Lease or in connection with the Premises, all of which excess sums shall be deemed immediately due and payable; PROVIDED, HOWEVER, that such payments shall not be deemed a penalty but shall merely constitute payment of liquidated damages, it being understood and acknowledged by Landlord and Tenant that actual damages to Landlord are extremely difficult, if not impossible, to ascertain. The excess, if any, of subparagraph (ii)(1) over subparagraph (ii)(2) herein shall be discounted to present value at an annual rate of ten percent (10%). In determining the aggregate reasonable rental value pursuant to subparagraph (ii)(2) above, the parties hereby agree that, at the time Landlord seeks to enforce this remedy, all relevant factors should be considered, including, but not limited to, (a) the length of time remaining in the Term, (b) the then current market conditions in the general area in which the Premises are located, (c) the likelihood of reletting the Premises for a period of time equal to the remainder of the Term, (d) the net effective rental rates then being obtained by landlords for similar type space of similar size in similar type buildings in the general area in which the Premises are located, (e) the vacancy levels in the general area in which the Building is located, (f) current levels of new construction that will be completed during the remainder of the Term and how this construction will likely affect vacancy rates and rental rates and (g) inflation; or

(iii) Without terminating this Lease, Landlord may, in its own name but as agent for Tenant, enter into and upon and take possession of the Premises or any part thereof. Any property remaining in the Premises may be removed and stored in a warehouse or elsewhere

at the cost of, and for the account of Tenant without Landlord being deemed guilty of trespass or becoming liable for any loss or damage which may be occasioned thereby. Thereafter, Landlord may, but shall not be obligated to, lease to a third party the Premises or any portion thereof as the agent of Tenant upon such term and conditions as Landlord may deem necessary or desirable in order to relet the Premises. The remainder of any rentals received by Landlord from such reletting, after the payment of any indebtedness due hereunder from Tenant to Landlord, and the payment of any costs and expenses of such reletting, shall be held by Landlord to the extent of and for application in payment of future rent owed by Tenant, if any, as the same may become due and payable hereunder. If such rentals received from such reletting shall at any time or from time to time be less than sufficient to pay to Landlord the entire sums then due from Tenant hereunder, Tenant shall pay any such deficiency to Landlord. Notwithstanding any such reletting without termination, Landlord may at any time thereafter elect to terminate this Lease for such previous default provided same has not been cured; or

(iv) Without terminating this Lease, and with or without notice to Tenant, Landlord may enter into and upon the Premises and without being liable for prosecution or any claim for damages thereof, maintain the Premises and repair or replace any damage thereto or do anything or make any payment for which Tenant is responsible hereunder. Tenant shall reimburse Landlord immediately upon demand for any expenses which Landlord incurs in thus effecting Tenant's compliance under this Lease and Landlord shall not be liable to Tenant for any damages with respect thereto; or

(v) Without liability to Tenant or any other party, and without constituting a constructive or actual eviction, suspend or discontinue furnishing or rendering to Tenant any property, material, labor utilities or other service, wherever Landlord is obligated to furnish or render the same, as long as Tenant is in default under this Lease; or

(vi) With or without terminating this Lease, allow the Premises to remain unoccupied and collect rent from Tenant as it comes due; or provided however, Landlord must act in a commercially reasonable manner.

(vii) Pursue such other remedies as are available at law or equity.

(c) If this Lease shall terminate as a result of or while there exists an Event of Default hereunder, any funds of Tenant held by Landlord may be applied by Landlord to any damages payable by Tenant (whether provided for herein or by law) as a result of such termination or default.

(d) Neither the commencement of any action or proceeding, nor the settlement thereof, nor entry or judgment thereon shall bar Landlord from bringing subsequent actions or proceedings from time to time, nor shall the failure to include in any action or proceeding any sum or sums then due be a bar to the maintenance of any subsequent actions or proceedings of the recovery of such sum or sums so omitted.

(e) No agreements to accept a surrender of the Premises and no act or omission by Landlord or Landlord's agents during the Term shall constitute an acceptance or surrender of the Premises unless made in writing and signed by Landlord. No re-entry or taking possession of the Premises by Landlord shall constitute an election by Landlord to terminate this Lease unless a written notice of such intention is given to Tenant. No provision of this Lease shall be deemed to have been waived by either party unless such waiver is in writing and signed by the party making such waiver. Landlord's acceptance of Minimum Base Rent or additional rent in full or in part following an Event of Default hereunder shall not be construed as a waiver of such Event of Default. No custom or practice which may grow up between the parties in connection with terms of this Lease shall be construed to waive or lessen either party's right to insist upon strict performance of the terms of this Lease, without a written notice thereof to the other party.

(f) If an Event of Default shall occur, Tenant shall pay to Landlord, on demand, all expenses incurred by Landlord as a result thereof, including reasonable attorney's fees, court costs and expenses actually incurred.

(g) Landlord shall not be considered to be under any duty by reason of any provision herein to take any action to mitigate damages by reason of Tenant's default. Tenant acknowledges that the Premises are to be used for commercial purposes and Tenant expressly waives the protections and rights set forth in the Official Code of Georgia Annotated Sections 44-7-31 and 44-7-32.

#### LENDER'S RIGHTS

21. (a) For purposes of this Lease:

(i) "Lender" as used herein means the current holder of a Mortgage;

(ii) "Mortgage" as used herein means any or all mortgages, deeds to secure debt, deeds of trusts or other instruments in the nature thereof which may now or hereafter affect or encumber Landlord's title to the Premises, and any amendments, modification, extension or renewal thereof.

(b) This Lease and all rights of Tenant hereunder are and shall be subject and subordinate to the lien and security title of any Mortgage.

(c) Tenant shall, in confirmation of the subordination set forth in subsection (b) immediately above and notwithstanding the fact that such subordination is self-operative, and no further instrument or subordination shall be necessary upon demand, at any time or times, execute acknowledge, and deliver to Landlord or Lender any and all instruments requested by either of them to evidence such subordination, and to verify the status of this Lease and the existence of any default by either party hereto.

#### LANDLORD'S RIGHT OF ENTRY

22. Tenant agrees to permit Landlord and the authorized representatives of Landlord to enter upon the Premises at all reasonable times for the purposes of inspecting the Premises and Tenant's compliance with this Lease, and making any necessary repairs thereto or to Landlord's adjoining property; provided that, except in the case of any emergency, Landlord shall give Tenant reasonable prior written notice of Landlord's intended entry upon the Premises. Landlord may card the Premises "For Rent" or "For Sale" sixty (60) days before the termination of this Lease. Landlord also shall have the right to enter the Premises at all reasonable times to exhibit the Premises to any prospective purchaser, mortgagee or tenant thereof.

#### QUIET ENJOYMENT

23. So long as Tenant observes and performs the covenants and agreements contained herein, it shall at all times during the lease term peacefully and quietly have and enjoy possession of the Premises, but always subject to the terms hereof.

#### NO ESTATE IN LAND

24. This Lease shall create the relationship of Landlord and Tenant between the parties hereto. No estate shall pass out of Landlord. Tenant has only a usufruct, not subject to levy and sale, and not assignable by Tenant except with Landlord's consent.

#### HOLDING OVER

25. If Tenant remains in possession of Premises after expiration of the term hereof, with Landlord's acquiescence and without any express agreement of parties, Tenant shall be a tenant at will at the Minimum Base Rent rate which is in effect at end of this Lease (subject to applicable annual increases) and there shall be no renewal of this Lease by operation of Law. If Tenant remains in possession of the Premises after the expiration of the term hereof without Landlord's acquiescence, Tenant shall be a tenant at sufferance and commencing on the date following the date of such expiration, the monthly Minimum Base Rent payable under Section 3 above shall for each month, or fraction thereof during which Tenant so remains in possession of the premises, be twice the monthly Minimum Base Rent otherwise payable under Section 3 above. Any payments of additional rent shall continue to be made in accordance with this Lease irrespective of Tenant's status as a tenant at will or tenant at sufferance.

#### LANDLORD LIABILITY

26. No owner of the Premises, whether or not named herein, shall have liability hereunder after it ceases to hold title to the Premises, except for obligations which may have theretofore accrued. Neither Landlord nor any officer, director, shareholder, partner or principal of Landlord, whether disclosed or undisclosed, shall be under any personal liability with respect to any of the provisions of this Lease. In the event Landlord is in breach or default with respect to Landlord's obligations or otherwise under this Lease, Tenant shall look solely to the equity of

Landlord in the office/warehouse development of which the Premises are a part for the satisfaction of Tenant's remedies. It is expressly understood and agreed that Landlord's liability under the terms, covenants, conditions, warranties and obligations of this Lease shall in no event exceed the loss of Landlord's equity interest in the office/warehouse development of which the Premises are a part.

#### RELOCATION

27. In the event that the total number of square feet of leasable space contained within the Premises is less than 6,001 square feet, then upon sixty (60) days advance written notice from Landlord to Tenant, Tenant agrees to relocate to other space in the office/warehouse development of which the Premises are a part designated by Landlord (the "New Space") provided: (i) the New Space is at least of equal size and similar configuration to the Premises; (ii) Landlord shall pay all reasonable out-of-pocket expenses in moving Tenant, its property and equipment into the New Space; and (iii) Landlord shall, at its sole cost, renovate or alter the New Space to conform substantially with the Premises. If Landlord moves Tenant to the New Space, every term and condition of this Lease shall remain in full force and effect, and the New Space shall thereafter be deemed to be the Premises as though Tenant had entered into an express written amendment to this Lease with respect thereto.

#### RIGHTS CUMULATIVE; WAIVER OF RIGHTS

28. All rights, powers and privileges conferred upon Landlord herein shall be cumulative and not restrictive to those given by law. No failure of Landlord to exercise any power given Landlord hereunder, or to insist upon strict compliance by Tenant of its obligation hereunder, and no custom or practice of the parties at variance with the terms hereof shall constitute a waiver of Landlord's right to demand strict compliance with the terms hereof.

#### AGENCY DISCLOSURE

29. Landlord and Tenant hereby acknowledge that KING INDUSTRIAL REALTY, INC. ("Procuring Agent") has acted as an agent for Tenant and COLLIERS CAUBLE & COMPANY ("Listing Agent") has acted as an agent for Landlord (Procuring Agent and Listing Agent sometimes hereinafter being referred to collectively as "Agents") in this transaction. Procuring Agent will be paid a real estate commission by Landlord in accordance with Section 30 below. Listing Agent will be paid a real estate commission in accordance with a separate agreement with the Landlord. Neither Landlord nor Tenant has engaged any brokers or agents who would be entitled to any commission or fee based on the execution of the Lease, other than Agents set forth in this Section 29. Landlord and Tenant hereby indemnify each other against and from any claims for any brokerage commissions or similar fees (except those payable to Agents above) and all costs, expenses and liabilities in connection therewith, including, without limitation, reasonable attorneys' fees and expenses, for any breach of the foregoing. The foregoing indemnification shall survive the termination of this Lease for any reason.

PROCURING AGENT'S COMMISSION

30. Landlord agrees to pay to Procuring Agent compensation for services rendered in procuring this Lease, the first month's installment of Minimum Base Rent hereunder and, in addition thereto, five percent (5%) of all payments of Minimum Base Rent thereafter paid by Tenant under this Lease. Landlord, with consent of Tenant, hereby assigns to Procuring Agent the first month's installment of Minimum Base Rent hereunder and five percent (5%) of all payments of Minimum Base Rent paid under this Lease. Landlord agrees if this Lease is extended, or if a new lease is entered into between Landlord and Tenant covering the Premises, or any part thereof, and provided that Tenant has authorized Procuring Agent to represent Tenant in connection with the negotiation of such extension or new lease, then Landlord agrees to pay the Procuring Agent five percent (5%) of all Minimum Base Rent installments paid to Landlord by Tenant under such extension or new lease. In no event shall Landlord be liable for the payment of any compensation to any one or more procuring agents or procuring brokers in connection with any extension of this Lease or any new lease covering the Premises in excess of five percent (5%) of the Minimum Base Rent Installments which shall be paid to Landlord by Tenant under such extension or new lease. CASH OUT OPTION: The Procuring Agent agrees that, provided Landlord has paid to Procuring Agent the first month's installment, Landlord at any time during this Lease may at its sole discretion make a one-time payment to the Procuring Agent of four percent (4%) of the remaining aggregate Minimum Base Rent installments accruing to Landlord under this Lease ("cash-out commission") as full satisfaction of Landlord's obligation to the Procuring Agent under this Lease; provided, however, that if this Lease is extended, or if a new Lease is entered into between Landlord and Tenant covering the Premises subsequent to the date as of which the amount of such cash-out commission shall have been computed, then, Landlord, in consideration of the Procuring Agent having procured Tenant hereunder, agrees to pay the Procuring Agent two percent (2%) of the aggregate Minimum Base Rent installments accruing to Landlord under such extension or new lease. In no event will the cash-out commission be calculated on Minimum Base Rent accruing to Landlord after Tenant's tenth year of occupancy of the Premises.

Agents each agree that, in the event Landlord sells the Premises, and upon Landlord's furnishing Agents with an agreement signed by Purchaser assuming Landlord's obligations to Agents under this Lease and under Landlord's separate agreement with the Listing Agent, Agents will release original Landlord from any further obligations to Agents hereunder. Agents are parties to this Lease solely for the purpose of enforcing their respective rights under this Section 30 and it is understood by all parties hereto that Listing Agent is acting solely in the capacity as agent for Landlord, to whom Tenant must look as regards all covenants, agreements, and warranties herein contained, and Procuring Agent is acting solely as agent for Tenant in finding the Premises for Tenant's particular leasing needs, and that Agents shall never be liable to Tenant in regard to any matter which may arise by virtue of this Lease. Voluntary cancellation of this Lease shall not nullify Agents' right to collect the commission due for the remaining term of this Lease. All commission calculations described herein shall apply to Minimum Base Rent under this Lease and not to additional rent.

ENVIRONMENTAL MATTERS

31. (a) For purposes of this Lease:

(i) "Contamination" as used herein means the uncontained or uncontrolled presence of or release of Hazardous Substances (as hereinafter defined) into any environmental media from, upon, within, below, into or on any portion of the Premises or the office/warehouse development of which the Premises is a part as to require remediation, cleanup or investigation under any applicable Environmental Law (as hereinafter defined).

(ii) "Environmental Laws" as used herein means all federal, state, and local laws, regulations, orders, permits, ordinances or other requirements, concerning protection of human health, safety and environment, all as may be amended from time to time.

(iii) "Hazardous Substances" as used herein means any hazardous or toxic substance, material, chemical pollutant, contaminate or waste as those terms are defined by any applicable Environmental Laws (including, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. 6901 et seq. ["RCRA"]) and any solid wastes, polychlorinated biphenyls, urea formaldehyde, asbestos, radioactive materials, radon, explosives, petroleum products and oil.

(b) Tenant represents that all its activities on the Premises, the building, and the office/warehouse development of which the Premises is a part during the course of this Lease will be conducted in compliance with Environmental Laws. Tenant warrants that it is currently in compliance with all applicable Environmental Laws and that there are no pending or threatened notices of deficiency, notices of violation, orders, or judicial or administrative actions involving alleged violations by Tenant of any Environmental Laws. Tenant at Tenant's sole cost and expense, shall be responsible for obtaining all permits or licenses or approvals under Environmental Laws necessary for Tenant's operation of its business on the Premises and shall make all notifications and registrations required by any applicable Environmental Laws. Tenant, at Tenant's sole cost and expense, shall at all times comply with the terms and conditions of such permits, licenses, approvals, notifications and registrations and with any other applicable Environmental Laws. Tenant warrants that it has obtained all such permits, licenses or approvals and made all such notifications and registrations required by any applicable Environmental Laws necessary for Tenant's operation of its business on the Premises.

(c) Tenant shall not cause or permit any Hazardous Substances to be brought upon, kept or used in or about the Premises, the building in which the Premises are located, or office/warehouse development of which the Premises is a part without the prior written consent of Landlord, which consent shall not be unreasonably withheld. For purposes of this Section 31, Landlord shall be deemed to have reasonably withheld consent if Landlord determines that the presence of such Hazardous Substance within the Premises could result in a risk of harm to person or property or otherwise negatively affect the value or marketability of the Premises, the building in which the Premises are located or the office/warehouse development of which the Premises is a part.

(d) Tenant shall not cause or permit the release of any Hazardous Substances by Tenant or its agents, contractors, employees or invitees into any environmental media such as air, water or land, or into or on the Demised Premises, the Building or the Project in any manner that violates any Environmental Laws. If such release shall occur, Tenant shall (i) take all steps reasonably necessary to contain such release and any associated Contamination, (ii) clean up or otherwise remedy such release and any associated Contamination to the extent required by, and take any and all other actions required under, applicable Environmental Laws and (iii) notify and keep Landlord reasonably informed of such release and response.

(e) Regardless of any consents granted by landlord pursuant to Section 31(d) Tenant shall under no circumstances whatsoever (i) cause or permit any activity on the Premises which would cause the Premises to become subject to regulation as a hazardous waste treatment, storage or disposal facility under RCRA or the regulations promulgated thereunder, (ii) discharge Hazardous Substances into the sanitary or storm sewer system serving the office/warehouse development of which the Premises is a part; or (iii) install any underground storage tank or underground piping on or under the Premises.

(f) Tenant shall and hereby does indemnify Landlord and hold Landlord harmless from and against any and all expense, loss, and liability suffered by Landlord (with the exception of those expenses, losses, and liabilities arising from Landlord's own negligence or willful act), by reason of Tenant's improper storage, generation, handling, treatment, transportation, disposal, or arrangement for transportation or disposal, of any Hazardous Substances (whether accidental, intentional, or negligent) or by reason of Tenant's breach of any of the provisions of this Section 31. Such expenses, losses and liabilities shall include, without limitation, (i) any and all expenses that Landlord may incur to comply with any Environmental Laws as a result of Tenant's failure to comply therewith; (ii) any and all costs that Landlord may incur in studying or remedying any Contamination at or arising from the Demised Premises, the Building, or the Project; (iii) any and all costs that Landlord may incur in studying, removing disposing or otherwise addressing any Hazardous Substances; (iv) any and all fines, penalties or other sanctions assessed upon Landlord by reason of Tenant's failure to comply with Environmental Laws; and (v) any and all legal and professional fees and costs incurred by landlord in connection with the foregoing. The indemnity contained herein shall survive the termination or expiration of this Lease.

(g) Landlord shall have the right, but not obligation, to enter the Premises at reasonable times throughout the Term to audit and inspect the Premises for Tenant's compliance with this Section 31.

#### CONSUMER PRICE INDEX ("CPI")

32. For the purposes of this Lease, where applicable, CPI refers to the Consumer Price Index for ALL URBAN CONSUMERS, UNITED STATES, ALL ITEMS, 1982-84=100, as provided by the U.S. Department of Labor, or any index which shall replace the CPI during the term of this Lease.

ATTORNEY'S FEES AND HOMESTEAD

33. If any rent owing under this Lease is collected by or through any attorney at law, Tenant agrees to pay fifteen percent (15%) thereof as attorney's fees. Tenant waives all homestead rights and exemptions which Tenant may have under any law as against any obligation owing under this Lease. Tenant hereby assigns to Landlord all of Tenant's homestead and exemption.

TIME OF ESSENCE

34. Time is of the essence of this Lease.

DEFINITIONS

35. "Landlord" as used in this Lease shall include the undersigned, its heirs, representatives, assigns and successors in title to Premises. "Tenant" shall include the undersigned, its heirs and representatives, assigns and successors, and if this Lease shall be validly assigned or sublet in accordance with the terms hereof, shall include also Tenant assignees or sublessees, as to Premises covered by such assignment or sublease. "Agents," shall include the undersigned, their successors, assigns, heirs and representatives. "Landlord," "Tenant" and "Agents," include male and female, singular and plural, corporation, partnership or individual, as may fit the particular parties.

NOTICES

36. All notices required or permitted under this Lease shall be in writing and shall be personally delivered or sent by U.S. Certified Mail, return receipt requested, postage prepaid. Notices to Tenant shall be delivered or sent to the address shown below, except that upon Tenant's taking possession of the Premises, then Premises shall be Tenant's address for notice purposes. Notices to Landlord and Agents shall be delivered or sent to the addresses hereinafter stated, to wit:

Landlord: Highlands Park Associates	Tenant: Ben-Abraham Technologies, Inc.
c/o Baker-Dennard Co.	4600-A & B Highlands Parkway
Plaza Square North	Smyrna, GA 30082
Suite 450	Attn: Dr. Claus Wagner-Bartak
4360 Chamblee-Dunwoody Road	
Atlanta, Georgia 30341	

Procuring Agent: King Industrial	Listing Agent: Colliers, Cauble &
Realty, Inc.	Company
1920 Monroe Dr., NE	1355 Peachtree St., NE
Atlanta, GA 30324	Suite 500
Attn: Bill Johnston	Atlanta, GA 30309
	ATTN: Henry Sawyer

All notices shall be effective upon delivery. Any party may change his notice address upon written notice to the other parties given in accordance with this Section 36.

#### RECORDATION OF LEASE

37. Under no circumstances shall Tenant or Agents have the right to record this Lease in the real property records of any state or local governmental authority without the express, prior, written consent of Landlord. Landlord and Tenant each agree to execute, upon request of the other, a memorandum of this Lease in recordable form, and the requesting party shall pay the costs and charges for the preparation and recording of the memorandum.

#### ENTIRE AGREEMENT

38. This Lease contains the entire agreement of the parties hereto, and no representations, inducements, promises or agreements, oral or otherwise, between the parties, not embodied herein shall be of any force or effect.

#### AMENDMENT

39. This Lease may not be modified, amended or supplemented in any manner except by an agreement in writing, signed by the parties after the date hereof; provided, however, that Agents' signatures shall not be required for any such agreement unless the terms of Section 30 are being modified, amended or supplemented or in effect will be modified, amended or supplemented by a change in Minimum Base Rent other than an increase in accordance with Section 3 of this Lease.

#### GOVERNING LAW

40. This Lease shall be governed by and construed in accordance with the laws of the State of Georgia.

#### AUTHORITY

41. The persons executing this Lease on behalf of Tenant represent and warrant that this Lease has been duly authorized by Tenant and properly executed and delivered by them on behalf of Tenant and constitutes the valid and binding agreement of Tenant in accordance with the terms hereof.

#### RULES AND REGULATIONS

42. Tenant shall comply with and observe all rules and regulations which Landlord may promulgate from time to time in connection with the Premises and the office/warehouse development of which the Premises are a part and of which Tenant has been notified in writing. Tenant agrees to comply with and observe all rules and regulations currently affecting the

Premises as specified on Exhibit A hereto, which Exhibit is incorporated herein and made a part hereof, and as the same may be amended or supplemented from time to time by Landlord. Tenant's failure to keep and observe all rules and regulations as amended or supplemented from time to time by Tenant, shall constitute an Event of Default under Section 20 above.

SPECIAL STIPULATIONS

43. Any special stipulations are set forth in the attached Exhibit B. In so far as said Special Stipulations conflict with any of the foregoing provisions, said Special Stipulations shall control.

IN WITNESS WHEREOF, the parties herein have hereunto set their hands and seals, in triplicate, the date and year first above written.

LANDLORD:

HIGHLANDS PARK ASSOCIATES

By: Dennard Cobb Properties, Inc.  
Managing General Partner

By: /s/ Don W. Dennard

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Don W. Dennard  
President

TENANT: Ben-Abraham Technologies, Inc.

/s/ (SEAL)

-----  
By  
Chief Operating Officer (SEAL)

-----  
Title:

PROCURING AGENT: King Industrial  
Realty, Inc.

/s/ (SEAL)

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Vice President

LISTING AGENT: Colliers Cauble &  
Company

/s/ (SEAL)

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EXHIBIT "A"

RULES AND REGULATIONS

Tenants shall at all times comply with the following rules and regulations:

- (a) Tenants shall load and unload materials, merchandise or other goods only in the areas, and through the entrances, designed for such purposes by Landlord.
- (b) Tenants shall not act in any way so as to obstruct the loading areas of other tenants of the building.
- (c) Tenants shall not store materials, merchandise, or other goods outside of the leased premises.
- (d) Tenants shall not park, or permit to be parked, abandoned vehicles outside of the leased premises.
- (e) With the exception of loading and unloading, Tenants' business functions shall be carried out within the demised premises and not in the yards, parking lots, loading areas, or other common areas of the building.
- (f) Tenants shall keep the area around its loading dock and its garbage containers clean and free of garbage and refuse. The cost of garbage removal shall be borne by the Tenants.
- (g) Tenants shall not penetrate the roof, floor, or exterior walls of the building without first obtaining written consent from the Landlord.
- (h) Tenants shall not use loud speakers, televisions, phonographs, radios or other devices in a manner so as to be heard or seen outside of the leased premises without written consent of the Landlord.
- (i) Tenants shall keep the walkways and entrances immediately adjoining the premises clean and free from snow, ice, dirt and rubbish.
- (j) Tenants shall keep the leased premises at a temperature sufficiently high to prevent freezing of water in pipes and fixtures.
- (k) Tenants shall not use the plumbing facilities for any other purpose than that for which they are constructed, and no foreign substance of any kind shall be thrown therein, and the expense of any breakage, stoppage or damage resulting from a violation of this provision shall be borne by Tenants.

- (l) Tenants shall not burn any materials of any kind in or about the leased premises or the surrounding areas, except in the premises in accordance with Tenant's laboratory use.
- (m) Tenants shall not make noises, cause disturbances, or create odors which are offensive to other tenants of the building.
- (n) Tenants shall not park buses, trucks or trailers in any areas designated for automobile parking or in any handicapped parking facilities or areas reserved for handicapped access.
- (o) Tenants shall place no signs upon the outside walls, canopies, windows, or roof of the premises or in the yards or driveways of the development except with the written consent of Landlord. Any and all signs placed on the premises by Tenants shall be installed and maintained in compliance with all governmental rules and regulations governing such signs and Tenants shall be responsible to Landlord for any damage caused by installation, use, or maintenance of said signs and all damage incident to such removal.
- (p) Tenants shall be responsible and pay for extermination of pests and insects in the premises.

EXHIBIT B  
TO LEASE DATED SEPTEMBER 15TH, 1997 BY AND BETWEEN  
BEN-ABRAHAM TECHNOLOGIES, INC.  
AND HIGHLANDS PARK ASSOCIATES ("LEASE")

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SPECIAL STIPULATIONS

44. DELIVERY OF PREMISES. Landlord shall deliver the Premises to Tenant upon full execution of this Lease for the purpose of beginning the Approved Alterations (below).
45. APPROVED ALTERATIONS. Prior to January 1, 1998, Tenant, at its cost, shall substantially complete the alterations to the Premises shown on the attached Exhibit D and occupy the Premises for its intended use. Final plans shall be completed by Tenant and subject to approval by Landlord which approval shall not be unreasonably withheld or delayed.
46. TENANT IDENTIFICATION SIGN. Within 15 days of occupancy of the Premises, Tenant shall install an identification sign, at its cost, on the sign band on the building above the front entrance to the Premises.
47. OPTION TO RENEW LEASE. Tenant shall have one option to renew this Lease for one additional term of four (4) years provided that: (1) Tenant notifies Landlord of its intent to exercise such option on or before ninety (90) days before the expiration of the Term of the Lease, and (2) An Event of Default in Section 20 is not then in occurrence. The Minimum Base Rental during the option period shall be the market rental for similar business park space in North Metro Atlanta which space shall have an office component of approximately 17%. During the option period all other terms and conditions of the Lease shall remain the same.
48. PARTIAL SECURITY DEPOSIT REFUND. Upon request by Tenant, at any time after November 1, 1999, Landlord shall return Four Thousand Five Hundred Eighty-Eight and 00/100ths Dollars (\$4,588.00) of the Security Deposit to Tenant, provided however that an Event of Default in Section 20 is not then in occurrence at the time of the request. If an Event of Default is in occurrence at the time of the request, then Tenant shall have the applicable period to satisfy such Event of Default in order to receive the aforementioned refund.
49. RESTORATION IMPROVEMENTS. Upon notice of request by Landlord to Tenant at any time prior to thirty (30) days before the expiration of the Term of the Lease, Tenant, at its cost, shall restore (or cause to be restored) the Premises to the condition as described on the attached Exhibit E. Such Restoration Improvements shall be completed prior to the expiration of the Term of the Lease.

EXHIBIT C  
TO LEASE DATED SEPTEMBER 15TH, 1997 BY AND BETWEEN  
BEN-ABRAHAM TECHNOLOGIES, INC.  
AND HIGHLANDS PARK ASSOCIATES ("LEASE")

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GUARANTY

This Exhibit intentionally left blank.

EXHIBIT D  
TO LEASE DATED SEPTEMBER 15TH, 1997 BY AND BETWEEN  
BEN-ABRAHAM TECHNOLOGIES, INC.  
AND HIGHLANDS PARK ASSOCIATES ("LEASE")

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APPROVED ALTERATIONS

EXHIBIT D-1  
TO LEASE DATED SEPTEMBER 15TH, 1997 BY AND BETWEEN  
BEN-ABRAHAM TECHNOLOGIES, INC.  
AND HIGHLANDS PARK ASSOCIATES ("LEASE")

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SITE PLAN

EXHIBIT E  
TO LEASE DATED SEPTEMBER 15TH, 1997 BY AND BETWEEN  
BEN-ABRAHAM TECHNOLOGIES, INC.  
AND HIGHLANDS PARK ASSOCIATES ("LEASE")

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RESTORATION IMPROVEMENTS

The area shaded in yellow shall remain in its original condition (which was a part of the Approved Alterations), natural wear and tear excepted, subject to the changes as noted below. The balance of the Premises shall be restored to warehouse use, which includes the existing concrete floor, the existing concrete block walls, open ceiling, strip fluorescent lighting, and ceiling hung heater(s). All restoration improvements shall be completed in good and workmanlike manner, in conformity with all applicable laws and regulations and free of any liens and encumbrances.

CONFIDENTIAL

January 21, 1998

Mr. Stephen M. Simes  
1173 RFD  
Long Grove, IL 60047

Dear Stephen:

I am pleased to confirm our agreement with you concerning your employment by Ben-Abraham Technologies, Inc. (the "Company"), which is subject to review, approval, and ratification by the Company's Board of Directors.

I. EMPLOYMENT. Subject to the terms and conditions described in this Employment Agreement (the "Agreement"), the Company agrees to employ you as the President, Chief Operating Officer, and Executive Vice Chairman of the Company, and you accept this employment on the following terms and conditions.

II. DUTIES.

1. You agree to spend substantially all of your business hours on the Company's business. You will diligently perform the duties of your position, within guidelines to be determined by Avi Ben-Abraham, who is the Company's Chief Executive Officer and the Chairman of the Board of Directors. In particular, you will actively manage the day-to-day business of the Company and shall set corporate policies, under the direction of the Board of Directors. More particularly, your duties shall include the day-to-day responsibility for running and administering the Company. Said responsibilities shall include, but not be limited to, the following specific areas: shareholder relations, fundraising, Nasdaq listing, direction of R&D, licensing and other business development activities, budgeting and fiscal controls, and all personnel matters. You will report to Dr. Ben-Abraham, who will be responsible for evaluating your job performance in accordance with the Company's annual performance review process. The Company agrees that during the term of this Agreement, as it may be extended, no one other than Dr. Ben-Abraham shall serve as CEO, except you.
2. During the term of this Agreement, you will also serve as a Director of the Company and will perform all such duties incident to such service. Towards this end, the Company shall nominate you as a nominee for director and solicit proxies for your election for so long as this Agreement is in effect.
3. While you are employed by the Company, except as otherwise permitted by the Company's Conflict of Interest policy or this Agreement, you will not engage in any business activity or outside employment that conflicts with the Company's interests or adversely affect the performance of your duties for the Company.

CONFIDENTIAL

4. You shall be based at, and shall perform your duties at an office located in, Chicago, Illinois, or the surrounding suburban area, where the corporate headquarters of the Company shall also be located. The Company agrees that the other officers and executives of the Company (except for those who are directly involved in the research and development activities of the Company that are currently conducted in Atlanta, Georgia) shall also be located in the same corporate headquarters. However, you shall also travel to other locations at such times as may be appropriate for the performance of your duties under this Agreement.

III. TERM. This Agreement is effective January 20, 1998 (the "Effective Date"), and will terminate on December 31, 2000, unless earlier terminated pursuant to Section V of this Agreement (the "Base Term"). Commencing January 1, 2001, and on each January 1st thereafter, the term of your employment will be automatically extended for three (3) additional years unless on or before October 1st immediately preceding any such extension, either party gives written notice to the other of the cessation of further extensions, in which case no further automatic extensions will occur. In the event that the Company elects not to renew this Agreement other than for "cause" as defined herein, you will be paid the amount described in Section V.C.2 below.

IV. COMPENSATION.

- A. BASE SALARY. The Company agrees to pay you an annual base salary of Two Hundred Thirty Thousand Dollars (\$230,000) in accordance with the Company's standard payroll practices ("Base Salary"). Beginning January 20, 1999 or sooner if you raise Two Million Dollars (\$2,000,000), your Base Salary shall be increased to Two Hundred and Fifty Thousand Dollars (\$250,000). In subsequent years, the Board of Directors shall have the sole discretion to establish your Base Salary, except that, at a minimum, it shall be adjusted upward consistent with changes to the Consumer Price Index.
- B. ANNUAL BONUS. You will be eligible to receive an annual performance bonus not to exceed 50% of your Base Salary in effect during the year under review. The amount of said bonus shall be determined in the sole discretion of the Compensation Committee and approved by the Board of Directors.
- C. OPTIONS.
  1. Upon execution of this Agreement, the Company will grant you six hundred thousand (600,000) stock options at the lowest permissible price when this agreement is executed, one hundred thousand of which shall vest at the time of the grant. The remainder shall vest in twelve equal quarterly installments over the Initial Term of this Agreement. The remaining unvested options shall vest immediately upon a termination without cause by the Company.

CONFIDENTIAL

2. You shall also be eligible to receive a combination of an additional four hundred thousand (400,000) shares and/or stock options during the Initial Term of this Agreement at the lowest permissible price when this agreement is executed. Receipt of these options shall be subject to the stock price being equal to or greater than One Dollar (\$1.00) per share at the time the options and/or shares vest. If this condition precedent is satisfied, then these options shall vest in twelve equal quarterly installments over the Initial Term of this Agreement.
3. In the event of any reorganization, merger, consolidation, recapitalization, liquidation, reclassification, stock dividend, reverse stock split, combination of shares, rights offering, extraordinary dividend or divestiture (including a spin-off) or any other change in the corporate structure or shares of the Company, (or, if the Company is not the surviving corporation in any such transaction, the board of directors of the surviving corporation), in order to prevent dilution or enlargement of your rights, the Company (or the board of the surviving corporation) shall make appropriate adjustment (which determination shall be conclusive) as to the number, kind and exercise price of securities subject to this Option.

In the event that your employment is terminated by the Company other than for justifiable cause (as hereinafter defined), or if the Company elects not to renew this Agreement, or if you are not nominated by the Company for reelection to the Board of Directors other than for justifiable cause (as hereinafter defined), all outstanding stock options and shares that are held by you or your estate will immediately become exercisable and all restrictions against disposition, if any, which have not otherwise lapsed shall immediately lapse, and the period within which they may be exercised will be one year following such termination of employment.

- D. **BENEFITS.** In addition to the other compensation to be paid under this Section IV, you will be entitled to participate in all benefit plans available to all full-time, eligible employees hereafter established by the Company, in accordance with the terms and conditions of such plans, which the Company shall adopt promptly following the date hereof. These plans shall include, but not be limited to, the following: a 401(k) plan; group hospitalization, health, dental, disability (for which the Company agrees to obtain the maximum long-term disability insurance benefit allowed by applicable law), and term life insurance (in the amount of \$1.1 million); and supplementary long-term disability insurance.
- E. **REIMBURSEMENT OF BUSINESS EXPENSES.** In addition to payment of compensation under this Section IV, the Company agrees to reimburse you for all reasonable out-of-pocket business expenses incurred by you on behalf of the Company, provided that you properly account to the Company for all such expenses in accordance with the rules and regulations of the Internal Revenue Service promulgated under the Internal Revenue Code of 1986, as amended, and in

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accordance with the standard policies of the Company relating to reimbursement of business expenses.

- F. AUTOMOBILE ALLOWANCE. The Company shall provide you with a monthly stipend of One Thousand Dollars (\$1,000.00) for your automobile use.
- G. VACATION. You are entitled to four (4) weeks of paid vacation per calendar year.

V. TERMINATION.

- A. EARLY TERMINATION. Subject to the respective continuing obligations of the parties pursuant to Sections VI, VII and VIII, this Section sets forth the terms for early termination of this Agreement.
- B. TERMINATION FOR CAUSE. The Company may terminate this Agreement and your employment immediately for cause. For this purpose, "cause" means any of the following: (1) fraud, (2) theft or embezzlement of the Company's assets, (3) a violation of law involving moral turpitude, (4) your repeated and willful failure to follow instructions of the Board provided that the conduct has not ceased or the offense cured within thirty (30) days following written warning from the Company that sets forth in reasonable detail the facts claimed to provide the basis for such termination. In the event of termination for cause pursuant to this Section V.B, you will be paid at the usual rate your annual Base Salary, car allowance, and any out-of-pocket expenses, through the date of termination specified in any notice of termination and any amounts to which you are entitled under any Company benefit plan in accordance with the terms of such plan.
- C. TERMINATION WITHOUT CAUSE. Either you or the Company may terminate this Agreement and your employment without cause on thirty (30) days written notice. In the event of termination of this Agreement and of employment pursuant to this Section V.C, compensation will be paid as follows:
  - 1. if the termination is by you without cause, you will be paid at the usual rate of your annual Base Salary, car allowance, and any out-of-pocket expenses incurred on behalf of the Company and accounted for pursuant to Section IV.E through the date of termination specified in such notice (but not to exceed thirty (30) days from the date of such notice); or
  - 2. Notwithstanding any provision to the contrary contained herein, in the event your employment is terminated by the Company at any time for any reason other than justifiable cause, disability or death, the Company shall:
    - (i) pay you a severance benefit, in a lump sum payable no later than the fifth business day following the date of termination, an amount equal to your total compensation over the preceding twelve months, including the car allowance;

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(ii) continue to provide you, at the Company's expense, with term life insurance, as provided herein until the earlier of (A) the expiration of the "Severance Period" (which shall mean the longer of these two periods: one year from the date of termination or the remaining term of this Agreement), or (B) your obtaining full-time employment;

(iii) continue to allow you to participate, at the Company's expense, in the Company's group hospitalization, health, dental and disability insurance programs until the earlier of (A) the expiration of the Severance Period, or (B) your becoming eligible to participate in another employer's corresponding group insurance and disability plans;

(iv) provide you with outplacement services at a qualified agency selected by you and the use of an office and reasonable secretarial support for one year (unless you become otherwise employed within such period);

(v) reimburse out-of-pocket expenses incurred by you on behalf of the Company and accounted pursuant to Section IV.E; and

(vi) reimburse you for any and all unused vacation days accrued to the date of such termination.

D. TERMINATION FOR GOOD REASON. You may terminate this Agreement upon thirty (30) days written notice to the Company for good reason. For this purpose, "good reason" means: (i) the assignment to you of any duties inconsistent with your positions, duties, responsibilities and status with the Company as of the date hereof, or a change in your reporting responsibilities, titles or offices, or any removal of you from or any failure to re-elect you to any of such positions; (ii) the failure of the Company to continue in effect any fringe benefit or compensation plan, retirement plan, life insurance plan, health or disability plan in which you were participating (except as such change is prompted in good faith by a change in the law), or the taking of any action by the Company, which could reasonably be expected to adversely affect your participation in or materially reduce your benefits under any such plans or deprive you of any material fringe benefit enjoyed by you, (iii) the reduction of your salary or car allowance or failure to increase such salary as is provided in Section IV.A above, or any other breach of this Agreement by the Company; or (iv) the occurrence of a Change in Control as defined in Section IX. In any such case the Company will pay you the amounts, and provide you the benefits, all as set forth in Section V.C.2 above.

E. TERMINATION IN THE EVENT OF DEATH OR PERMANENT DISABILITY. This agreement and your employment will terminate in the event of your death or permanent disability.

1. In the event of your death, Base Salary and car allowance will be terminated as of the end of the month in which death occurs.

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2. For the purposes of this Agreement, the term "disability" shall mean your inability, due to illness, accident or any other physical or mental incapacity, to substantially perform your duties for a period of four (4) consecutive months or for a total of six (6) months (whether or not consecutive) in any twelve (12) month period during the term of this Agreement.
3. Upon your "disability", the Company shall have the right to terminate your employment. Notwithstanding any inability to perform your duties, you shall be entitled to receive your compensation (including bonuses, if any) as provided herein until the later of (i) the date of your termination of employment for disability in accordance with this Agreement, or (ii) the date upon which you begin to receive long-term disability insurance benefits under the policy provided by the Company pursuant to this Agreement. Any termination pursuant to Section V.E.2 shall be effective on the date thirty (30) days after which you shall have received written notice of the Company's election to terminate.

F. ENTIRE TERMINATION PAYMENT.

1. The compensation provided for in Sections V.B, V.C, V.D and V.E for early termination of this Agreement will constitute your sole remedy for such termination. You will not be entitled to any other termination or severance payment which might otherwise be payable to you under any other agreement between you and the Company or under any policy of the Company. This Section will not have any effect on distributions to which you may be entitled at termination from any qualified tax plan or any other plan (other than a severance payment or similar plan).
2. Notwithstanding any other provisions of this Agreement or any other agreement, contract or understanding heretofore or hereafter entered into between you and the Company, if any "payments" (including, without limitation, any benefits or transfers of property or the acceleration of the vesting of any benefits) in the nature of compensation under any arrangement that is considered contingent on a Change in Control for purposes of Section 280G of the Internal Revenue Code of 1986, as amended (the "Code"), together with any other payments that you have the right to receive from the Company or any corporation that is a member of an "affiliated group" (as defined in Section 1504(a) of the Code without regard to Section 1504(b) of the Code) of which the Company is a member, would constitute a "parachute payment" (as defined in Section 280G of the Code), such payments will be reduced to the largest amount as will result in no portion of such payments being subject to the excise tax imposed by Section 4999 of the Code; provided, however, that you will be entitled to designate those payments that will be reduced or eliminated in order to comply with the foregoing provision.

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- G. REQUIRED RESIGNATIONS UPON EARLY TERMINATION OR EXPIRATION. You agree that upon any termination of your employment with the Company or expiration of this Employment Agreement, such termination or expiration under this Agreement will automatically and without further action be deemed to constitute your simultaneous resignation from all director, officer, trustee, agent and any other positions within the Company, all of its affiliates (including but not limited to any entity that is a shareholder of the Company and any subsidiaries and any parent of the Company), the Company's employee benefit plans, trusts and foundations (charitable or otherwise) or any other similar position associated with the Company. Simultaneously upon such termination of employment or expiration of this employment agreement, you agree to execute and deliver to the Company any and all documents, agreements, certificates, letters or other written instruments confirming all such resignations.

VI. INVENTIONS.

- A. You agree that all Inventions (as defined below) you make, conceive, reduce to practice or author (either alone or with others) during or within one year after the term of this Agreement will be the Company's sole and exclusive property. You will, with respect to any such Invention: (i) keep current, accurate, and complete records, which will belong to the Company and be kept and stored on the Company's premises while you are employed by the Company; (ii) promptly and fully disclose the existence and describe the nature of the Invention to the Company in writing (and without request); (iii) assign (and you do hereby assign) to the Company all of your rights to the Invention, any applications you make for patents or copyrights in any country, and any patents or copyrights granted to you in any country; and (iv) acknowledge and deliver promptly to the Company any written instruments, and perform any other acts necessary in the Company's opinion to preserve property rights in the Invention against forfeiture, abandonment, or loss and to obtain and maintain patents and/or copyrights on the Invention and to vest the entire right and title to the Invention in the Company.
- B. "Inventions," as used in this Section, means any discoveries, improvements, creations, ideas and inventions, including without limitation software and artistic and literary works (whether or not they are described in writing or reduced to practice) or other works of authorship (whether or not they can be patented or copyrighted) that: (i) relate directly to the Company's business or the Company's research or development during the term of this Agreement; (ii) result from any work you perform for the Company; (iii) use the Company's equipment, supplies, facilities or trade secret information; or (iv) you develop during any time that Section II above obligates you to perform your employment duties.

The requirements of this Section do not apply to an Invention for which no equipment, supplies, facility or trade secret information of the Company was used and which was developed entirely on your own time, and which neither (1) relates directly to the Company's business or to the Company's actual or demonstrably

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anticipated research or development, nor (2) results from any work you performed for the Company. Except as previously disclosed to the Company in writing, you do not have, and will not assert, any claims to or rights under any Inventions as having been made, conceived, authored or acquired by you prior to your employment by the Company.

VII. PROPRIETARY INFORMATION.

- A. Except as required in your duties to the Company, you will never, either during or after your employment by the Company, use or disclose Proprietary Information to any person not authorized by the Company to receive it. When your employment with the Company ends, you will promptly turn over to the Company all records and any compositions, articles, devices, apparatus and other items that disclose, describe or embody Proprietary Information, including all copies, reproductions and specimens of the Proprietary Information in your possession, regardless of who prepared them.
- B. "Proprietary Information," as used in this Section VII, means any nonpublic information concerning the Company, including information relating to the Company's research, product development, engineering, purchasing, product costs, accounting, leasing, servicing, manufacturing, sales, marketing, administration and finances. This information includes, without limitation: (i) trade secret information about the Company and its products; (ii) "Inventions," as defined in Section VI.B; (iii) information concerning any of the Company's past, current or possible future products. Proprietary Information or confidential information also includes any information which is not generally disclosed and which is useful or helpful to the Company and/or which would be useful or helpful to competitors. More specific examples include financial data, sales figures for individual projects or groups of projects, planned new projects or planned advertising programs, areas where the Company intends to expand, lists of suppliers, lists of customers, wage and salary data, capital investment plans, projected earnings, changes in management or policies of the Company, testing data, manufacturing methods, suppliers' prices to us, or any plans we may have for improving any of our products. This information is confidential or Proprietary Information regardless of its form, e.g. oral, written, electronic or other, and whether or not it is labeled as "proprietary" or "confidential." The Company's Proprietary Information or confidential information includes our information and that of our affiliates and third parties concerning or relating to us.

VIII. COMPETITIVE ACTIVITIES.

- A. You agree that during your employment with the Company, you will not alone, or in any capacity with another person or entity, (i) directly or indirectly engage in any employment or activity that competes with the Company's business at the time your employment with the Company ends, within any state in the United

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States or within Canada, (ii) interfere with the Company's relationships with any of its current or potential customers.

- B. You also agree that for a period of one year after the termination of this Agreement for any one of the following reasons: (i) for "cause" as defined above, (ii) voluntarily by you without "good reason" as defined above; or (iii) in the event of a non-renewal of the Agreement by you other than for "good reason", you will abide by clauses (ii) and (iii) of Section VIII.A above.

IX. CHANGE IN CONTROL.

- A. For purposes of this Agreement, a "Change in Control" of the Company will mean the following:
- (i) the sale, lease, exchange or other transfer, directly or indirectly, of substantially all of the assets of the Company (in one transaction or in a series of related transactions) to a person or entity that is not controlled by the Company;
  - (ii) the approval by the shareholders of the Company of any plan or proposal for the liquidation or dissolution of the Company;
  - (iii) a change in control of the Company of a nature that would be required to be reported in response to Item 5(f) of Schedule 14A of Regulation 14A or to Item 1 of Form 8-K promulgated under the Securities Exchange Act of 1934, as amended (the "Act"), provided that, without limitation, a Change in Control shall be deemed to have occurred if (i) any "person" (as such term is used in Sections 13(d) and 14(d)(2) of the Act) is or shall become the beneficial owner, directly or indirectly, of securities of the Company representing 30% or more of the Company's then outstanding securities; or (ii) during any period of twenty-four (24) consecutive months, individuals who at the beginning of such period constitute the entire Board of Directors shall cease for any reason to constitute a majority thereof unless the election, or the nomination for election by the Company's stockholders, of each new director was approved by a vote of at least two-thirds of the directors then still in office who were directors at the beginning of the period.
- B. If a Change in Control occurs, the Option will become immediately exercisable in full and will remain exercisable for the remainder of its term, regardless of whether you remain in the employ or service of the Company.
- C. For purposes of this Section IX, you shall be entitled to the severance benefits provided in Section V.D if the date of termination occurs either (i) while there is to the Company's knowledge actively pending a proposed transaction, which, if consummated, could reasonably be expected to result within one (1) year in a Change in Control, or (ii) within two (2) years following a Change in Control;

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unless, in the case of either (i) or (ii), your employment is terminated or this Agreement is not renewed because of death or disability or by the Company for "cause" or voluntarily by you other than for "good reason".

X. MISCELLANEOUS.

- A. NO ADEQUATE REMEDY. You understand that if you fail to fulfill your obligations under this Agreement, the damages to the Company would be very difficult to determine. Therefore, in addition to any other rights or remedies available to the Company at law, in equity, or by statute, you hereby consent to the specific enforcement of this Agreement by the Company through an injunction or restraining order issued by an appropriate court.
- B. GOVERNING LAW. The laws of Illinois will govern the validity, construction, and performance of this Agreement.
- C. ARBITRATION. Any and all disputes which arise concerning the rights, duties or obligations of either party under any provision of this Agreement shall be resolved exclusively by binding arbitration in accordance with the following terms and conditions. The party seeking arbitration shall commence a proceeding in arbitration in Chicago, Illinois under the Rules of the American Arbitration Association. Within one month from one of the party's request for arbitration, the party requesting arbitration shall appoint one arbitrator and within one month of the date of such appointment, the other party shall appoint an arbitrator. Within three weeks of the date that the second arbitrator is appointed, and prior to any examination of the merits of the case, the two arbitrators shall mutually select a third arbitrator. If either of the parties fails to appoint an arbitrator or if the two arbitrators fail to appoint the third arbitrator within the periods referred to above, one shall be appointed in accordance with the Rules within fifteen (15) days of the expiry date of the respective period referred to above. The three arbitrators so selected shall constitute the arbitral panel. The arbitral panel shall make its decisions by the majority of its members. The arbitral panel shall render its decision and award in writing within ninety (90) days from its final constitution. There shall be no appeal from the decision and award of the arbitral panel, which shall be final and binding on the parties and may be entered in any court having jurisdiction thereof.
- D. RIGHTS IN THE EVENT OF DISPUTE. If, with respect to any alleged failure by the Company to comply with any of the terms of this Agreement, you hire legal counsel with respect to this Agreement or institute any negotiations or institute or respond to legal action to assert or defend the validity of, enforce your rights under, or recover damages for breach of this Agreement, the Company shall pay, as they are incurred, your actual expenses for attorneys' fees and disbursements, together with such additional payments, if any, as may be necessary so that the net-after-tax payments to you equal such fees and disbursements, provided that such payments shall be reimbursed by you to the Company if the Arbitration

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panel rules in favor of the Company and further decides that such reimbursement is appropriate. Further, pending the resolution of any such claim or dispute, you shall not be deemed terminated for purposes of this Agreement.

- E. MITIGATION. You are not required to mitigate the amount of any payments to be made pursuant to this Agreement by seeking other employment or otherwise, nor shall the amount of any payments provided for in this Agreement be reduced by any compensation earned by you as the result of your self-employment or your employment by another employer after the date of termination of your employment with the Company.
- F. CONSTRUCTION. Wherever possible, each provision of this agreement will be interpreted so that it is valid under the applicable law. If any provision of this agreement is to any extent invalid under the applicable law, that provision will still be effective to the extent it remains valid under the applicable law. The remainder of this agreement also will continue to be valid, and the entire agreement will continue to be valid in other jurisdictions.
- G. WAIVERS. No failure or delay by either the Company or you in exercising any right or remedy under this agreement will waive any provision of the agreement. Nor will any single or partial exercise by either the Company or you of any right or remedy under this agreement preclude either the Company or you from otherwise or further exercising these rights or remedies, or any other rights or remedies granted by any law or any related document.
- H. ENTIRE AGREEMENT. This Agreement is the entire agreement between the parties and replaces all other oral negotiations, commitments, writings and understandings between the parties concerning the matters in this agreement. This Agreement can only be modified by mutual written consent of the parties. You acknowledge that you have been advised to seek legal counsel to review this Agreement with you before you sign it.
- I. SUCCESSORS AND ASSIGNS. Except as otherwise provided in Section IX, this Agreement will be binding upon and inure to the benefit of the successors and assigns of the Company whether by way of merger, consolidation, operation of law, purchase or other acquisition of substantially all of the assets or business of the Company, and any such successor or assign will absolutely and unconditionally assume all of the Company's obligations under this Agreement.
- J. NOTICES. All notices, requests and demands given to or made pursuant hereto will, except as otherwise specified herein, be in writing and be delivered or mailed to any such party at its address which:

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1. In the case of the Company will be:

Ben-Abraham Technologies  
225 Peachtree Street, NE  
Suite 1400, South Tower  
Atlanta, GA 30303  
Attention: Avi Ben-Abraham, CEO

2. In the case of employee will be:

Stephen M. Simes  
1173 RFD  
Long Grove, IL 60047

Any party may, by notice to the other party, designate a changed address. Any notice, if mailed properly addressed, postage prepaid, registered or certified mail, will be deemed dispatched on the registered date or that date stamped on the certified mail receipt, and will be deemed received within the second business day thereafter or when it is actually received, whichever is sooner.

- K. CAPTIONS. The various headings or captions in this agreement are for convenience only and will not affect the meaning or interpretation of this agreement.

Would you please confirm that this agreement is in accordance with your understanding and that you have received a copy of this letter by signing an dating it where indicated below, and returning an executed copy for our records.

Very truly yours,

BEN-ABRAHAM TECHNOLOGIES, INC.

/s/ Avi Ben-Abraham  
-----

\*By: Avi Ben-Abraham, M.D.  
Its: Chief Executive Officer

Agreed to and confirmed as of January 21, 1998:

/s/ Stephen M. Simes  
-----  
Stephen M. Simes

\*Subject to approval by the Company's Board of Directors.

/s/ ABA

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April 15, 1999

Mr. Stephen M. Simes  
1173 RFD  
Long Grove, IL 60047

Dear Stephen:

As you are aware, Ben-Abraham Technologies, Inc. (the "Company") has agreed to sell securities (the "Transaction") to certain investors on the date hereof pursuant to a Private Placement Memorandum dated March 19, 1999 and certain Securities Purchase Agreements (the "Securities Purchase Agreements") with such purchasers (the "Purchasers"). The Securities Purchase Agreements specify, as a condition to closing, that (i) the certain letter agreement dated as of January 21, 1998 between you and the Company regarding your employment (the "Employment Agreement") be amended; and (ii) you waive certain rights you may have under such Employment Agreement. Terms not defined herein shall have the meanings ascribed to such terms in the Employment Agreement.

1. The first two sentences of SECTION 11.1 of the Employment Agreement are hereby amended in their entirety to read as follows:

"You agree to devote, on a full-time basis, all of your business house to the Company's business. You will diligently perform the duties of your position within guidelines to be determined by the Board of Directors."

2. SECTION IV.C.3 of the Employment Agreement is hereby amended in its entirety to read as follows:

"In the event the Company issues a stock dividend, or effectuates a stock split or exchange of any shares of the Company, whether by way of reorganization, reclassification, conversion or other means, the Company shall make appropriate adjustments to the terms of the Option in order to prevent dilution or enlargement of your rights."

Notwithstanding the foregoing, the Company has agreed to issue to you concurrently with the closing of the Transaction additional options to purchase that number of subordinate voting shares of the Company equal to the product of (i) five percent (5%) multiplied by (ii) the number of subordinate voting shares sold in the Transaction (excluding any shares issuable pursuant to warrants). You acknowledge that any future sales of securities by the Company will not entitle you to additional options.

3. In the event the Transaction would be deemed a "Change of Control", or cause a "Change of Control" to have occurred, as such term is defined in SECTION IX.A of the Employment Agreement, you hereby agree to waive, only with respect to any deemed "Change of Control" arising out of or related to the Transaction (which, for greater certainty, includes the change in constitution of the Board of Directors), any rights you have under SECTION IX.B, including without limitation the right for the Option to become immediately exercisable.

4. Except as otherwise specifically set forth herein, the Employment Agreement shall remain in full force and effect.

You hereby acknowledge that the Company and the Purchasers are entering into the Securities Purchase Agreements in reliance upon on this letter. Please indicate your agreement to the foregoing by signing the enclosed copy of this letter where indicated and returning such executed copy to the Company.

Very truly yours,

Ben-Abraham Technologies, Inc.

By: /s/ Louis W. Sullivan

-----  
Its: Chairman, Board of Directors and  
Chairman, Compensation Committee

ACCEPTED AND AGREED:

/s/ Stephen M. Simes

-----  
Stephen M. Simes

Dated: 4/15/99  
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4-MOS	9-MOS	9-MOS
DEC-31-1996	DEC-31-1997	DEC-31-1997
AUG-29-1996	JAN-01-1997	JAN-01-1997
DEC-31-1996	SEP-30-1997	SEP-30-1997
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	0	0
	0	0
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662		21,586
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	2,415	2,377
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	2,637,518	
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	0	0
	0	0
	0	0
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0		0
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0		0
(6,246,710)		(1,009,384)
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(1.21)		(0.08)
(1.21)		(0.08)