SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D. C. 20549

FORM 10-K

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 1999

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____ .

Commission File Number 000-28782

NEOTHERAPEUTICS, INC.
(Name of Registrant as Specified in its Charter)

DELAWARE	93-0979187
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
157 TECHNOLOGY DRIVE IRVINE, CALIFORNIA	92618
(Address of principal executive offices)	(Zip Code)
Registrant's telephone number, including area code:	(949) 788-6700

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT: None

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT:

Common Stock, $.001 par value
Common Stock Purchase Warrants

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

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

The aggregate market value of the voting common equity held by non-affiliates of the registrant as of March 22, 2000, was $158,920,940.

As of March 22, 2000, there were 9,534,103 shares of the registrant's common stock outstanding.

TABLE OF CONTENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified. The Company's actual results may differ materially from the results projected in the forward-looking statements. Factors that might cause such a difference include, but are not limited to, those discussed in "ITEM 1 - Business," including the section therein entitled "Risk Factors," and in "ITEM 7 - - Management's Discussion and Analysis of Financial Condition and Results of Operations." Forward-looking statements generally can be identified by the use of forward-looking terminology such as "believes," "may," "will," "expects," "intends," "estimates," "anticipates," "plans," "seeks," or "continues," or the negative thereof or variations thereon or similar terminology.

PART I

ITEM 1. BUSINESS

GENERAL

NeoTherapeutics, Inc. is a development stage biopharmaceutical company engaged in the discovery and development of novel therapeutic drugs intended to treat neurological and psychiatric diseases and conditions, such as memory deficits associated with Alzheimer's disease and aging, stroke, spinal cord injuries, Parkinson's disease, migraine, depression and obesity. Our lead product candidate, Neotrofin(TM) (AIT-082, leteprinim potassium), and other compounds under development, are based on our patented technology. This technology uses small synthetic molecules to create non-toxic compounds, intended to be administered orally or by injection, that are capable of passing through the blood-brain barrier to rapidly act upon specific target cells in specific locations in the central nervous system, including the brain. Animal and laboratory tests have shown that Neotrofin(TM) appears to selectively increase the production of certain neurotrophic factors, a type of large protein, in selected areas of the brain and in the spinal cord. These neurotrophic factors regulate nerve cell growth and function. Our technology has been developed to capitalize on the beneficial effects of these proteins, which have been widely acknowledged to be closely involved in the early formation and differentiation of the central nervous system. We believe that Neotrofin(TM) could have therapeutic and regenerative effects.

Our developmental activities to date have benefited from a close association with the National Institutes of Health ("NIH"). The NIH's National Institute on Aging ("NIA") has contracted for, and funded a portion of, the pre-clinical studies on our Neotrofin(TM) compound, including toxicity studies. The NIA has committed to fund and conduct two Phase 1 clinical trials under the auspices of its Alzheimer's Disease Cooperative Study ("ADCS"), a consortium of approximately 35 highly regarded clinical centers throughout the United States. One of these clinical trials has been completed and one is in progress. The NIH's National Institute for Mental Health ("NIMH") also supported our development efforts by contracting and providing funds, along with the NIA, for the production of sufficient quantities of the Neotrofin(TM) compound to conduct some preclinical toxicity testing and the two Phase 1 human clinical trials conducted by the ADCS.

In June 1997, an Investigational New Drug Application ("IND") for Neotrofin(TM) was approved by the U.S. Food and Drug Administration ("FDA") and Phase 1 human clinical testing in the United States for the treatment of Alzheimer's disease began. In addition, Neotrofin(TM) received a physician's IND in Canada in March 1997, where a Phase 1 clinical trial to evaluate safety in patients with Alzheimer's disease was completed. We have since received regulatory approval to conduct human clinical trials in additional countries. We believe that Neotrofin(TM) is the first orally active drug to enter human clinical trials that is specifically designed to address the issue of nerve regeneration. In preclinical studies in animals, Neotrofin(TM) has been shown to induce the production of multiple neurotrophic factors in the brain and spinal cord. These factors have been reported to induce the multiplication and functional maturation, in the brain, of cholinergic neurons, those neurons known to die in patients with Alzheimer's disease. We believe that Neotrofin(TM) is the only compound in human clinical trials that has activated, in animals, multiple genes to produce multiple neurotrophic factors in the specific areas of the brain associated with memory loss or other deficits.

In September 1999, we entered into a Collaborative Research and Technology Development Agreement with the University of California, Irvine. This agreement grants us the exclusive right to all technology developed by Dr. Olivier Civelli through his research into functional genomics and orphan receptors, in exchange for royalty payments for the use of such technology. Dr. Civelli's research and technology complement our own research and development efforts and may enable us to offer a greater number of drugs that more effectively address a broad array of neurological diseases and conditions.

We were incorporated in Colorado in December 1987. On August 7, 1996, we changed our name from Americus Funding Corporation to NeoTherapeutics, Inc. In June 1997, our stockholders approved the reincorporation of NeoTherapeutics, Inc. as a Delaware corporation. Our wholly owned subsidiary, Advanced ImmunoTherapeutics, Inc. ("AIT"), was incorporated as a California corporation in June 1987. In July 1989, in a transaction accounted for as a

reverse acquisition, all of the stockholders of AIT exchanged all of their shares of AIT common stock for shares of the Company's common stock, and AIT became our wholly owned subsidiary. In April 1997, we established NeoTherapeutics GmbH ("NEOT GmbH"), as our wholly owned subsidiary in Switzerland, for the purpose of conducting future licensing and other related activities in the international market. Our third wholly owned subsidiary, NeoGene Technologies, Inc. ("NeoGene") was incorporated in California in October, 1999, for the purpose of commercializing functional genomics technologies being developed through a joint venture with the University of California, Irvine. Unless the context otherwise requires, all references to the "Company", "We", "Our", "Us" and "NeoTherapeutics" refer to NeoTherapeutics, Inc., a Delaware corporation, AIT, NEOT GmbH and NeoGene as a consolidated entity.

INTRODUCTION TO THE CENTRAL NERVOUS SYSTEM

The human brain contains some 10 billion nerve cells, or neurons, each of which has connections with many other neurons. Sensory, motor and cognitive activities are all governed by this complex network of neurons, each member of which communicates with other neurons across junctions known as "synapses." Communication between neurons involves chemical "messengers" known as neurotransmitters, which are released by the sending neuron, diffuse across a small gap, and bind to corresponding receptors on the receiving neuron. Abnormal neuronal communication has been implicated in a range of psychiatric and neurological disorders, including memory deficits, schizophrenia, depression, anxiety, Parkinson's disease and eating disorders.

The treatment of many diseases is facilitated by cell regeneration, a natural component of human healing. However, in the highly complex realm of neurological diseases, treatment is more difficult because neurons may not naturally regenerate efficiently after maturity. Currently available drugs for the treatment of such significant neurological disorders as Alzheimer's and Parkinson's diseases act by increasing or replacing supplies of critical neurotransmitters, but provide time-limited benefits at best. These benefits are limited because the eventual loss of neuronal cells without regeneration means there are eventually few nerve cells for those neurotransmitters to activate.

Much of neuroscience-oriented biotechnology research centers on the investigation of certain proteins, known as neurotrophic factors, which are necessary to the early development of neurons as well as their long-term maintenance and survival. These substances are involved in the fundamental formation and shaping of the nervous system. Given their role in the early neuron development and maintenance, it has been hypothesized that these neurotrophic factors could be used in the treatment of neurodegenerative diseases.

Since neurons do not naturally regenerate completely following damage or disease, substantial research has been conducted by academic researchers and by the pharmaceutical industry in developing these factors as possible treatments for a variety of neurological disorders. To date, the usefulness of these factors has been limited by their inability to pass the blood-brain barrier, which serves as a "filter" to keep molecules larger than a certain size from leaving the bloodstream and entering the brain and spinal cord. Therefore, neurotrophic factors, which are large protein molecules, cannot be administered orally or through injection into the bloodstream for the treatment of diseases of the central nervous system.

There are currently three alternative approaches to achieving blood-brain barrier access. One approach is to introduce neurotrophic factors by direct injection into the brain through a catheter inserted into a hole drilled into the skull. While this treatment has achieved some success in alleviating some of the symptoms of Alzheimer's disease, the prospect for infection, the side effects, the inconvenience and expense of the procedure have limited its practical usefulness to date. The second approach is to temporarily break down the blood-brain barrier, which would allow molecules of all sizes (including therapeutic as well as toxic or infectious agents) to enter into the central nervous system. This approach is in the early stage of development, and its utility has not been established.

The third approach, the one we have taken, is to find small molecules which can pass through the blood-brain barrier and which can be administered orally or through injection into the bloodstream. Our small-molecule approach, if successful, could lead to the development of compounds which can either mimic the actions of the larger molecule neurotrophic factors or stimulate the production of such factors within the brain, after administration either orally or through injection. We believe that such a development could represent a major advance in the treatment of neurological disorders.

OUR DRUG DEVELOPMENT STRATEGY

We are engaged in research that has primarily focused on the development of new drugs that act on the nervous system to treat neurological and psychiatric diseases and conditions, such as memory deficits associated with Alzheimer's disease and aging, stroke, spinal cord injuries and Parkinson's disease, migraine, depression and obesity.

Our technical strategy is the synthesis of proprietary chemical molecules that modify specific biological processes in the body. The methods by which the molecules are synthesized are proprietary and we have patented specific molecules and their methods of use. Our drug design methods are based upon the use of hypoxanthine, a natural non-toxic purine compound which is contained in the genetic material of all living matter. Hypoxanthine is chemically linked to a variety of other molecules in order to produce our proprietary series of compounds. The various molecules that are linked to hypoxanthine are selected from known drugs or naturally-occurring molecules that have established therapeutic activity, producing a potentially bi-functional compound. These compounds exhibit certain functional features of both hypoxanthine and the linked therapeutic compounds. Chemical and behavioral studies have given us reason to believe that this compound synthesis and selection process increases the probability that our new compounds will retain the actions exhibited by their "parent" molecules.

We synthesize new compounds and conduct the early testing to establish therapeutic potential necessary to obtain patents on new compounds. We have conducted preclinical testing of the safety and efficacy of certain of our compounds and intend to file an IND for each such compound which shows therapeutic potential. With respect to our Neotrofin(TM) compound, some clinical trials have been completed, others are in progress, and we intend to conduct additional clinical trials. We intend to seek out large pharmaceutical companies as partners for the development, manufacture and marketing of certain of our compounds.

PRODUCTS IN DEVELOPMENT

The table below summarizes the primary or possible indications and development status for some of our current research and development programs.

PRODUCT	POSSIBLE INDICATIONS	DEVELOPMENT STATUS	
Neotrofin(TM) (AIT-082)	Alzheimer's Disease	Phase 1:	Five clinical trials completed, two in progress and additional Phase 1 studies to be conducted in 2000
		Phase 2:	One clinical trial completed and four in progress
	Spinal Cord Injury	Preclinical	
	Stroke	Preclinical	
	Peripheral Neuropathy	Preclinical	
AIT-034	Dementia	Preclinical	
AIT-202	Depression; obesity	Preclinical	
AIT-203	Parkinson's Disease	Preclinical	
AIT-297	Migraine	Preclinical	

We cannot guarantee that any of our compounds will effectively treat the indicated diseases or conditions, or that any such compounds will receive FDA approval.

Neotrofin(TM)

Our Neotrofin(TM) compound is the most extensively studied compound in the AIT series and has been the primary focus of our research efforts. Neotrofin(TM) has been shown in animal studies to enhance working (or recent) memory, the type of memory which is deficient in patients suffering from Alzheimer's disease. In addition, we believe that Neotrofin(TM) may help treat memory impairments in the aged, in stroke patients and in patients with traumatic brain injuries. Neotrofin(TM) may also help treat patients with nerve damage such as stroke, spinal cord injury and peripheral neuropathy.

Preclinical testing involving laboratory animals has indicated that Neotrofin(TM) exhibits the following properties and/or effects:

- Shown to reduce, delay and prevent memory deficits in aged animals; shown to enhance memory function in young and aged animals.
- Shown to protect brain cells against neurotoxic injury.
- Shown to be non-toxic at high oral dosage levels in dogs and rats after up to nine months of administration.
- Effective over a wide range of doses in animals.
- Active both orally and through injection.

Until completion of the entire human clinical trial process, there can be no assurance that these properties and/or

effects can be replicated in humans.

We have shown that when administered to neurons in tissue culture, Neotrofin(TM) can induce the same neurite outgrowth effects as NGF (nerve growth factor). We have also shown that Neotrofin(TM) causes the production of mRNA (messenger ribonucleic acid) for multiple neurotrophic factors in tissue culture. In addition, we have demonstrated that oral administration of Neotrofin(TM) increases the levels of mRNA and protein for multiple neurotrophic factors in the central nervous systems of rats and mice. Other researchers have shown, in animals, that administration of multiple neurotrophic factors may be more effective as a treatment method for neurodegenerative diseases than the administration of a single factor. We believe that Neotrofin's mechanism of action involves activating the genes that lead to the production of a number of different neurotrophic factors. Neurotrophic factors themselves are not orally active and do not pass the blood-brain barrier. Therefore, should Neotrofin(TM) prove to be an effective treatment for neurological disorders, it could have two distinct practical advantages over neurotrophic factors administered alone directly into the brain as a treatment for such disorders: (i) it can be administered orally; and (ii) it induces the production of multiple neurotrophic factors in those areas of the brain associated with a variety of deficits.

The NIA and the NIMH have contracted for, and completed production of, sufficient quantities of Neotrofin(TM) to conduct subchronic animal toxicity studies and early human clinical trials and have provided the funding for these contracts. An IND was approved for Neotrofin(TM) by the U.S. FDA in June 1997.

The ADCS has committed to conduct two Phase 1 clinical trials of Neotrofin(TM). The first trial began in July 1997 and was completed in 1998. The second trial commenced in October 1998 and is due to be completed in the first half of 2000. In addition, the Geriatric Research Group and Memory Clinic, McMaster University, Hamilton, Ontario, completed a two-part single-dose Phase 1 clinical trial of Neotrofin(TM) in September 1997. Additional Phase 1 clinical trials evaluating safety and pharmacokinetic parameters have been conducted with Neotrofin(TM). The results from the Phase 1 clinical trials which have been completed indicate that Neotrofin(TM) is rapidly absorbed after oral administration and produces no serious side effects at high doses.

The first Phase 2 trial of Neotrofin(TM) (28 days of dosing) was initiated in July 1998 and completed in the first quarter of 1999. The results from this study confirmed the observations seen in the Phase 1 trials and also indicated improved memory performance. In the first quarter of 1999, we initiated a larger Phase 2 clinical trial (90 days of dosing) in Canada, Australia and the Republic of South Africa. Two additional Phase 2 clinical trials have been initiated in the United States. The first is to study the effects of oral Neotrofin(TM) in the brain using PET (Positron Emission Tomography) imaging technology. The second United States Phase 2 clinical trial, initiated in the fourth quarter of 1999, is designed to study the effects of a single dose level of Neotrofin(TM) compared to placebo when administered for 90 days. We have also initiated, in the first quarter of 2000, a large multinational (excluding the United States) dose-ranging Phase 2/3 study of Neotrofin(TM) (24 weeks of dosing). We expect that we will have to conduct and fund additional animal and human studies that may possibly include Phase 3 human clinical studies prior to submitting Neotrofin(TM) to the FDA, or regulatory agencies in other countries, for marketing approval. We cannot guarantee, however, that ongoing or future clinical trials of Neotrofin(TM) will be successful, that the marketing of Neotrofin(TM) will be approved by regulatory agencies, or that Neotrofin(TM) can be marketed successfully to its targeted population. See "Drug Approval Process and Government Regulation."

Other Compounds in Development

Due to the historically limited resources available to us and our decision to focus those resources on the development of Neotrofin(TM), our other compounds are in earlier stages of development. These compounds include:

AIT-034: AIT-034 is a distinct chemical analog of hypoxanthine and pyrollidone that has been demonstrated in animal studies to enhance memory and to reverse memory deficits in severely impaired animals that do not respond to Neotrofin(TM). AIT-034 does not induce the production of NGF, and its mechanism of action is therefore believed to be different than Neotrofin(TM). We believe that AIT-034 could complement Neotrofin(TM) as a treatment for Alzheimer's disease and dementia.

AIT-202: AIT-202 is a derivative of hypoxanthine and serotonin and has the potential for use in the treatment of depression and obesity.

AIT-203: AIT-203 is a chemical derivative of hypoxanthine and dopamine. With further development, AIT-203 might be used to treat Parkinson's disease.

AIT-297: AIT-297 is a derivative of hypoxanthine and norepinephrine which has shown, in preliminary studies, potential to treat migraine and hypertension.

Until extensive further development and testing is completed, which will take many years, if undertaken at all, the therapeutic and other effects of these compounds cannot be established.

PRIMARY THERAPEUTIC TARGETS

Alzheimer's Disease. Alzheimer's disease is a neurodegenerative brain disorder that leads to progressive memory loss and dementia. Alzheimer's disease generally follows a course of deterioration over eight years or more, with the earliest symptom being impairment of short-term memory. Alzheimer's disease is now recognized as the most common cause of severe intellectual impairment in persons over the age of 65 in the United States, with approximately four million Americans diagnosed as suffering from Alzheimer's disease. The number of patients with Alzheimer's disease is expected to reach 14 million by 2050. Alzheimer's disease is the fourth leading cause of death in the United States with approximately 100,000 deaths per year. The Alzheimer's Association has estimated that the overall care costs required for the treatment and care of the estimated four million U.S. patients with Alzheimer's disease are $100 billion per year. The only drug presently marketed in the U.S. for the treatment of Alzheimer's disease is donepezil (Aricept(R), Pfizer, Inc. and Eisai), which has market sales of approximately $1 billion per year. We have two compounds in development, Neotrofin(TM) and AIT-034, which have shown potential to treat Alzheimer's disease.

Dementia and Memory Impairment Associated with Aging. Because the populations of developed countries are aging, the costs and social burden of medical care and housing of aged persons suffering from mentally deteriorative diseases are increasing. The availability of a drug to reduce the memory impairments associated with aging would not only have a significant economic impact but would also greatly improve the quality of life for the elderly population. Both Neotrofin(TM) and AIT-034 have shown to be effective in ameliorating memory loss associated with aging in mice. Clinical trials indicate that Neotrofin(TM) also improves memory performance in patients with Alzheimer's disease.

Spinal Cord Injury. There are an estimated 200,000 severely disabled survivors of spinal cord trauma in the United States with approximately 10,000 new injuries each year. The cost of care and services for these individuals is estimated to exceed $10 billion per year. Significant research efforts are currently being focused on the neurotrophic factors that can initiate and support new cell development, guide new or damaged nerves to appropriate targets and maintain neuronal function. Animal studies have shown that functional restorations are possible with appropriate neurotrophic factors. A major obstacle to the effective use of these neurotrophic factors is the delivery of the appropriate neurotrophic factors to the site of damage. Neotrofin(TM) has been shown in mice to cause the production of several neurotrophic factors in the spinal cord after oral administration, demonstrating that it can effectively penetrate the blood-brain barrier. We believe that Neotrofin(TM) potentially could be used to stimulate the regeneration of nerves damaged by spinal cord injury. We have paid $50,000 and have committed an additional $50,000 to establish a NeoTherapeutics Fellowship as part of the Reeve-Irvine Research Center for spinal cord injury at the University of California, Irvine.

Stroke. Among older Americans, stroke ranks as the third leading cause of death. An estimated 500,000 people in the United States suffer strokes each year. The costs associated with the treatment and care of stroke patients are estimated to be approximately $25 billion per year. Most therapeutic approaches to treating strokes are directed towards correcting the circulatory deficit or to blocking the toxic effects of chemicals released in the brain at the time of the stroke. Since Neotrofin(TM) has the potential to be neuroprotective in addition to enhancing nerve regeneration, we believe that it may prove useful in treating stroke.

Functional Genomics. Under the auspices of the Human Genome Project of the National Institute of Health, it is projected that the entire sequence of the human genetic blueprint will be completely deciphered by 2003. However, knowing the sequence of a gene does not tell what the function of that gene is in the body. Understanding the function of genes in the body is a process called "functional genomics." To date, the functions of only 10,000 of the estimated 100,000 genes in the body are understood. The Human Genome Project has identified about 1,000 genes that belong to the G-protein-coupled receptor family, or GPCR. Functions have been elucidated for about 860 of these genes, leaving 140 genes which control the as yet unidentified functions of these "orphan receptor" genes.

Using genetic engineering techniques, it has been possible to deduce the function of certain orphan receptor genes, but the process is difficult, labor intensive and expensive. Of the 10 orphan receptor genes whose functions have been established, three have been the result of research conducted by Dr. Olivier Civelli. Among them is the MCH receptor, which is associated with obesity control, and Urotensin II, a potent controller of blood pressure.

In September 1999, we entered into a collaborative agreement with the University of California, Irvine and Dr. Civelli whereby we will have access to all technology and products developed by Dr. Civelli and his colleagues in exchange for research funding support in the amount of $2.0 million over three years. While it may be several years before

therapeutic product candidates are identified, this technology platform complements our current technology base and product pipeline and should provide us with the next generation of potential products.

BUSINESS STRATEGY

Marketing and Sales

We do not currently sell any products and therefore have no marketing, sales, or distribution organization. We intend to possibly complete a series of strategic alliances with multinational or large regional pharmaceutical companies having substantial financial capacity, marketing capability and clinical development expertise, who can assist us in the development, marketing and sale of Neotrofin(TM) and our potential other products. However, we may seek to retain rights to co-market our products in the United States.

We believe the support of the National Institute of Health's National Institute on Aging ("NIA") and the National Institute of Health's National Institute for Mental Health ("NIMH"), along with the Alzheimer's Disease Cooperative Study, the clinical arm of the NIA's research on Alzheimer's disease, could contribute significantly to the future marketing and educational efforts directed to physicians who treat Alzheimer's disease patients. We believe that this exposure to the leaders in the field of neurodegenerative diseases may reduce the time and marketing costs required to introduce our potential products when and if they are approved by the FDA.

Strategic Alliances

We believe that our patented technology platforms provide a major commercial opportunity for developing strategic alliances with larger pharmaceutical companies. We believe that any such alliance would enable us to focus on our inherent strength; namely exploitation of the technology platform to develop additional novel therapies.

The most common phase in which industry collaborations are completed is the discovery stage, since a license for early stage discoveries generally cost a large pharmaceutical company much less than licensing later stage products. We chose to postpone the structuring of a corporate sponsored licensing agreement for Neotrofin(TM) in favor of an early stage, government-assisted development program. By completing strategic alliances later in the development cycle, we hope to increase value for our stockholders that may be reflected in the enhanced terms of any licensing agreement.

From time to time we engage in licensing discussions with one or more multinational or regional pharmaceutical companies. We anticipate that the terms of any strategic alliance that we enter into for our lead compound, Neotrofin(TM), will include an up-front payment, milestone payments, royalties on product sales, and agreements requiring the licensee to purchase drug compound from us. We cannot guarantee that any such discussions will result in a commercial transaction on favorable terms.

Research Collaborations

We currently have several proprietary compounds in various stages of preclinical development. From time to time, we evaluate these compounds for efficacy in specialized assays or test models. We locate expert academic researchers to perform the desired tests and provide them, through their respective academic institutions, with grants and/or contracts to perform the designated tests while we maintain proprietary rights to the compounds. We monitor these studies to ensure that these studies are performed to the highest research standards.

Production

We currently have our compounds manufactured in large scale by a third party vendor and have no plans to establish our own manufacturing facilities. In connection with any licensing arrangements we may enter into, we intend to retain the rights to control the manufacturing and sale of our compounds to our licensees. Preliminary estimates indicate that Neotrofin(TM) can be manufactured cost effectively.

DRUG APPROVAL PROCESS AND OTHER GOVERNMENT REGULATION

The production and marketing of our products and our research and development activities are subject to regulation for safety, efficacy and quality by numerous governmental authorities in the United States and other countries. In the United States, drugs are subject to rigorous regulation. The Federal Food, Drug and Cosmetics Act, as amended, and the regulations promulgated thereunder, as well as other federal and state statutes and regulations, govern, among other things, the testing, manufacture, safety, efficacy, labeling, storage, record keeping, approval, advertising and promotion of our proposed products. Product development and approval within this regulatory framework take a number of years and involve the expenditure of substantial resources. In addition to obtaining FDA approval for each product, each drug manufacturing establishment must be registered with, and approved by, the FDA. Domestic manufacturing establishments are subject to regular inspections by the FDA and must comply with Good Manufacturing Practices ("GMP"). To supply products for use in the United States, foreign manufacturing establishments must also comply with GMP and are subject to

periodic inspection by the FDA or by regulatory authorities in certain of such countries under reciprocal agreements with the FDA. Drug product and drug substance manufacturing establishments located in California also must be licensed by the State of California in compliance with local regulatory requirements.

New Drug Development and Approval. The United States system of new drug approval is one of the most rigorous in the world. According to a February 1993 report by the Congressional Office of Technology Assessment, it costs an average of $359 million and takes an average of 15 years from discovery of a compound to bring a single new pharmaceutical product to market. Approximately one in 1,000 compounds that enter the pre-clinical testing stage eventually makes it to human testing and only one-fifth of those are ultimately approved for commercialization. In recent years, societal and governmental pressures have created the expectation that drug discovery and development costs can be reduced without sacrificing safety, efficacy and innovation. The need to significantly improve or provide alternative strategies for successful pharmaceutical discovery, research and development remains a major health care industry challenge.

Drug Discovery. In the initial stages of drug discovery before a compound reaches the laboratory, typically thousands of potential compounds are randomly screened for activity in an assay assumed to be predictive of a particular disease process. This drug discovery process can take several years. Once a "screening lead" or starting point for drug development is found, isolation and structural determination is initiated. Numerous chemical modifications are made to the screening lead in an attempt to improve the drug properties of the lead. After a compound emerges from the above process, it is subjected to further studies on the mechanism of action, further in vitro screening against particular disease targets and finally, in vivo animal screening. If the compound passes these evaluation points, animal toxicology is performed to begin to analyze the potential toxic effects of the compound, and if the results indicate acceptable toxicity findings, the compound emerges from the basic research mode and moves into the preclinical phase.

Preclinical Testing. During the preclinical testing stage, laboratory and animal studies are conducted to show biological activity of the compound against the targeted disease, and the compound is evaluated for safety. These tests can take up to three years or more to complete.

Investigational New Drug Application (IND). After preclinical testing, an IND is submitted to the FDA to begin human testing of the drug. The IND becomes effective if the FDA does not reject it within 30 days. The IND must indicate the results of previous experiments, how, where and by whom the new studies will be conducted, how the chemical compound is manufactured, the method by which it is believed to work in the human body, and any toxic effects of the compound found in the animal studies. In addition, the IND clinical protocol must be reviewed and approved by an Institutional Review Board comprised of physicians and lay people at the hospital or clinic where the proposed studies will be conducted. Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA.

Phase 1 Clinical Trials. After an IND becomes effective, Phase 1 human clinical trials can begin. These studies, involving small numbers of healthy volunteers or patients, can take up to one year or more to complete. The studies determine a drug's safety profile, including the safe dosage range. The Phase 1 clinical studies also determine how a drug is absorbed, distributed, metabolized and excreted by the body. Additional Phase 1 clinical trials, which may be conducted at any time during the clinical development of a new drug, evaluate interactions between the test drug and drugs commonly used in the target population and safety in patients with compromised organ systems.

Phase 2 Clinical Trials. In Phase 2 clinical trials, controlled studies of volunteer patients with the targeted disease assess the drug's effectiveness. These studies are designed primarily to determine the appropriate dose levels and to evaluate the effectiveness of the drug on the volunteer patients as well as to determine if there are any side effects on these patients. These studies can take up to two years or more.

Phase 3 Clinical Trials. This phase can last up to three years or more and usually involves large numbers of patients with the targeted disease. During the Phase 3 clinical trials, physicians monitor the patients to determine efficacy and to observe and report any adverse reactions that may result from long-term and more widespread use of the drug.

New Drug Application (NDA). After completion of all three clinical trial phases, the data is analyzed and, if the data indicates that the drug is safe and effective, an NDA is filed with the FDA. The NDA must contain all of the information on the drug that has been gathered to date, including data from the clinical trials. NDAs are often over 100,000 pages in length. After passage of the Prescription Drug User Fee Act, average review times for new medicine applications dropped from nearly 30 months in 1992 to less than 18 months in 1996.

Fast Track Review. In September 1998, the FDA clarified procedures for accelerating the approval of drugs to be marketed for serious diseases for which the manufacturer can demonstrate the potential to address unmet medical needs. We do not know whether Neotrofin(TM) will fulfill this requirement for the treatment of Alzheimer's disease as there are drugs currently approved and available for such treatment. However, Neotrofin(TM) might qualify for "fast track" classification in a different disease indication. At this time, we have not requested fast track designation for Neotrofin(TM).

The FDA has also made provisions for priority review of drugs. A drug will qualify for priority review if it provides a significant improvement compared to marketed products in the treatment, diagnosis or prevention of a disease regardless if the indication is serious or life-threatening. We believe that Neotrofin(TM) may qualify for priority review.

Approval. If the FDA approves the NDA, the drug becomes available for physicians to prescribe. We must continue to submit periodic reports to the FDA, including descriptions of any adverse reactions reported. For certain drugs which are administered on a long-term basis, the FDA may request additional clinical studies (Phase 4) after the drug has begun to be marketed to evaluate long-term effects. The marketing of a drug after FDA approval is subject to substantial continuing regulation by the FDA, including regulation of manufacturing practices and the advertising and promotion of the drug.

In addition to regulations enforced by the FDA, we are also subject to regulation under the Occupational Safety and Health Act, the Environmental Protection Act, the Toxic Substances Control Act, the Resource Conservation and Recovery Act and other present and future federal, state or local regulations. Our research and development activities involve the controlled use of hazardous materials, chemicals, biological materials and various radioactive compounds. Although we believe that our safety procedures for handling and disposing of such materials comply with the standards prescribed by state and federal regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, we could be held liable for any damages that result, and any such liability could exceed our resources.

For marketing outside the United States, we, or our prospective licensees, are subject to foreign regulatory requirements governing human clinical trials and marketing approval for drugs and devices in the respective countries. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary widely from country to country.

RESEARCH AND DEVELOPMENT

Since our inception, we have devoted substantially all of our efforts to research and development. Research and development expenditures were $4,508,255 in 1997, $8,542,034 in 1998 and $20,057,687 in 1999.

PATENTS AND PROPRIETARY RIGHTS

Patents and other proprietary rights are vital to our business. Our policy is to seek patent protection for our proprietary compounds and technology, and we intend to protect our technology, inventions and improvements to inventions that are commercially important to the development of our business. We also intend to rely on trade secrets, know-how, continuing technology innovations and licensing arrangements to develop and maintain our competitive position. In addition, we have applied for registration of several trademarks, including the name of the Company, NeoTherapeutics(TM), and our potential products.

On February 25, 1992, Dr. Alvin Glasky was issued a United States patent (No. 5,091,432) which establishes proprietary rights for a series of compounds whose chemistry is based upon a purine, hypoxanthine, and for the use of these compounds in the treatment of neuroimmunologic disorders. This patent expires on February 25, 2009. These compounds are bi-functional drugs that combine the ability of hypoxanthine to be absorbed rapidly into the body with the pharmacological activity of a second molecular component. These second components were selected to provide a wide variety of potential therapeutic applications that act on the central nervous system to treat neurological or psychiatric diseases or conditions associated with Alzheimer's disease, impairment associated with aging, Parkinson's disease, stroke, spinal cord injuries, migraine and depression.

On September 5, 1995, a second United States patent (No. 5,447,939) was issued to Dr. Glasky which covers the treatment of neurological and neurodegenerative diseases through modification of certain biochemical processes in cells. This patent expires on July 25, 2014. This second patent also incorporates certain technology developed under the auspices of, and belonging to, McMaster University in Ontario, Canada.

On September 1, 1998, Dr. Glasky was issued a third United States patent (No. 5,801,184) which relates to the control of neural activity and the treatment of neurological disorders by controllably inducing the in vivo genetic expression of naturally occurring protein molecules including neurotrophic factors. This patent expires on September 1, 2015. This third patent also incorporates certain technology developed under the auspices of, and belonging to, McMaster University in Ontario, Canada.

On February 22, 2000, a fourth United States patent (No. 6,027,936) was issued to Dr. Glasky which covers the use of certain purine-containing compounds to induce the production of naturally occurring neural growth factors for the purpose of stimulating neuritogenesis, or sprouting of nerve cells. This patent expires on July 25, 2014.

All four patents have been assigned to NeoTherapeutics by Dr. Glasky. In connection with these assignments, Dr. Glasky has been granted a royalty of two percent of all revenues derived by NeoTherapeutics from the use and sale by us of any products which are covered by any of the aforementioned patents or any subsequent derivative patents, in each case for the life of the patent. However, Dr. Glasky will not receive any royalties with respect to sales of products which utilize patent rights licensed to us by McMaster University. In the event NeoTherapeutics terminates Dr. Glasky's employment without cause, the royalty rate shall be increased to five percent, and in the event Dr. Glasky dies, his estate or family shall be entitled to continue to receive royalties at the rate of two percent.

With respect to the second United States patent, we have entered into a license agreement whereby McMaster University has licensed to NeoTherapeutics all patent rights belonging to McMaster University contained in such patent. This agreement calls for minimum payments of $25,000 per year to McMaster University, with the first payment due in July of 1997, and for us to pay to McMaster University a royalty of five percent of the net sales of all products sold by NeoTherapeutics which incorporate the patent rights licensed to us by McMaster University. The third and fourth U.S. patents are covered under this agreement.

In addition to a number of foreign patents which have been granted corresponding to the first and third United States patents, we also currently have eight additional United States patent applications and a number of corresponding foreign patent applications on file. There can be no assurance, however, that the scope of the coverage claimed in our patent applications will not be significantly reduced prior to a patent being issued.

The patent positions of pharmaceutical and drug development companies are generally uncertain and involve complex legal and factual issues. There can be no assurance that third parties will not assert patent or other intellectual property infringement claims against us with respect to our products or technology or other matters. There may be third-party patents and other intellectual property relevant to our products and technology of which we are not aware.

Patent litigation is becoming more common in the biopharmaceutical industry. Litigation may be necessary to defend against or assert claims of infringement, to enforce our patents, to protect trade secrets we own or to determine the scope and validity of proprietary rights of third parties. Although no third party has asserted that we are infringing upon their patent rights or other intellectual property, there can be no assurance that litigation asserting such claims will not be initiated, that we would prevail in any such litigation or that we would be able to obtain any necessary licenses on reasonable terms, if at all. Any such claims against us, whether meritorious or not, as well as claims initiated by us against third parties, can be time consuming and expensive to defend or prosecute and to resolve. If our competitors prepare and file patent applications in the United States that claim technology we also claim, we may have to participate in interference proceedings declared by the Patent and Trademark Office to determine priority of invention, which could result in substantial costs, even if we ultimately prevailed. The results of such proceedings are highly unpredictable and, as a result of such proceedings, we may have to obtain licenses in order to continue to conduct clinical trials, manufacture or market certain of our products. No assurance can be made that we will be able to obtain any such licenses on favorable terms, if at all.

We also rely upon unpatented trade secrets and improvements, unpatented know-how and continuing technological innovation to develop and maintain our competitive position. We protect such information with confidentiality agreements with our employees and consultants and with corporate partners and/or collaborators as such relationships are formed. The agreements provide that all confidential information developed or made known to an individual during the course of the employment or consulting relationship shall be kept confidential and not disclosed to third parties except in specified circumstances. Agreements with employees provide that all inventions conceived by the individual while employed by NeoTherapeutics are our exclusive property. We cannot guarantee that these agreements will be honored, that we will have adequate remedies for breach, or that our trade secrets will not otherwise become known or be independently discovered by competitors.

COMPETITION

The pharmaceutical industry is characterized by rapidly evolving technology and intense competition. Many companies of all sizes, including a number of large pharmaceutical companies as well as several specialized biotechnology companies, are engaged in activities similar to that of NeoTherapeutics. Our competitors include Amgen, Inc., Bayer AG, Eli Lilly and Co., Novartis, Bristol-Myers Squibb Company, Glaxo Wellcome PLC, Regeneron Pharmaceuticals, Inc., Vertex Pharmaceuticals, Inc., Guilford Pharmaceuticals, Inc., Cephalon, Inc., Warner-Lambert Co., Aventis and Pfizer, Inc., among others. In addition, colleges, universities, governmental agencies and other public and private research institutions will continue to conduct research and are becoming more active in seeking patent protection and licensing arrangements to collect license fees, milestone payments and royalties in exchange for license rights to technologies that

they have developed, some of which may directly compete with our technologies. These companies and institutions also compete with us in recruiting highly qualified scientific personnel. Many of our competitors have substantially greater financial, research and development, human and other resources than we do. Furthermore, large pharmaceutical companies have significantly more experience than we do in preclinical testing, human clinical trials and regulatory approval procedures.

Although we have begun to conduct clinical trials with respect to Neotrofin(TM), we have not conducted clinical trials with respect to any of our other compounds under development nor have we sought the approval of the FDA for any product based on such compounds. Furthermore, if we are permitted to commence commercial sales of products based on compounds we develop, including Neotrofin(TM), and decide to manufacture and sell such products ourselves, then we will also be competing with respect to manufacturing efficiency and marketing capabilities, which are areas in which we have no prior experience.

Any product for which we obtain FDA approval must also compete for market acceptance and market share. A number of drugs intended for the treatment of Alzheimer's disease, memory loss associated with aging, stroke and other neurodegenerative diseases and disorders are on the market or in the later stages of clinical testing. Two drugs are currently approved for the treatment of Alzheimer's disease in the United States and both are cholinesterase inhibitors: Cognex(R) (tacrine), formerly marketed by Warner-Lambert Co. and CoCensys, Inc., and Aricept(R) (donepezil), marketed by Pfizer, Inc. and Eisai Co., Ltd.

Certain technologies under development by other pharmaceutical companies could result in treatments for Alzheimer's disease and other diseases and disorders for which we are developing our own treatments. Several other companies are engaged in research and development of compounds which use neurotrophic factors in a manner similar to that of our compounds. In the event that one or more of these programs are successful, the market for our products could be reduced or eliminated.

We expect technological developments in the field of neuropsychopharmacology to continue to occur at a rapid rate and expect competition will remain intense as advances continue to be made. Although we believe, based on the preliminary preclinical test results involving certain of our compounds, that we will be able to continue to compete in the discovery and early clinical development of compounds for neurological and psychiatric disorders, we cannot guarantee that we will be able to do so. At present, we do not have sufficient resources to compete with major pharmaceutical companies in the areas of later-stage clinical testing, manufacturing and marketing.

RISK FACTORS

OUR LOSSES WILL CONTINUE TO INCREASE AS WE EXPAND OUR DEVELOPMENT EFFORTS, AND OUR EFFORTS MAY NEVER RESULT IN PROFITABILITY.

Our cumulative losses during the period from our inception in 1987 through December 31, 1999 were approximately $49.8 million, almost all of which consisted of research and development and general and administrative expenses. We lost approximately $6.2 million in 1997, $11.6 million in 1998, and $26.0 million in 1999. We expect our losses to increase in the future as we expand our clinical trials and increase our research and development activities. We currently do not sell any products and we may never achieve significant revenues or become profitable. Even if we eventually generate revenues from sales, we nevertheless expect to incur significant operating losses over the next several years.

OUR POTENTIAL DRUG PRODUCTS ARE IN AN EARLY STAGE OF CLINICAL AND PRECLINICAL DEVELOPMENT AND MAY NOT PROVE SAFE OR EFFECTIVE ENOUGH TO OBTAIN REGULATORY APPROVAL TO SELL ANY OF THEM.

We currently are testing our first potential drug product in human clinical trials. Our other proposed products are in preclinical development. We cannot be certain that our proposed products will prove to be safe or effective in treating disorders of the central nervous system or any other diseases. All of our potential drugs will require additional research and development, testing and regulatory clearances before we can sell them. We do not expect to have any products commercially available for at least two years.

IF WE ARE UNABLE TO OBTAIN SUBSTANTIAL ADDITIONAL FUNDING ON ACCEPTABLE TERMS, WE MAY HAVE TO DELAY OR ELIMINATE ONE OR MORE OF OUR DEVELOPMENT PROGRAMS.

We currently are spending cash at a rate in excess of $3.0 million per month, and we expect this rate of spending to continue for at least the next 12 months. We believe that our existing cash and capital resources, including the equity and debt financings obtained of approximately $8 million in February 2000 and $10 million in April 2000, plus the investors' commitment to fund up to an additional $20 million, subject to certain restrictions, in the form of either convertible debentures and/or from the sale of stock issued in connection with the exercise of redeemable warrants, will satisfy our current funding

requirements for at least the next twelve months.

We expect that we will need a minimum of $90 million to complete development and clinical trials of Neotrofin(TM), our lead drug candidate, before we will be able to submit it to the Food and Drug Administration for approval for commercial sale. Our capital requirements will depend on many factors, including:

- the progress of preclinical and clinical testing;
- the time and cost involved in obtaining regulatory approvals; and
- our ability to establish collaborative and other arrangements with third parties, such as licensing and manufacturing agreements.

We expect to seek additional funding through public or private financings or collaborative or other arrangements with third parties. We may not obtain additional funds on acceptable terms, if at all. If adequate funds are not available, we will have to delay or eliminate one or more of our development programs.

COMPETITION FOR ALZHEIMER'S PATIENTS IN CONDUCTING CLINICAL TRIALS MAY DELAY COMPLETION OF CLINICAL TESTING OF OUR DRUG CANDIDATES AND STRAIN OUR LIMITED FINANCIAL RESOURCES.

Many pharmaceutical companies are conducting clinical trials in patients with Alzheimer's disease. As a result, we must compete with them for clinical sites, physicians and the limited number of patients with Alzheimer's disease who fulfill the stringent requirements for participation in clinical trials. This competition may increase the costs of our clinical trials and delay the introduction of our potential products.

THE LOSS OF KEY RESEARCHERS OR MANAGERS COULD HINDER OUR DRUG DEVELOPMENT PROCESS SIGNIFICANTLY AND MIGHT CAUSE OUR BUSINESS TO FAIL.

Our success depends upon the contributions of our key management and scientific personnel, especially Dr. Alvin Glasky, our Chief Executive Officer and Chief Scientific Officer. Our loss of the services of Dr. Glasky or any other key personnel could delay or preclude us from achieving our business objectives. Although we currently have key-man life insurance on Dr. Alvin Glasky in the face amount of $2 million, the loss of Dr. Glasky's services would damage our research and development efforts substantially.

WE MAY NOT HAVE THE RESOURCES TO PROTECT OR ENFORCE OUR INTELLECTUAL PROPERTY RIGHTS ADEQUATELY.

We actively pursue patent protection for our proprietary products and technologies. We hold four U.S. patents and currently have nine U.S. patent applications pending. In addition, we have numerous foreign patents issued and patent applications pending corresponding to our U.S. patents. However, our patents may not protect us against our competitors. We may have to file suit to protect our patents or to defend our use of our patents against infringement claims brought by others. Because we have limited cash resources, we may not be able to afford to pursue or defend against litigation in order to protect our patent rights.

WE ARE A SMALL COMPANY RELATIVE TO OUR PRINCIPAL COMPETITORS AND OUR LIMITED FINANCIAL AND RESEARCH RESOURCES MAY LIMIT OUR ABILITY TO DEVELOP AND MARKET NEW PRODUCTS.

Many companies, both public and private, including well-known pharmaceutical companies, are developing products to treat Alzheimer's disease. Most of these companies have substantially greater financial, research and development, manufacturing and marketing experience and resources than we do. As a result, our competitors may develop additional drugs to treat Alzheimer's disease sooner, and that are more effective or less costly than any drug we may develop.

THERE ARE A SUBSTANTIAL NUMBER OF SHARES OF OUR COMMON STOCK ELIGIBLE FOR FUTURE SALE IN THE PUBLIC MARKET. THE SALE OF THESE SHARES COULD CAUSE THE MARKET PRICE OF OUR COMMON STOCK TO FALL.

There are 9,534,103 shares of our common outstanding as of March 22, 2000. In addition, security holders held options and warrants as of March 22, 2000 which, if exercised, would obligate us to issue up to an additional 4,863,237 shares of common stock. A substantial number of those shares, when we issue them upon exercise, will be available for immediate resale in the public market. In addition, we have the ability to sell up to approximately 637,000 additional shares of our common stock to a private investor that will be eligible for immediate resale in the public market. Furthermore, with respect to the convertible debenture and warrant financing that closed in April 2000, approximately 600,000 shares will become eligible for resale upon conversion of the convertible debenture, assuming the price of our common stock is approximately $17 per share, which number of shares would increase if our stock price were less. In addition, shares issued upon exercise of up to 4 million shares which are issuable upon exercise of redeemable warrants will be eligible for immediate resale in the public market. The market price of our common stock could fall as a result of such resales.

OUR DIRECTORS AND EXECUTIVE OFFICERS OWN A SUBSTANTIAL PERCENTAGE OF OUR COMMON STOCK. THEIR OWNERSHIP COULD ALLOW THEM TO EXERCISE SIGNIFICANT CONTROL OVER CORPORATE DECISIONS AND TO IMPLEMENT CORPORATE ACTS THAT ARE NOT IN THE BEST INTERESTS OF OUR STOCKHOLDERS AS A GROUP.

Our directors and executive officers beneficially own approximately 18% of our outstanding common stock as of March 22, 2000. Two of our stockholders, Montrose Investments Ltd. and Westover Investments L.P., beneficially own 460,582 shares, or approximately 4.8%, and Strong River Investments, Inc. beneficially own 401,969 shares, or approximately 4.2% of our outstanding common stock as of March 26, 2000. Montrose Investments Ltd., Westover Investments L.P. and Strong River Investments Inc. have agreed that they will vote any and all shares of our common stock that they own as recommended by our board of directors in any meeting of our stockholders. Therefore, our directors and executive officers, if they acted together, could exert substantial control over matters requiring approval by our stockholders. These matters would include the election of directors and the approval of mergers or other business combination transactions. This concentration of ownership and voting control may discourage or prevent someone from acquiring our business.

DILUTIVE AND OTHER EFFECTS OF FUTURE EQUITY ISSUANCES

If we issue equity securities, such issuances may have a dilutive impact on our other stockholders. Additionally, such issuances would cause our net income (loss) per share to decrease (increase) in future periods. As a result, the market price of our common stock could drop. In addition, if we issue common stock under our Equity Line Agreement, it will be issued at a discount to its then-prevailing market price. These discounted sales could cause the market price of our common stock to drop.

RISK OF PRODUCT LIABILITY

Although we currently carry product liability insurance, it is possible that the amounts of such coverage will be insufficient to protect us from future claims. Further, we cannot be certain that we will be able to obtain or maintain additional insurance on acceptable terms for our clinical and commercial activities or that such additional insurance would be sufficient to cover any potential product liability claim or recall. Failure to maintain sufficient insurance coverage could have a material adverse effect on our business and results of operations.

USE OF HAZARDOUS MATERIALS

Our research and development efforts involve the use of hazardous materials. We are subject to federal, state and local laws and regulations governing the storage, use and disposal of such materials and certain waste products. We believe that our safety procedures for handling and disposing of such materials comply with the standards prescribed by federal, state and local regulations. However, we cannot completely eliminate the risk of accidental contamination or injury from these materials. If there was an accident, we could be held liable for any damages that result. Such liability could exceed our resources. We may incur substantially increased costs to comply with environmental regulations if we develop our own commercial manufacturing facility.

VOLATILITY OF STOCK PRICE

The stock market from time to time experiences significant price and volume fluctuations that are unrelated to the operating performance of particular companies. These broad market fluctuations may cause the market price of our common stock to drop. In addition, the market price of our common stock is highly volatile. Factors that may cause the market price of our common stock to drop include fluctuations in our results of operations, timing and announcements of our technological innovations or new products or those of our competitors, FDA and foreign regulatory actions, developments with respect to patents and proprietary rights, public concern as to the safety of products developed by us or others, changes in health care policy in the United States and in foreign countries, changes in stock market analyst recommendations regarding our common stock, the pharmaceutical industry generally and general market conditions. In addition, the market price of our common stock may drop if our results of operations fail to meet the expectations of stock market analysts and investors.

EFFECT OF CERTAIN CHARTER AND BYLAWS PROVISIONS

Certain provisions of our Certificate of Incorporation and Bylaws may make it more difficult for someone to acquire control of us. These provisions may make it more difficult for stockholders to take certain corporate actions and could delay or prevent someone from acquiring our business. These provisions could limit the price that certain investors might be willing to pay for shares of our common stock.

ITEM 2. PROPERTIES

During June 1997, we relocated our research and development and corporate administrative offices to a new

34,000 square foot facility constructed for us in Irvine, California. The facility is occupied under a non-cancelable lease for seven years and contains two five-year options to renew. The base monthly rent for the Irvine facility is currently $40,435, which amount is subject to minimum cost of living increases each July, plus taxes, insurance and common area maintenance. We also maintain a small administrative office in Zurich, Switzerland on an expense-sharing basis.

ITEM 3. LEGAL PROCEEDINGS

In December 1998, we were served with a lawsuit initiated by four of our former employees. The lawsuit, which was filed in the Superior Court of Orange County, California, also named Dr. Alvin J. Glasky, the Company's founder and Chief Executive Officer, as a defendant. The lawsuit arises from a dispute concerning the termination, as of December 31, 1997, of agreements entered into as of June 1990 and December 1993 between the Company and each of the former employees, pursuant to which the employees agreed to accept an aggregate of 278,590 shares of our common stock, subject to forfeiture provisions, in exchange for the cancellation of indebtedness owed to them by the Company arising from unpaid compensation and expenses in the total amount of $458,411. Pursuant to these agreements, the employees were not entitled to keep the shares unless we achieved certain revenue goals by a specified date, as determined by our independent auditors in accordance with generally accepted accounting principles. The revenue goals were not met and we demanded that the forfeited shares be returned pursuant to the terms of the agreements. In the lawsuit the plaintiffs alleged, among other things, that our cumulative revenues of the Company were met and that the defendants fraudulently induced the plaintiffs into entering into the agreements and the subsequent amendments to the agreements. The lawsuit asked for damages in excess of $4,000,000 or, in the alternative, that the forfeiture restrictions be removed and the plaintiffs be allowed to keep their shares of common stock. The plaintiffs also sought punitive damages and reimbursement of attorneys' fees and costs. In March 1999, we filed a cross-complaint against the plaintiffs to seek a determination that the plaintiffs' shares have in fact been forfeited, and to obtain a court order requiring the plaintiffs to return their shares to the Company for cancellation. At the same time that the plaintiffs entered into their agreement with the Company in 1990 and 1993, Dr. Alvin J. Glasky and his wife, who were then and are now our employees, also entered into agreements with us that were identical to those entered into by the plaintiffs, pursuant to which Dr. and Mrs. Glasky received an aggregate of 400,246 shares of common stock subject to identical forfeiture provisions, in exchange for the cancellation of indebtedness owed to them by the Company arising from unpaid compensation and expenses in the total amount of $755,531. Dr. and Mrs. Glasky entered into an agreement with the Company on December 21, 1998, pursuant to which they agreed to surrender for cancellation the same proportion of their restricted shares as the plaintiffs are required to surrender based on the final resolution of the lawsuit. Until we settled this, we accounted for all of these shares, which we deemed to be forfeited, as issued and outstanding.

On December 15, 1999, we entered into a settlement agreement with the plaintiffs. The agreement provided that each of the parties pay their own legal fees and that the plaintiffs forfeit 51%, or 142,081 of their shares of common stock. In addition, the plaintiffs received three-year warrants to purchase an aggregate of 6,826 shares of common stock at $13.00 per share. Pursuant to the settlement terms of the litigation and in accordance with the terms of their agreement with us, Dr. and Mrs. Glasky forfeited 204,125 shares of their common stock and received identical warrants to purchase 9,806 shares of common stock. Accordingly, of the 678,836 total number of shares in dispute, we cancelled 346,206 shares and retained as outstanding 332,630 shares of common stock. We recorded a charge to operations in the fourth quarter of 1999 in the net amount of $2,458,359, representing the increase from 1995, the date of the previous reissuance of shares of common stock under this transaction, in the market value of the shares that remained outstanding ($2,357,005) plus the value of the warrants issued ($101,355).

We are involved in several matters of litigation and threatened litigation that we consider normal to our business. It is our policy to accrue for amounts related to these legal matters if it is probable that a liability has been incurred and an amount is reasonably determinable. Although it is impossible to predict with any certainty the ultimate outcome of any such litigation, in the opinion of management, such litigation and threatened litigation currently pending will not materially affect our consolidated financial statements.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

No matters were submitted to a vote of security holders during the fourth quarter of the year ended December 31, 1999.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

COMMON STOCK

As of March 22, 2000, there were 9,534,103 shares of common stock outstanding held of record by 316 stockholders.

MARKET FOR SECURITIES

The Company's common stock is currently listed on the Nasdaq National Market and trades under the symbol "NEOT." For each of the calendar quarters indicated, the high and low trades of the Company's common stock, as reported by NASDAQ, were as follows:

	High	Low
Year Ended December 31, 1998:		
Quarter Ended		
March 31, 1998	$10-1/2	$8-1/8
June 30, 1998	$21	$6-7/8
September 30, 1998	$14-1/2	$5-5/8
December 31, 1998	$14-1/4	$4-11/16
Year Ended December 31, 1999:		
Quarter Ended		
March 31, 1999	$13-3/4	$7-3/8
June 30, 1999	$14-1/2	$8
September 30, 1999	$16-1/4	$9-1/8
December 31, 1999	$14-1/2	$10-3/8

The foregoing bid quotations reflect inter-dealer prices, without retail mark-ups, mark-downs or commissions, and may not represent actual transactions.

DIVIDENDS

We have never paid cash dividends on our common stock and we do not intend to pay dividends in the foreseeable future.

RECENT SALES OF UNREGISTERED SECURITIES

The following is a summary of transactions during the quarter ended December 31, 1999, involving sales of our securities that were not registered under the Securities Act of 1933 (the "Securities Act").

On November 19, 1999, we sold 845,594 shares of common stock at $11.83 per share for a total of $10 million to two private investors and five-year warrants to purchase 126,839 shares of common stock at $14.24 per share. On March 22, 2000, pursuant to a reset formula contained in the agreement, we issued to the investors an additional 43,383 shares. The investors agreed to waive their rights to any future shares of common stock under the agreement as consideration for entering into the financing agreement which closed on March 30, 2000. On December 10, 1999, we sold 101,574 shares of common stock at $9.845 per share for a total of $1,000,000 to Kingsbridge Capital Limited ("Kingsbridge") pursuant to a Private Equity Line of Credit Agreement entered into between the Company and Kingsbridge on March 27, 1998.

On February 25, 2000 we sold to two private investors 520,324 shares of common stock for $8.0 million. The investors also received five-year warrants to purchase 104,000 shares of common stock at an exercise price of $21.00 per share.

On April 6, 2000, we entered into a financing transaction with two private investor groups who have previously invested with the Company. The transaction consists of an initial tranche at the closing of $10 million in 5% subordinated convertible debentures due April 6, 2005. In addition, the investors have agreed to fund two future tranches of up to $10 million each (subject to certain conditions) and redeemable warrants to purchase up to 4 million shares of common stock over a two-year period (the "B" warrants). The "B" warrants can be redeemed in part by the Company as frequently as several times per week and when called for redemption can be exercised by the investors at 97% of the per share closing market price (i.e. a discount of 3%) and are exercisable at the sole option of the investors at

the price of $33.75 per share. The number of "B" warrants that are exercisable at each redemption are subject to average daily volume restrictions.

The debentures are convertible into common stock at $20.25 per share for the first 90 days after the closing. Thereafter, they are convertible at the lesser of $20.25 per share or 101% of the market price of the common stock as determined under the agreement. The two additional tranches of convertible debentures of up to $10 million each, 5 and 10 months after the closing, are at the option of either the Company or the investor. If at the option of the Company, the tranches are under similar terms and conditions as the initial tranche. If at the option of the investor, the two tranches are at the fixed conversion price of $20 per share. The amount available under the two additional tranches will be reduced pro-rata to the extent that the investors have exercised or the Company has redeemed the "B" warrants to purchase common stock. The investors also received five-year warrants to purchase up to 265,000 shares of common stock (the "A" warrants). The "A" warrants are exercisable at $19.672 per share.

ITEM 6. SELECTED FINANCIAL DATA

The following table presents selected financial data of the Company. Certain of this financial data has been derived from the Company's audited financial statements included in this Annual Report on Form 10-K and should be read in conjunction with those financial statements and accompanying notes and in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operation."

	Years Ended December 31,				
	1999	1998	1997	1996	1995
	(In thousands, except per share data)				
STATEMENT OF OPERATIONS DATA:					
Revenues, from grants	$ --	$ --	$ --	$ --	$ 125
Operating expenses:					
Research and development	20,058	8,542	4,508	615	306
General and administrative	3,465	3,123	2,342	660	667
Settlement of litigation	2,458	--	--	--	--
Loss from operations	(25,981)	(11,665)	(6,850)	(1,275)	(848)
Other income (expense)	(9)	60	688	236	(47)
Net loss	$(25,990)	$(11,605)	$ (6,162)	$ (1,039)	$ (895)
Basic and diluted loss per share	$ (3.68)	$ (2.07)	$ (1.14)	$ (0.32)	$ (0.36)
BALANCE SHEET DATA AT DECEMBER 31:					
Cash, cash equivalents and Marketable securities	$ 9,681	$ 2,867	$ 9,132	$ 17,444	$ 1
Property and equipment, net	3,161	3,252	3,475	133	9
Total assets	13,174	6,826	13,198	17,979	11
Long-term debt	637	1,126	177	--	558
Total stockholders' equity (deficit)	7,705	3,290	10,543	16,622	(1,253)

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

RESULTS OF OPERATIONS

Overview

From our inception in June 1987 through December 31, 1999, we devoted our resources primarily to fund research and development, and incurred a cumulative net loss of approximately $49.8 million. During this period, we had only limited revenues from grants, and had no revenues from the sale of products or other sources. We expect our operating expenses to increase over the next several years as we expand our research and development and commercialization activities and operations. We expect to incur significant additional operating losses for at least the next several years unless such operating losses are offset, if at all, by licensing revenues under strategic alliances with larger pharmaceutical companies which we are currently seeking. To obtain working capital, we entered into an equity agreement with a private investor in March 1998 which allows us to sell to the investor over a two and one-half year period, at our sole discretion, but subject to certain restrictions, up to $15 million of our common stock. At March 22, 2000, we had $7.5 million

remaining on the Line of Equity. In January 1999, we sold $4 million of preferred stock to private investors, which had all been converted into 347,334 shares of common stock by December 31, 1999. In May 1999 we sold $4 million of common stock to private investors. In November 1999 we sold $10 million of common stock to private investors. In July 1999, we sold, in a secondary public offering, 1,150,000 shares of common stock for net proceeds of $8.7 million. See - - Liquidity and Capital Resources.

Year ended December 31, 1999 compared to Year ended December 31, 1998

We had no revenues for the twelve-month periods ended December 31, 1999 or 1998.

Research and development expenses for the twelve months ended December 31, 1999 increased by approximately $11.5 million, or 135% over the previous year. This increase was due primarily to the costs and expenses associated with the conduct of clinical and preclinical trials as we accelerated our program to commercialize our lead compound, Neotrofin(TM). These costs and expenses were due primarily to the increased number and length of our clinical trials and manufacturing and formulation of drug compound, all of which are conducted by outside organizations. Internally, research and development expenses increased in the categories of salaries due to additional personnel and salary increases, research grants, professional fees due to increased patent activity, rent (due principally to the re-allocation from general and administrative expense as a result of research and development utilizing a higher proportion of our facility) and depreciation of property and equipment.

General and administrative expenses increased approximately $0.3 million, or 11%, for the year ended December 31, 1999, over the year ended December 31, 1998. General and administrative expenses for 1999 reflect increased expenses related to increases in salaries due principally to added personnel, investor relations, regulatory agency fees and licenses and printing, offset by the re-allocation of rent to research and development.

We expect the above mentioned operating expenses to continue to increase in future periods due to expected increases in both research and development, administrative support and sales and marketing activities associated with attempting to bring one or more of our products to market.

In 1999 the Company entered into a non-recurring, non-cash settlement of a matter of litigation and recorded a charge to general and administrative expense of $2,458,359.

Year ended December 31, 1998, compared to Year ended December 31, 1997

We had no revenues for the twelve-month periods ended December 31, 1998 or 1997.

Research and development expenses for the twelve months ended December 31, 1998, increased by approximately $4.0 million, or 90% over the previous year. This increase was due primarily to the costs and expenses associated with the conduct of clinical and preclinical trials as we accelerated our program to commercialize our lead compound, Neotrofin(TM). These costs and expenses were primarily in the categories of salaries due to additional personnel, rent, contract manufacturing and formulation of drug compounds, outside preclinical testing and the increased number and length of clinical trials.

General and administrative expenses increased approximately $0.8 million, or 33%, for the year ended December 31, 1998, over the year ended December 31, 1997. General and administrative expenses for 1998 reflect increased expenses related to additional personnel, insurance, professional and consulting fees, commissions, facilities rent and travel. We expect general and administrative expenses to continue to increase in future periods due to expected increases in both research and development support and sales and marketing activities associated with attempting to bring one or more of our products to market.

Interest income decreased by approximately $0.5 million, or 68%, in 1998 over 1997 due to increased use of cash to fund current operations.

LIQUIDITY AND CAPITAL RESOURCES

From inception through December 31, 1999, we financed our operations primarily through grants, sales of securities, borrowings and deferred payment of salaries and other expenses from related parties. During September and October 1996, we sold a total of 2,700,000 units of our common stock and attached warrants to the public. Each unit consisted of one share of common stock and one warrant to purchase one share of common stock. We realized net cash proceeds of approximately $18.2 million from the sale.

On March 27, 1998, we executed an agreement with a private investor (the "Equity Line Agreement") which provides for us, at our sole discretion, subject to certain restrictions, to sell ("put") to the investor up to $15 million of our common stock. The Equity Line Agreement expires in February 2001 and, among other things, provides for minimum and maximum puts ranging from $250,000 to $2.0 million, depending on our stock price and trading volume. Puts cannot occur more frequently than every 15 days, and are subject to a discount of 12% from the then current average market price of our common stock, as determined under the Equity Line Agreement. In addition, we issued to the investor five-year warrants to purchase 25,000 shares of common stock at $11.62 per share. Under the Equity Line Agreement, we received proceeds of approximately $3.55 million from sales of 506,049 shares of common stock in 1998 and $1.95 million from sales of 211,393 shares of common stock in 1999. We received an additional $2.0 million in January 2000 from the sale of 186,961 shares of common stock and, as of March 22, 2000, an additional $7.5 million remains available under the Equity Line Agreement.

We also entered into the following financing transactions from January 1, 1999 through April 11, 2000:

(1) On January 29, 1999, we sold to two private investors $4 million of preferred stock, all of which was converted during 1999 into 347,334 shares of common stock at an average price of $11.52 per share. The investors also received five-year warrants to purchase 75,000 shares of common stock at an exercise price of $12.98 per share. We chose not to exercise an option to acquire an additional $2.0 million under similar terms. During the period the preferred stock was outstanding, we paid dividends of approximately $136,000 to the investors;

(2) On May 31, 1999, we sold to a group of private investors 400,000 shares of common stock for approximately $4.0 million. The investors also received five-year warrants to purchase 80,000 shares of common stock at an exercise price of $15 per share;

(3) On July 29, 1999, we completed a secondary public offering and sold 1,150,000 shares of common stock, realizing approximately $8.7 million in net cash proceeds from the sale;

(4) On November 19, 1999, we sold to two private investors, one of whom had invested in the January 1999 preferred stock transaction, 845,594 shares of common stock for approximately $10.0 million, and five-year warrants to purchase 126,839 shares of common stock at $14.24 per share. On March 22, 2000, we issued to the investors an additional 43,383 shares of common stock for no further consideration, pursuant to a reset formula contained in the agreement;

(5) On February 25, 2000 we sold to two private investors 520,324 shares of common stock for $8.0 million. The investors also received five-year warrants to purchase 104,000 shares of common stock at an exercise price of $21.00 per share; and

(6) On April 6, 2000, we entered into a financing transaction with two private investor groups who have previously invested with us. The transaction consists of (a) $10 million in 5% subordinated convertible debentures due April 6, 2005, (b) redeemable warrants to purchase up to 4 million shares of common stock over a two-year period (the "B" warrants) and (c) five-year warrants to purchase from 115,000 shares up to 265,000 shares of our common stock at an exercise price of $19.67 per share. The "B" warrants can be redeemed in part by us as frequently as several times per week and when called for redemption can be exercised by the investors at 97% of the per share closing market price (i.e. a discount of 3%) and are exercisable at the sole option of the investors at the price of $33.75 per share. The number of "B" warrants that are exercisable at each redemption are subject to average daily volume restrictions. To the extent the "B" warrants have not been exercised, the investors have committed to two additional tranches of $10 million each of 5% subordinated convertible debentures, subject to certain restrictions, including the following:

   (i) The investors will limit their investment to 10% of our market capitalization at the time of each additional tranche, not to exceed $10,000,000;

   (ii) The shares underlying the April 6, 2000 transaction and the additional tranches must be successfully registered with the SEC; and

   (iii) We must maintain the continued listing requirements of the Nasdaq Stock Market.

In the event any of these conditions cannot be met and the additional tranches (or other financing alternatives) are not available, we may be required to scale-back or cancel certain of our clinical development activities.

The debentures are convertible into common stock at $20.25 per share for the first 90 days after the closing. Thereafter, they are convertible at the lesser of $20.25 per share or 101% of the market price of the common stock as determined under the agreement. The two additional tranches of

convertible debentures of up to $10 million each, 5 and 10 months after the closing, are at the option of either us or the investor. If at the option

of us, the tranches are under similar terms and conditions as the initial tranche. If at the option of the investor, the two tranches are at the fixed conversion price of $20 per share. The amount available under the two additional tranches will be reduced pro-rata to the extent that the investors have exercised or we have redeemed the "B" warrants to purchase common stock.

At December 31, 1999, we had working capital of approximately $5.2 million which included cash and equivalents of approximately $6.7 million and short-term investments of approximately $3.0 million. In comparison, at December 31, 1998, we had working capital of approximately $1.0 million which included cash and cash equivalents of approximately $1.1 million and short-term investments of approximately $1.8 million. The $4.2 million increase in working capital is attributable primarily to the net proceeds of equity transactions entered into during 1999, aggregating approximately $25.8 million, less the funding of the $26.0 million operating loss for the year ended December 31, 1999, offset in part by the $2.5 million non-cash portion of such loss resulting from the settlement of litigation. Through December 31, 1999, we spent (principally in 1997) approximately $4.0 million for capital equipment and leasehold improvements of which $1.5 million was borrowed from a finance company in July 1998 pursuant to a $2 million equipment line of credit agreement. We have pledged substantially all of our tangible assets as collateral for this borrowing. We have also granted to the finance company a warrant to purchase up to 13,459 shares of our common stock at $7.43 a share. In 2000, we intend to spend approximately $1.5 million for additional equipment, including equipment for our new genomics-based subsidiary, as we further expand our research and development laboratories. We expect to partially finance these capital equipment acquisitions by utilizing our existing equipment line of credit agreement.

Effective June 1997 we entered into a non-cancelable long-term operating lease with a major developer. The initial lease term is seven years with two renewal options for five years each at the then fair market value rate. Minimum rental commitments under this lease for the four and one-half year period from January 2000 through June 2004 are approximately $500,500 in 2000 and 2001, $538,100 in 2002, $554,200 in 2003 and $285,400 in 2004. In addition to rentals, we are obligated under the lease for real property taxes, insurance and maintenance.

We have entered into a series of agreements with a contract research organization to conduct clinical trials in the United States and other countries involving an aggregate of approximately 2,500 patients. The agreements are all cancelable by either party upon thirty days notice and we expect to spend an aggregate of approximately $26 million in 2000 and $12 million in 2001 for these trials. Through December 31, 1999, we expended approximately $13 million in connection with these clinical trials. We have also committed to spend approximately $874,000 in 2000 and $20,000 in 2001 to a number of universities to conduct general scientific research programs and to provide for Fellowship Grants. We have also committed to spend a minimum of $2.0 million over three years to fund our functional genomics joint venture with the University of California, Irvine. Our agreement with the University is cancelable upon thirty days notice by either party.

Since our inception, we have been in the development stage and therefore devote substantially all of our efforts to research and development. We have incurred cumulative losses of approximately $49.8 million through December 31, 1999, and expect to incur substantial losses over the next several years. We received approximately $18 million in new funding in early 2000. In addition, in April 2000, we received commitments for additional funding of approximately $20 million, contingent on certain terms as defined in the agreement (see Note 14). Our future capital requirements and availability of capital will depend upon many factors, including continued scientific progress in research and development programs, the scope and results of preclinical studies and clinical trials, the time and costs involved in obtaining regulatory approvals, the cost involved in filing, prosecuting and enforcing patent claims, competing technological developments, the cost of manufacturing scale-up, the cost of commercialization activities and other factors which may not be within our control. Assuming that the aforementioned additional funding is available, we believe that our existing capital resources will be adequate to fund our capital needs for at least 12 months of operations. We also believe that if these funds are not available, we may be required to scale-back or possibly cancel certain clinical trial activities or obtain additional financing elsewhere. Ultimately, we will require substantial additional funds in order to complete the research and development activities currently contemplated and to commercialize our proposed products. If we are successful in obtaining additional funding, our existing stockholders could experience substantial dilution to their shares of stock.

Without additional funding, we may be required to delay, reduce the scope of or eliminate one or more of our research and development projects, or obtain funds through arrangements with collaborative partners or others which may require us to relinquish rights to certain technologies, product candidates or products that we otherwise would seek to develop or commercialize on our own, and which could be on terms unfavorable to us.

YEAR 2000 READINESS DISCLOSURE

Through March 22, 2000, we have not experienced any problems related to the Year 2000 Issue which have materially impacted our operations or operating results. Accordingly, we believe that our own internal systems are, at the

present time, substantially compliant based upon internal systems tests, currently available information and reasonable assurance by our equipment and software vendors.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

QUANTITATIVE DISCLOSURES

We are exposed to certain market risks associated with interest rate fluctuations on our marketable securities and borrowing arrangements. All investments in marketable securities and borrowing arrangements are entered into for purposes other than trading. We are not subject to material risks from currency rate fluctuations, nor do we utilize hedging contracts or similar instruments.

Our exposure to interest rate risk arises from financial instruments entered into in the normal course of business. Certain of our financial instruments are fixed rate, short-term investments in government and corporate notes and bonds, which are available for sale (and have been marked to market in the accompanying financial statements). Changes in interest rates generally affect the fair value of these investments, however, because these financial instruments are considered "available for sale," all such changes are reflected in the financial statements in the period affected.

Our borrowings bear interest at fixed annual rates. Changes in interest rates generally affect the fair value of such debt, but do not have an impact on earnings or cash flows. Because of the relatively short-term nature of our borrowings, fluctuations in fair value are not deemed to be material.

QUALITATIVE DISCLOSURES

Our primary exposures relate to (1) interest rate risk on borrowings, (2) our ability to pay or refinance our borrowings at maturity at market rates, (3) interest rate risk on the value of our investment portfolio and rate of return, (4) the impact of interest rate movements on our ability to obtain adequate financing to fund future cash requirements. We manage interest rate risk on our investment portfolio by matching scheduled investment maturities with our cash requirements. We manage interest rate risk on our outstanding borrowings by using fixed rate debt. While we cannot predict or manage our ability to refinance existing borrowings and investment portfolio, we evaluate our financial position on an ongoing basis.

ITEM 8. FINANCIAL STATEMENTS

INDEX TO FINANCIAL STATEMENTS

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

To the Board of Directors and Stockholders
of NeoTherapeutics, Inc.:

We have audited the accompanying consolidated balance sheets of NeoTherapeutics, Inc. (a Delaware corporation in the development stage) and subsidiaries as of December 31, 1999 and 1998, and the related consolidated statements of operations, stockholders' equity (deficit) and cash flows for each of the three years in the period ended December 31, 1999 and for the period from inception (June 15, 1987) to December 31, 1999. 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 auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. 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, the financial statements referred to above present fairly, in all material respects, the financial position of NeoTherapeutics, Inc. and subsidiaries as of December 31, 1999 and 1998, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 1999 and for the period from inception (June 15, 1987) to December 31, 1999, in conformity with accounting principles generally accepted in the United States.

/s/ ARTHUR ANDERSEN LLP

Orange County, California
April 11, 2000

NEOTHERAPEUTICS, INC. AND SUBSIDIARIES
(A DEVELOPMENT STAGE ENTERPRISE)

CONSOLIDATED BALANCE SHEETS

	DECEMBER 31, 1998	DECEMBER 31, 1999
ASSETS		
CURRENT ASSETS:		
Cash and equivalents	$ 1,097,341	$ 6,726,220
Marketable securities and short-term investments	1,769,348	2,955,212
Other receivables, principally investment interest	112,552	148,034
Advance deposit to clinical trial vendor	265,727	--
Prepaid expenses and refundable deposits	157,495	130,202
Total current assets	3,402,463	9,959,668
PROPERTY AND EQUIPMENT, at cost:		
Equipment	2,197,253	2,607,741
Leasehold improvements	1,794,794	1,814,167
Accumulated depreciation and amortization	(740,413)	(1,261,220)
Property and equipment, net	3,251,634	3,160,688
OTHER ASSETS - Prepaid expenses and deposits	172,066	53,641
	$ 6,826,163	$ 13,173,997
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable and accrued expenses	$ 1,278,954	$ 3,613,680
Accrued payroll and related taxes	81,370	111,822
Note payable to related party	558,304	558,304
Current portion of long-term debt	445,297	472,938
Total current liabilities	2,363,925	4,756,744
LONG-TERM DEBT, net of current portion	1,126,174	637,308
DEFERRED RENT	46,308	75,121
Total liabilities	3,536,407	5,469,173
COMMITMENTS AND CONTINGENCIES (NOTE 7)		
STOCKHOLDERS' EQUITY:		
Preferred Stock, par value $0.001 per share, 5,000,000 shares authorized: Issued and outstanding, none at December 31, 1998 and 1999	--	--
Common Stock, par value $0.001 per share, 25,000,000 shares authorized: Issued and outstanding, 6,146,854 and 8,778,370 shares, respectively	27,535,329	58,139,327
Unrealized gains (losses) on available-for-sale securities	24,207	(38,572)
Deficit accumulated during the development stage	(24,269,780)	(50,395,931)
Total stockholders' equity	3,289,756	7,704,824
	$ 6,826,163	$ 13,173,997

The accompanying notes are an integral part of these consolidated balance sheets.

NEOTHERAPEUTICS, INC. AND SUBSIDIARIES
(A DEVELOPMENT STAGE ENTERPRISE)

CONSOLIDATED STATEMENTS OF OPERATIONS

	YEARS ENDED DECEMBER 31,			PERIOD FROM JUNE 15, 1987 (INCEPTION) THROUGH DECEMBER 31,
	1997	1998	1999	1999
REVENUES, from grants	$ --	$ --	$ --	$ 497,128
OPERATING EXPENSES:				
Research and development	4,508,255	8,542,034	20,057,687	36,074,788
General and administrative	2,341,276	3,122,506	3,465,443	12,358,331
Settlement of litigation	--	--	2,458,359	2,458,359
	6,849,531	11,664,540	25,981,489	50,891,478
LOSS FROM OPERATIONS	(6,849,531)	(11,664,540)	(25,981,489)	(50,394,350)
OTHER INCOME (EXPENSE):				
Interest income	746,008	235,265	199,267	1,456,484
Interest expense	(56,419)	(156,016)	(243,410)	(935,981)
Other income (expense)	(1,599)	(19,265)	35,727	63,162
Total other income (expense)	687,990	59,984	(8,416)	583,665
NET LOSS	$ (6,161,541)	$(11,604,556)	$(25,989,905)	$(49,810,685)
BASIC AND DILUTED LOSS PER SHARE	$ (1.14)	$ (2.07)	$ (3.68)	
BASIC AND DILUTED WEIGHTED AVERAGE COMMON SHARES OUTSTANDING	5,405,831	5,615,449	7,105,041	

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

NEOTHERAPEUTICS, INC. AND SUBSIDIARIES
(A DEVELOPMENT STAGE ENTERPRISE)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)

	REVENUE PARTICIPATION UNITS AND PREFERRED STOCK	COMMON STOCK SHARES	COMMON STOCK AMOUNT	UNREALIZED GAINS (LOSSES) FROM SECURITIES	DEFICIT ACCUMULATED DURING THE DEVELOPMENT STAGE	TOTAL
BALANCE, Inception (June 15, 1987)	$ --	--	$ --	$ --	$ --	$ --
Common stock issued	--	465,902	2,100	--	--	2,100
Net loss	--	--	--	--	(31,875)	(31,875)
BALANCE, December 31, 1987	--	465,902	2,100	--	(31,875)	(29,775)
Common stock issued	--	499,173	2,250	--	--	2,250
Revenue Participation Units issuance	594,000	--	--	--	--	594,000
Net loss	--	--	--	--	(556,484)	(556,484)
BALANCE, December 31, 1988	594,000	965,075	4,350	--	(588,359)	9,991
Revenue Participation Units issuance	82,000	--	--	--	--	82,000
Net effect of acquisition	--	145,000	354,316	--	--	354,316
Net loss	--	--	--	--	(934,563)	(934,563)
BALANCE, December 31, 1989	676,000	1,110,075	358,666	--	(1,522,922)	(488,256)
Exercise of warrants	--	31,108	136,402	--	--	136,402
Common stock issued in exchange for accrued salaries	--	402,518	503,144	--	--	503,144
Net loss	--	--	--	--	(859,172)	(859,172)
BALANCE, December 31, 1990	676,000	1,543,701	998,212	--	(2,382,094)	(707,882)
Net Loss	--	--	--	--	(764,488)	(764,488)
BALANCE, December 31, 1991	676,000	1,543,701	998,212	--	(3,146,582)	(1,472,370)
Net loss	--	--	--	--	(423,691)	(423,691)
BALANCE, December 31, 1992	676,000	1,543,701	998,212	--	(3,570,273)	(1,896,061)
Common stock issued in exchange for investment banking services	--	40,000	54,000	--	--	54,000
Common stock issued in exchange for accrued salaries	--	255,476	638,694	--	--	638,694
Common stock issued in exchange for note payable to President	--	200,000	500,000	--	--	500,000
Common stock issued in exchange for accrued expenses	--	20,842	52,104	--	--	52,104
Stock options issued in exchange for accrued professional fees	--	--	108,000	--	--	108,000
Stock options issued in exchange for future services	--	--	39,750	--	--	39,750
Stock options issued for services	--	--	--	(93,749)	--	(93,749)
Net loss	--	--	--	--	(237,815)	(237,815)
BALANCE, December 31, 1993	676,000	2,060,019	2,390,760	(93,749)	(3,808,088)	(835,077)
Common stock issued for cash	--	13,000	32,500	--	--	32,500
Amortization of deferred compensation	--	--	--	93,749	--	93,749
Net loss	--	--	--	--	(312,342)	(312,342)

NEOTHERAPEUTICS, INC. AND SUBSIDIARIES
(A DEVELOPMENT STAGE ENTERPRISE)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT) - (CONTINUED)

	REVENUE PARTICIPATION UNITS AND PREFERRED STOCK	COMMON STOCK		UNREALIZED GAINS (LOSSES) FROM SECURITIES	DEFICIT ACCUMULATED DURING THE DEVELOPMENT STAGE	TOTAL
		SHARES	AMOUNT			
BALANCE, December 31, 1994	$ 676,000	2,073,019	$ 2,423,260	$ --	$ (4,120,430)	$ (1,021,170)
Common stock issued for cash	--	22,000	55,000	--	--	55,000
Common stock forfeiture	--	(678,836)	(1,193,943)	--	--	(1,193,943)
Common stock reissued	--	678,836	1,697,090	--	--	1,697,090
Stock options issued for services	--	--	105,000	--	--	105,000
Net loss	--	--	--	--	(895,378)	(895,378)
BALANCE, December 31, 1995	676,000	2,095,019	3,086,407	--	(5,015,808)	(1,253,401)
Common stock issued for cash	--	266,800	633,650	--	--	633,650
Stock options issued for services	--	--	103,950	--	--	103,950
Cash paid out for fractional shares	--	(12)	(25)	--	--	(25)
Conversion of Revenue Participation Units into common stock	(676,000)	300,000	1,125,000	--	(449,000)	--
Common stock and warrants issued for cash, net of costs of public offering	--	2,700,000	18,176,781	--	--	18,176,781
Net loss	--	--	--	--	(1,038,875)	(1,038,875)
BALANCE, December 31, 1996	--	5,361,807	23,125,763	--	(6,503,683)	16,622,080
Stock options exercised	--	104,000	2,600	--	--	2,600
Stock options issued for services	--	--	60,000	--	--	60,000
Unrealized gains on available-for-sale securities	--	--	--	20,256	--	20,256
Net loss	--	--	--	--	(6,161,541)	(6,161,541)
BALANCE, December 31, 1997	--	5,465,807	23,188,363	20,256	(12,665,224)	10,543,395
Common stock and warrants issued for cash under Line of Equity Agreement, net of issuance costs	--	506,049	3,451,782	--	--	3,451,782
Stock options exercised by employees, directors and consultants	--	134,000	340,560	--	--	340,560
Exercise of underwriters' warrant	--	41,000	373,920	--	--	373,920
Notes receivable for exercise of stock options	--	--	(286,560)	--	--	(286,560)
Stock options issued for services	--	--	422,264	--	--	422,264
Warrant to purchase common stock issued in connection with equipment financing	--	--	45,000	--	--	45,000
Fractional shares adjustment upon conversion of pre-split shares.	--	(2)	--	--	--	--
Unrealized gains on available-for-sale securities	--	--	--	3,951	--	3,951
Net loss	--	--	--	--	(11,604,556)	(11,604,556)

NEOTHERAPEUTICS, INC. AND SUBSIDIARIES
(A DEVELOPMENT STAGE ENTERPRISE)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT) - (CONTINUED)

	REVENUE PARTICIPATION UNITS AND PREFERRED STOCK	COMMON STOCK		UNREALIZED GAINS (LOSSES) FROM SECURITIES	DEFICIT ACCUMULATED DURING THE DEVELOPMENT STAGE	TOTAL
		SHARES	AMOUNT			
BALANCE, December 31, 1998	--	6,146,854	27,535,329	24,207	(24,269,780)	3,289,756
Sale of common stock to Private Equity Line investor, net of costs of issuance	--	211,393	1,918,152	--	--	1,918,152
Sale of shares of 5% Series A Preferred Stock, net of offering costs and allocated warrants	3,608,788	--	--	--	--	3,608,788
Conversion of preferred stock into common stock	(3,608,788)	347,334	3,608,788	--	--	--
Common stock and warrants issued for cash under an exempt private sale agreement, net of offering costs	--	400,000	3,982,716	--	--	3,982,716
Sale of common stock pursuant to a secondary public offering, net of offering costs	--	1,150,000	8,706,660	--	--	8,706,660
Common stock issued to legal counsel for services	--	12,500	70,000	--	--	70,000
Fair value of warrants issued as compensation to investment advisor	--	--	204,280	--	--	204,280
Exercise of underwriters' warrant	--	9,000	82,080	--	--	82,080
Stock options exercised by employees	--	1,900	12,489	--	--	12,489
Stock options and warrants issued for legal and consulting services	--	--	119,471	--	--	119,471
Sale of common stock to private investors	--	845,594	9,441,003	--	--	9,441,003
Common stock forfeiture in settlement of litigation	--	(678,836)	(1,697,090)	--	--	(1,697,090)
Common stock and warrants issued in settlement of litigation	--	332,630	4,155,449	--	--	4,155,449
Fractional share adjustment upon conversion of pre-split shares	--	1	--	--	--	--
Unrealized losses on available-for-sale securities	--	--	--	(62,779)	--	(62,779)
Dividends paid on preferred stock	--	--	--	--	(136,246)	(136,246)
Net loss	--	--	--	--	(25,989,905)	(25,989,905)
BALANCE, December 31, 1999	$ --	8,778,370	$ 58,139,327	$ (38,572)	$(50,395,931)	$ 7,704,824

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

NEOTHERAPEUTICS, INC. AND SUBSIDIARIES
(A DEVELOPMENT STAGE ENTERPRISE)

CONSOLIDATED STATEMENTS OF CASH FLOWS

	YEARS ENDED DECEMBER 31,			PERIOD FROM JUNE 15, 1987 (INCEPTION) THROUGH DECEMBER 31,
	1997	1998	1999	1999
CASH FLOWS FROM OPERATING ACTIVITIES:				
Net loss	$ (6,161,541)	$(11,604,556)	$(25,989,905)	$(49,810,685)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization	220,950	460,500	519,875	1,385,777
Issuance of common stock options and warrants for compensation	60,000	422,264	393,751	1,084,965
Issuance of common stock in settlement of litigation	--	--	2,458,359	2,458,359
Amortization of deferred compensation	--	--	--	93,749
Compensation expense for extension of Debt Conversion Agreements, net	--	--	--	503,147
Gain on sale of assets	--	--	--	(5,299)
Changes in assets and liabilities:				
(Increase) decrease in other receivables	(57,841)	109,277	(35,482)	(147,788)
(Increase) decrease in prepaid expenses and refundable deposits	(130,402)	(180,715)	412,376	(87,909)
Increase in accounts payable and accrued expenses	630,018	303,615	2,334,726	3,773,780
(Decrease) increase in accrued payroll and related taxes	(331,175)	81,370	30,452	750,516
Increase in deferred rent	--	46,308	28,812	75,120
Increase (decrease) in accrued interest to related parties	(122,396)	--	--	300,404
Net cash used in operating activities	(5,892,387)	(10,361,937)	(19,847,036)	(39,625,864)
CASH FLOWS FROM INVESTING ACTIVITIES:				
Purchases of property and equipment	(3,563,790)	(236,785)	(429,861)	(4,502,211)
Redemptions (purchases) of marketable securities and short-term investments	5,315,171	364,027	(1,185,864)	(2,955,212)
Unrealized gain (loss) on available-for-sale securities	20,256	3,951	(62,779)	(38,572)
Payment of organization costs	--	--	--	(66,093)
Proceeds from sale of equipment	--	--	--	29,665
Issuance of notes receivable	--	--	--	100,000
Net cash provided by (used in) investing activities	1,771,637	131,193	(1,678,504)	(7,432,423)

NEOTHERAPEUTICS, INC. AND SUBSIDIARIES
(A DEVELOPMENT STAGE ENTERPRISE)

CONSOLIDATED STATEMENTS OF CASH FLOWS - (CONTINUED)

	YEARS ENDED DECEMBER 31,			PERIOD FROM JUNE 15, 1987 (INCEPTION) THROUGH DECEMBER 31,
	1997	1998	1999	1999
CASH FLOWS FROM FINANCING ACTIVITIES:				
Borrowings from related parties, net	$ --	$ --	$ --	$ 757,900
Proceeds from (repayment of) bank line of credit	850,000	(850,000)	--	--
(Increase) decrease in restricted cash	(935,000)	935,000	--	--
Proceeds from long-term debt	326,625	1,500,000	36,333	1,862,958
Repayment of long-term debt	(55,190)	(199,964)	(497,557)	(752,711)
Proceeds from preferred stock issuance, net of offering costs	--	--	3,608,788	3,608,788
Proceeds from issuance of common stock and warrants, net of related offering costs and expenses	--	3,451,782	24,048,532	47,042,142
Proceeds from exercise of stock options	2,600	714,480	94,569	811,649
Issuance of notes to officers and directors for exercise of stock options	--	(286,560)	--	(286,560)
Dividends paid to preferred stockholders	--	--	(136,246)	(136,246)
Proceeds from Revenue Participation Units	--	--	--	676,000
Cash paid out for fractional shares	--	--	--	(25)
Cash at acquisition	--	--	--	200,612
Net cash provided by financing activities	189,035	5,264,738	27,154,419	53,784,507
Net (decrease) increase in cash and equivalents	(3,931,715)	(4,966,006)	5,628,879	6,726,220
Cash and equivalents, beginning of period	9,995,062	6,063,347	1,097,341	--
Cash and equivalents, end of period	$ 6,063,347	$ 1,097,341	$ 6,726,220	$ 6,726,220
SCHEDULE OF NON-CASH INVESTING AND FINANCING ACTIVITIES:				
Conversion of accrued payroll into shares of common stock	$ --	$ --	$ --	$ 1,141,838
Conversion of notes payable to related parties into shares of common stock	$ --	$ --	$ --	$ 500,000
Conversion of accrued interest into notes payable to related parties	$ --	$ --	$ --	$ 300,404
Conversion of preferred stock into shares of common stock	$ --	$ --	$ 3,608,788	$ 3,608,788
Conversion of Revenue Participation Units into shares of common stock	$ --	$ --	$ --	$ 676,000
Issuance of stock options and warrants for services	$ 60,000	$ 422,264	$ 393,751	$ 1,084,965
Issuance of common stock and warrants in connection with settlement of litigation	$ --	$ --	$ 2,458,359	$ 2,458,359
Issuance of warrants in connection with equity and debt financings	$ --	$ 45,000	$ 344,610	$ 389,610
Conversion of other accrued liabilities to shares of no par value common stock	$ --	$ --	$ --	$ 52,104

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

NEOTHERAPEUTICS, INC. AND SUBSIDIARIES
(A DEVELOPMENT STAGE ENTERPRISE)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 1999

1. BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Organization and Nature of Business

NeoTherapeutics, Inc. (the "Company") was incorporated in Colorado as Americus Funding Corporation ("AFC") in December 1987. In August 1996, AFC changed its name to NeoTherapeutics, Inc. and in June 1997, the Company was reincorporated in the state of Delaware. At December 31, 1999, the Company had three wholly owned subsidiaries, Advanced ImmunoTherapeutics, Inc. ("AIT"), incorporated in California in June 1987, NeoTherapeutics GmbH ("NEOT GmbH"), incorporated in Switzerland in April 1997 and NeoGene Technologies, Inc. ("NeoGene"), a subsidiary incorporated in California in October 1999. AIT became a wholly owned subsidiary of AFC in July 1989 in a transaction accounted for as a reverse acquisition. All references to the "Company" hereinafter refer to the Company, AIT, NEOT GmbH and NeoGene as a consolidated entity.

The Company is a development stage biopharmaceutical enterprise engaged in the discovery and development of novel therapeutic drugs intended to treat neurological and psychiatric diseases and conditions, such as memory deficits associated with Alzheimer's disease, aging, stroke, spinal cord injuries, Parkinson's disease, migraine, depression and obesity. The accompanying consolidated financial statements include the results of the Company and its subsidiaries.

Development Stage Enterprise

The Company is in the development stage and, therefore, devotes substantially all of its efforts to research and development activities. Since its inception, the Company has incurred cumulative losses of approximately $49.8 million through December 31, 1999, and expects to incur substantial losses over the next several years. The Company is in the development stage and, therefore, devotes substantially all of its efforts to research and development activities. Since its inception, the Company has incurred cumulative losses of approximately $49.8 million through December 31, 1999, and expects to incur substantial losses over the next several years. The Company believes that its existing capital resources, including (a) the $8 million sale of common stock and common stock warrants on February 29, 2000 (b) the $10 million sale of 5% subordinated convertible debentures and warrants on April 6, 2000, and (c) the investors' commitment to fund up to an additional $20 million over the next ten months in the form of either redeemable warrant exercises or the purchase of additional tranches of 5% subordinated convertible debentures, subject to certain restrictions (see Note 14), will be adequate to fund its capital needs for at least 12 months of operations.

The Company also believes that, ultimately, it will require substantial additional funds in order to complete the research and development activities currently contemplated and to commercialize its proposed products. The Company's future capital requirements and availability of capital will depend upon many factors including, but not limited to, continued scientific progress in research and development programs, the scope and results of preclinical studies and clinical trials, the time and costs involved in obtaining regulatory approvals, the costs involved in filing, prosecuting and enforcing patent claims, competing technological developments, the cost of manufacturing scale-up, the cost of commercialization activities and other factors which may not be within the Company's control. Without additional funding, the Company may be required to delay, reduce the scope of or eliminate one or more of its research and development projects, or obtain funds through arrangements with collaborative partners or others which may require the Company to relinquish rights to certain technologies, product candidates or products that the Company would otherwise seek to develop or commercialize on its own. Other factors impacting the future success of the Company are the ability to develop products which will be safe and effective in treating neurological and psychiatric diseases, the ability to obtain government approval and to retain key personnel.

Principles of Consolidation

The consolidated financial statements include accounts of the Company and its subsidiaries. All significant intercompany accounts and transactions have been eliminated.

Cash and Equivalents

Cash and equivalents consist of cash and highly liquid investments of commercial paper and

demand notes with original maturities of 90 days or less.

Prepaid Expenses and Refundable Deposits

Prepaid expenses and refundable deposits are capitalized and amortized over the period benefited, or as the related services are rendered (as applicable).

Marketable Securities and Short-Term Investments

The Company accounts for investments in marketable securities under Statements of Financial Accounting Standards ("SFAS") No. 115, "Accounting for Certain Investments in Debt and Equity Securities." The statement requires investments in debt and equity securities to be classified among three categories as follows: held-to-maturity, trading and available-for-sale. As of December 31, 1999, all securities held by the Company were considered as available-for-sale. Available-for-sale securities are carried at fair value, with unrealized gains and losses reported as a separate component of stockholders' equity. Quoted market prices have been used in determining the fair value of these investments. Short-term investments consist of commercial paper and equivalent corporate obligations and are stated at amortized cost, with respect to held-to-maturity investments, and at fair value with respect to investments classified as available-for-sale securities.

Property and Equipment

Property and equipment are carried at cost, less accumulated depreciation and amortization. When property and equipment are retired or otherwise disposed of, the related cost and accumulated depreciation are removed from the accounts and any resulting gain or loss is reflected in income. Depreciation and amortization are computed using principally the straight-line method over the following estimated useful lives:

Equipment	5 to 7 years
Leasehold Improvements	The shorter of the estimated useful life or lease term

Research and Development

All costs related to research and development activities are expensed in the period incurred.

Grant Revenue

Revenue consists of amounts earned from grants which are recognized in accordance with the terms of the related agreements.

Income Taxes

The Company follows SFAS 109, "Accounting for Income Taxes." Under the asset and liability method of SFAS 109, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. A valuation allowance is provided for the Company's net deferred tax asset.

Stock-Based Compensation

The Financial Accounting Standards Board issued SFAS No. 123, "Accounting for Stock-Based Compensation" in October 1995. SFAS 123 encourages companies to adopt a fair value approach to valuing stock options that would require compensation cost to be recognized based on the fair value of stock options granted. The Company has elected, as permitted by the standard, to continue to follow its intrinsic value based method of accounting for stock options issued to employees consistent with Accounting Principles Board ("APB") Opinion No. 25, "Accounting for Stock Issued to Employees." Under the intrinsic method, compensation cost for stock options is measured as the excess, if any, of the quoted market price of the Company's stock at the measurement date over the exercise price.

Net Loss Per Share

Net loss per share is calculated using the weighted average number of common shares outstanding for the period. Net loss used in the calculation of net loss per share includes preferred stock dividends. Common stock options and warrants are excluded from the computation as their effect would be antidilutive. In February 1997, the Financial Accounting Standards Board issued SFAS No. 128 "Earnings Per Share," which requires companies to present basic earnings per share and diluted earnings per share, instead of the

primary and fully diluted earnings per share ("EPS") as previously required. The new standard was adopted by the Company in 1997.

New Pronouncements

In 1998, the Company adopted SFAS No. 130 "Reporting Comprehensive Income" which requires that comprehensive income and its components, as defined, be reported in the financial statements. Current accounting standards require that certain items such as (1) foreign currency translation adjustments, (2) unrealized gains and losses on certain investments in debt and equity securities, and (3) unearned compensation expense related to stock issuances to employees be presented as separate components of stockholders' equity, without having been recognized in the determination of net income. The Company's comprehensive loss was not materially different from the 1998 and 1999 net loss.

In 1998, the Company adopted SFAS No. 131, "Disclosure About Segments of an Enterprise and Related Information". SFAS No. 131 requires the disclosure of extensive information about an entity's operating segments. In addition to disclosure of information about multiple reporting segments, an enterprise is required to report certain disaggregated information, even if it functions as a single operating unit. Management believes that the Company currently operates under a single segment.

In June 1998, the Financial Accounting Standards Board issued SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities." The Statement establishes accounting and reporting standards requiring that every derivative instrument (including certain derivative instruments embedded in other contracts) be recorded in the balance sheet as either an asset or liability measured at its fair value. The Statement requires that changes in the derivative's fair value be recognized currently in earnings unless specific hedge accounting criteria are met. SFAS No. 133 is effective for fiscal years beginning after June 15, 2000, although earlier implementation is allowed. Management plans to adopt the Standard in fiscal 2000 and has not determined the impact this statement will have on the Company's financial statements.

Use of Estimates

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 and 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. RELATED PARTY TRANSACTIONS

During 1987 and 1988, the Company's Chief Executive Officer, who is also a major stockholder of the Company, loaned a total of $270,650 to the Company for working capital purposes, of which $250,000 plus $2,000 of accrued interest was canceled in December 1988 in exchange for the issuance of 28 Revenue Participation Units ("RPU's"). The RPU's, in turn, were converted into 112,000 shares of common stock (see Note 9).

From 1989 through 1993, the Company borrowed an additional $757,900 from the Chief Executive Officer which, together with accrued interest of $300,404, aggregated $1,058,304 on December 31, 1993, at which time the Company issued 200,000 shares of common stock to the Chief Executive Officer in exchange for cancellation of $500,000 of loans made to the Company. The remaining $257,900 in principal and accrued interest of $300,404 were converted to a $558,304 promissory note which, as amended from time to time, is currently unsecured, and is payable upon demand. Interest is payable monthly at the annual rate of 9%.

In September 1990, the Company issued a warrant to the Chief Executive Officer to purchase up to 88,173 shares of common stock of the Company at any time between September 1, 1990 and August 31, 1995, for $3.75 per share. Effective August 31, 1995, the expiration date of the warrant was extended to August 31, 2000.

Assignment of Patents by Chief Executive Officer

The Chief Executive Officer of the Company has assigned all of his rights in the following four patents to the Company:

1. U.S. Patent No. 5,091,432 issued on February 25, 1992;

2. U.S. Patent No. 5,447,939 issued on September 5, 1995;

3. U.S. Patent No. 5,801,184 issued on September 1, 1998; and

4. U.S. Patent No. 6,027,936 issued on February 22, 2000.

In connection with the assignment of these patents to the Company, the Chief Executive Officer and the Company entered into royalty agreements, which expire concurrently with the expiration of the underlying patents and any patents derived therefrom. Under each of the Agreements, as amended, the Company is obligated to pay the Chief Executive Officer a royalty of two percent (2%) of all revenues derived by the Company from the use and sale by the Company of any products or methods included in the patents. Further, in the event that the Chief Executive Officer's employment is terminated by the Company without cause, the royalty rate under each Agreement was to be increased to five percent (5%). Finally, in the event of the Chief Executive Officer's death, the family or estate is entitled to continue to receive under each Agreement royalties at a rate of two percent (2%) for the duration of the respective Agreement.

McMaster University Agreement

On July 10, 1996, the Company entered into a license agreement with McMaster University (the "University") which allows the Company use of certain chemical compounds developed by the University covered in the patents filed jointly by the Company and the University. Under the agreement, the Company paid a one time licensing fee of $15,000 and is obligated to pay an annual royalty of five percent (5%) on net sales of products containing compounds developed by the University. The Company commenced payment of minimum annual royalties of $25,000 beginning July 1997 and has continued such annual payments through 1999. The third and fourth patent noted above were also jointly filed by the Company and the University and are subject to the same royalty agreement.

Employment Agreement

On May 6, 1999, the Company entered into a new employment agreement with the Chief Executive Officer which is effective from January 1, 2000, the date of termination of the predecessor employment agreement, through December 31, 2003. The agreement, among other things, provides for the grant of incentive stock options and an annual base salary with annual increases. The agreement also provides for guaranteed severance payments upon the Chief Executive Officer's termination of employment without cause, or upon a change of control of the Company. In connection with entering into this agreement, the Chief Executive Officer was granted an option to purchase 225,000 shares of common stock at the fair market value at the date of grant ($10.25 per share). This option vests in three equal annual increments over the life of the agreement commencing May 2000.

3. MARKETABLE SECURITIES AND SHORT-TERM INVESTMENTS

A summary of marketable securities and short-investments at December 31, 1998 and 1999 are as follows:

Type of Investment	Cost	Gross Unrealized Gains	Gross Unrealized (Losses)	Market Value
December 31, 1998:				
Available-for-Sale:				
U.S. Government Treasury Notes and Bonds	$ 894,516	$ 13,076	$ --	$ 907,592
U.S. Government guaranteed securities	156,112	4,971	--	161,083
Corporate Bonds	694,513	6,160	--	700,673
Total Investments	$1,745,141	$ 24,207	$ --	$1,769,348
December 31, 1999:				
Available-for-Sale:				
U.S. Government Treasury Notes and Bonds	403,357	--	(11,433)	391,924
U.S. Government guaranteed securities	295,060	1,996	(503)	296,553
Corporate Bonds	2,295,367	--	(28,632)	2,266,735
Total Investments	$2,993,784	$ 1,996	$ (40,568)	$2,955,212

For the years ended December 31, 1998 and 1999, sales of securities aggregated $1,169,156 and $2,230,139, and net gains were $15,310 and $35,727, respectively.

4. DEBT

In September 1997, the Company financed the premium for a three-year insurance policy through a borrowing from the insurer. The loan is payable through August 2000 in monthly installments of $9,475, including principal and 8.25% interest.

In September 1998, the Company entered into a $2 million Master Note and Security Agreement (the "Note") with a finance company affiliated with its bank. Through December 31, 1999, the Company borrowed $1,500,000 under the Note for equipment and computer software purchases. Borrowings are collateralized by substantially all of the Company's assets, exclusive of its patents and other intellectual properties. The note requires monthly repayments of $41,277, bears interest at approximately 12% and is due March 2002, at which time a final principal installment of $150,000 is due. The Company has also granted to the finance company a warrant to purchase up to 13,459 shares of its common stock at $7.43 a share which was valued at $45,000 using the Black-Scholes option-pricing model with the following assumptions: Risk-free interest rate of 5.02 percent; expected life of three years; expected volatility of 75.3 percent. The warrant was recorded as a prepaid expense and is being amortized with the effective interest method over the life of the note.

Future installments of debt principal are as follows:

Year Ending December 31:	Amount
2000	$ 472,938
2001	423,431
2002	213,877
	$1,110,246

5. REVENUE FROM GRANTS

From 1991 to 1995, the Company received funding in the form of two Small Business Innovative Research Grants ("SBIR") from the National Institutes of Health. A Phase 1 grant was initiated in September 1991 and a Phase 2 grant was initiated in August 1993. In July 1995, both grants were completed and no additional funds were due or collected. The Company has received an aggregate of $497,128 from the two SBIR grants. No additional grants have been received.

6. PROVISION FOR INCOME TAXES

No provision for federal and state income taxes has been recorded, as the Company has incurred net operating losses through December 31, 1999. At December 31, 1999, the Company and its domestic subsidiaries had approximately $33.3 million of federal net operating loss carryforwards available to offset future United States taxable income, if any. Such carryforwards expire on various dates beginning 2009 through 2019. The primary differences between the tax and financial reporting basis of assets and liabilities is the capitalization of certain start-up expenses for income tax reporting purposes which are expensed for financial reporting purposes. Under the Tax Reform Act of 1986, the amounts of, and benefits from, net operating losses carried forward may be impaired or limited in certain circumstances. Events which may cause limitations in the amount of net operating losses that the Company may utilize in any one year include, but are not limited to, a cumulative ownership change of more than 50 percent over a three year period. At December 31, 1999, the effect of such limitation, if imposed, has not been determined. The Company's foreign subsidiary has a loss carryforward of approximately $12.9 million at December 31, 1999, resulting principally from the transfer of licensing rights by the Parent to the foreign subsidiary and from the Parent Company's allocation of research and development costs to the foreign subsidiary during the period from April 1997 through December 1999. The Company has recognized a valuation allowance for the full amount of the deferred tax benefit arising from these net operating losses due to the uncertainty of their realization.

7. COMMITMENTS AND CONTINGENCIES

Facility Leases

During June 1997, the Company relocated to a new facility, which it leases from a property developer under a non-cancelable operating lease expiring in June 2004. The lease requires monthly rent payments ranging from $38,800 to $47,600, plus cost of living adjustments (as defined, including certain minimum increases) over its term, property taxes, insurance and maintenance reimbursements. The lease contains two five-year options to renew at fair value rates in effect at the time of renewal. In addition, the Company leases certain office and telephone equipment under non-cancelable operating leases expiring in

2002. Minimum lease requirements for each of the next five years and thereafter under the aforementioned property and equipment leases are as follows:

Year ending December 31:	Amount
2000	$ 517,800
2001	513,400
2002	542,100
2003	554,200
2004	285,400
	$2,412,900

Rent expense for the years ended December 31, 1997, 1998 and 1999 aggregated approximately $372,000, $572,400 and $601,100, respectively.

Research and Fellowship Grants

At December 31, 1999, the Company has committed to pay, principally in the year 2000, approximately $894,000 to a number of universities to conduct general scientific research programs. The Company also paid $50,000 and committed an additional $50,000 to the Reeve-Irvine Research Center at the University of California, Irvine ("UCI"), to provide for a Fellowship Grant. Grant expense for 1997, 1998 and 1999 amounted to approximately $335,000, $465,900 and $617,000, respectively.

Joint Venture

In September 1999, the Company entered into a three-year joint venture agreement with UCI to assist in the marketing and commercialization of discoveries made by certain members of its functional genomics science department. The Company is obligated under the agreement to fund the joint venture for three years with minimum payments of $2.0 million over the life of the agreement. The agreement is cancelable by either party upon giving thirty days notice. The Company has the right of first refusal to acquire the licensing rights to any new discoveries and UCI retains ownership rights to all discoveries under the agreement.

Major Clinical Trial

In 1998 and 1999, the Company entered into agreements with a contract research organization and a university to conduct multiple clinical trials in a number of countries involving approximately 2,500 patients. The agreements, all of which are cancelable by either party upon thirty days notice, are expected to result in aggregate expenditures ranging from approximately $35 to $38 million over a period of approximately eighteen months through June 2001. The costs of these clinical trials which were incurred and charged to operations for the years 1998 and 1999 were approximately $2 million and $13 million, respectively.

Litigation

The Company is involved in several matters of litigation and threatened litigation considered normal to our business. It is the Company's policy to accrue for amounts related to these legal matters if it is probable that a liability has been incurred and an amount is reasonably determinable. Management believes that the outcome of these matters will not materially impact the Company's financial position.

8. SETTLEMENT OF LITIGATION

During December 1999, the Company settled a lawsuit which was initiated in December 1998 by four of its former employees. The lawsuit, which was filed in the Superior Court of Orange County, California, also names Dr. Alvin J. Glasky, the Company's founder and Chief Executive Officer, as a defendant. The lawsuit arises from a dispute concerning the termination, as of December 31, 1997, of agreements entered into as of June 1990 and December 1993 between the Company and each of the former employees, pursuant to which the employees agreed to accept an aggregate of 278,590 shares of the Company's common stock, subject to forfeiture provisions, in exchange for the cancellation of indebtedness owed to them by the Company arising from unpaid compensation and expenses in the total amount of $458,411. Pursuant to the agreements, the employees were not entitled to keep the shares unless the Company achieved certain revenue goals by a specified date, as determined by the Company's independent auditors in accordance with accounting principles generally accepted in the United States. The revenue goals were not met and the Company demanded that the forfeited shares be returned pursuant to the terms of the agreements. In the lawsuit the plaintiffs alleged, among other things, that the cumulative revenues of the Company were met and that the defendants fraudulently induced the plaintiffs into entering into the agreements and the subsequent amendments to the agreements. The lawsuit asked for damages in excess of $4,000,000 or, in the alternative, that the forfeiture restrictions be removed and the plaintiffs be allowed to

keep their shares of common stock. The plaintiffs also sought punitive damages and reimbursement of attorneys' fees and costs. In March 1999, the Company filed a cross-complaint against the plaintiffs to seek a determination that the plaintiffs' shares have in fact been forfeited, and to obtain a court order requiring the plaintiffs to return their shares to the Company for cancellation. At the same time that the plaintiffs entered into their agreement with the Company in 1990 and 1993, Dr. Alvin J. Glasky and his wife, who were then and are now employees of the Company, also entered into agreements with the Company that were identical to those entered into by the plaintiffs, pursuant to which Dr. and Mrs. Glasky received an aggregate of 400,246 shares of common stock subject to identical forfeiture provisions, in exchange for the cancellation of indebtedness owed to them by the Company arising from unpaid compensation and expenses in the total amount of $755,531. Dr. and Mrs. Glasky entered into an agreement with the Company on December 21, 1998, pursuant to which they agreed to surrender for cancellation the same proportion of their restricted shares as the plaintiffs are required to surrender based on the final resolution of the lawsuit. Until the lawsuit was settled, the Company accounted for all of these shares as issued and outstanding.

On December 15, 1999, the Company entered into a settlement agreement with the plaintiffs. The agreement provided that each of the parties would pay their own legal fees and that the plaintiffs forfeit 51%, or 142,081 of their shares of common stock. As further consideration, the plaintiffs received three-year warrants to purchase an aggregate of 6,825 shares of common stock at $13.00 per share. Pursuant to the settlement terms of the plaintiffs' litigation and in accordance with the terms of their agreement with the Company, Dr. and Mrs. Glasky forfeited 204,125 shares of their common stock and received identical warrants to purchase 9,806 shares of common stock. Accordingly, of the total number of shares in dispute, 678,836, the Company cancelled 346,206 shares and retained as outstanding, 332,630 shares of common stock. In 1995 the forfeiture clause to the agreements was extended and at that time the Company recorded a charge to general and administrative expense amounting to $1,697,090, representing the increase through that period in the market value of the common stock that was subject to forfeiture. In 1999, the Company again recorded a charge to general and administrative expense in the net amount of $2,458,359 representing the increase from 1995 to the date of settlement in the market value of the shares of common stock retained by the plaintiffs and Dr. and Mrs. Glasky ($2,357,004), plus the value of the warrants issued ($101,355).

9. STOCKHOLDERS' EQUITY

Revenue Participation Units

In 1988 and 1989, AIT raised private placement funds via a financial instrument specified as a RPU. The Company raised an aggregate of $676,000 from the issuance of seventy-five RPU's at prices ranging from $9,000 to $10,000 per RPU. The RPU's entitled holders to cash payments based on stipulated percentages of revenues. Holders of RPU's were entitled to convert to common stock at any time and AIT had the option to redeem the RPU's subject to certain conditions by paying cash or in exchange for common stock.

In July 1996, the Company offered, and all RPU holders accepted, an option to convert each RPU unit into 4,000 shares of common stock (300,000 shares in the aggregate) in exchange for waiving all rights as an RPU holder.

Reverse Stock Split

In June 1996, the Board of Directors authorized, with stockholder approval, a reverse split of the Company's outstanding common stock on the basis of 1 share for each 2.5 shares of the then outstanding common stock. The Board of Directors also authorized, with stockholder approval, an increase in the authorized common stock from 10 million to 25 million shares and the creation of a new class of preferred stock with the authorization to issue up to 5 million shares of such preferred stock. All references to common stock amounts and loss per share in the accompanying financial statements give effect to the reverse stock split.

Re-incorporation

During June 1997, the stockholders of the Company approved the re-incorporation of the Company as a Delaware corporation. In connection therewith, a par value of $0.001 per share was assigned to the common stock of the Company. The total number of authorized and issued shares remained unchanged.

Common Stock

During 1993, the Company issued to a financial consultant in exchange for investment banking services, 40,000 shares of common stock at $1.35 per share, the market value on issuance date, for an aggregate amount of $54,000.

During 1994, three investors bought 13,000 shares of restricted (restrictions as to transferability) common stock at $2.50 per share, for an aggregate amount of $32,500, through a private placement. During 1995, six investors bought 22,000 shares of restricted common stock at $2.50 per share, for an aggregate amount of $55,000, through a private placement.

From January 1, 1996, to June 20, 1996, 266,800 shares of restricted (restrictions as to transferability) common stock were issued at $2.50 per share, for an aggregate amount of $633,650 (net of commission), through a private placement.

In June 1996, the Company filed a registration statement with the Securities and Exchange Commission offering to the public 2,500,000 units (the "Units"), each Unit consisting of one share of the Company's common stock (the "common stock"), and one warrant to purchase one share of common stock (the "warrants"). The registration statement became effective on September 26, 1996, and on October 1, 1996, the Company realized $17,363,003 in net proceeds from the sale of the 2,500,000 Units.

On October 11, 1996, the principal underwriter of the offering exercised a portion of its overallotment option and purchased 200,000 Units for net cash of $1,389,280. The Units separated immediately following issuance and the common stock and warrants that made up the Units trade only as separate securities.

On March 27, 1998, the Company executed a $15 million Private Equity Line of Credit Agreement (the "Equity Line Agreement") with a private investor. The Equity Line Agreement can be terminated by the Company at any time prior to its expiration in August 2001, and, among other things, provides for minimum and maximum puts ranging from $250,000 to $2.0 million, depending on the Company's stock price and trading volume. At the time of each put, the investor receives a discount of 12% from the then current average market price, as determined under the Equity Line Agreement. Pursuant to the Equity Line Agreement, the Company also issued to the investor warrants to purchase 25,000 shares of common stock at an exercise price of $11.62 per share. Under the Equity Line Agreement, the Company received proceeds of approximately $3.45 million from sales of 506,049 shares of common stock in 1998 and $1.9 million from sales of 211,393 shares of common stock in 1999. As of December 31, 1999, approximately $9.6 million remained available under this agreement.

On August 31, 1998, certain officers and directors of the Company exercised non-qualified stock options and purchased 62,000 shares of common stock. The exercise price of the stock options was at $4.50 per share for 50,000 shares and $5.13 per share for 12,000 shares for an aggregate purchase price of $286,560, represented by notes issued by the purchasers. The notes are full recourse promissory notes bearing interest at 7% per annum, and are collateralized by the stock issued upon the exercise of the stock options. Interest and principal are payable two years after the issue dates. The notes have been offset against the underlying common stock in the accompanying financial statements.

Common stock was also sold in 1999 as follows:

On May 31, 1999, the Company sold to a group of private investors 400,000 shares of common stock for proceeds of $4.0 million. The investors also received five-year warrants to purchase 80,000 shares of common stock at an exercise price of $15 per share.

On July 27, 1999, the Company completed a secondary public offering and sold 1,150,000 shares of common stock (including the underwriters overallotment), realizing approximately $8.7 million in net cash proceeds from the sale.

On November 30, 1999, the Company sold to two private investors, one of whom had invested in the below mentioned preferred stock transaction, 845,594 shares of common stock, for net proceeds of $9.4 million, and warrants to purchase 126,839 shares of common stock at $14.24 per share. Based on a reset formula contained in the agreement, in March 2000 the Company issued to the investors 43,383 additional shares of common stock. A second reset was waived by the investors as consideration for entering into the April 2000 financing transaction.

Preferred Stock:

On January 29, 1999, the Company entered into an agreement with two private investors to sell up to $6 million of 5% preferred stock, with rights of conversion into common stock. The financing consisted of two tranches of preferred stock. The first tranche of $4.0 million was sold on January 29, 1999, and for an initial period of 120 days was convertible into common stock at a fixed price of $13.06 per share. Thereafter, the preferred stock was convertible at the lesser of the fixed price or a variable rate of 101% of the average of the ten lowest closing bid prices of the common stock during the thirty days immediately preceding the conversion date. During June, July and December, 1999, the investors converted all of the first tranche of preferred stock into a total of 347,334 shares of common stock at the average price of $11.52 per share. The Company waived its option to purchase an additional $2.0 million of preferred stock through the second tranche. During the period in 1999 in which the preferred stock was outstanding, the Company paid to the investors cash dividends amounting to $136,246. The investors also received five-year warrants to purchase 75,000 shares of the Company's common stock at $12.98 per share.

10. STOCK OPTIONS AND WARRANTS

The Company has two stock option plans: the 1991 Stock Incentive Plan (the "1991 Plan") and the 1997 Stock Incentive Plan (the "1997 Plan") (collectively, the "Plans"). The Plans were adopted by the Company's stockholders and Board of Directors in May 1991 and June 1997, respectively, and provide for the granting of incentive and nonqualified stock options as well as other stock-based compensation. The 1991 Plan, as amended, authorizes for issuance up to 401,430 shares of the Company's common stock. Options which have been granted under the 1991 Plan contain vesting provisions determined by the Board of Directors which range from one to four years. The 1997 Plan, as amended, authorizes for issuance up to 1,250,000 shares of the Company's common stock. Under the Plans, shares of the Company's common stock may be granted to directors, officers and employees of the Company, except that incentive stock options may not be granted to non-employee directors.

The Plans provide for issuance of incentive stock options having exercise prices equal to the fair market values of the stock on the date of grant of the options or, in certain circumstances, at option prices at least equal to 110 percent of the fair market value of the stock on the date the options are granted. Options granted under the Plans are exercisable in such a manner and within such period, not to exceed ten years from the date of the grant, as shall be set forth in a stock option agreement between the director, officer or employee and the Company.

Stock options have also been issued outside of the aforementioned plans to various consultants. During the period from December 1993 through December 1996, the Company issued a total of 194,000 options to purchase common stock to two scientific consultants and a financial consultant in exchange for past and future services. The options are exercisable through December 31, 2001, at an exercise price of $0.025 per share. As the exercise price was lower than the fair market value of the stock on the date the options were granted, compensation expense was recorded for the difference between the option exercise price and the estimated fair market value of the stock as determined by the Board of Directors on the grant date. All options and warrants issued outside of the Plan were vested and exercisable upon issuance. In September 1990, the Company issued a warrant to the Chief Executive Officer of the Company to purchase 88,173 shares of common stock at $3.75 per share. The warrant expires August 31, 2000.

In January 1997, the Company issued to a financial consultant, 10-year options to purchase 180,000 shares of the Company's common stock at the exercise price of $3.875 per share, of which 30,000 options vested immediately. In November 1998, the Company issued to the same financial consultant additional 10-year options to purchase 25,000 shares of the Company's common stock at an exercise price of $8.5625 per share, all of which vested immediately. The Company recognized $60,000, $422,264 and $393,751 of compensation expense for these options in 1997, 1998 and 1999, respectively. Compensation expense was determined in accordance with SFAS No. 123, with the fair values determined using the Black-Scholes option pricing model at the original grant dates. Management believes that the fair value results using calculations over the respective vesting periods of these options would not have been materially different.

A summary of stock option activities are as follows:

	1997		1998		1999	
	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
Outstanding at beginning of year	447,173	$ 3.15	658,173	$ 4.66	853,873	$ 5.78
Granted	329,000	5.37	331,300	8.03	543,500	10.76
Exercised	(104,000)	0.025	(134,000)	2.54	(1,900)	6.57
Forfeited	(14,000)	4.29	(1,600)	8.88	(6,100)	8.08
Outstanding, at end of year	658,173	$ 4.66	853,873	$ 5.78	1,389,373	$ 6.77
Exercisable, at end of year	363,923	$ 1.18	391,048	$ 1.95	662,823	$ 3.23

The following table summarizes information about stock options outstanding at December 31, 1999:

Range of Exercise Prices	Options Outstanding at 12/31/99	Weighted Average Remaining Life	Weighted Average Exercise Price	Options Exercisable 12/31/99	Weighted Average Exercise Price
$ 0.025	30,000	1.00	$0.025	30,000	$0.025
3.75 to 5.625	440,673	5.89	4.16	290,673	4.31
5.626 to 8.875	330,200	7.936	7.96	259,550	8.03
8.876 to 13.00	588,500	9.446	11.46	82,500	12.58

As of December 31, 1999, there were 886,200 options outstanding under the 1997 Plan and 180,000 options outstanding under the 1991 Plan. The remaining 323,173 outstanding options were granted outside of option plans.

The Company applies APB Opinion No. 25 and related interpretations in accounting for stock options granted to employees, and does not recognize compensation expense when the exercise price of the options equals the fair market value of the underlying shares at the date of grant. Directors' stock options are treated in the same manner as employee stock options for accounting purposes. Under SFAS No. 123, the Company is required to present certain pro forma earnings information determined as if employee stock options were accounted for under the fair value method of that statement.

The fair value of each option grant is estimated on the date of grant using the Black-Scholes option pricing model with the following weighted average assumptions used for grants in 1997, 1998 and 1999, respectively: risk-free interest rates of 6.37 percent (1997), 4.96 percent (1998); and 5.80 percent (1999), zero expected dividend yields; expected lives of 5 years; expected volatility of 50 percent in 1997, 75.26 percent in 1998, and 75.44 percent in 1999.

For purposes of the following required pro forma information, the weighted average fair value of stock options granted in 1997, 1998 and 1999 was $3.06, $4.96, and $7.57, respectively. The total estimated fair value is amortized to expense over the vesting period.

	1997	1998	1999
Pro forma net loss	$ (6,551,287)	$ (12,395,411)	$ (27,414,976)
Pro forma basic and diluted loss per share	$ (1.21)	$ (2.21)	$ (3.82)

Warrants are typically issued by the Company to investors as part of a financing transaction, or in connection with services rendered by outside consultants and expire at varying dates ranging from September 2001 through November 2004. A summary of warrant activity follows:

	1997		1998		1999	
	Common Shares	Range of Exercise Prices	Common Shares	Range of Exercise Prices	Common Shares	Range of Exercise Prices
Outstanding, at beginning of year	2,700,000(1)	$ 11.40	2,700,000	$ 11.40	2,697,459	
Granted	--	--	38,459	7.43 to 11.618	528,664	11.00 to 20.625
Exercised	--	--	(41,000)	11.40	(9,000)	11.40

Outstanding, at end of year	2,700,000	2,697,459	3,217,123

(1) Public warrants issued at time of initial public offering.

11. SALARY DEFERRAL PLAN

The Company established a 401(k) Salary Deferral Plan on January 1, 1990. The Plan allows eligible employees to defer part of their income on a tax-free basis. Contributions by the Company to the Plan are discretionary upon approval by the Board of Directors. To date, the Company has not made any contributions into the Plan.

12. RESEARCH ACTIVITIES

During 1995, the National Institute on Aging (NIA) and the National Institute for Mental Health (NIMH) issued contracts to an independent subcontractor of theirs to manufacture Neotrofin(TM) for animal and human testing programs. The NIA also issued an additional contract to one of its subcontractors to conduct the subchronic animal toxicity studies required by the U.S. Food and Drug Administration as a part of an Investigational New Drug (IND) application for Neotrofin(TM). The entire cost of these two contracts was funded by the NIA and NIMH directly to the subcontractors.

13. UNAUDITED QUARTERLY FINANCIAL INFORMATION

The following is a summary of the unaudited quarterly results of operations for fiscal 1999, 1998 and 1997 (in thousands except per share data):

Fiscal 1999	March 31	June 30	September 30	December 31
Revenues	$ --	$ --	$ --	$ --
Total operating expenses	4,404	4,006	5,425	12,146
Net loss	$ (4,419)	$ (4,056)	$ (5,329)	$(12,186)
Basic and diluted loss per share	$ (0.71)	$ (0.63)	$ (0.70)	$ (1.47)
Shares used in calculation	6,204	6,444	7,583	8,387

Fiscal 1998	March 31	June 30	September 30	December 31
Revenues	$ --	$ --	$ --	$ --
Total operating expenses	2,528	2,643	2,984	3,509
Net loss	$ (2,508)	$ (2,581)	$ (3,000)	$ (3,515)
Basic and diluted loss per share	$ (0.46)	$ (0.47)	$ (0.54)	$ (0.60)
Shares used in calculation	5,467	5,493	5,570	5,918

Fiscal 1997	March 31	June 30	September 30	December 31
Revenues	$ --	$ --	$ --	$ --
Total operating expenses	1,048	1,406	1,977	2,419
Net loss	$ (819)	$ (1,212)	$ (1,813)	$ (2,318)
Basic and diluted loss per share	$ (0.15)	$ (0.23)	$ (0.33)	$ (0.42)
Shares used in calculation	5,362	5,365	5,433	5,466

14. DEBT AND EQUITY TRANSACTIONS SUBSEQUENT TO DECEMBER 31, 1999

The Company also entered into the following financing transactions from January 1, 2000 through April 11, 2000:

Under the Equity Line Agreement, during January 2000, the Company received an additional $2.0 million for the sale of 186,961 shares of its common stock. As of March 22, 2000, $7.5 million remains available under the agreement.

On February 25, 2000 the Company sold to two private investors 520,324 shares of common stock for $8.0 million. The investors also received five-year warrants to purchase 104,000 shares of common stock at an exercise price of $21.00 per share.

On April 6, 2000, the Company entered into a financing transaction with two private investor groups who have previously invested with the Company. The transaction consists of (a) $10 million in 5% subordinated convertible debentures due April 6, 2005, (b) redeemable warrants to purchase up to 4 million shares of common stock over a two-year period (the "B" warrants) and (c) five-year warrants to purchase from 115,000 shares up to 265,000 shares of the Company's common stock at an exercise price of $19.67 per share. The "B" warrants can be redeemed in part by the Company as frequently as several times per week and when called for redemption can be exercised by the investors at 97% of the per share closing market price (i.e. a discount of 3%) and are exercisable at the sole option of the investors at the price of $33.75 per share. The number of "B" warrants that are exercisable at each redemption are subject to average daily volume restrictions. To the extent the "B" warrants have not been exercised, the investors have committed to

two additional tranches of $10 million each of 5% subordinated convertible debentures, subject to certain restrictions, including the following:

(iv) The investors will limit their investment to 10% of the Company's market capitalization at the time of each additional tranche, not to exceed $10,000,000;

(v) The shares underlying the April 6, 2000 transaction and the additional tranches must be successfully registered with the SEC; and

(vi) The Company must maintain the continued listing requirements of the Nasdaq Stock Market.

In the event any of these conditions cannot be met and the additional tranches (or other financing alternatives) are not available, the Company may be required to scale-back or cancel certain of its clinical development activities.

The debentures are convertible into common stock at $20.25 per share for the first 90 days after the closing. Thereafter, they are convertible at the lesser of $20.25 per share or 101% of the market price of the common stock as determined under the agreement. The two additional tranches of convertible debentures of up to $10 million each, 5 and 10 months after the closing, are at the option of either the Company or the investor. If at the option of the Company, the tranches are under similar terms and conditions as the initial tranche. If at the option of the investor, the two tranches are at the fixed conversion price of $20 per share. The amount available under the two additional tranches will be reduced pro-rata to the extent that the investors have exercised or the Company has redeemed the "B" warrants to purchase common stock.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

The following table sets forth certain information as of March 22, 2000, with respect to each person who is an executive officer or a director of the Company:

Name	Age	Position
Alvin J. Glasky, Ph.D.	66	Chairman of the Board, Chief Executive Officer, President and Director
Samuel Gulko	68	Chief Financial Officer, Secretary and Treasurer and Director
Stephen Runnels	50	Executive Vice President and Director
Michelle S. Glasky, Ph.D.	40	Vice President Scientific Affairs
D. Scott Wieland, Ph.D., MBA	40	Vice President Product Development and Regulatory Affairs
Mark J. Glasky	38	Director
Ann C. Kessler, Ph.D.	56	Director
Armin M. Kessler	62	Director
Frank M. Meeks	55	Director
Eric L. Nelson, Ph.D.	75	Director
Carol O'Cleireacain, Ph.D.	53	Director
Joseph Rubinfeld, Ph.D.	67	Director
Paul H. Silverman, Ph.D., D.Sc.	75	Director

Executive Officers and Directors

Alvin J. Glasky, Ph.D., has been Chief Executive Officer, President, Chief Scientific Officer and a director of Advanced ImmunoTherapeutics, Inc. ("AIT") since its inception in June 1987, and has served as the Chairman of the Board, Chief Executive Officer, President, Chief Scientific Officer and a director of the Company since July 1989, when AIT became a wholly-owned subsidiary of NeoTherapeutics. From March 1986 to January 1987, Dr. Glasky was Executive Director of the American Social Health Association, a non-profit organization. From 1968 until March 1986, Dr. Glasky was the President and Chairman of the Board of Newport Pharmaceuticals International, Inc., a publicly-held pharmaceutical company that developed, manufactured and marketed prescription medicines. From 1966 to 1968, Dr. Glasky served as Director of Research for ICN Pharmaceutical, Inc. and as Director of the ICN-Nucleic Acid Research Institute in Irvine, California. During that period, he was also an assistant professor in the Pharmacology Department of the Chicago Medical School. Dr. Glasky currently is a Regent's Professor at the University of California, Irvine. Dr. Glasky received a B.S. degree in Pharmacy from the University of Illinois College of Pharmacy in 1954 and a Ph.D. degree in Biochemistry from the University of Illinois Graduate School in 1958. Dr. Glasky was also a Post-Doctoral Fellow, National Science Foundation, in Sweden.

Samuel Gulko has served as the Chief Financial Officer of NeoTherapeutics since October 1996 and as Secretary, Treasurer and a director since June, 1998. From 1968 until March 1987, Mr. Gulko served as a partner in the audit practice of Ernst & Young, LLP, Certified Public Accountants. From April 1987 to July 1996, Mr. Gulko was self-employed as a Certified Public Accountant and business consultant, as well as the part-time Chief Financial Officer of several private companies. Mr. Gulko obtained his B.S. degree in Accounting from the University of Southern California in 1958.

Stephen Runnels joined NeoTherapeutics as Executive Vice President in April, 1997, and has been a director of NeoTherapeutics since June 1998. Prior to joining NeoTherapeutics, Mr. Runnels held the position of Vice President, Marketing and Business Development for Sigma-Aldrich, Inc., a Fortune 500 manufacturer of biochemicals, pharmaceuticals, and biotechnology products since January 1992. Mr. Runnels has also held positions as Vice President -- Sales and Marketing for Irvine Scientific, and Vice President, International Operations for Gamma Biologicals, a manufacturer of immunological reagents. Mr. Runnels is certified by the American Society of Clinical Pathologists as a specialist in Immunohematology, and was an instructor of Clinical Immunology at Arizona State University. Mr. Runnels obtained a B.S. in Cell Biology from the University of Arizona.

Michelle S. Glasky, Ph.D., joined NeoTherapeutics as Director of Scientific Affairs in July 1996 and was promoted to Vice President, Scientific Affairs in June 1997. Prior to joining NeoTherapeutics, Dr. M. Glasky was employed in the Department of Pathology, University of Southern California School of Medicine, as a Research Associate and Laboratory Administrator from February 1991 until July 1996. Dr. M. Glasky served as a consultant to the Company from August 1990 to July 1996. Dr. M. Glasky holds a non-salaried research associate position at the University of California, Irvine. Dr. M. Glasky received a B.A. degree in Microbiology from the University of California, San Diego in 1981, and a Ph.D. degree in Biomedical Sciences from the University of Texas Health Science Center, Houston, in 1988. Dr. M. Glasky completed a post-doctoral fellowship at Stanford University School of Medicine. Michelle S. Glasky, Ph.D. is the adult daughter of Dr. Alvin J. Glasky.

D. Scott Wieland, Ph.D., MBA, joined NeoTherapeutics as Director of Regulatory Affairs in July 1997, became Director of Drug Development and Regulatory Affairs in 1998, and was promoted to Vice President, Product Development and Regulatory Affairs in July 1999. Prior to joining NeoTherapeutics, Dr. S. Wieland was employed by CoCensys from 1990-1997, a biopharmaceutical company specializing in CNS disorders. Dr. S. Wieland received a B.S. degree in Physiological Psychology from the University of California, Santa Barbara in 1981, a M.A. degree in Psychology from the University of Arizona, Tucson, Arizona in 1984, a Ph.D. in Biopsychology from the University of Arizona in 1987, and a M.B.A. from Webster University, Irvine, California in 1998. Dr. S. Wieland completed a post-doctoral fellowship in Behavioral Pharmacology at the University of Pennsylvania, Department of Psychiatry.

Mark J. Glasky has been a director of NeoTherapeutics since August 1994. Since 1982, Mr. Glasky has been employed by Bank of America in various corporate lending positions and currently serves as Senior Vice President and Credit Products Executive for Southern California Commercial Banking. Mr. Glasky obtained a B.S. degree in International Finance from the University of Southern California in 1983 and an M.B.A. degree in Corporate Finance from the University of Texas at Austin in 1987. Mark J. Glasky is the adult son of Dr. Alvin J. Glasky.

Ann C. Kessler, Ph.D., has been a director of NeoTherapeutics since November 12, 1999. From January 1969 until she retired in June 1995, Dr. Ann Kessler held a number of management positions with Hoffmann-La Roche in Basel, Switzerland and Nutley, New Jersey. Most recently, Dr. Ann Kessler was Director of International Project Management and was responsible for global project development decisions. Dr. Ann Kessler's previous appointments included Director of the Division of Exploratory Research and Director of the Departments of Pharmacology, Chemotherapy, and Biochemical Nutrition. Dr. Ann Kessler has authored over 100 publications dealing with obesity, lipid metabolism and appetite regulation, and has 20 patents issued concerning pharmacological approaches to diseases. Dr. Ann Kessler obtained her B.S. degree from the College of Notre Dame of Maryland in 1965, M.S. in Biological Sciences from Northwestern University, Evanston, Illinois in 1967, and a Ph.D. in Biochemistry from New York University in 1973. Dr. Ann Kessler is the wife of Armin M. Kessler.

Armin M. Kessler has been a director of NeoTherapeutics since November 12, 1999. From 1983 until he retired in 1995, Mr. Kessler held a number of executive management positions with Hoffmann-La Roche AG including Chief Operating Officer, Head of the Pharmaceutical Division, Head of the Diagnostic Division with worldwide responsibility for pharmaceuticals, diagnostics, vitamins and chemicals and Managing Director of Roche U.K. Mr. Kessler also served as a member of the Board of Directors and Corporate Executive Committee of Hoffmann-La Roche AG. Until his retirement in 1995, Mr. Kessler served as a member of the Board of Directors of Genentech Inc. from 1990 and Syntex Corporation from 1994. During this same period, Mr. Kessler served on the Executive Board of Pharmaceutical Partners for Better Healthcare and as President of the European Federation of Pharmaceutical Industry Associations. From 1961 to 1982 Mr. Kessler held a variety of positions in various countries with Sandoz Pharmaceuticals Corporation including Director of Worldwide Pharmaceutical Marketing, as well as Head of Patents and Licensing and President of Sandoz Japan. Mr. Kessler received a Bachelor of Science degree in Chemistry and Physics from the University of Pretoria, South Africa in 1957, a Bachelor of Science Honors degree in Chemical Engineering from The University of Cape Town in 1959, a Juris Doctorate from Seton Hall

University in 1971, and an Honorary Doctorate of Business Administration from University of Pretoria, South Africa in 1993. Mr. Kessler qualified as a U.S. Patent Attorney in 1972. Mr. Armin Kessler is the husband of Dr. Ann C. Kessler.

Frank M. Meeks has been a director of NeoTherapeutics since July 1989. Since September 1992, Mr. Meeks has been pursuing personal investments in real estate, property management and oil and gas. Mr. Meeks was employed by Environmental Developers, Inc., a real estate development and construction company, from June 1979 until March 1993, first as Vice President and finally as Financial Vice President. Mr. Meeks obtained a B.S. degree in Business Administration from Wittenberg University in 1966, and an M.B.A. degree from Emory University in 1967. Mr. Meeks is a non-practicing certified public accountant and a licensed real estate broker.

Eric L. Nelson, Ph.D., has been a director of NeoTherapeutics since June 1998 and a member of our Scientific Advisory Board since 1987. Dr. Nelson has been self-employed as a pharmaceutical research consultant since 1986. He was a founder, and served as Chairman from 1972 until 1986, of Nelson Research and Development Corporation, a publicly held corporation engaged in research and development of drug receptor technology applied to the development of pharmaceutical products and novel drug delivery systems. Prior to 1972, Dr. Nelson spent eleven years at Allergan Pharmaceuticals, Inc., a developer of eye care products, where as Vice President of Research he was responsible for establishing Allergan's entire research organization. Dr. Nelson received his doctorate degree in Microbiology from UCLA in 1951 and has authored numerous publications. He is the inventor on various patents in the areas of microbiology, immunology, molecular biology and pharmacology.

Carol O'Cleireacain, Ph.D., has been a director of NeoTherapeutics since September 1996. Dr. O'Cleireacain has been self-employed as an economic and management consultant in New York City since 1994. Since 1998, Dr. O'Cleireacain has served as Senior Fellow (non-resident) at the Brookings Institution in Washington D.C., where previously, from March 1996 until June 1997, as a Visiting Fellow, Economic Studies, she authored The Orphaned Capital: Adopting the Right Revenues for the District of Columbia. During 1998, Dr. O'Cleireacain served as a member of the President's Commission to Study Capital Budgeting, and during 1997, Dr. O'Cleireacain served as a member of the National Civil Aviation Review Commission. Since May 1996, Dr. O'Cleireacain has served as a director and member of the Executive Committee of Trillium Asset Management (formerly known as Franklin Research and Development Corp.), an employee-owned investment company in Boston. From April 1994 through April 1996, Dr. O'Cleireacain served as the first nominee of the United Steelworkers of America and the first woman director of ACME Metals Inc. Dr. O'Cleireacain served as the Director of the Mayor's Office of Management and Budget of the City of New York from August 1993 until December 1993. From February 1990 until August 1993, Dr. O'Cleireacain was the Commissioner of the New York City Department of Finance. Dr. O'Cleireacain received a B.A., with distinction, in Economics from the University of Michigan in 1968, an M.A. in Economics from the University of Michigan in 1970 and a Ph.D. in Economics from the London School of Economics in 1977.

Joseph Rubinfeld, Ph.D., has been a director of NeoTherapeutics since June 1998. Dr. Rubinfeld is the co-founder of SuperGen, Inc., a publicly-held pharmaceutical company focused on drugs for life-threatening diseases, particularly cancer, and has served as the Chief Executive Officer, President and a director of SuperGen since its inception in March 1991 and was Chief Scientific Officer from inception until September 1997. Since May 1996, Dr. Rubinfeld has served as a Director of AVI Biopharma, a biopharmaceutical company. Dr. Rubinfeld was one of the four initial founders of Amgen, Inc., a biotechnology company, in 1980 and served as Vice President and Chief of Operations until 1983, and as a consultant to Amgen from 1983 until 1985. From 1987 to 1990, Dr. Rubinfeld was a Senior Director at Cetus Corporation, a biotechnology company. From 1968 to 1980, Dr. Rubinfeld was employed at Bristol-Myers Company International Division ("Bristol-Myers") in a variety of positions, most recently as Vice President and Director of Research and Development. While at Bristol-Myers, Dr. Rubinfeld was instrumental in licensing the original anticancer line of products for Bristol-Myers, including Mitomycin and Bleomycin. Prior to that time, Dr. Rubinfeld was a research scientist with several pharmaceutical and consumer product companies including Schering-Plough and Colgate-Palmolive Co. Dr. Rubinfeld received his M.A. and Ph.D. in Chemistry from Columbia University.

Paul H. Silverman, Ph.D., D.Sc., has been a director of NeoTherapeutics and member of our Scientific Advisory Board since September 1996. Dr. Silverman has served as a Director for the Western Center of the American Academy of Arts and Sciences, located on the University of California, Irvine campus since March 1997. Since March 1993, Dr. Silverman has also been an Adjunct Professor in the Department of Medicine at the University of California, Irvine. From January 1994 until July 1996, Dr. Silverman served as an Associate Chancellor for the Center for Health Sciences at the University of California, Irvine. From August 1992 until January 1994, Dr. Silverman served as the Director of Corporate and Government Affairs at the Beckman Laser Institute and Medical Clinic in Irvine, California. From November 1990 until December 1993, Dr. Silverman served as Director of Scientific Affairs at Beckman Instruments, Inc. Prior to 1990, Dr. Silverman served as the Director of the Systemwide Biotechnology Research and Education Program for the University of California; the Director of the Donner Laboratory and an Associate Director of the Lawrence Berkeley Laboratory at the University of California, Berkeley; as the President of the University of Maine at Orono; as the President of The Research Foundation of the State University of New York, and as the head of the Department of Immunoparasitology at Glaxo, Ltd. Dr. Silverman received his Ph.D. in Parasitology and Epidemiology and his Doctor of Science degree from the University of Liverpool, England.

The Board of Directors of NeoTherapeutics currently consists of eleven directors, divided into two classes. Each Class is elected in alternate years and serves a term of two years. The Class I directors, whose term expires at the Annual Meeting of Stockholders in 2000, are Samuel Gulko, Frank M. Meeks, Eric L. Nelson, Ph.D., Stephen Runnels and Paul H. Silverman, Ph.D., D.Sc.. The Class II directors, whose term expires at the Annual Meeting of Stockholders in 2001, are Alvin J. Glasky, Ph.D., Mark J. Glasky, Ann C. Kessler, Ph.D., Armin M. Kessler, Carol O'Cleireacain, Ph.D. and Joseph Rubinfeld, Ph.D. Each director serves the term for which he or she was elected until the election and qualification of his or her successor or until his or her earlier resignation.

The Board of Directors currently has four committees, a Compensation Committee, an Audit Committee, a Litigation Committee formed in 1999 and a Special Function Committee formed in March 2000.

The Compensation Committee is comprised of Dr. Eric L. Nelson, Dr. Carol O'Cleireacain, Dr. Paul H. Silverman and Dr. Joseph Rubinfeld. The Compensation Committee reviews and recommends the salaries and bonuses of officers and certain key employees of NeoTherapeutics, establishes compensation and incentive plans, authorizes and approves the granting of stock options and restricted stock in accordance with our stock option and incentive plans, and determines other fringe benefits.

The Audit Committee is comprised of Dr. Carol O'Cleireacain, Frank M. Meeks and Dr. Eric L. Nelson. The Audit Committee recommends engagement of our independent public accountants and is primarily responsible for approving the services performed by our independent accountants and for reviewing and evaluating our accounting principles and its system of internal controls.

The Litigation Committee is comprised of Dr. Eric L. Nelson, Stephen Runnels and Samuel Gulko. The Litigation Committee is empowered by the Board of Directors to enter into settlement agreements for pending litigation.

The Special Function Committee is comprised of all non-employee directors, which includes Mark J. Glasky, Dr. Ann C. Kessler, Armin M. Kessler, Frank M. Meeks, Dr. Eric L. Nelson, Dr. Carol O'Cleireacain, Dr. Paul H. Silverman and Dr. Joseph Rubinfeld. Individual members of the Special Function Committee provide services from time to time at the request of the Chairman of the Board of Directors which are unique to that member's industry or educational knowledge and experience and which are determined by the Chairman to be above and beyond their normal requirements as a Board member.

SCIENTIFIC ADVISORY BOARD

We have established a Scientific Advisory Board consisting of distinguished scientists who we believe will make a contribution to the development of our research. The Scientific Advisory Board members review our research and development progress, advise us of advances in their fields and assist in identifying special product opportunities. We compensate our members on a consulting fee basis for their services and we reimburse them for reasonable travel expenses. All of the advisors are employed by employers other than NeoTherapeutics and may have commitments to, or consulting or advisory agreements with, other entities, including our potential competitors, that may limit their availability to us. Although these advisors may contribute significantly to our business, none is required to devote more than a small portion of his time to us in his capacity as a member of the Scientific Advisory Board. The members of the Scientific Advisory Board currently are as follows:

Geoffrey Burnstock, D.Sc., F.A.A., M.R.C.P. (Hon), F.R.S., has been a Professor of Anatomy in the Department of Anatomy and Developmental Biology at the University College London since 1975 and since 1997, has been the director of the Autonomic Neuroscience Institute, Royal Free Hospital School of Medicine. From 1959 through 1975, Dr. Burnstock held several positions within the Department of Zoology at the University of Melbourne, Australia. Dr. Burnstock received his B.Sc. degree in 1953 from Kings College, University of London and his Ph.D. in 1957 from Kings College and University College London, University of London. Dr. Burnstock also received a D.Sc. degree in 1971 from the University of Melbourne.

Olivier Civelli, Ph.D., has been the Eric L. and Lila D. Nelson Chair in Neuropharmacology at the University of California, Irvine since 1996. From 1992-1996, Dr. Civelli was affiliated with F. Hoffmann-La Roche, AG of Basel, Switzerland in various research positions. From 1987-1993, Dr. Civelli held various research positions in the Department of Cell Biology and Anatomy of the Vollum Institute for Advanced Biomedical Research at the Oregon Health Sciences University. Dr. Civelli received his doctorate degree in Molecular Biology from the Swiss Federal Institute of Technology in Zurich, Switzerland in 1979.

Stuart M. Krassner, Ph.D., has been affiliated with the University of California, Irvine since 1965, currently as Professor of Biological Sciences and formerly in several administrative positions, most recently as Associate Dean of Research and Graduate Studies. Dr. Krassner has conducted research at both the Rockefeller University (New York) and the Swiss Tropical Institute (Basel). Dr. Krassner's research interests included parasitology and immunology and he has numerous publications in those fields. Dr. Krassner received his doctorate degree in Parasitology from Johns Hopkins University in 1961.

Eric L. Nelson, Ph.D., see "Executive Officers and Directors."

Paul H. Silverman, Ph.D., D.Sc., see "Executive Officers and Directors."

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Based solely upon its review of the copies of reporting forms furnished to the Company, and written representations that no other reports were required, the Company believes that all filing requirements under Section 16(a) of the Securities Exchange Act of 1934 applicable to its directors, officers and any persons holding 10% or more of the Company's common stock with respect to the Company's fiscal year ended December 31, 1999, were satisfied.

ITEM 11. EXECUTIVE COMPENSATION

SUMMARY COMPENSATION

The following table sets forth summary information concerning the compensation of our Chief Executive Officer and the other most highly compensated executive officers whose total salary and bonuses for services rendered to us and our subsidiaries in all capacities during the fiscal year ended December 31, 1999 exceeded $100,000 (the "Named Executive Officers"). No other executive officer received compensation in 1999 in excess of $100,000.

SUMMARY COMPENSATION TABLE

		ANNUAL COMPENSATION			LONG TERM COMPENSATION AWARDS SECURITIES UNDERLYING
NAME AND PRINCIPAL POSITION	YEAR	SALARY	BONUS	OTHER	OPTIONS
Alvin J. Glasky, Ph.D	1999	$210,954	--	$ --	275,000
Chairman, Chief Executive Officer	1998	199,998	--	--	65,000
and President	1997	199,992(1)	--	--	
Stephen Runnels	1999	167,701	--	--	10,000
Executive Vice President	1998	165,940	--	--	25,000
	1997	108,513(3)	--	$ 25,107(2)	62,000
Samuel Gulko	1999	118,165	--	--	60,000
Chief Financial Officer,	1998	109,250	--	--	25,000
Secretary and Treasurer	1997	78,000(4)	--	--	6,000

(1) Excludes prior years accrued salaries of $265,328 and auto allowances and expense account reimbursements

previously accrued aggregating $84,516, all of which were paid in 1997.

(2) Represents a one-time relocation allowance.

(3) Commenced employment in April 1997.

(4) Employed in 1997 on a part-time basis.

OPTION GRANTS

The following table sets forth information concerning stock options granted during the fiscal year ended December 31, 1999 to the Named Executive Officers:

OPTION GRANTS IN LAST FISCAL YEAR

NAME	OPTIONS GRANTED(1) (NO. OF SHARES)	PERCENTAGE OF TOTAL OPTIONS GRANTED TO EMPLOYEES IN FISCAL YEAR	EXERCISE PRICE ($/SHARE)	EXPIRATION DATE	POTENTIAL REALIZABLE VALUE AT ASSUMED ANNUAL RATES OF STOCK PRICE APPRECIATION FOR OPTION TERM(2)	
					5%	10%
Alvin J. Glasky	225,000(1)	41%	$ 10.25	May 6, 2009	$1,450,388	$3,675,569
	50,000(2)	9%	$ 12.188	Dec. 15, 2009	$ 383,248	$ 971,227
Stephen Runnels	10,000(2)	2%	$ 12.188	Dec. 15, 2009	$ 76,650	$ 194,245
Samuel Gulko	35,000(3)	6%	$ 10.25	May 6, 2009	$ 225,616	$ 571,755
	25,000(2)	5%	$ 12.188	Dec. 15, 2009	$ 191,624	$ 485,613

(1) The above options become exercisable in increments of 33.3% per year, commencing January 2, 2001.

(2) The above options become exercisable in increments of 25% per year, commencing one year after date of grant.

(3) The above options become exercisable as follows: 10,000 at the date of grant and 25,000 in increments of 25% per year, commencing one year after date of grant.

The potential realizable value is calculated from the exercise price per share, assuming the market price of our common stock appreciates in value at the stated percentage rate from the date of grant to the expiration date. Actual gains, if any, are dependent on the future market price of the common stock.

OPTIONS EXERCISED AND FISCAL YEAR-END VALUES

The following table sets forth information concerning stock options exercised during the fiscal year ended December 31, 1999, by the Named Executive Officers and the value of such officers' unexercised options at December 31, 1999:

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

NAME	NUMBER OF SHARES ACQUIRED ON EXERCISE	VALUE REALIZED	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS AT FISCAL YEAR-END		VALUE OF UNEXERCISED IN-THE-MONEY OPTIONS AT FISCAL YEAR-END(1)	
			EXERCISABLE	UNEXERCISABLE	EXERCISABLE	UNEXERCISABLE
Alvin J. Glasky, Ph.D	-	$ --	156,923	71,250	$953,512	$287,531
Stephen Runnels	-	--	17,500	57,500	48,438	178,438
Samuel Gulko	-	--	13,000	22,000	46,313	58,563

(1) Based upon the closing price of the common stock on December 31, 1999, as reported by the NASDAQ National Market of $10.50 per share.

EMPLOYMENT AGREEMENT

We have entered into an employment agreement with Dr. Alvin J. Glasky, effective as of January 1, 2000. The agreement requires Dr. Glasky to devote all of his productive time, attention, knowledge and skill to the affairs of the Company during the term of the agreement. The agreement provides for an annual base salary of $215,000 with annual increases and periodic bonuses as determined by the Board of Directors. The agreement ends on December 31, 2003, and may be terminated by us with or without cause as defined in the agreement. The agreement also provides for guaranteed severance payments equal to Dr. Glasky's annual base salary over the remaining life of the agreement upon the termination of employment without cause or upon a change in control of us. In connection with entering into this agreement, we granted to Dr. Glasky a stock option to purchase 225,000 shares of common stock at an exercise price of $10.25 per share, which vests in three equal annual increments.

COMPENSATION OF DIRECTORS

Each of our non-employee directors receives $1,000 for each Board of Directors meeting and $500 for each committee meeting attended, with the Chairperson of the Committee receiving $1,000. The directors are also reimbursed for certain expenses in connection with attendance at Board meetings. In June 1999, we granted to each non-employee director an option to purchase 10,000 shares of common stock at $13.00 per share. In December 1999, we granted to six of our non-employee directors an option for each to purchase 2,000 shares of common stock at $12.188 per share. Commencing in the year 2000, non-employee Board members who served on the Litigation and Special Function Committees will be compensated at the rate of $150 per hour; no compensation was paid for representation on these Committees in 1999.

STOCK OPTION PLANS

We have two stock option plans: the 1991 Stock Incentive Plan (the "1991 Plan") and the 1997 Stock Incentive Plan (the "1997 Plan") (the "Plans"). The Plans were adopted by our stockholders and Board of Directors in May 1991 and June 17, 1997, respectively.

The 1991 Incentive Stock Option Plan

The 1991 Plan, as amended, provides for grants of "incentive stock options" within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended (the "Code"), nonqualified stock options, stock appreciation rights ("SARs") and bonus stock. The 1991 Plan, as amended, authorizes for issuance up to 401,430 shares of our common stock. Under the 1991 Plan, incentive stock options may be granted to employees, and nonqualified stock options, SARs and bonus stock may be granted to our employees and other persons whose participation in the 1991 Plan we determined to be in our best interest. As of December 31, 1999, there were options to purchase 180,000 shares of common stock outstanding under the 1991 Plan.

The 1997 Incentive Stock Option Plan

The 1997 Plan provides for grants of "incentive stock options" within the meaning of the Code, nonqualified stock options and rights to purchase shares of our common stock ("Purchase Rights"). The 1997 Plan authorized for issuance up to 1,250,000 shares of our common stock, subject to adjustment in the number and kind of shares subject to the 1997 Plan and to outstanding shares in the event of stock splits, stock dividends or certain other similar changes in our capital structure. Under the 1997 Plan, we may grant incentive stock options, nonqualified stock options and Purchase Rights to our employees and employees of our subsidiaries and affiliates. We also may grant nonqualified stock options and Purchase Rights to our employees and employees of our subsidiaries and affiliates and non-employee directors, consultants and other service providers. As of December 31, 1999, there were options to purchase 756,025 shares of common stock outstanding under the 1997 Plan.

The Compensation Committee of the Board of Directors (the "Committee") administers the Plans and has sole discretion and authority, consistent with the provisions of the Plans, to determine which eligible participants will receive options, the time when options will be granted, the terms of options granted and the number of shares which will be subject to options granted under the Plans.

In the event of our merger with or into another corporation or the sale of substantially all of our assets, any outstanding options and SARs granted under the Plans shall be assumed or equivalent options and SARs substituted by the successor corporation. In the event a successor corporation does not assume or substitute the options and SARs, the exercisability of the options and SARs under the 1991 Plan shall be accelerated. The vesting of all options outstanding under the 1997 Plan will accelerate upon a change in control of us, regardless of whether the options are assumed or new options are issued by the successor corporation.

The exercise price of incentive stock options must be not less than the fair market value of a share of common stock on the date that the option is granted (110% with respect to optionees who own at least 10%

of the outstanding common stock). Nonqualified options shall have such exercise price as determined by the Committee. The Committee has the authority to determine the time or times at which options granted under the Plans become exercisable, provided that options expire no later than ten years from the date of grant (five years with respect to optionees who own at least 10% of the outstanding common stock). Options are nontransferable, other than upon death, by will and the laws of descent and distribution, and incentive stock options may be exercised only by an employee while employed by us or within three months after termination of employment (one year for termination resulting from death or disability).

SECTION 401(k) PLAN

In January 1990, we adopted the AIT Cash or Deferred Profit Sharing Plan (the "401(k) Plan") covering our full-time employees located in the United States. The 401(k) Plan is intended to qualify under Section 401(k) of the Code, so that contributions to the 401(k) Plan by our employees or us, and the investment earnings thereon, are not taxable to employees until withdrawn from the 401(k) Plan, and so that contributions made by us, if any, will be deductible by us when made. Pursuant to the 401(k) Plan, employees may elect to reduce their current compensation by up to the statutorily prescribed annual limit ($10,500 in 1999) and to have the amount of such reduction contributed to the 401(k) Plan. The 401(k) Plan permits, but does not require, us to make additional matching contributions to the 401(k) Plan on behalf of all participants in the 401(k) Plan. We have not made any contributions to the 401(k) Plan.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information with respect to the beneficial ownership of our common stock as of March 22, 2000 by (i) each person, or group of affiliated persons, who is known by us to own beneficially 5% or more of the common stock, (ii) each of our directors, (iii) each of the Named Executive Officers, and (iv) all of our executive officers and directors as a group. The information as to each person or entity has been furnished by such person or entity, and unless otherwise indicated, the persons named in the table have sole voting and sole investment power with respect to all shares beneficially owned, subject to community property laws where applicable.

NAME AND ADDRESS OF BENEFICIAL OWNERSHIP(1)	SHARES BENEFICIALLY OWNED(1)	PERCENT OF SHARES OUTSTANDING
Alvin J. Glasky, Ph.D.(2) ..... 157 Technology Drive Irvine, CA 92618	1,358,997	13.8%
Ingalls & Snyder, L.L.C.(3)	1,701,160	17.8%
Samuel Gulko(4)	63,733	*
Stephen Runnels(5)	55,000	*
Michelle S. Glasky, Ph.D.(6)(7)	43,480	*
Mark J. Glasky(8)(9)	56,479	*
Ann C. Kessler, Ph.D.(10)	2,500	*
Armin M. Kessler(10)	2,500	*
Frank M. Meeks(11)	68,460	*
Eric L. Nelson, Ph.D.(12)	64,500	*
Carol O'Cleireacain, Ph.D.(13)	48,000	*
Joseph Rubinfeld, Ph.D.(12)	18,000	*

Paul H. Silverman, Ph.D., D.Sc.(13)	48,000	*
D. Scott Wieland, Ph.D., MBA(14)	3,750	*
All Executive Officers and Directors as a group (13 persons)(15)	1,833,399	18%

- ---------------

* less than 1%

(1) Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and generally includes voting or investment power with respect to securities. Shares of common stock subject to options and warrants currently exercisable or convertible, or exercisable or convertible within 60 days of March 22, 2000, are deemed beneficially owned and outstanding for computing the percentage of the person holding such securities, but are not considered outstanding for computing the percentage of any other person.

(2) Includes 215,000 shares subject to options held by Dr. Alvin J. Glasky and 19,750 shares subject to options held by Rosalie H. Glasky, which are currently exercisable or exercisable within 60 days of March 22, 2000. Also includes 88,173 shares issuable within 60 days of March 22, 2000, upon exercise of the Glasky warrant, 4,000 shares owned by the NeoTherapeutics, Inc. 401(k) Plan, and 23,149 shares beneficially owned by Dr. Glasky's wife, Rosalie H. Glasky. Does not include 56,479 shares beneficially owned by Mark J. Glasky and 43,480 shares beneficially owned by Dr. Michelle S. Glasky, Dr. Glasky's adult children, for which Dr. Glasky disclaims beneficial ownership.

(3) Based on a Schedule 13G filed with the Securities and Exchange Commission on February 11, 2000, Ingalls & Synder, L.L.C. reported that it had sole voting and dispositive power over 192,637 shares, including 29,825 shares issuable upon the exercise of warrants, and sole voting and shared dispositive power over 1,508,523 shares, including 175,175 shares issuable upon exercise of warrants.

(4) Includes 50,033 shares subject to options held by Mr. Gulko which are currently exercisable or exercisable within 60 days of March 22, 2000, 1050 shares subject to currently exercisable warrants and 1,300 shares owned by the Sam Gulko CPA Defined Contribution Employee Benefit Plan.

(5) Includes 55,000 shares subject to options held by Mr. Runnels which are currently exercisable or exercisable within 60 days of March 22, 2000.

(6) Michelle S. Glasky, Ph.D., is the adult daughter of Dr. Alvin J. Glasky.

(7) Includes 36,000 shares subject to options held by Dr. Michelle S. Glasky which are currently exercisable or exercisable within 60 days of March 22, 2000, and 500 shares subject to currently exercisable warrants.

(8) Mark J. Glasky is the adult son of Dr. Alvin J. Glasky.

(9) Includes 38,000 shares subject to options held by Mr. Glasky which are currently exercisable or exercisable within 60 days of March 22, 2000, and 1,000 shares subject to currently exercisable warrants.

(10) Includes 2,500 shares subject to options held by each of Dr. Ann Kessler and Armin M. Kessler which are currently exercisable or exercisable within 60 days of March 22, 2000. Dr. Ann Kessler and Armin M. Kessler are husband and wife.

(11) Includes 38,000 shares subject to options held by Mr. Meeks which are currently exercisable or exercisable within 60 days of March 22, 2000. Does not include 460 shares beneficially owned by Mr. Meeks' wife, for which Mr. Meeks disclaims beneficial ownership.

(12) Includes 18,000 shares subject to options held by each of Drs. Nelson and Rubinfeld which are currently exercisable or exercisable within 60 days of March 22, 2000.

(13) Includes 38,000 shares subject to options held by each of Drs. O'Cleireacain and Silverman, which are currently exercisable or exercisable within 60 days of March 22, 2000.

(14) Includes 3,750 shares subject to options held by Dr. Wieland, which are currently exercisable or exercisable within 60 days of March 22, 2000.

(15) Includes 88,173 shares issuable upon the exercise of the Glasky warrant, 572,833 shares subject to options which are currently exercisable or exercisable within 60 days of March 22, 2000, and 2,550 shares subject to currently exercisable warrants.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

In September 1990, the Company issued a warrant to Dr. Alvin J. Glasky (the "Glasky warrant") to purchase up to 88,173 shares of common stock of the Company at any time between September 1, 1990, and August 31, 1995, for $3.75 per share. Effective August 31, 1995, the expiration date of the Glasky warrant was extended to August 31, 2000.

In December 1998, we were served with a lawsuit initiated by four of our former employees. The lawsuit, which was filed in the Superior Court of Orange County, California, also named Dr. Alvin J. Glasky, the Company's founder and Chief Executive Officer, as a defendant. The lawsuit arises from a dispute concerning the termination, as of December 31, 1997, of agreements entered into as of June 1990 and December 1993 between the Company and each of the former employees, pursuant to which the employees agreed to accept an aggregate of 278,590 shares of our common stock, subject to forfeiture provisions, in exchange for the cancellation of indebtedness owed to them by the Company arising from unpaid compensation and expenses in the total amount of $458,411. Pursuant to these agreements, the employees were not entitled to keep the shares unless we achieved certain revenue goals by a specified date, as determined by our independent auditors in accordance with generally accepted accounting principles. The revenue goals were not met and we demanded that the forfeited shares be returned pursuant to the terms of the agreements. In the lawsuit the plaintiffs alleged, among other things, that our cumulative revenues of the Company were met and that the defendants fraudulently induced the plaintiffs into entering into the agreements and the subsequent amendments to the agreements. The lawsuit asked for damages in excess of $4,000,000 or, in the alternative, that the forfeiture restrictions be removed and the plaintiffs be allowed to keep their shares of common stock. The plaintiffs also sought punitive damages and reimbursement of attorneys' fees and costs. In March 1999, we filed a cross-complaint against the plaintiffs to seek a determination that the plaintiffs' shares have in fact been forfeited, and to obtain a court order requiring the plaintiffs to return their shares to the Company for cancellation. At the same time that the plaintiffs entered into their agreement with the Company in 1990 and 1993, Dr. Alvin J. Glasky and his wife, who were then and are now our employees, also entered into agreements with us that were identical to those entered into by the plaintiffs, pursuant to which Dr. and Mrs. Glasky received an aggregate of 400,246 shares of common stock subject to identical forfeiture provisions, in exchange for the cancellation of indebtedness owed to them by the Company arising from unpaid compensation and expenses in the total amount of $755,531. Dr. and Mrs. Glasky entered into an agreement with the Company on December 21, 1998, pursuant to which they agreed to surrender for cancellation the same proportion of their restricted shares as the plaintiffs are required to surrender based on the final resolution of the lawsuit. Until we settled this, we accounted for all of these shares, which we deemed to be forfeited, as issued and outstanding.

On December 15, 1999, we entered into a settlement agreement with the plaintiffs. The agreement provided that each of the parties pay their own legal fees and that the plaintiffs forfeit 51%, or 142,081 of their shares of common stock. In addition, the plaintiffs received three-year warrants to purchase an aggregate of 6,826 shares of common stock at $13.00 per share. Pursuant to the settlement terms of the litigation and in accordance with the terms of their agreement with us, Dr. and Mrs. Glasky forfeited 204,125 shares of their common stock and received identical warrants to purchase 9,806 shares of common stock. Accordingly, of the 678,836 total number of shares in dispute, we cancelled 346,206 shares and retained as

outstanding 332,630 shares of common stock. We recorded a charge to operations in the fourth quarter of 1999 in the net amount of $2,458,359, representing the increase from 1995, the date of the previous reissuance of shares of common stock under this transaction, in the market value of the shares that remained outstanding ($2,357,005) plus the value of the warrants issued ($101,355).

On June 6, 1991, the Company entered into an agreement (the "1991 Patent Agreement") with Dr. Alvin Glasky whereby Dr. Glasky assigned to the Company all rights to the inventions covered by United States Patent No. 5,091,432 and any corresponding foreign applications and patents, including all continuations, divisions, reissues and renewals of said applications and any patents issued out of or based upon said applications (the "Assigned Rights"). The 1991 Patent Agreement was amended on July 26, 1996. The 1991 Patent Agreement, as amended, calls for the Company to pay Dr. Glasky a two percent royalty on all revenues derived by the Company from the use and sale by the Company of any products covered by these patents and applications or any patents derived from them. In the event that Dr. Glasky's employment is terminated by the Company without cause, the royalty rate shall be increased to five percent and in the event that Dr. Glasky dies during the term of the 1991 Patent Agreement, Dr. Glasky's family or estate shall be entitled to continue to receive royalties at the rate of two percent. The 1991 Patent Agreement terminates on the later of its ten year anniversary or the expiration of the final patent included within the Assigned Rights. On June 30, 1996, the Company and Dr. Glasky entered into an agreement whereby Dr. Glasky assigned to AIT all rights to the inventions covered by United States Patent No. 5,447,939 (the "1996 Patent Agreement"). The scope of the 1996 Patent Agreement as well as its terms and conditions are identical in all material respects to the 1991 Patent Agreement; provided, however, that the aggregate royalty amount with respect to any product shall be two percent (five percent in the event of termination without cause), even if a product is based on both patents. The 1996 Patent Agreement was also amended on July 26, 1996. Dr. Glasky will not receive any royalties with respect to sales of products, which utilize patent rights licensed to the Company by McMaster University. A third patent which was issued September 1, 1998 and a fourth patent, issued on February 22, 2000, are also subject to the royalty provisions of the 1996 Patent Agreement. See "ITEM 1 - Business - Patents and Proprietary Rights."

On December 31, 1993, the Company issued 200,000 shares of common stock to Dr. Glasky in exchange for cancellation of $500,000 of indebtedness for loans made by Dr. Glasky to the Company. Dr. Glasky received certain registration rights with respect to these shares. The remaining $257,900 in principal on the loans payable and accrued interest of $300,404 due to Dr. Glasky were converted into a $558,304 promissory note which, as amended from time to time, is currently unsecured, bears interest at 9% per annum, and is payable upon demand.

ITEM 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K

a) Exhibits.

EXHIBIT NO.	DESCRIPTION
3.1	Certificate of Incorporation of the Registrant, as filed on May 7, 1997. (Filed as Exhibit B to the Definitive Proxy Statement dated May 8, 1997, for the Annual Meeting of Shareholders of NeoTherapeutics Colorado, the predecessor to Registrant, held on June 17, 1997, as filed with the Securities and Exchange Commission on May 9, 1997, and incorporated herein by reference.)
3.2	Bylaws of the Registrant, as amended on March 24, 2000.
4.1	Form of Registration Rights Agreement dated as of July 23, 1996, entered into between the Registrant and certain investors named therein. (Filed as Exhibit 4.1 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
4.2	Form of Registration Rights Agreement dated December 30, 1993, entered into between the Registrant and each of Alvin J. Glasky, Sanford J. Glasky, Joanne Law, Luana M. Kruse, Rosalie H. Glasky and John W. Baldridge. (Filed as Exhibit 4.2 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
4.3	Form of Representatives' Warrant Agreement dated as of September 25, 1996, entered into in connection with the public offering of the Company's securities on September 26, 1996. (Filed as Exhibit 4.3 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
4.4	Form of Stock Purchase Agreement dated December 30, 1993, including amendment effective December 30, 1995, between the Registrant and each of Alvin J. Glasky, Sanford Glasky, Joanne Law, Luana Kruse, Rosalie Glasky and John Baldridge. (Filed as Exhibit 4.4 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
4.5	Form of Stock Purchase Agreement dated June 30, 1990, as amended on May 27, 1992, June 30, 1993, and December 30, 1993, and amendment thereto effective December 30, 1995, between the Registrant and each of Alvin J. Glasky, Sanford Glasky, Joanne Law, Luana Kruse, Rosalie Glasky and John Baldridge. (Filed as Exhibit 4.5 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
4.6	Warrant Agreement entered into between NeoTherapeutics, Inc. and U.S. Stock Transfer Corporation dated as of September 25, 1996. (Filed as Exhibit 4.6 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
4.7	Private Equity Line of Credit Agreement between Registrant and Kingsbridge Capital Limited dated as of March 27, 1998. (Filed as Exhibit 4.1 to the Registrant's Registration Statement on form S-3 (No. 333-52331), and incorporated herein by reference.)
4.8	Registration Rights Agreement between Registrant and Kingsbridge Capital Limited dated as of March 27, 1998. (Filed as Exhibit 4.2 to the Registrant's Registration Statement on form S-3 (No. 333-52331), and incorporated herein by reference.)
4.9	Warrant to Purchase up to 25,000 shares of common stock of Registrant, issued to Kingsbridge Capital Limited as of March 27, 1998. (Filed as Exhibit 4.3 to the Registrant's Registration Statement on Form S-3 (No. 333-52331), and incorporated herein by reference.)

EXHIBIT NO.	DESCRIPTION
4.10	Certificate of Designation of 5% Series A Preferred Stock with Conversion Features. (Filed as Exhibit 4.1 to Form 8-K, as filed with the Securities and Exchange Commission on February 9, 1999, and incorporated herein by reference.)
4.11	Preferred Stock Purchase Agreement dated as of January 29, 1999, by and among Registrant, Westover Investments L.P. and Montrose Investments Ltd. (Filed as Exhibit 4.2 to Form 8-K, as filed with the Securities and Exchange Commission on February 9, 1999, and incorporated herein by reference.)
4.12	Registration Rights Agreement dated as of January 29, 1999, by and among Registrant, Westover Investments L.P. and Montrose Investments Ltd. (Filed as Exhibit 4.3 to Form 8-K, as filed with the Securities and Exchange Commission on February 9, 1999, and incorporated herein by reference).
4.13	Form of warrant issued by Registrant to Westover Investments L.P. and Montrose Investments Ltd. dated as of January 29, 1999. (Filed as Exhibit 4.4 to Form 8-K, as filed with the Securities and Exchange Commission on February 9, 1999, and incorporated herein by reference.)
4.14	Securities Purchase Agreement dated as of November 19, 1999, by and among Registrant, Strong River Investments, Inc. and Montrose Investments Ltd. (Filed as Exhibit 4.1 to Form 8-K as filed with the Securities and Exchange Commission on November 19, 1999, and incorporated herein by reference.)
4.15	Registration Rights Agreement dated as of November 19, 1999, by and among Registrant, Strong River Investments, Inc. and Montrose Investments Ltd. (Filed as Exhibit 4.1 to Form 8-K as filed with the Securities and Exchange Commission on November 19, 1999, and incorporated herein by reference.)
4.16	Closing Warrant issued by Registrant to Montrose Investments Ltd., dated as of November 19, 1999. (Filed as Exhibit 4.1 to Form 8-K as filed with the Securities and Exchange Commission on November 19, 1999, and incorporated herein by reference.)
4.17	Closing Warrant issued by Registrant to Strong River Investments, Inc., dated as of November 19, 1999. (Filed as Exhibit 4.1 to Form 8-K as filed with the Securities and Exchange Commission on November 19, 1999, and incorporated herein by reference.)
4.18	Adjustable Warrant issued by Registrant to Montrose Investments Ltd., dated as of November 19, 1999. (Filed as Exhibit 4.1 to Form 8-K as filed with the Securities and Exchange Commission on November 19, 1999, and incorporated herein by reference.)
4.19	Adjustable Warrant issued by Registrant to Strong River Investments, Inc., dated as of November 19, 1999. (Filed as Exhibit 4.1 to Form 8-K as filed with the Securities and Exchange Commission on November 19, 1999, and incorporated herein by reference.)
4.20	Securities Purchase Agreement dated as of February 25, 2000, by and among Registrant, Montrose Investments Ltd. and Strong River Investments, Inc. (Filed as Exhibit 4.1 to Form 8-K as filed with the Securities and Exchange Commission on April 3, 2000, and incorporated herein by reference.)
4.21	Registration Rights Agreement dated as of February 25, 2000, by and among Registrant, Montrose Investments Ltd. and Strong River Investments, Inc. (Filed as Exhibit 4.2 to Form 8-K as filed with the Securities and Exchange Commission on April 3, 2000, and incorporated herein by reference.)

EXHIBIT NO.	DESCRIPTION
4.22	Closing Warrant issued by Registrant to Montrose Investments Ltd., dated as of February 25, 2000. (Filed as Exhibit 4.3 to Form 8-K as filed with the Securities and Exchange Commission on April 3, 2000, and incorporated herein by reference.)
4.23	Closing Warrant issued by Registrant to Strong River Investments, Inc., dated as of February 25, 2000. (Filed as Exhibit 4.4 to Form 8-K as filed with the Securities and Exchange Commission on April 3, 2000, and incorporated herein by reference.)
10.1*	1991 Stock Incentive Plan. (Filed as Exhibit 10.2 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
10.2*	Employment Agreement between the Registrant and Alvin J. Glasky, Ph.D. (Filed as Exhibit 10.3 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
10.3	Note dated June 21, 1996, between the Registrant and Alvin J. Glasky and related Security Agreement dated August 31, 1990. (Filed as Exhibit 10.4 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
10.4	Warrant to purchase common stock of the Registrant dated August 31, 1990, held by Alvin J. Glasky. (Filed as Exhibit 10.6 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
10.5	Agreement dated as of June 6, 1991, as amended on July 26, 1996, by and between the Registrant and Alvin J. Glasky. (Filed as Exhibit 10.7 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
10.6	Agreement dated as of June 30, 1991, as amended on July 26, 1996, by and between the Registrant and Alvin J. Glasky. (Filed as Exhibit 10.8 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
10.7*	Form of Indemnification Agreement between the Registrant and each of its officers and directors. (Filed as Exhibit 10.10 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
10.8	Underwriting Agreement dated as of September 25, 1996, among the Company, Paulson Investment Company, Inc. and First Colonial Securities Group, Inc. (Filed as Exhibit 1.1 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
10.9	Industrial Lease Agreement dated January 16, 1997, between the Company and the Irvine Company. (Filed as Exhibit 10.11 to the Form 10-KSB for the fiscal year ended December 31, 1996, as filed with the Securities and Exchange Commission on March 31, 1997, and incorporated herein by reference).
10.10	Addendum to Note dated June 21, 1996, between the Registrant and Alvin J. Glasky. (Filed as Exhibit 10.12 to the Form 10-KSB for fiscal year ended December 31, 1996, as filed with the Securities and Exchange Commission on March 31, 1997, and incorporated herein by reference).
10.11*	1997 Stock Incentive Plan. (Filed as Exhibit D to the Definitive Proxy Statement dated May 8, 1997, for the Annual Meeting of Shareholders of NeoTherapeutics Colorado, the predecessor to Registrant, held on June 17, 1997, as filed with the Securities and Exchange Commission on May 9, 1997, and incorporated herein by reference).

EXHIBIT NO.	DESCRIPTION
10.12	Master Note and Security Agreement between the Registrant and Leasing Technologies, Inc. dated as of July 10, 1998. (Filed as Exhibit 4 to Form 10-QSB for the quarter ended September 30, 1998, as filed with the Securities and Exchange Commission on November 9, 1998, and incorporated herein by reference.)
10.13	Employment Agreement entered into as of May 6, 1999 between Alvin J. Glasky, Ph.D. and NeoTherapeutics, Inc. (Filed as Exhibit 10.14 to the Registration Statement on form S-1 (No. 333-79935), and incorporated herein by reference.)
10.14	Form of Financial Consulting Agreement between the Registrant and Joseph Charles & Associates, Inc. entered into in connection with the public offering of the Registrant's securities on July 27, 1999. (Filed as Exhibit 1.4 to the Registration Statement on Form S-1 (No. 333-79935), and incorporated herein by reference.)
10.15	Underwriting Agreement between the Registrant and Joseph Charles & Associates, Inc. entered into in connection with the public offering of the Registrant's securities on July 27, 1999. (Filed as Exhibit 1.1 to the Registration Statement on Form S-1, as amended (No. 333-79935), and incorporated herein by reference.)
21	Subsidiaries of Registrant.
27	Financial Data Schedule.

- ----------

* Indicates a management contract or compensatory plan or arrangement.

(b) Reports on Form 8-K. The Registrant filed a Report on Form 8-K dated January 27, 1999, to report a press releases issued to the public on January 27, 1999. The Registrant filed Reports on Form 8-K dated January 29, 1999, November 19, 1999, and April 3, 2000 to report financing transactions.

SIGNATURES

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

NEOTHERAPEUTICS, INC.

Date: April 12, 2000 By: /s/ Alvin J. Glasky
Alvin J. Glasky, Ph.D.
President and Chief Executive Officer

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

SIGNATURE	TITLE	DATE
/s/ Alvin J. Glasky Alvin J. Glasky, Ph.D.	Chairman of the Board, Chief Executive Officer, President and Director (Principal Executive Officer)	April 12, 2000
/s/ Samuel Gulko Samuel Gulko	Chief Financial Officer, Secretary, Treasurer and Director (Principal Accounting and Financial Officer)	April 12, 2000
/s/ Mark J. Glasky Mark J. Glasky	Director	April 12, 2000
/s/ Ann C. Kessler Ann C. Kessler, Ph.D.	Director	April 12, 2000
/s/ Armin M. Kessler Armin M. Kessler	Director	April 12, 2000
/s/ Frank M. Meeks Frank M. Meeks	Director	April 12, 2000
/s/ Carol O'Cleireacain Carol O'Cleireacain, Ph.D.	Director	April 12, 2000
/s/ Paul H. Silverman Paul H. Silverman Ph.D., D.Sc.	Director	April 12, 2000
/s/ Stephen Runnels Stephen Runnels	Executive Vice President and Director	April 12, 2000
/s/ Eric L. Nelson Eric L. Nelson, Ph.D.	Director	April 12, 2000
/s/ Joseph Rubinfeld Joseph Rubinfeld, Ph.D.	Director	April 12, 2000

EXHIBIT INDEX

EXHIBIT NO.	DESCRIPTION
3.1	Certificate of Incorporation of the Registrant, as filed on May 7, 1997. (Filed as Exhibit B to the Definitive Proxy Statement dated May 8, 1997, for the Annual Meeting of Shareholders of NeoTherapeutics Colorado, the predecessor to Registrant, held on June 17, 1997, as filed with the Securities and Exchange Commission on May 9, 1997, and incorporated herein by reference.)
3.2	Bylaws of the Registrant, as amended on March 24, 2000.
4.1	Form of Registration Rights Agreement dated as of July 23, 1996, entered into between the Registrant and certain investors named therein. (Filed as Exhibit 4.1 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
4.2	Form of Registration Rights Agreement dated December 30, 1993, entered into between the Registrant and each of Alvin J. Glasky, Sanford J. Glasky, Joanne Law, Luana M. Kruse, Rosalie H. Glasky and John W. Baldridge. (Filed as Exhibit 4.2 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
4.3	Form of Representatives' Warrant Agreement dated as of September 25, 1996, entered into in connection with the public offering of the Company's securities on September 26, 1996. (Filed as Exhibit 4.3 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
4.4	Form of Stock Purchase Agreement dated December 30, 1993, including amendment effective December 30, 1995, between the Registrant and each of Alvin J. Glasky, Sanford Glasky, Joanne Law, Luana Kruse, Rosalie Glasky and John Baldridge. (Filed as Exhibit 4.4 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
4.5	Form of Stock Purchase Agreement dated June 30, 1990, as amended on May 27, 1992, June 30, 1993, and December 30, 1993, and amendment thereto effective December 30, 1995, between the Registrant and each of Alvin J. Glasky, Sanford Glasky, Joanne Law, Luana Kruse, Rosalie Glasky and John Baldridge. (Filed as Exhibit 4.5 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
4.6	Warrant Agreement entered into between NeoTherapeutics, Inc. and U.S. Stock Transfer Corporation dated as of September 25, 1996. (Filed as Exhibit 4.6 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
4.7	Private Equity Line of Credit Agreement between Registrant and Kingsbridge Capital Limited dated as of March 27, 1998. (Filed as Exhibit 4.1 to the Registrant's Registration Statement on form S-3 (No. 333-52331), and incorporated herein by reference.)
4.8	Registration Rights Agreement between Registrant and Kingsbridge Capital Limited dated as of March 27, 1998. (Filed as Exhibit 4.2 to the Registrant's Registration Statement on form S-3 (No. 333-52331), and incorporated herein by reference.)
4.9	Warrant to Purchase up to 25,000 shares of common stock of Registrant, issued to Kingsbridge Capital Limited as of March 27, 1998. (Filed as Exhibit 4.3 to the Registrant's Registration Statement on Form S-3 (No. 333-52331), and incorporated herein by reference.)

EXHIBIT NO.	DESCRIPTION
4.10	Certificate of Designation of 5% Series A Preferred Stock with Conversion Features. (Filed as Exhibit 4.1 to Form 8-K, as filed with the Securities and Exchange Commission on February 9, 1999, and incorporated herein by reference.)
4.11	Preferred Stock Purchase Agreement dated as of January 29, 1999, by and among Registrant, Westover Investments L.P. and Montrose Investments Ltd. (Filed as Exhibit 4.2 to Form 8-K, as filed with the Securities and Exchange Commission on February 9, 1999, and incorporated herein by reference.)
4.12	Registration Rights Agreement dated as of January 29, 1999, by and among Registrant, Westover Investments L.P. and Montrose Investments Ltd. (Filed as Exhibit 4.3 to Form 8-K, as filed with the Securities and Exchange Commission on February 9, 1999, and incorporated herein by reference).
4.13	Form of warrant issued by Registrant to Westover Investments L.P. and Montrose Investments Ltd. dated as of January 29, 1999. (Filed as Exhibit 4.4 to Form 8-K, as filed with the Securities and Exchange Commission on February 9, 1999, and incorporated herein by reference.)
4.14	Securities Purchase Agreement dated as of November 19, 1999, by and among Registrant, Strong River Investments, Inc. and Montrose Investments Ltd. (Filed as Exhibit 4.1 to Form 8-K as filed with the Securities and Exchange Commission on November 19, 1999, and incorporated herein by reference.)
4.15	Registration Rights Agreement dated as of November 19, 1999, by and among Registrant, Strong River Investments, Inc. and Montrose Investments Ltd. (Filed as Exhibit 4.1 to Form 8-K as filed with the Securities and Exchange Commission on November 19, 1999, and incorporated herein by reference.)
4.16	Closing Warrant issued by Registrant to Montrose Investments Ltd., dated as of November 19, 1999. (Filed as Exhibit 4.1 to Form 8-K as filed with the Securities and Exchange Commission on November 19, 1999, and incorporated herein by reference.)
4.17	Closing Warrant issued by Registrant to Strong River Investments, Inc., dated as of November 19, 1999. (Filed as Exhibit 4.1 to Form 8-K as filed with the Securities and Exchange Commission on November 19, 1999, and incorporated herein by reference.)
4.18	Adjustable Warrant issued by Registrant to Montrose Investments Ltd., dated as of November 19, 1999. (Filed as Exhibit 4.1 to Form 8-K as filed with the Securities and Exchange Commission on November 19, 1999, and incorporated herein by reference.)
4.19	Adjustable Warrant issued by Registrant to Strong River Investments, Inc., dated as of November 19, 1999. (Filed as Exhibit 4.1 to Form 8-K as filed with the Securities and Exchange Commission on November 19, 1999, and incorporated herein by reference.)
4.20	Securities Purchase Agreement dated as of February 25, 2000, by and among Registrant, Montrose Investments Ltd. and Strong River Investments, Inc. (Filed as Exhibit 4.1 to Form 8-K as filed with the Securities and Exchange Commission on April 3, 2000, and incorporated herein by reference.)
4.21	Registration Rights Agreement dated as of February 25, 2000, by and among Registrant, Montrose Investments Ltd. and Strong River Investments, Inc. (Filed as Exhibit 4.2 to Form 8-K as filed with the Securities and Exchange Commission on April 3, 2000, and incorporated herein by reference.)

EXHIBIT NO.	DESCRIPTION
4.22	Closing Warrant issued by Registrant to Montrose Investments Ltd., dated as of February 25, 2000. (Filed as Exhibit 4.3 to Form 8-K as filed with the Securities and Exchange Commission on April 3, 2000, and incorporated herein by reference.)
4.23	Closing Warrant issued by Registrant to Strong River Investments, Inc., dated as of February 25, 2000. (Filed as Exhibit 4.4 to Form 8-K as filed with the Securities and Exchange Commission on April 3, 2000, and incorporated herein by reference.)
10.1*	1991 Stock Incentive Plan. (Filed as Exhibit 10.2 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
10.2*	Employment Agreement between the Registrant and Alvin J. Glasky, Ph.D. (Filed as Exhibit 10.3 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
10.3	Note dated June 21, 1996, between the Registrant and Alvin J. Glasky and related Security Agreement dated August 31, 1990. (Filed as Exhibit 10.4 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
10.4	Warrant to purchase common stock of the Registrant dated August 31, 1990, held by Alvin J. Glasky. (Filed as Exhibit 10.6 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
10.5	Agreement dated as of June 6, 1991, as amended on July 26, 1996, by and between the Registrant and Alvin J. Glasky. (Filed as Exhibit 10.7 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
10.6	Agreement dated as of June 30, 1991, as amended on July 26, 1996, by and between the Registrant and Alvin J. Glasky. (Filed as Exhibit 10.8 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
10.7*	Form of Indemnification Agreement between the Registrant and each of its officers and directors. (Filed as Exhibit 10.10 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
10.8	Underwriting Agreement dated as of September 25, 1996, among the Company, Paulson Investment Company, Inc. and First Colonial Securities Group, Inc. (Filed as Exhibit 1.1 to the Registration Statement on Form SB-2 as amended (No. 333-05342-LA), and incorporated herein by reference.)
10.9	Industrial Lease Agreement dated January 16, 1997, between the Company and the Irvine Company. (Filed as Exhibit 10.11 to the Form 10-KSB for the fiscal year ended December 31, 1996, as filed with the Securities and Exchange Commission on March 31, 1997, and incorporated herein by reference).
10.10	Addendum to Note dated June 21, 1996, between the Registrant and Alvin J. Glasky. (Filed as Exhibit 10.12 to the Form 10-KSB for fiscal year ended December 31, 1996, as filed with the Securities and Exchange Commission on March 31, 1997, and incorporated herein by reference).
10.11*	1997 Stock Incentive Plan. (Filed as Exhibit D to the Definitive Proxy Statement dated May 8, 1997, for the Annual Meeting of Shareholders of NeoTherapeutics Colorado, the predecessor to Registrant, held on June 17, 1997, as filed with the Securities and Exchange Commission on May 9, 1997, and incorporated herein by reference).

EXHIBIT NO.	DESCRIPTION
10.12	Master Note and Security Agreement between the Registrant and Leasing Technologies, Inc. dated as of July 10, 1998. (Filed as Exhibit 4 to Form 10-QSB for the quarter ended September 30, 1998, as filed with the Securities and Exchange Commission on November 9, 1998, and incorporated herein by reference.)
10.13	Employment Agreement entered into as of May 6, 1999 between Alvin J. Glasky, Ph.D. and NeoTherapeutics, Inc. (Filed as Exhibit 10.14 to the Registration Statement on form S-1 (No. 333-79935), and incorporated herein by reference.)
10.14	Form of Financial Consulting Agreement between the Registrant and Joseph Charles & Associates, Inc. entered into in connection with the public offering of the Registrant's securities on July 27, 1999. (Filed as Exhibit 1.4 to the Registration Statement on Form S-1 (No. 333-79935), and incorporated herein by reference.)
10.15	Underwriting Agreement between the Registrant and Joseph Charles & Associates, Inc. entered into in connection with the public offering of the Registrant's securities on July 27, 1999. (Filed as Exhibit 1.1 to the Registration Statement on Form S-1, as amended (No. 333-79935), and incorporated herein by reference.)
21	Subsidiaries of Registrant.
27	Financial Data Schedule.

- ----------

* Indicates a management contract or compensatory plan or arrangement.

EXHIBIT 3.2

BYLAWS
OF
NEOTHERAPEUTICS, INC.
A DELAWARE CORPORATION

ARTICLE I
OFFICES

SECTION 1. REGISTERED OFFICE. The registered office of the Corporation in the State of Delaware shall be in the City of Wilmington, County of New Castle.

SECTION 2. OTHER OFFICES. The Corporation may also have offices at such other places both within and without the State of Delaware as the Board of Directors may from time to time determine or the business of the Corporation may require.

SECTION 3. BOOKS. The books of the Corporation may be kept within or without the State of Delaware as the Board of Directors may from time to time determine or the business of the Corporation may require.

ARTICLE II
MEETINGS OF STOCKHOLDERS

SECTION 1. PLACE OF MEETINGS. All meetings of stockholders shall be held at such place either within or without the State of Delaware as may be designated from time to time by the Board of Directors.

SECTION 2. ANNUAL MEETINGS. Annual meetings of stockholders shall be held at a time and date designated by the Board of Directors for the purpose of electing directors and transacting such other business as may properly be brought before the meeting.

SECTION 3. SPECIAL MEETINGS. Special meetings of stockholders, for any purpose or purposes, unless otherwise prescribed by statute or by the Certificate of Incorporation, may be called by the Board of Directors, the Chairman of the Board, or by the Chief Executive Officer.

SECTION 4. NOTIFICATION OF BUSINESS TO BE TRANSACTED AT MEETING. At any meeting of the stockholders, only such business shall be conducted as shall have been properly brought before such meeting. To be brought properly before an annual meeting of stockholders, business must be (a) specified in the notice of meeting (or any supplement thereto) given by or at the direction of the Board of Directors, (b) otherwise properly brought before the meeting by or at the direction of the Board of Directors or the chairman of the meeting, or (c) otherwise properly brought before the meeting by a stockholder. For business to be properly brought before an annual meeting by a stockholder, the stockholder must have given timely notice thereof in writing to the Secretary of the Corporation. To be timely, a stockholder's notice must be received no less than sixty days nor more than ninety days prior to the first anniversary of the preceding year's annual meeting of stockholders; provided, however, that in the event that the date of the annual meeting is advanced by more than thirty days or delayed by more than sixty days from such anniversary, notice by the stockholder, to be timely, must be received not earlier than the ninetieth day prior to such annual meeting of

stockholders and not later than the close of business on the later of (a) the sixtieth day prior to such annual meeting or (b) the tenth day following the date on which notice of the date of the annual meeting was mailed or public disclosure thereof was made, whichever first occurs. Each such notice shall set forth as to each matter the stockholder proposes to bring before the annual meeting of stockholders: (a) a brief description of the business desired to be brought before the annual meeting of stockholders and the reasons for conducting such business at such meeting, (b) the name and address, as they appear on the Corporation's books, of the stockholder proposing such business, (c) the class, series, and number of shares of the Corporation that are beneficially owned by the stockholder, and (d) any material interest of the stockholder or any Affiliate of the stockholder in such business. The stockholder also shall comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder with respect to the matters set forth in this Section 4.

To be properly brought before a special meeting, business must be (a) specified in the notice of meeting (or any supplement thereto) given by or at the direction of the Board of Directors or (b) otherwise properly brought before the meeting by or at the direction of the Board of Directors or the chairman of the meeting. No other business may be brought before a special meeting by stockholders.

No business shall be conducted at any meeting of the stockholders except in accordance with the procedures set forth in this Section 4. The chairman of the meeting shall, if the facts warrant, determine and declare to the meeting that business was not properly brought before the meeting and in accordance with the provisions of this Section 4, and if he or she should so determine, any such business not properly brought before the meeting shall not be transacted. Nothing herein shall be deemed to affect any rights of stockholders to request inclusion of proposals in the Corporation's proxy statement pursuant to Rule 14a-8 under the Exchange Act or any successor provision.

SECTION 5. NOTICE; WAIVER OF NOTICE. Whenever stockholders are required or permitted to take any action at a meeting, a written notice of the meeting shall be given which shall state the place, date and hour of the meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called. Unless otherwise required by law, such notice shall be given not less than ten (10) nor more than sixty (60) days before the date of the meeting to each stockholder of record entitled to vote at such meeting. If mailed, such notice shall be deemed to be given when deposited in the United States mail, postage prepaid, directed to the stockholder at his address as it appears on the records of the Corporation. A written waiver of any such notice signed by the person entitled thereto, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends the meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

SECTION 6. QUORUM; ADJOURNMENT. Except as otherwise required by law, or provided by the Certificate of Incorporation or these Bylaws, the holders of a majority of the capital stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum for the transaction of business at all meetings of the stockholders. A meeting at which a quorum is initially present may continue to transact business, notwithstanding the withdrawal of enough votes to leave less than a quorum, if any action taken is approved by at least a majority of the required quorum to conduct that meeting. If, however, such quorum shall not be present or represented at any meeting of the stockholders, the majority of the stockholders entitled to vote thereat, present in person or represented by proxy, shall have power to adjourn the meeting from time to time, without notice other than announcement at the meeting of the time and place of the adjourned meeting, until a quorum

shall be present or represented. At such adjourned meeting at which a quorum shall be present or represented, any business may be transacted which might have been transacted at the meeting as originally noticed. If the adjournment is for more than thirty (30) days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder entitled to vote at the meeting.

SECTION 7. VOTING; PROXIES. At all meetings of stockholders at which a quorum is present for the election of directors a plurality of the votes cast shall be sufficient to elect. All other questions brought before a meeting of stockholders at which a quorum is present shall, unless otherwise provided by law, the Certificate of Incorporation or these Bylaws, be decided by the vote of the holders of the majority of stock represented and entitled to vote thereat. Unless otherwise provided in the Certificate of Incorporation, each stockholder represented at a meeting of stockholders shall be entitled to cast one vote for each share of the capital stock entitled to vote thereat held by such stockholder. Each stockholder entitled to vote at a meeting of stockholders or to express consent or dissent to corporate action in writing without a meeting may authorize another person or persons to act for him by proxy, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. A proxy shall be irrevocable if it states that it is irrevocable and if, and only as long as, it is coupled with an interest sufficient in law to support an irrevocable power. A stockholder may revoke any proxy which is not irrevocable by attending the meeting and voting in person or by filing an instrument in writing revoking the proxy or by delivering a proxy in accordance with applicable law bearing a later date to the Secretary of the Corporation. Elections of directors need not be by ballot unless the Chairman of the meeting so directs or unless a stockholder demands election by ballot at the meeting and before the voting begins.

SECTION 8. STOCKHOLDER ACTION BY WRITTEN CONSENT WITHOUT A MEETING. Except as otherwise provided in the Certificate of Incorporation, any action which may be taken at any annual or special meeting of stockholders, may be taken without a meeting and without prior notice, if a consent in writing, setting forth the action so taken, is signed by the holders of all of the outstanding shares entitled to vote thereon. All such consents shall be filed with the Secretary of the Corporation and shall be maintained in the corporate records.

SECTION 9. RECORD DATE. In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix, in advance, a record date, which shall not be more than sixty (60) days nor less than ten (10) days before the date of such meeting, nor more than sixty (60) days prior to any other action. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting. Stockholders on the record date are entitled to notice and to vote or to receive the dividend, distribution or allotment of rights or to exercise the rights, as the case may be, notwithstanding any transfer of any shares on the books of the Corporation after the record date, except as otherwise provided by agreement or by applicable law.

SECTION 10. LIST OF STOCKHOLDERS ENTITLED TO VOTE. The officer who has charge of the stock ledger of the Corporation shall prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of

each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least ten (10) days prior to the meeting, either at a place within the city where the meeting is to be held, which place shall be specified in the notice of the meeting, or, if not so specified, at the place where the meeting is to be held. The list shall also be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder of the Corporation who is present.

SECTION 11. STOCK LEDGER. The stock ledger of the Corporation shall be the only evidence as to who are the stockholders entitled to examine the stock ledger, the list required by Section 10 of this Article II or the books of the Corporation, or to vote in person or by proxy at any meeting of stockholders.

SECTION 12. INSPECTORS OF ELECTION. In advance of any meeting of stockholders, the Board of Directors may appoint one or more persons (who shall not be candidates for office) as inspectors of election to act at the meeting or any adjournment thereof. If an inspector or inspectors are not so appointed, or if an appointed inspector fails to appear or fails or refuses to act at a meeting, the Chairman of any meeting of stockholders may, and on the request of any stockholder or his proxy shall, appoint an inspector or inspectors of election at the meeting. The duties of such inspector(s) shall include: determining the number of shares outstanding and the voting power of each; the shares represented at the meeting; the existence of a quorum; the authenticity, validity and effect of proxies; receiving votes, ballots or consents; hearing and determining all challenges and questions in any way arising in connection with the right to vote; counting and tabulating all votes or consents; determining the result; and such acts as may be proper to conduct the election or vote with fairness to all stockholders. In the event of any dispute between or among the inspectors, the determination of the majority of the inspectors shall be binding.

SECTION 13. ORGANIZATION. At each meeting of stockholders the Chairman of the Board of Directors, if one shall have been elected, (or in his absence or if one shall not have been elected, the Chief Executive Officer) shall act as Chairman of the meeting. The Secretary (or in his or her absence or inability to act, the person whom the Chairman of the meeting shall appoint Secretary of the meeting) shall act as Secretary of the meeting and keep the minutes thereof.

SECTION 14. ORDER OF BUSINESS. The order and manner of transacting business at all meetings of stockholders shall be determined by the Chairman of the meeting.

SECTION 15. NOMINATION AND ELECTION OF DIRECTORS. Subject to the rights of holders of any class or series of stock having a preference over the Common Stock as to dividends or upon liquidation, dissolution or winding up of the Corporation, nominations for the election of directors shall be made by a nominating committee of the Board of Directors if then constituted pursuant to these Bylaws, or if no nominating committee has been constituted, by the Board of Directors. In addition, any stockholder entitled to vote in the election of directors generally may nominate one or more persons for election as directors at an annual meeting of stockholders, but only if written notice of such stockholder's intent to make such nomination or nominations has been received by the Secretary of the Corporation not less than sixty nor more than ninety days prior to the first anniversary of the preceding year's annual meeting of stockholders. In the event that the date of the annual meeting of stockholders is advanced by more than thirty days or delayed by more than sixty days from such anniversary, notice by the stockholder to be timely must be received by the Secretary of the Corporation not earlier than the ninetieth day prior to such annual meeting and not later than the close of business on the later of (a) the sixtieth day prior to such annual meeting or (b) the tenth

day following the day on which notice of the date of the annual meeting was mailed or public disclosure thereof was made by the Corporation, whichever first occurs. Each such notice by a stockholder shall set forth: (a) the name and address of the stockholder who intends to make the nomination and of the person or persons to be nominated; (b) a representation that the stockholder is a holder of record of stock of the Corporation entitled to vote at such meeting and intends to appear in person or by proxy at a meeting to nominate the person or persons specified in the notice; (c) a description of all arrangements or understandings between the stockholder or any person that directly or indirectly through one or more intermediaries controls, or is controlled by, or is under common control with, such stockholder (an "Affiliate" of such stockholder) and each nominee and any other person or persons (naming such person or persons) relating to the nomination or nominations; (d) the class and number of shares of the Corporation that are beneficially owned by such stockholder and the person to be nominated as of the date of such stockholder's notice and by any other stockholders known by such stockholder to be supporting such nominees as of the date of such stockholder's notice; (e) such other information regarding each nominee proposed by such stockholder as would be required to be included in a proxy statement filed pursuant to the proxy rules of the Securities and Exchange Commission; and (f) the written consent of each nominee to serve as a director of the Corporation if so elected. The stockholder also shall comply with all applicable requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the rules and regulations thereunder, with respect to the matters set forth in this Section 15.

In addition, in the event the Corporation calls a special meeting of stockholders for the purpose of electing one or more directors, any stockholder entitled to vote in the election of directors generally may nominate one or more persons for election as directors at a special meeting only if written notice of such stockholder's intent to make such nomination or nominations, setting forth the information and complying with the form described in the immediately preceding paragraph, has been received by the Secretary of the Corporation not earlier than the ninetieth day prior to such special meeting and not later than the close of business on the later of (i) the sixtieth day prior to such special meeting or (ii) the tenth day following the day on which notice of the date of the special meeting was mailed or public disclosure thereof was made by the Corporation, whichever comes first. The stockholder also shall comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder with respect to the matters set forth in this Section 15.

No person shall be eligible for election as a director of the Corporation unless nominated in accordance with the procedures set forth in this Section 15. The chairman of the meeting shall, if the facts warrant, determine and declare to the meeting that a nomination was not made in accordance with the procedures prescribed by this Section 15, and if he or she should so determine, the defective nomination shall be disregarded.

ARTICLE III
DIRECTORS

SECTION 1. POWERS. Except as otherwise required by law or provided by the Certificate of Incorporation, the business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors.

SECTION 2. NUMBER AND ELECTION OF DIRECTORS. Subject to any limitations in the Certificate of Incorporation, the authorized number of directors of the Corporation shall be set at five (5). The number of directors may be changed by an amendment to this Bylaw adopted by the affirmative vote of

a majority of the Board of Directors. Directors shall be elected at each annual meeting of stockholders to replace directors whose terms then expire, and, subject to the provisions of Section 3 of this Article III, each director elected shall hold office for a term of two (2) years or until his successor is duly elected and qualified, or until his earlier death, resignation or removal. Any director may resign at any time effective upon giving written notice to the Board of Directors, unless the notice specifies a later time for such resignation to become effective. Unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective. If the resignation of a director is effective at a future time, the Board of Directors may elect a successor prior to such effective time to take office when such resignation becomes effective. Directors need not be stockholders.

SECTION 3. CLASSIFIED BOARD OF DIRECTORS. The Board of Directors shall be divided into two classes, as nearly equal in number as possible, designated Class I and Class II. Class I shall consist of two (2) directors, who shall hold office for an initial term expiring at the first annual meeting of stockholders, and Class II shall consist of three (3) directors, who shall hold office for a full term expiring at the second annual meeting of stockholders. At each annual meeting of stockholders held thereafter, directors shall be elected for a full term to succeed the directors of the Class whose terms then expire.

SECTION 4. VACANCIES. Subject to the limitations in the Certificate of Incorporation, vacancies in the Board of Directors resulting from death, resignation, removal or otherwise and newly created directorships resulting from any increase in the authorized number of directors may be filled by a majority of the directors then in office, although less than a quorum, or by a sole remaining director. Each director so selected shall hold office for the remainder of the full term of office of the former director which such director replaces and until his successor is duly elected and qualified, or until his earlier death, resignation or removal. No decrease in the authorized number of directors constituting the Board of Directors shall shorten the term of any incumbent directors.

SECTION 5. TIME AND PLACE OF MEETINGS. The Board of Directors shall hold its meetings at such place, either within or without the State of Delaware, and at such time as may be determined from time to time by the Board of Directors.

SECTION 6. ANNUAL MEETING. The Board of Directors shall meet for the purpose of organization, the election of officers and the transaction of other business, as soon as practicable after each annual meeting of stockholders, on the same day and at the same place where such annual meeting shall be held. Notice of such meeting need not be given. In the event such annual meeting is not so held, the annual meeting of the Board of Directors may be held at such place, either within or without the State of Delaware, on such date and at such time as shall be specified in a notice thereof given as hereinafter provided in Section 8 of this Article III or in a waiver of notice thereof.

SECTION 7. REGULAR MEETINGS. Regular meetings of the Board of Directors may be held at such places within or without the State of Delaware at such date and time as the Board of Directors may from time to time determine and, if so determined by the Board of Directors, notices thereof need not be given.

SECTION 8. SPECIAL MEETINGS. Special meetings of the Board of Directors may be called by the Chairman of the Board, the Chief Executive Officer, or by any two (2) directors. Notice of the date, time and place of special meetings shall be delivered personally or by telephone to each director or sent by first-class mail or telegram, charges prepaid, addressed to each director at the director's address as it is shown on the records of the Corporation. In case the notice is mailed, it shall be deposited in the United States mail at least four (4) days before the time of the holding of the meeting. In case the notice is delivered personally or by telephone or telegram, it shall be delivered personally or by telephone or to the telegraph company at least forty-eight (48) hours before the time of the holding of the meeting. The notice need not specify the purpose of the meeting. A written waiver of any such notice signed by the person entitled thereto, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends the meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

SECTION 9. QUORUM; VOTE REQUIRED FOR ACTION; ADJOURNMENT. Except as otherwise required by law, or provided in the Certificate of Incorporation or these Bylaws, a majority of the directors shall constitute a quorum for the transaction of business at all meetings of the Board of Directors and the affirmative vote of not less than a majority of the directors present at any meeting at which there is a quorum shall be the act of the Board of Directors. If a quorum shall 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 shall be present. A meeting at which a quorum is initially present may continue to transact business, notwithstanding the withdrawal of directors, if any action taken is approved by at least a majority of the required quorum to conduct that meeting. When a meeting is adjourned to another time or place (whether or not a quorum is present), notice need not be given of the adjourned meeting if the time and place thereof are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the Board of Directors may transact any business which might have been transacted at the original meeting.

SECTION 10. ACTION BY WRITTEN CONSENT. Unless otherwise restricted by the Certificate of Incorporation, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting if all the members of the Board of Directors or committee, as the case may be, consent thereto in writing, and the writing or writings are filed with the minutes of proceedings of the Board of Directors or committee.

SECTION 11. TELEPHONE MEETINGS. Unless otherwise restricted by the Certificate of Incorporation, members of the Board of Directors of the Corporation, or any committee designated by the Board of Directors, may participate in a meeting of the Board of Directors or such committee, as the case may be, by conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other. Participation in a meeting pursuant to this Section 11 shall constitute presence in person at such meeting.

SECTION 12. COMMITTEES. The Board of Directors may, by resolution passed by a majority of the entire Board, designate one or more committees, each committee to consist of one or more of the directors of the Corporation. The Board of Directors may designate one or more directors as alternate members of any such committee, who may replace any absent or disqualified member at any meeting of the committee. In the event of absence or disqualification of a member of a committee, and in the absence of a designation by the Board of Directors of an alternate member to replace the absent or disqualified member, the committee member or members present at any meeting and not disqualified

from voting, whether or not he or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of the absent or disqualified member. Any committee, to the extent allowed by law and as provided in the resolution establishing such committee, shall have and may exercise all the power and authority of the Board of Directors in the management of the business and affairs of the Corporation, but no such committee shall have the power or authority in reference to amending the Certificate of Incorporation, adopting an agreement of merger or consolidation, recommending to the stockholders the sale, lease or exchange of all or substantially all of the Corporation's property and assets, recommending to the stockholders a dissolution of the Corporation or a revocation of a dissolution, or amending the Bylaws of the Corporation; and, unless the resolution or the Certificate of Incorporation expressly so provides, no such committee shall have the power or authority to declare a dividend or to authorize the issuance of stock. Each committee shall keep regular minutes of its meetings and report to the Board of Directors when required.

SECTION 13. COMPENSATION. The directors may be paid such compensation for their services as the Board of Directors shall from time to time determine.

SECTION 14. INTERESTED DIRECTORS. No contract or transaction between the Corporation and one or more of its directors or officers, or between the Corporation and any other corporation, partnership, association, or other organization in which one or more of its directors or officers are directors or officers, or have a financial interest, shall be void or voidable solely for this reason, or solely because the director or officer is present at or participates in the meeting of the Board of Directors or the committee thereof which authorizes the contract or transaction, or solely because his or their votes are counted for such purpose if: (i) the material facts as to his or their relationship or interest and as to the contract or transaction are disclosed or are known to the Board of Directors or the committee, and the Board of Directors or committee in good faith authorizes the contract or transaction by the affirmative votes of a majority of the disinterested directors, even though the disinterested directors be less than a quorum; or (ii) the material facts as to his or their relationship or interest and as to the contract or transaction are disclosed or are known to the stockholders entitled to vote thereon, and the contract or transaction is specifically approved in good faith by vote of the stockholders; or (iii) the contract or transaction is fair as to the Corporation as of the time it is authorized, approved or ratified, by the Board of Directors, a committee thereof, or the stockholders. Interested directors may be counted in determining the presence of a quorum at a meeting of the Board of Directors or of a committee which authorizes the contract or transaction.

ARTICLE IV
OFFICERS

SECTION 1. OFFICERS. The officers of the Corporation shall be a President, a Secretary and a Chief Financial Officer. The Corporation may also have, at the discretion of the Board of Directors, a Chairman of the Board, a Vice Chairman of the Board, a Chief Executive Officer, one or more Vice Presidents, one or more Assistant Financial Officers and Treasurers, one or more Assistant Secretaries and such other officers as may be appointed in accordance with the provisions of Section 3 of this Article IV.

SECTION 2. APPOINTMENT OF OFFICERS. The officers of the Corporation, except such officers as may be appointed in accordance with the provisions of Section 3 or Section 5 of this Article IV, shall be appointed by the Board of Directors, and each shall serve at the pleasure of the Board, subject to the rights, if any, of an officer under any contract of employment.

SECTION 3. SUBORDINATE OFFICERS. The Board of Directors may appoint, and may empower the Chief Executive Officer or President to appoint, such other officers as the business of the Corporation may require, each of whom shall hold office for such period, have such authority and perform such duties as are provided in the Bylaws or as the Board of Directors may from time to time determine.

SECTION 4. REMOVAL AND RESIGNATION OF OFFICERS. Subject to the rights of an officer under any contract, any officer may be removed at any time, with or without cause, by the Board of Directors or, except in case of an officer chosen by the Board of Directors, by any officer upon whom such power of removal may be conferred by the Board of Directors. Any officer may resign at any time by giving written notice to the Corporation. Any resignation shall take effect at the date of the receipt of that notice or at any later time specified in that notice; and, unless otherwise specified in that notice, the acceptance of the resignation shall not be necessary to make it effective. Any resignation shall be without prejudice to the rights of the Corporation under any contract to which the officer is a party.

SECTION 5. VACANCIES IN OFFICES. A vacancy in any office because of death, resignation, removal, disqualification or any other cause shall be filled in the manner prescribed in these Bylaws for regular appointments to that office.

SECTION 6. CHAIRMAN OF THE BOARD. The Chairman of the Board, if such an officer is elected, shall, if present, preside at meetings of the stockholders and of the Board of Directors. He shall, in addition, perform such other functions (if any) as may be prescribed by the Bylaws or the Board of Directors.

SECTION 7. CHIEF EXECUTIVE OFFICER. The Chief Executive Officer of the Corporation shall, subject to the control of the Board of Directors, have general supervision, direction and control of the business and the officers of the Corporation. He shall exercise the duties usually vested in the chief executive officer of a corporation and perform such other powers and duties as may be assigned to him from time to time by the Board of Directors or prescribed by the Bylaws. In the absence of the Chairman of the Board and any Vice Chairman of the Board, the Chief Executive Officer shall preside at all meetings of the stockholders and of the Board of Directors.

SECTION 8. PRESIDENT. The President of the Corporation shall, subject to the control of the Board of Directors and the Chief Executive Officer of the Corporation, if there be such an officer, have general powers and duties of management usually vested in the office of president of a corporation and shall have such other powers and duties as may be prescribed by the Board of Directors or the Bylaws or the Chief Executive Officer of the Corporation. In the absence of the Chairman of the Board, Vice Chairman of the Board and Chief Executive Officer, the President shall preside at all meetings of the Board of Directors and stockholders.

SECTION 9. VICE PRESIDENT. In the absence or disability of the President, the Vice Presidents, if any, in order of their rank as fixed by the Board of Directors or, if not ranked, a Vice President designated by the Board of Directors, shall perform all the duties of the President, and when so acting shall have all the powers of, and subject to all the restrictions upon, the President. The Vice Presidents shall have such other powers and perform such other duties as from time to time may be prescribed for them respectively by the Board of Directors or the Bylaws, and the President, or the Chairman of the Board.

SECTION 10. SECRETARY. The Secretary shall keep or cause to be kept, at the principal executive office or such other place as the Board of Directors may direct, a book of minutes of all meetings and actions of Directors, committees of Directors, and stockholders, with the time and place of holding, whether regular or special, and, if special, how authorized, the notice given, the names of those present at Directors' meetings or committee meetings, the number of shares present or represented at stockholders' meetings, and a summary of the proceedings.

The Secretary shall keep, or cause to be kept, at the principal executive office or at the office of the Corporation's transfer agent or registrar, as determined by resolution of the Board of Directors, a share register, or a duplicate share register, showing the names of all stockholders and their addresses, the number and classes of shares held by each, the number and date of certificates issued for the same, and the number and date of cancellation of every certificate surrendered for cancellation.

The Secretary shall give, or cause to be given, notice of all meetings of the stockholders and of the Board of Directors required by the Bylaws or by law to be given, and he shall keep or cause to be kept the seal of the Corporation if one be adopted, in safe custody, and shall have such powers and perform such other duties as may be prescribed by the Board of Directors or by the Bylaws.

SECTION 11. CHIEF FINANCIAL OFFICER. The Chief Financial Officer shall keep and maintain, or cause to be kept and maintained, adequate and correct books and records of accounts of the properties and business transactions of the Corporation. The Chief Financial Officer shall deposit all moneys and other valuables in the name and to the credit of the Corporation with such depositories as may be designated by the Board of Directors. He shall make such disbursements of the funds of the Corporation as are authorized and shall render from time to time an account of all of his transactions as Chief Financial Officer and of the financial condition of the Corporation. The Chief Financial Officer shall also have such other powers and perform such other duties as may be prescribed by the Board of Directors or the Bylaws.

ARTICLE V
STOCK

SECTION 1. FORM OF CERTIFICATES. Every holder of stock in the Corporation shall be entitled to have a certificate signed in the name of the Corporation by the Chairman or Vice Chairman of the Board of Directors, or the President or a Vice President and by the Treasurer or an Assistant Treasurer, or by the Secretary or an Assistant Secretary of the Corporation, certifying the number of shares owned by such stockholder in the Corporation.

SECTION 2. SIGNATURES. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if he were such officer, transfer agent or registrar at the date of issue.

SECTION 3. LOST CERTIFICATES. The Corporation may issue a new certificate to be issued in place of any certificate theretofore issued by the Corporation, alleged to have been lost, stolen or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate to be lost, stolen or destroyed. The Board of Directors may in its discretion require a bond in such form and amount and with such surety as it may determine, before issuing a new certificate.

SECTION 4. TRANSFERS. Stock of the Corporation shall be transferable in the manner prescribed by law and in these Bylaws or in any agreement with the stockholder making the transfer. Transfers of stock shall be made on the books of the Corporation only by the person named in the certificate or by his attorney lawfully constituted in writing and upon the surrender of the certificate therefor, which shall be canceled before a new certificate shall be issued.

SECTION 5. RECORD HOLDERS. The Corporation shall be entitled to recognize the exclusive right of a person registered on its books as the record holder of shares to receive dividends, and to vote as such record holder, and to hold liable for calls and assessments a person registered on its books as the record holder of shares, and shall 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 shall have express or other notice thereof, except as otherwise required by law.

SECTION 6. TRANSFER AGENT. The Board of Directors may at its discretion appoint one or more transfer agents, registrars and agents for making payment upon any class of stock, bond, debenture or other security of the Corporation. Such agents shall be located either within or outside of Delaware. They shall be entitled to such compensation as may be agreed.

ARTICLE VI
INDEMNIFICATION

SECTION 1. RIGHT TO INDEMNIFICATION. Each person who was or is made a party or is threatened to be made a party to or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (hereinafter a "proceeding"), by reason of the fact that he or she is or was a director or officer of the Corporation or is or was serving at the request of the Corporation as a director or officer of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans (hereinafter an "indemnitee"), whether the basis of such proceeding is alleged action in an official capacity as a director or officer or in any other capacity while serving as a director or officer, shall be indemnified and held harmless by the Corporation to the fullest extent authorized by the Delaware General Corporation Law, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Corporation to provide broader indemnification rights than such law permitted the Corporation to provide prior to such amendment), against all expense, liability and loss (including attorneys' fees, judgments, fines, ERISA excise taxes or penalties and amounts paid in settlement) reasonably incurred or suffered by such indemnitee in connection therewith and such indemnification shall continue as to an indemnitee who has ceased to be a director or officer and shall inure to the benefit of the indemnitee's heirs, executors and administrators; provided, however, that, except as provided in Section 2 of this Article VI with respect to proceedings to enforce rights to indemnification, the Corporation shall indemnify any such indemnitee in connection with a proceeding (or part thereof) initiated by such indemnitee only if such proceeding (or part thereof) was authorized by the Board of Directors of the Corporation. The right to indemnification conferred in this Section shall be a contract right and shall include the right to be paid by the Corporation the expenses incurred in defending any such proceeding in advance of its final disposition (hereinafter an "advancement of expenses"); provided, however, that, if the Delaware General Corporation Law requires, an advancement of expenses incurred by an indemnitee in his capacity as a director or officer (and not in any other capacity in which service was or is rendered by such indemnitee, including without limitation, service to an employee benefit plan) shall be made only upon delivery to the Corporation of

an undertaking, by or on behalf of such indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal that such indemnitee is not entitled to be indemnified for such expenses under this Article VI or otherwise (hereinafter an "undertaking").

SECTION 2. RIGHT OF INDEMNITEE TO BRING SUIT. If a claim under Section 1 of this Article VI is not paid in full by the Corporation within forty-five (45) days after a written claim has been received by the Corporation, the indemnitee may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim. If successful in whole or part in any such suit or in a suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the indemnitee shall be entitled to be paid also the expense of prosecuting or defending such suit. In (i) any suit brought by the indemnitee to enforce a right to indemnification hereunder (but not in a suit brought by the indemnitee to enforce a right to an advancement of expenses) it shall be a defense that, and (ii) any suit by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking the Corporation shall be entitled to recover such expenses upon a final adjudication that, the indemnitee has not met the applicable standard of conduct set forth in the Delaware General Corporation Law. Neither the failure of the Corporation (including its Board of Directors, independent legal counsel, or its stockholders) to have made a determination prior to the commencement of such suit that indemnification of the indemnitee is proper in the circumstances because the indemnitee has met the applicable standard of conduct set forth in the Delaware General Corporation Law, nor an actual determination by the Corporation (including its Board of Directors, independent legal counsel, or its stockholders) that the indemnitee has not met such applicable standard of conduct, shall create a presumption that the indemnitee has not met the applicable standard of conduct or, in the case of such a suit brought by indemnitee, be a defense to such suit. In any suit brought by the indemnitee to enforce a right hereunder, or by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the burden of proving that the indemnitee is not entitled to be indemnified or to such advancement of expenses under this Article VI or otherwise shall be on the Corporation.

SECTION 3. NON-EXCLUSIVITY OF RIGHTS. The rights of indemnification and to the advancement of expenses conferred in this Article VI shall not be exclusive of any other right which any person may have or hereafter acquire under any statute, provision of the Certificate of Incorporation, Bylaws, agreement, vote of stockholders or disinterested directors or otherwise.

SECTION 4. INSURANCE. The Corporation may maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or other enterprise against any expense, liability or loss, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under the Delaware General Corporation Law.

SECTION 5. INDEMNIFICATION OF EMPLOYEES OR AGENTS OF THE CORPORATION. The Corporation may, to the extent authorized from time to time by the Board of Directors, grant rights to indemnification and to the advancement of expenses, to any employee or agent of the Corporation to the fullest extent of the provisions of this Article VI with respect to the indemnification and advancement of expenses of directors or officers of the Corporation.

SECTION 6. INDEMNIFICATION CONTRACTS. The Board of Directors is authorized to enter into a contract with any director, officer, employee or agent of the Corporation, or any person serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, including employee benefit plans, providing for

indemnification rights equivalent to or, if the Board of Directors so determines, greater than, those provided for in this Article VI.

SECTION 7. EFFECT OF TERMINATION OF ACTION. The termination of any action, suit or proceeding by judgment, order, settlement, or conviction or upon a plea of nolo contendere or its equivalent shall not of itself create a presumption that the person seeking indemnification did not act in good faith and in the best interests of the Corporation and, with respect to any criminal action or proceeding, had a reasonable cause to believe that his conduct was unlawful. Entry of a judgment by a consent as part of a settlement shall not be deemed a final adjudication of liability for negligence or misconduct in the performance of duty, nor of any other issue or matter.

SECTION 8. EFFECT OF AMENDMENT. Any amendment, repeal or modification of any provision of this Article VI by the stockholders or the directors of the Corporation shall not adversely affect any right or protection of a director or officer of the Corporation existing at the time of such amendment, repeal or modification.

ARTICLE VII
GENERAL PROVISIONS

SECTION 1. DIVIDENDS. Subject to limitations contained in the General Corporation Law of the State of Delaware and the Certificate of Incorporation, the Board of Directors may declare and pay dividends upon the shares of capital stock of the Corporation, which dividends may be paid either in cash, securities of the Corporation or other property.

SECTION 2. DISBURSEMENTS. All checks or demands for money and notes of the Corporation shall 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 3. FISCAL YEAR. The fiscal year of the Corporation shall be fixed by resolution of the Board of Directors.

SECTION 4. CORPORATE SEAL. The Corporation shall have a corporate seal in such form as shall be prescribed by the Board of Directors.

SECTION 5. VOTING OF STOCK OWNED BY THE CORPORATION. The Chairman of the Board, the Chief Executive Officer, the President and any other officer of the Corporation authorized by the Board of Directors shall have power, on behalf of the Corporation, to attend, vote and grant proxies to be used at any meeting of stockholders of any corporation (except this Corporation) in which the Corporation may hold stock.

SECTION 6. CONSTRUCTION AND DEFINITIONS. Unless the context requires otherwise, the general provisions, rules of construction and definitions in the General Corporation Law of the State of Delaware shall govern the construction of these Bylaws.

SECTION 7. AMENDMENTS. Subject to the General Corporation Law of the State of Delaware, the Certificate of Incorporation and these Bylaws, the Board of Directors may by the affirmative vote of a majority of the entire Board of Directors amend or repeal these Bylaws, or adopt other Bylaws as in their judgment may be advisable for the regulation of the conduct of the affairs of the Corporation. Unless otherwise restricted by the Certificate of Incorporation, these Bylaws may be altered, amended

or repealed, and new Bylaws may be adopted, at any annual meeting of the stockholders (or at any special meeting thereof duly called for that purpose) by a majority of the combined voting power of the then outstanding shares of capital stock of all classes and series of the Corporation entitled to vote generally in the election of directors, voting as a single class, provided that, in the notice of any such special meeting, notice of such purpose shall be given.

EXHIBIT 21

SCHEDULE 21 SUBSIDIARIES OF REGISTRANT

SUBSIDIARY NAME	INCORPORATION	DATE
Advanced ImmunoTherapeutics, Inc.	California	06-15-87
NeoTherapeutics GmbH	Switzerland	04-26-97
NeoGene Technologies, Inc.	California	10-01-99

12-MOS	
DEC-31-1999	
JAN-01-1999	
DEC-31-1999	
	6,726,220
	2,955,212
	148,034
	0
	0
	9,959,668
	4,421,908
	1,261,220
	13,173,997
	4,756,744
	637,308
	0
	0
	58,139,327
	(50,434,503)
	13,173,997
	0
	0
	0
	0
	25,981,489
	0
	243,410
	(25,989,905)
	0
	(25,989,905)
	0
	0
	0
	(25,989,905)
	(3.68)
	(3.68)