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, 1998

[ ] 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 (Address of principal executive offices)	92618 (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
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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 16, 1999, was $43,383,538.

As of March 16, 1999, there were 6,225,709 shares of the registrant's common stock outstanding.

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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 neurodegenerative 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. The Company's initial product candidate, NEOTROFIN(TM) (AIT-082, leteprinim potassium) and other compounds under development are based on the Company's 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 the Company's AIT-082 compound appears to selectively increase the production of certain neurotrophic factors, a type of large protein, in the areas of the brain implicated in memory and in the spinal cord. These neurotrophic factors regulate nerve cell growth and function. The Company's 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. The Company believes that AIT-082 could have therapeutic and regenerative effects.

The Company's 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 the Company's AIT-082 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. The NIH's National Institute for Mental Health ("NIMH") also supported the Company's development efforts by contracting for and providing funds, along with the NIA, for the production of sufficient quantities of the AIT-082 compound to conduct some pre-clinical toxicity testing and the two Phase 1 human clinical trials conducted by the ADCS.

In June 1997, an Investigational New Drug Application ("IND") for AIT-082 was approved by the U.S. Food and Drug Administration ("FDA") and Phase I human clinical testing in the United States for the treatment of Alzheimer's disease began. In addition, AIT-082 received a physician's IND in Canada in March 1997, where a Phase 1 clinical trial for the treatment of Alzheimer's disease was completed. The Company believes that AIT-082 is the first orally active drug to enter human clinical trials that is specifically designed to address the issue of nerve regeneration. In pre-clinical trials, AIT-082 has been shown to induce the production of multiple neurotrophic factors in the brain. 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. The Company believes that AIT-082 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.

The Company was incorporated in Colorado in December 1987. On August 7, 1996, the Company changed its name from Americus Funding Corporation to NeoTherapeutics, Inc. In June 1997, the stockholders approved the reincorporation of NeoTherapeutics, Inc. as a Delaware corporation. A 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 shareholders of AIT exchanged all of their shares of AIT common stock for shares of the Company's common stock, and AIT became a wholly owned subsidiary of the Company. In April 1997, the Company established NeoTherapeutics GmbH ("NEOT GmbH"), a wholly owned subsidiary in Switzerland, for the purpose of conducting future licensing and other related activities in the international market. Unless the context otherwise requires, all references to the "Company" and "NeoTherapeutics" refer to NeoTherapeutics, Inc., a Delaware corporation, AIT and NEOT GmbH 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 most 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 do 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 the early neuroscience-oriented biotechnology research centered 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.

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 and 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 taken by the Company, 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. The small-molecule approach taken by the Company, 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. The Company believes that such a development could represent a major advance in the treatment of neurological disorders.

THE COMPANY'S DRUG DEVELOPMENT STRATEGY

The Company is engaged in research that has primarily focused on the development of new drugs that act on the nervous system to treat neurodegenerative 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.

The technical strategy employed by the Company 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 specific molecules and their methods of use have been patented by the Company. The Company's 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 the Company's proprietary AIT series of compounds. The various molecules that are linked to hypoxanthine are selected from known drugs that have established therapeutic activity, producing a potentially bi-functional compound. These compounds exhibit certain functional features of both hypoxanthine (including its ability to possibly facilitate passage through the blood-brain barrier) and the linked therapeutic drugs. Chemical and behavioral studies have given the Company reason to believe that this compound synthesis and selection process increases the probability that the new AIT compounds will retain the actions exhibited by their "parent" drugs.

The Company conducts the synthesis and early testing to establish therapeutic potential necessary to obtain patents on new compounds. In that regard, the Company has conducted pre-clinical testing of the safety and efficacy of certain of its compounds and intends to file an IND for each such compound which shows therapeutic potential. With respect to the Company's AIT-082 compound, some Phase I clinical trials will be conducted by the ADCS with the support of the NIH, and the Company intends to conduct all other clinical trials pending. The Company intends to seek out large pharmaceutical companies as partners for the development, manufacture and marketing of certain of its other compounds.

PRODUCTS IN DEVELOPMENT

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

PRODUCT	POSSIBLE INDICATIONS	DEVELOPMENT STATUS
NEOTROFIN(TM) (AIT-082)	Alzheimer's Disease	Phase 1: Three clinical trials completed, one in progress and additional Phase 1 studies to be conducted in 1999
		Phase 2: One clinical trial completed, one in progress
	Spinal Cord Injury	Pre-IND: Clinical trial planned for 1999
	Stroke	Pre-IND
AIT-034	Severe Dementia	Pre-IND: IND Submission planned Q4, 1999
AIT-202	Depression; obesity	Pre-IND
AIT-203	Parkinson's Disease	Pre-IND
AIT-297	Migraine	Pre-IND

No assurance can be made that any of the Company's compounds will prove to be effective treatments for the indicated diseases or conditions or for any other purposes, or that any such compounds will receive FDA approval.

NEOTROFIN(TM) (AIT-082)

The Company's AIT-082 compound is the most extensively studied compound in the AIT series and has been the primary focus of the Company's research efforts. AIT-082 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, the Company believes that AIT-082 has potential as a treatment for memory impairments that are seen in the aged and stroke patients. AIT-082 also has potential for treatment of patients with nerve damage such as stroke and spinal cord injury.

Pre-clinical testing involving laboratory animals conducted by the Company and independent research institutions has indicated that AIT-082 exhibits the following properties and/or effects:

- MEMORY: Shown to reduce, delay and prevent memory deficits in aged animals; shown to enhance memory function in young and aged animals.

- TOXICITY: Shown to be non-toxic at the highest testable oral dosage in dogs (1,000 mg/kg) and rats (3,000 mg/kg) after at least 90 days of administration.

- DOSAGE: Effective over a wide range of doses in animals, with effectiveness observed at doses as low as 0.5 mg/kg and up to 60 mg/kg; a single dose has been observed to have measurable effects for more than seven days in mice.

- ADMINISTRATION: Active both orally and through injection.

- SIDE EFFECTS: Has no measured effect in mice on neurological parameters such as learning rate, motivation, performance or locomotor activity.

Until completion of human clinical trials, there can be no assurance that these properties and/or effects can be replicated in humans.

The Company has shown that when administered to neurons in tissue culture, AIT-082 can induce the same neurite outgrowth effects as nerve growth factor ("NGF"). The Company has also shown that AIT-082 causes the production of messenger RNA for multiple neurotrophic factors in tissue culture. In addition, the Company has demonstrated that oral administration of AIT-082 increases the levels of messenger RNA for multiple neurotrophic factors and proteins 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 than the administration of a single factor. The Company believes that AIT-082's mechanism of action (after it has passed through the blood-brain barrier) 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 oral AIT-082 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 memory.

The NIA and the NIMH have contracted for and completed production of sufficient quantities of AIT-082 to conduct subchronic animal toxicity studies and early human clinical trials and have provided the funding for these contracts. An IND was approved for AIT-082 by the U.S. FDA in June 1997.

The ADCS reviewed the Company's pre-clinical test data and approved conducting such clinical trials with AIT-082 after FDA approval of the Company's IND. A Phase 1 clinical study of AIT-082 in the United States began in July 1997. This study and one additional study, initiated in October 1998, will be paid for and conducted in the United States by the ADCS. In September 1997, the Geriatric Research Group and Memory Clinic, McMaster University, Hamilton, Ontario, completed two Phase 1 clinical trials on AIT-082. The composite results from the Phase 1 clinical trials completed to date confirm that AIT-082 is rapidly absorbed after oral administration and produces no serious side effects at high doses. In 1998 the Company completed an additional Phase 1 study (repeat dosing) and initiated the first Phase 2 study of AIT-082 for 28 days of treatment. In the first quarter of 1999, the Company completed one Phase 2 clinical trial (28 days of dosing) and initiated a larger, Phase 2 clinical trial (90 days of dosing) in Canada, Australia and the Republic of South Africa. The Company expects that it will have to fund additional animal and human studies that may include an additional Phase 2 and possibly two Phase 3 human clinical studies prior to submitting AIT-082 to the FDA for marketing approval. There can be no assurance, however, that clinical trials of AIT-082 will be successful, that the marketing of AIT-082 will be approved by the FDA, or that AIT-082 can be successfully marketed to its targeted population. See "Drug Approval Process and Government Regulation."

OTHER COMPOUNDS IN DEVELOPMENT

Due to the historically limited resources available to the Company and the Company's decision to focus those resources on the development of its AIT-082 compound, its 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 AIT-082. AIT-034 does not induce the production of NGF, and its mechanism of action is therefore believed to be different than AIT-082. The Company believes that AIT-034 could be a complementary product for Alzheimer's disease. The Company expects initial toxicity studies on AIT-034 to commence in 1999.

AIT-203: AIT-203 is a chemical derivative of hypoxanthine and dopamine. The Company believes that AIT-203 has the potential of being developed as a product for the treatment of Parkinson's disease. The Company plans to expand pre-clinical testing and initiate toxicity studies on AIT-203 in 1999.

AIT-297: AIT-297 is a derivative of hypoxanthine that has shown in preliminary studies activities which indicate its potential use for migraine and hypertension. The Company anticipates expanding pre-clinical testing and initiating toxicity studies on AIT-297 in 1999.

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 National Alzheimer's Association has estimated that the overall care costs required for the treatment and care of the estimated four million United States Alzheimer's disease patients is $100 billion per year.

The Company is testing two compounds, AIT-082 and AIT-034, which have shown preliminary indications in animals of enhancing or restoring memory, and have potential to be used to treat Alzheimer's disease patients.

MEMORY IMPAIRMENT ASSOCIATED WITH AGING. Because the populations of developed countries are increasingly becoming older, 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 AIT-082 and AIT-034 have shown to be effective in ameliorating memory loss associated with aging in mice.

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. The Company is focusing its emphasis in the treatment of strokes on protecting the cells from injury or degeneration caused by strokes. Since AIT-082 has the potential to enhance nerve regeneration, the Company believes that AIT-082 may prove useful in the treatment of stroke.

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 AIT-082 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. The Company believes that AIT-082 could potentially be used to stimulate the regeneration of nerves damaged by spinal cord injury. The Company has paid $50,000 and has committed an additional $50,000 for the establishment of a NeoTherapeutics Fellowship as part of the Reeve-Irvine Research Center for spinal cord injury at the University of California, Irvine.

BUSINESS STRATEGY

MARKETING AND SALES

The Company does not currently sell any products and therefore has no marketing, sales, or distribution organization. However, under the terms of any contemplated licensing agreement for developing and commercializing AIT-082 or any of its products, the Company may retain an option to co-market the product in the United States.

The Company believes the support of the NIA and NIMH, along with ADCS, the clinical arm of the NIA's research on Alzheimer's disease, contributes significantly to the future marketing and educational efforts directed to physicians who treat Alzheimer's disease patients. The Company believes that this exposure to the leaders in the field of neurodegenerative diseases may reduce the time and marketing costs required to introduce the Company's products when and if they are approved by the FDA.

PRODUCTION

The Company currently has its compounds manufactured in large scale by third party vendors and has no plans to establish its own manufacturing facilities. In connection with any licensing arrangements it may enter into, the Company intends to retain the rights to control the manufacturing and sale of its compounds to its licensees. Preliminary estimates indicate that AIT-082 can be manufactured cost effectively.

STRATEGIC ALLIANCE

The Company believes that its patented technology platform provides a major commercial opportunity for developing strategic alliances with larger pharmaceutical companies. It is the intent of the Company to complete a series of strategic alliances with multi-national or large regional pharmaceutical companies having substantial financial capacity, marketing capability and clinical development expertise. Any potential collaborations will enable the Company to focus on its 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. The Company chose to postpone the structuring of a corporate sponsored licensing agreement for AIT-082, in favor of an early stage, government-assisted development program. By completing strategic alliances later in the development cycle, the Company believes this may create an improved value for its shareholders that may be reflected in the enhanced terms of any licensing agreement.

RESEARCH OUTSOURCING

The Company currently has several proprietary compounds in various stages of preclinical development. From time to time, the Company evaluates these compounds for efficacy in specialized assays or models. In these instances the Company has chosen to locate academic researchers who are experts in performing the desired tests and has provided the researchers, through their respective academic institutions, with grants to perform the designated tests while the Company maintains proprietary rights to the compounds and these studies are performed to the highest standards.

CONTEMPLATED LICENSING TERMS FOR AIT-082

In general, the terms of a licensing agreement anticipated by the Company for its lead compound, AIT-082, will include an up front payment, milestone payments, and royalties on product sales.

From time to time, the Company is engaged in licensing discussions with one or more multinational or regional pharmaceutical companies. No assurance can be made that any such discussions will result in a commercial transaction on terms acceptable to the Company.

DRUG APPROVAL PROCESS AND OTHER GOVERNMENT REGULATION

The production and marketing of the Company's products and its 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 the Company's 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 pre-clinical phase.

PRE-CLINICAL TESTING. During the pre-clinical 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 pre-clinical 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 a 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 usually between 20 and 80 healthy volunteers, 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, as well as the duration of its action.

PHASE 2 CLINICAL TRIALS. In Phase 2 clinical trials, controlled studies of approximately 100 to 300 volunteer patients with the targeted disease assess the drug's effectiveness. These studies are designed primarily 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 1,000 to 3,000 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. Drugs designated as "fast track" must meet both these qualifications. It is unclear at this time if AIT-082 will fulfill this requirement as there are currently approved drugs available for the treatment of Alzheimer's disease. It may be possible that AIT-082 would qualify for fast track classification in a different disease indication. At this time the Company has not requested fast track designation for AIT-082.

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. The Company believes that AIT-082 will qualify for priority review.

APPROVAL. If the FDA approves the NDA, the drug becomes available for physicians to prescribe. The Company 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.

In addition to regulations enforced by the FDA, the Company is 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. The Company's research and development activities involves the controlled use of hazardous materials, chemicals, viruses and various radioactive compounds. Although the Company believes that its 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, the Company could be held liable for any damages that result, and any such liability could exceed the resources of the Company.

For marketing outside the United States, the Company or its prospective licensees will be subject to foreign regulatory requirements governing human clinical trials and marketing approval for drugs and devices. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary widely from country to country.

RESEARCH AND DEVELOPMENT

Since its inception, the Company has devoted substantially all of its efforts to research and development. Research and development expenditures were $615,485 in 1996, $4,508,255 in 1997 and $8,542,034 in 1998.

PATENTS AND PROPRIETARY RIGHTS

Patents and other proprietary rights are vital to the Company's business. The Company's policy is to seek patent protection for its proprietary compounds and technology, and it intends to protect its technology, inventions and improvements to inventions that are commercially important to the development of its business. The Company also intends to rely on trade secrets, know-how, continuing technology innovations and licensing arrangements to develop and maintain its competitive position.

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 neurodegenerative 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, Dr. Glasky was issued a second United States patent (No. 5,447,939) 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 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 incorporates certain technology developed under the auspices of, and belonging to, McMaster University in Ontario, Canada.

All three patents have been assigned to the Company by Dr. Glasky. In connection with these assignments, Dr. Glasky has been granted a royalty of two percent of all revenues derived by the Company from the use and sale by the Company 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 the Company by McMaster University. In the event the Company 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, the Company and McMaster University have entered into a license agreement whereby McMaster University has licensed to the Company all patent rights belonging to McMaster University contained in such patent. This agreement calls for minimum payments by the Company of $25,000 per year to McMaster University, with the first payment due in July of 1997, and for the Company to pay to McMaster University a royalty of five percent of the net sales of all products sold by the Company which incorporate the patent rights licensed to the Company by McMaster University. The third U.S. patent is 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, the Company also currently has five 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 the Company's 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 the Company with respect to its products or technology or other matters. There may be third-party patents and other intellectual property relevant to the Company's products and technology which are not known to the Company. Patent litigation is becoming more common in

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

The Company also relies upon unpatented trade secrets and improvements, unpatented know-how and continuing technological innovation to develop and maintain its competitive position, which it seeks to protect in part, by confidentiality agreements with its employees and consultants and with corporate partners and/or collaborators as such relationships are formed in the future. 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. In the case of employees, the agreements provide that all inventions conceived by the individual while employed by the Company shall be the exclusive property of the Company. There can be no assurance that these agreements will not be breached, that the Company would have adequate remedies for breach, or that the Company's 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 the Company. The Company's 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., Hoechst Marion Roussel Ltd. 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 be directly competitive with that of the Company. These companies and institutions also compete with the Company in recruiting highly qualified scientific personnel. Many of the Company's competitors have substantially greater financial, research and development, human and other resources than the Company. Furthermore, large pharmaceutical companies have significantly more experience than the Company in pre-clinical testing, human clinical trials and regulatory approval procedures.

Although the Company has begun to conduct clinical trials with respect to AIT-082, the Company has not conducted clinical trials with respect to any of its other compounds under development nor has it sought the approval of the FDA for any product based on such compounds. Furthermore, if the Company is permitted to commence commercial sales of products based on compounds it develops, including AIT-082, and decides to manufacture and sell such products itself, then the Company will also be competing with respect to manufacturing efficiency and marketing capabilities, which are areas in which the Company has no prior experience.

Any product for which the Company obtains 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), licensed by Pfizer, Inc. from 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 the Company is developing its own treatments. Several other companies are engaged in research and development of compounds which use neurotrophic factors in a manner similar to that of the Company's compounds. In the event that one or more of these programs are successful, the market for the Company's products could be reduced or eliminated.

The Company expects technological developments in the neuropharmacology field to continue to occur at a rapid rate and expects competition will remain intense as advances continue to be made. Although the Company believes, based on the preliminary pre-clinical test results involving certain of its compounds, that it will be able to continue to compete in the discovery and early clinical development of compounds for neurological disorders, there can be no assurance that the Company will be able to do so, and the Company does not presently have sufficient resources to compete with major pharmaceutical companies in the areas of later-stage clinical testing, manufacturing and marketing.

EMPLOYEES

As of December 31, 1998, the Company had thirty-three full-time employees, of which seven hold Ph.D. degrees, and one part-time employee. There can be no assurance that the Company will be able to attract and retain qualified personnel in sufficient numbers to meet its needs. The Company's employees are not subject to any collective bargaining agreements, and the Company regards its relations with its employees to be good.

RISK FACTORS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1993 and Section 21E of the Securities Exchange Act of 1934. In light of the important factors that can materially affect results, including those set forth below, the inclusion of forward-looking information herein should not be regarded as a representation by the Company or any other person that the objectives or plans for the Company will be achieved. Assumptions relating to budgeting, research, and other management decisions are subjective in many respects and thus susceptible to interpretations and periodic revisions based on actual experience and business developments, the impact of which may cause the Company to alter its research, capital expenditure or other budgets, which may in turn affect the Company's business, financial position, results of operations and cash flows. The reader is therefore cautioned not to place undue reliance on forward-looking statements contained herein, which speak as of the date of this Annual Report on Form 10-K.

HISTORICAL OPERATING LOSSES; EXPECTED CONTINUED LOSSES

We are considered to be a development stage company because we have not generated revenues from sales. Moreover, even if we eventually generate revenues from sales, we nevertheless expect to incur significant operating losses over the next several years. From our inception in 1987 through December 31, 1998, we have incurred cumulative losses of approximately $23.8 million, almost all of which consisted of research and development and general and administrative expenses. Our ability to become profitable will depend on (1) our development of our proposed products, (2) our obtaining regulatory approvals for such products and (3) our success in bringing these products to market. Many factors have a bearing on our likelihood of long-term success. These include the expenses, difficulties and delays frequently encountered in the development and commercialization of new pharmaceutical products, competitive factors in the marketplace and the burdensome regulatory environment in which we operate. It is possible that we may never achieve significant revenues or become profitable.

EARLY STAGE OF PRODUCT DEVELOPMENT; RISK OF FAILURE

Our proposed products are in an early stage of development. They will require additional research and development, clinical testing and regulatory clearances. We do not currently sell any products and do not expect to have any products commercially available for at least several years. Our proposed products are subject to the risks of failure inherent in the development of pharmaceutical products based on innovative technologies. Some of these risks are that a proposed product (1) could be found to be ineffective or toxic,

(2) may fail to receive necessary regulatory clearances, (3) will be uneconomical to manufacture or market, (4) may not be sold because of patent or other rights of third parties or (5) becomes unmarketable because a third party introduces a superior or equivalent product. As a result, we are unable to predict whether our research and development activities will result in any commercially viable products or applications. Our primary area of therapeutic focus, disorders of the central nervous system, is not thoroughly understood and we cannot be certain that our proposed products will prove to be safe or effective in treating such disorders or any other diseases.

NEED FOR ADDITIONAL FUNDING; UNCERTAIN ACCESS TO CAPITAL

We will require substantial additional capital to further develop our proposed products and to commercialize any products that may be developed. Our capital requirements will depend on many factors, including (1) the progress of our research and development programs, (2) the progress of pre-clinical and clinical testing, (3) the time and cost involved in obtaining regulatory approvals, (4) the cost of filing, prosecuting, defending and enforcing patent claims and other intellectual property rights, (5) competing technological and market developments and (6) our ability to establish collaborative and other arrangements with third parties, such as licensing and manufacturing agreements.

On March 27, 1998, we entered into a Private Equity Line of Credit Agreement with a private investor (the "Equity Line Agreement"). Under the Equity Line Agreement we may, at our option, sell shares of our common stock to the investor at a price equal to 88% of the market price of the common stock at the time of such sales, subject to certain limitations contained in the Equity Line Agreement. At December 31, 1998, we had the remaining availability of approximately $11.5 million under the Equity Line Agreement. On January 29, 1999, we entered into an Agreement with two private investors to sell up to $6.0 million of preferred stock with conversion rights into common stock. The initial tranche of $4.0 million was received on January 29, 1999. At our option, under certain circumstances, we may sell to the investors an additional $2.0 million after approximately 6 months.

We believe that our existing capital resources, including the proceeds from any future sales of our equities under the Equity Line and Preferred Stock Agreements, will be sufficient to satisfy our current and projected funding requirements for the next 12 months. Thereafter, we may require substantial additional capital. Moreover, if we experience unanticipated cash requirements during the next 12 months, we could require additional capital sooner. We may seek such additional funding through public or private financing or collaborative or other arrangements with third parties. We cannot be certain that additional funds will be available on acceptable terms, if at all. From time to time, we may receive additional funds from the exercise of our outstanding warrants and stock options, but we cannot be certain that these will be exercised or that the amounts we receive will be sufficient for our purposes. If we raise additional funds by issuing equity securities, our existing stockholders may experience substantial dilution. We may be able to obtain additional funds through sales of our common stock under our Equity Line Agreement, but we may not be able to do so under certain circumstances. If adequate funds are not available, we may be required to delay, scale back or eliminate one or more of our development programs. Alternatively, we may obtain funds by entering into arrangements with third parties. These arrangements may require us to relinquish rights to certain of our products or technologies that we would not otherwise relinquish.

DEPENDENCE ON THIRD PARTIES FOR CLINICAL TESTING, MANUFACTURING AND MARKETING

Except with respect to our NEOTROFIN(TM) (AIT-082) compound, we may not conduct later-stage human clinical trials ourselves or to manufacture any of our proposed products for commercial sale nor do we have the resources necessary to do so. We intend to seek larger pharmaceutical companies as partners to conduct such activities. In connection with our efforts to secure corporate partners, we will seek to retain certain co-marketing rights to certain of our proposed products, so that we may promote such products to selected medical specialists while our corporate partner promotes these products to the medical market generally. We cannot be certain that we will be able to enter into any such partnering arrangements on this or any other basis. In addition, we cannot be certain that we or our potential corporate partners can successfully introduce our proposed products or that such proposed products will achieve acceptance by patients, health care providers and insurance companies. Further, it is possible that we may not be able to manufacture and market our proposed products at prices that would permit us to make a profit.

LACK OF OPERATING EXPERIENCE

To date, we have engaged exclusively in the development of pharmaceutical technology and products. Our management has substantial experience in pharmaceutical company operations, but NeoTherapeutics itself has no experience in manufacturing or procuring products in commercial quantities or in marketing pharmaceutical products and has only limited experience in negotiating, setting up and maintaining strategic relationships, conducting clinical trials and other later-stage phases of the regulatory approval process. We cannot be certain that we will be able to successfully engage in any of these activities with respect to any of our proposed products which we may attempt to commercialize. If we decide to establish a commercial-scale manufacturing facility for NEOTROFIN(TM) (AIT-082), we will require substantial additional funds and personnel and will be required to comply with extensive regulations applicable to such a facility. We cannot be certain that we will be able to successfully develop manufacturing or marketing capabilities either on our own or through third parties.

NEED TO COMPLY WITH GOVERNMENTAL REGULATION AND TO OBTAIN PRODUCT APPROVALS

Various regulatory agencies in the United States and abroad regulate the testing, manufacturing, labeling, distribution, marketing and advertising of our proposed products and our ongoing research and development activities. The U.S. FDA and comparable agencies in foreign countries impose many requirements on the introduction of new pharmaceutical products through lengthy and detailed clinical testing procedures, sampling activities and other costly and time consuming compliance procedures. Our proprietary compounds will require substantial clinical trials and FDA review as new drugs. We cannot predict with certainty when we might submit any of our proposed products currently under development for regulatory review. Once we submit a proposed product for review, there can be no assurance that FDA or other regulatory approvals for any of our proposed products will be granted on a timely basis, if at all. If we are delayed or fail to obtain such approvals, our business and results of operations would be damaged. If we fail to comply with regulatory requirements we could be subject to regulatory or judicial enforcement actions. These actions could result in product recalls or seizures, injunctions, civil penalties, criminal prosecution, refusals to approve new products and withdrawal of existing approvals, as well as potentially enhanced product liability exposure. If we sell our products outside the United States, we will be subject to regulatory requirements governing such sales. These requirements vary widely from country to country and could delay introduction of our proposed products in those countries.

DEPENDENCE ON KEY PERSONNEL

Our success will depend largely upon the contributions of our key management and scientific personnel. If we lose the services of any such personnel we could be delayed in or precluded 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 could substantially damage our business. We will need substantial additional expertise in such areas as research, finance and marketing, among others in order to achieve our business objective. Competition for qualified personnel among pharmaceutical companies is intense, and the loss of key personnel, or the inability to attract and retain the additional skilled personnel required for the expansion of our business, could damage our business.

UNCERTAINTY REGARDING PATENTS AND PROPRIETARY RIGHTS

We actively pursue a policy of seeking patent protection for our proprietary products and technologies. We hold three United States patents and currently have five United States patent applications pending. In addition, we have numerous foreign patents corresponding to our first patent and have corresponding patent applications with respect to our second United States patent and pending United States patent applications which have been filed in various foreign jurisdictions. We cannot be certain that our patents will protect us against our competitors. We could be required to file suit to protect our patents, and we cannot be certain that we will have the resources necessary to pursue such litigation or otherwise to protect our patent rights.

We also rely on trade secret protection for our unpatented proprietary technology. However, trade secrets are difficult to protect. It is possible that others will independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or that such trade secrets will be disclosed. We have a policy requiring that our

employees and consultants execute proprietary information agreements upon commencement of employment or consulting relationships. These agreements provide that all confidential information developed or made known to the individual during the course of the relationship shall be kept confidential except in specified circumstances. However, these agreements may not successfully protect our trade secrets or other proprietary information.

We cannot be certain that others will not assert claims against us based on patents held by others. Such claims, if brought, could seek damages as well as an injunction prohibiting clinical testing, manufacturing and marketing of the product at issue. Such claims may or may not be successful. If any such actions are successful, in addition to any potential liability for damages, we could be required to obtain a license in order to continue to manufacture or market the product at issue. It is possible that any license required under any such patent would not be made available on acceptable terms, if at all. There has been, and we believe that there will continue to be, significant litigation in the pharmaceutical industry regarding patent and other intellectual property rights. If we become involved in any litigation, a substantial portion of our financial and personnel resources could be consumed, regardless of the outcome of such litigation.

COMPETITION

Competition in the pharmaceuticals market is intense. Many companies, both public and private, including well-known pharmaceutical companies, are engaged in the development of products for certain of the applications we are pursuing. Most of these companies have substantially greater financial, research and development, manufacturing and marketing experience and resources than we do and represent significant long-term competition. In addition, numerous other companies are in the process of developing products for the treatment of diseases and disorders for which we are developing products. Such companies may develop pharmaceutical products that are more effective or less costly than any products which we may develop.

Factors affecting competition in the pharmaceutical industry vary depending on the extent to which the competitor is able to achieve a competitive advantage based on proprietary technology. If we are able to establish and maintain a significant proprietary position with respect to our proposed products, competition will likely depend primarily on the effectiveness of the particular product and the number, gravity and severity of its unwanted side effects as compared to alternative products or treatments.

We compete in an industry which is characterized by extensive research and development efforts and rapid technological progress. Although we believe that our proprietary position may give us a competitive advantage with respect to our proposed products, new developments are expected to continue and it is possible that discoveries by others will render our potential products noncompetitive. Our competitive position also depends on our ability to attract and retain qualified scientific and other personnel, develop effective proprietary products, implement development and marketing plans, obtain patent protection and secure adequate capital resources. We cannot be certain that we will be able to do so.

DILUTIVE EFFECT OF CONVERSION OF SERIES A PREFERRED STOCK

As of March 16, 1999, there were outstanding a total of 400 shares of Series A Preferred Stock. These shares presently are convertible, at any time at the option of their holders, into an aggregate of 306,278 shares of our common stock. After April 27, 1999, the conversion price of the Series A Preferred Stock may decrease. After such date the conversion price of the Series A Preferred Stock will be equal to the lesser of $13.06 per share of common stock or 101% of the average of the ten lowest closing bid prices of the common stock occurring in the 30 trading days preceding the particular conversion. However, in no event can all 400 outstanding shares of Series A Preferred Stock convert into more than 1,450,000 shares of our common stock. In the event the conversion prices decreases, the number of shares of our common stock to be issued upon conversion will increase proportionately. The conversion of the Series A Preferred Stock into an increasing number of shares of common stock could cause the market price of our common stock to drop.

SHARES ELIGIBLE FOR FUTURE SALE

As of March 16, 1999, security holders held options and warrants which, if exercised, would obligate us to issue 4,206,332 shares of common stock. Substantially all of such shares, when issued upon exercise, will be available for immediate resale in the public market. In addition, at March 16, 1999, our Equity Line Agreement provides that we may issue common stock in exchange for up to an additional $10.75 million. The shares of common stock which the Company may sell under our Equity Line Agreement will be available for immediate resale in the public market. The market price of our common stock could drop because of such resales.

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 or 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.

CONTROL BY DIRECTORS AND EXECUTIVE OFFICERS

Our directors and executive officers beneficially own in the aggregate approximately 26.8% of our outstanding common stock. These stockholders, if they acted together, would be able to 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 may discourage or prevent someone from acquiring our business.

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.

THE YEAR 2000 ISSUE

The Year 2000 issue (the "Year 2000 Issue") in computers arises from the common industry practice of using two digits to represent a date in computer software code and databases to enhance both processing time and save storage space. Therefore, when dates in the year 2000 and beyond are indicated and computer programs read the date "00," the computer may default to the year "1900" rather than the correct "2000." This could result in incorrect calculations, faulty data and computer shutdowns, which would cause disruptions of operations. In addition, the year 2000 is a leap year and systems need to recognize it as such.

We have completed an inventory and risk assessment of our internal information technology ("IT") system applications (including voice and data systems), our internal non-IT facilities systems (including embedded software in environmental controls, security systems, fire protection systems, elevators and public utility connections for gas, electric and telephone systems), and embedded and external software contained in laboratory and other equipment that we believe could be adversely affected by the Year 2000 Issue. We believe that our 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. Any costs to remediate Year 2000 Issues with regard to these systems are not anticipated to be material.

In June of 1998, we began sending questionnaires to and/or contacting our outside vendors regarding their state of readiness with respect to identifying and remediating their Year 2000 Issues. We have completed our risk assessment of our outside vendors and are currently reviewing their compliance. We cannot be certain that our vendors will adequately address their Year 2000 Issues. Furthermore, we cannot determine that third parties upon which our vendors depend will accomplish adequate remediation of their Year 2000 Issues. Except for our public utility service vendors, who have indicated that they expect to be in compliance by mid-1999, we believe that, with respect to the computer systems of our major outside vendors, should a Year 2000 Issue exist whereby a vendor was unable to address our needs, alternative vendors have been identified and are readily available that could furnish us with the same or similar supplies or services that we presently receive from these vendors without undue cost or expense.

Based on currently available information, we believe that the impact of the Year 2000 Issue, as it relates to our internal operations, information systems and software applications will not be material. In the event we fail to successfully resolve our Year 2000 Issues with respect to our internal systems in a timely manner, we believe that, while such events would be disruptive to our operations in the short term, such circumstances would not have a material adverse effect on our business, financial condition and results of operations over the long term. However, failure of the major third parties, in particular the financial institutions with which we have significant banking and investment management relationships and our third party manufacturers, to be Year 2000 compliant could have a material adverse effect on our business, financial condition and results of operations or business prospects.

ITEM 2. PROPERTIES

During June 1997, the Company relocated its research and development and corporate administrative offices to a new 34,000 square foot facility constructed for it in Irvine, California. The facility is occupied under a non-cancellable lease for seven years and contains two five year options to renew. The monthly rent for the Irvine facility is $38,800 plus taxes, insurance and common area maintenance and, beginning in July 1999, minimum cost of living increases. The Company also maintains a small administrative office in Zurich, Switzerland on an expense sharing basis.

ITEM 3. LEGAL PROCEEDINGS

On December 10, 1998, the Company was served with a lawsuit initiated by four former employees of the Company. 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 278,589 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 generally accepted accounting principles. Under the agreements, as amended, the Company was required to achieve total operating revenues from the date of each agreement through December 31, 1995, in a cumulative amount of at least $500,000. When the Company failed to achieve this goal, the agreements were amended to extend the deadline until December 31, 1997 and increase the revenue goal to a cumulative amount of at least $1,000,000. The agreements provide that, if the revenue goals are not achieved by the stated deadline, the shares will be forfeited and the employees will be required to return the shares to the Company. The Company did not achieve the required revenue goals either by December 31 1995, or by December 31, 1997. The Company's total revenues from inception through December 31, 1995 were only $497,128. The Company did not have any revenues in 1996 or 1997, and the total revenues from inception through December 31, 1997 remained at $497,128. In the lawsuit the plaintiffs allege, among other things, that the cumulative revenues of the Company were or should have been in excess of $500,000 as of December 31, 1995, and that the defendants fraudulently induced the plaintiffs into entering into the agreements and the subsequent amendments to the agreements. The lawsuit asks 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 are also seeking 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. The lawsuit is in the early stages of discovery and no trial date has been set. Management of the Company believes that the plaintiffs' claims are without merit and that the resolution of this matter will not have a material adverse effect on the financial condition or operations of the Company. The Company intends to vigorously defend the lawsuit and to pursue the cross-complaint for the return and cancellation of all of the disputed shares. 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 was then and is now an employee 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 400,244 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 have 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 such time as the lawsuit is finally resolved, the Company is accounting for all of these shares, which it deems to be forfeited, as issued and outstanding.

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, 1998.

PART II

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

COMMON STOCK

As of March 16, 1999, there were 6,225,709 shares of common stock outstanding held of record by 256 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 bid quotations of the Company's common stock, as reported by NASDAQ, were as follows:

	High	Low
Year Ended December 31, 1997:		
Quarter Ended		
March 31, 1997	$6-3/4	$3-7/8
June 30, 1997	$16-3/8	$4-7/8
September 30, 1997	$15-7/8	$11-1/2
December 31, 1997	$14-1/2	$7
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

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

DIVIDENDS

The Company has never paid cash dividends on its common stock and does not intend to pay dividends in the foreseeable future.

RECENT SALES OF UNREGISTERED SECURITIES

The following is a summary of transactions by the Company during the quarter ended December 31, 1998, involving sales of the Company's securities that were not registered under the Securities Act of 1933 (the "Securities Act.")

In November 1998, the Company granted to a financial consultant options to purchase 25,000 shares of common stock at an exercise price of $8.5625 per share, which were vested upon issuance and expire in five years.

During the fourth quarter of fiscal 1998, the Company sold shares of its common stock to Kingsbridge Capital Limited ("Kingsbridge") in six separate transactions pursuant to a Private Equity Line of Credit Agreement entered into between the Company and Kingsbridge on March 27, 1998. The six separate transactions were as follows: (i) on October 8, 1998, the Company sold 99,030 shares at $5.049 per share for a total of $500,000; (ii) on October 29, 1998, the Company sold 67,042 shares at $7.458 per share for a total of $500,000; (iii) on November 17, 1998, the Company sold 86,197 shares at $8.701 per share for a total of $750,000; (iv) on November 30, 1998, the Company sold 64,383 shares at $7.766 per share for a total of $500,000; (v) on December 8, 1998, the Company sold 102,994 shares at $7.282 per share for a total of $750,000; and (vi) on December 21, 1998, the Company sold 45,005 shares at $6.666 per share for a total of $300,000. The six transactions totaled 464,651 shares of Company common stock for an aggregate of $3,300,000.

Exemption from the registration requirements of the Securities Act was claimed under Rule 506 and/or Section 4(2) of the Securities Act. The foregoing transactions did not involve any public offering and the recipient either received adequate information about the Company or had access, through employment or other relationships, to such information. In the foregoing transactions, the Company reasonably believed that each of the recipients was "sophisticated" within the meaning of Section 4(2) of the Securities Act.

USE OF PROCEEDS FROM REGISTERED SECURITIES

The following information is provided pursuant to Rule 463 of the Securities Act and Item 701(f) of Regulation S-K in connection with the Company's Registration Statement on Form SB-2 filed under the Securities Act:

(1)	Effective date of Registration Statement: Commission file number:	September 26, 1996 333-05342-LA
(2)	Date offering commenced:	September 26, 1996
(3)	Offering terminated before securities sold:	Not applicable
(4)	Disclosures:	
	(i) Has Offering terminated:	No
	(ii) Managing underwriter(s):	Paulson Investment Company, Inc. First Colonial Securities Group, Inc.
	(iii) Title of each class of securities registered:	Common Stock Common Stock Purchase Warrants*

* Each common stock purchase warrant entitles the holder to purchase one share of common stock at an exercise price of $11.40 per share. The common stock purchase warrants expire 5 years from September 26, 1996. Outstanding common stock purchase warrants may be redeemed by the Company, in whole or in part, at any time upon at least 30 days prior written notice to the registered holders thereof, at a price of $0.25 per warrant, provided that the closing bid price of the common stock has been at least $22.80 for the 20 consecutive trading days immediately preceding the date of the notice of redemption.

(iv) Information regarding each class of securities:

		Common Stock	Common Stock Purchase Warrants
	Amount registered	2,875,000	2,875,000
	Aggregate offering price of amount registered	$21,850,000	$ 0
	Amount sold	2,700,000	2,700,000
	Aggregate offering price of amount sold	$20,520,000	$ 0
(v)	Expenses of offering:	A*	B*
	Underwriting discounts and commissions	$ 0	$ 1,436,400
	Finders fees	$ 0	$ 50,000
	Expenses paid to or for underwriters	$ 0	$ 331,317
	Other expenses	$ 0	$ 525,502
	Total expenses		$ 2,343,219
(vi)	Net offering proceeds		$ 18,176,781

(vii) Use of net proceeds through December 31, 1998:

	A*	B*
Construction of plant, building and facilities	$	$ 1,794,794
Purchase and installation of machinery and equipment and equipment		2,197,253
Repayment of indebtedness	533,613	9,000
Working capital		13,642,121
Total Net Proceeds Used	$533,613	$17,643,168

As of December 31, 1998, all of the net proceeds from the sale of securities covered by the foregoing registration statement (other than proceeds, if any, which may be received from exercise of the common stock purchase warrants) have been applied.

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,				
	1998	1997	1996	1995	1994
	(In thousands, except per share data)				
STATEMENT OF OPERATIONS DATA:					
Revenues, from grants	$ --	$ --	$ --	$ 125	$ 236
Operating expenses:					
Research and development	8,542	4,508	615	306	287
General and administrative	3,123	2,341	660	667	221
Loss from operations	11,665	6,850	1,275	848	272
Other income (expense)	60	688	237	(48)	(40)
Net loss	$(11,605)	$ (6,162)	$ (1,039)	$ (895)	$ (312)
Basic and diluted loss per share	$ (2.07)	$ (1.14)	$ (0.32)	$ (0.36)	$ (0.13)
BALANCE SHEET DATA AT DECEMBER 31:					
Cash and equivalents and marketable securities	$ 2,867	$ 9,132	$17,444	$ 1	$ 6
Property and equipment, net	3,252	3,475	133	9	10
Total assets	6,826	13,198	17,979	11	18
Long-term debt	1,126	177	--	558	558
Total stockholders' equity (deficit)	3,290	10,543	16,622	(1,253)	(1,021)

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

RESULTS OF OPERATIONS

OVERVIEW

From the Company's inception in June 1987 through December 31, 1998, the Company devoted its resources primarily to fund research and development, and incurred a cumulative net loss of approximately $23.8 million. During this period, the Company had only limited revenues from grants, and had no revenues

from the sale of products or other sources. The Company expects its operating expenses to increase over the next several years as it expands its research and development and commercialization activities and operations. The Company expects 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 the Company currently is seeking. To obtain working capital, the Company entered into an equity agreement with a private investor in March 1998 which allows the Company to sell to the investor over a two and one-half year period, at the Company's sole discretion but subject to certain restrictions, up to $15 million of its common stock. At March 16, 1999, the Company had $10.75 million remaining on the Line of Equity. In January 1999, the Company sold $4 million of Preferred Stock to private investors. See - Liquidity and Capital Resources.

Year Ended December 31, 1998 Compared to Year Ended December 31, 1997

The Company 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 the Company accelerated its program to commercialize its lead compound, NEOTROFIN(TM) (AIT-082). 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. The Company expects general and administrative expenses to continue to increase in future periods due to expected increases in both research and development and sales and marketing activities associated with attempting to bring one or more of its 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. The Company expects its interest earnings to decrease over the next year as it continues to use its cash to fund current operations.

Year Ended December 31, 1997, Compared to Year Ended December 31, 1996

The Company had no revenues for the twelve month periods ended December 31, 1997 or 1996.

Research and development expenses for the twelve months ended December 31, 1997, increased by approximately $3.9 million, or 632%, over 1996. This increase was due primarily to the costs and expenses associated with the commencement of clinical trials as well as personnel additions, salary increases, facilities rent, consulting fees, license fees and insurance costs as the Company expanded its operations and used the proceeds from the September 1996 initial public offering of common stock.

General and administrative expenses increased approximately $1.7 million or 255% for the year ended December 31, 1997, over the year ended December 31, 1996. General and administrative expenses for 1997 reflect increased expenses related to additional personnel, salary increases, insurance, professional and consulting fees, commissions, facilities rent, travel, regulatory agency and other fees associated with being a public company which were all either significantly higher in 1997 than in 1996 or were initially incurred in 1997. In 1996, the Company operated for a portion of the year on a rent-free basis from the Chief Executive Officer's residence with very limited administrative and technical staff.

Interest income increased by approximately $0.5 million or 178% in 1997 over 1996 as a result of the full year's utilization of invested and unallocated proceeds from the September 1996 initial public offering.

LIQUIDITY AND CAPITAL RESOURCES

From inception through December 1998, the Company financed its operations primarily through grants, sales of securities, borrowings and deferred payment of salaries and other expenses from related parties. During September and October 1996, the Company effected the sale of a total of 2,700,000 units of its 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. The Company realized net cash proceeds of approximately $18.2 million from the sale.

On March 27, 1998, the Company executed an agreement with a private investor (the "Equity Line Agreement") which provides for the Company, at its sole discretion, subject to certain restrictions, to sell ("put") to the investor up to $15 million of its common stock. The Equity Line Agreement expires 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. 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 the Company's common stock, as determined under the Equity Line Agreement. In addition, the Company issued to the investor 5-year warrants to purchase 25,000 shares of common stock at $11.62 per share. Through December 31, 1998, the Company had received proceeds of approximately $3.5 million from sales of common stock under the Equity Line Agreement. The Company received an additional $0.7 million in January 1999, and as of March 16, 1999, an additional $10.75 million remains available under the Equity Line Agreement.

To supplement the Equity Line Agreement for the purpose of funding the Company's planned larger clinical trials, on January 29, 1999, the Company entered into a financing transaction to sell to two private investors up to $6 million of preferred stock in two tranches. The first tranche of $4.0 million was sold on January 29, 1999, and for an initial period of 120 days is convertible into common stock at a fixed price of $13.06 per share. Thereafter, the preferred stock is convertible at the lesser of the fixed price or at a variable rate of 101% of the average market price for the ten lowest of the thirty days immediately preceding the conversion date. In no event can the first tranche be converted into more than 1,450,000 shares. The second tranche of $2.0 million, which is at the Company's option, can be sold during the period of July 28, 1999 through September 16, 1999, subject to the satisfaction by the Company of certain conditions. The preferred stock in the second tranche will contain terms and conditions for conversion similar to the first tranche, except that the fixed conversion price will be set at 125% of the average market price of the common stock at the time of the second closing. Dividends on the preferred stock are payable in cash or in common stock, at the option of the Company, at the annual rate of 5%. Additional features of the preferred stock issue include, among other things, a redemption feature at the Company's option if the common stock trades below a floor of $5 per share or above a ceiling of $20 per share.

At December 31, 1998, the Company had working capital of approximately $1.0 million which included cash and equivalents of approximately $1.1 million and short-term investments of approximately $1.8 million. In comparison, at December 31, 1997, the Company had working capital of approximately $7.0 million which included cash and cash equivalents of approximately $7.0 million (of which approximately $0.9 million was restricted) and short-term investments of approximately $2.1 million. The $6.0 million decrease in working capital is attributable primarily to the funding of the $11.6 million operating loss for the year ended December 31, 1998, offset in part by a borrowing collateralized by equipment ($1.5 million) and equity transactions, principally utilization of the Equity Line Agreement, of approximately $4.0 million.

Through December 31, 1998, the Company 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 pursuant to a $2 million equipment line of credit agreement. In 1999, the Company intends to spend approximately $1 million for additional equipment as it further expands its research and development laboratories, and to partially finance these capital equipment acquisitions by utilizing the $500,000 remaining under its existing equipment line of credit agreement. The Company has pledged substantially all of its tangible assets as collateral for this borrowing. 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.

Effective June 1997 the Company 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 five and one-half year period from January 1999 through June 2002 are approximately $483,100 (1999), $500,500 (2000 and 2001), $538,100 (2002), $554,200 (2003) and $285,400 (2004). In addition to rentals, the Company is obligated under the lease for real property taxes, insurance and maintenance.

In October 1998 the Company entered into an agreement with a contract research organization to conduct a clinical trial in three countries involving approximately 400 patients. The agreement, which is cancelable by either party upon thirty days notice, is expected to result in aggregate expenditures ranging from $4 to $5 million over the course of one year. Through December 31, 1998, the Company had expended approximately $360,000 in connection with this

clinical trial, of which approximately $265,000 was reflected as an advance at December 31, 1998, for services to be rendered in 1999.

The Company has committed to spend approximately $442,000 in 1999 and $178,000 in 2000 to a number of universities to conduct general scientific research programs and to provide for Fellowship Grants.

Since its inception, the Company has been in the development stage and therefore devotes substantially all of its efforts to research and development. The Company has incurred cumulative losses of approximately $23.8 million through December 31, 1998, and expects to incur substantial losses over the next several years. The Company's 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 the Company's control. While the Company believes that its existing capital resources 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. If the Company is successful in obtaining additional funding, the Company's existing stockholders could experience substantial dilution to their shares of stock.

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, and which could be on terms unfavorable to the Company.

YEAR 2000 READINESS DISCLOSURE

All statements contained in the following section are "Year 2000 Readiness Disclosures" within the meaning of the Year 2000 Information and Disclosure Act.

The Year 2000 issue (the "Year 2000 Issue") in computers arises from the common industry practice of using two digits to represent a date in computer software code and databases to enhance both processing time and save storage space. Therefore, when dates in the year 2000 and beyond are indicated and computer programs read the date "00," the computer may default to the year "1900" rather than the correct "2000." This could result in incorrect calculations, faulty data and computer shutdowns, which would cause disruptions of operations. In addition, the year 2000 is a leap year and systems need to recognize it as such.

The Company has developed a multi-phase program for Year 2000 Issues that consists of the following: (i) assessment of the corporate systems and operations of the Company that could be affected by the Year 2000 Issue, (ii) remediation of non-compliant systems and components, if any, and (iii) testing of systems and components following remediation. The Company has focused its Year 2000 compliance assessment program on four principal areas: (a) the Company's internal information technology system applications, including voice and data systems ("IT Systems"), (b) the Company's internal non-IT facilities systems, including embedded software in environmental controls, security systems, fire protection systems, elevators and public utility connections for gas, electric and telephone systems ("Facilities Systems"), (c) embedded and external software contained in laboratory and other equipment ("Equipment"), and (d) Year 2000 compliance by third parties with which the Company has a material relationship, such as significant vendors, financial institutions and insurers.

The Company has completed an inventory and risk assessment of its own internal IT Systems, Facilities Systems, and Equipment that it believes could be adversely affected by the Year 2000 Issue, and believes that its own internal systems are, at the present time, substantially compliant based upon internal systems tests, currently available information and reasonable assurance by its equipment and software vendors. The cost to remediate the Year 2000 Issues with regard to the Company's IT and Facility Systems and Equipment is not material.

In June of 1998, the Company began sending questionnaires to and/or contacting its outside vendors regarding their state of readiness with respect to identifying and remediating their Year 2000 Issues. The Company has

completed its risk assessment of its outside vendors and is currently reviewing their compliance. It is not possible for the Company to determine or be assured that adequate remediation of the Year 2000 Issue will be accomplished by such vendors. Furthermore, it is not possible for the Company to determine or be assured that third parties upon which the Company's vendors are dependent, will accomplish adequate remediation of their Year 2000 Issues. Except for the Company's public utility service vendors, who have indicated that they expect to be in compliance by mid-1999, the Company believes that, with respect to the computer systems of its major outside vendors, should a Year 2000 Issue exist whereby a vendor was unable to address the Company's needs, alternative vendors have been identified and are readily available that could furnish the Company with the same or similar supplies or services that it presently receives from these vendors without undue cost or expense.

Based on currently available information, the Company believes that the impact of the Year 2000 Issue, as it relates to its IT Systems, Facilities Systems, Equipment and third parties will not be material. In the event the Company were to fail to successfully implement its solutions to the Year 2000 Issues with respect to its internal systems in a timely manner, the Company believes that while such events would be disruptive to the Company's operations in the short term, such circumstances would not have a material adverse effect on the business, financial condition and results of operations of the Company over the long term. However, failure of the major third parties, in particular the financial institutions with which the Company has significant banking and investment management relationships and the Company's third party manufacturers, to be Year 2000 compliant could have a material adverse effect on the Company's business, financial condition and results of operations or business prospects.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

QUANTITATIVE DISCLOSURES

The Company is exposed to certain market risks associated with interest rate fluctuations on its marketable securities and borrowing arrangements. All investments in marketable securities and borrowing arrangements are entered into for purposes other than trading. The Company is not subject to risks from currency rate fluctuations. In addition, the Company does not utilize hedging contracts or similar instruments.

The Company's exposure to interest rate risk arises from financial instruments entered into in the normal course of business. Certain of the Company's 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.

The Company's 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 the Company's borrowings, fluctuations in fair value are not deemed to be material.

QUALITATIVE DISCLOSURES

The Company's primary exposures relate to (1) interest rate risk on its borrowings, (2) the Company's ability to pay or refinance its borrowings at maturity at market rates, (3) interest rate risk on the value of the Company's investment portfolio and rate of return, (4) the impact of interest rate movements on the Company's ability to obtain adequate financing to fund future cash requirements. The Company manages interest rate risk on its investment portfolio by matching scheduled investment maturities with its cash requirements. The Company manages interest rate risk on its outstanding borrowings by using fixed rate debt. While the Company cannot predict or manage its ability to refinance existing borrowings and investment portfolio, management evaluates the Company's 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, 1997 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, 1998 and for the period from inception (June 15, 1987) to December 31, 1998. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform 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, 1997 and 1998, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 1998 and for the period from inception to December 31, 1998, in conformity with generally accepted accounting principles.

/s/ ARTHUR ANDERSEN LLP

Orange County, California
February 26, 1999

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

CONSOLIDATED BALANCE SHEETS

ASSETS

	DECEMBER 31,	
	1997	1998
CURRENT ASSETS:		
Cash and equivalents	$ 6,063,347	$ 1,097,341
Restricted cash	935,000	--
Marketable securities and short-term investments	2,133,375	1,769,348
Other receivables, principally investment interest	221,829	112,552
Advance deposit to clinical trial vendor	--	265,727
Prepaid expenses and refundable deposits	127,259	157,495
Total current assets	9,480,810	3,402,463
PROPERTY AND EQUIPMENT, at cost:		
Equipment	1,952,262	2,197,253
Leasehold improvements	1,803,000	1,794,794
Accumulated depreciation and amortization	(279,913)	(740,413)
Property and equipment, net	3,475,349	3,251,634
OTHER ASSETS - Prepaid expenses and deposits	242,314	172,066
	$ 13,198,473	$ 6,826,163

LIABILITIES AND STOCKHOLDERS' EQUITY

CURRENT LIABILITIES:		
Line of credit	$ 850,000	$ --
Accounts payable and accrued expenses	975,339	1,278,954
Accrued payroll and related taxes	--	81,370
Note payable to related party	558,304	558,304
Current portion of long-term debt	94,886	445,297
Total current liabilities	2,478,529	2,363,925
LONG TERM DEBT, net of current portion	176,549	1,126,174
DEFERRED RENT	--	46,308
Total liabilities	2,655,078	3,536,407
COMMITMENTS AND CONTINGENCIES		
STOCKHOLDERS' EQUITY:		
Common Stock, par value $0.001 per share, 25,000,000 shares authorized: Issued and outstanding, 5,465,807 and 6,146,854 shares, respectively	23,188,363	27,535,329
Unrealized gains on available-for-sale securities	20,256	24,207
Deficit accumulated during the development stage	(12,665,224)	(24,269,780)
Total stockholders' equity	10,543,395	3,289,756
	$ 13,198,473	$ 6,826,163

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,
	1996	1997	1998	1998
REVENUES, from grants	$ --	$ --	$ --	$ 497,128
OPERATING EXPENSES:				
Research and development	615,485	4,508,255	8,542,034	16,017,101
General and administrative	659,895	2,341,276	3,122,506	8,892,888
	1,275,380	6,849,531	11,664,540	24,909,989
LOSS FROM OPERATIONS	(1,275,380)	(6,849,531)	(11,664,540)	(24,412,861)
OTHER INCOME (EXPENSE):				
Interest income	268,231	746,008	235,265	1,257,217
Interest expense	(51,769)	(56,419)	(156,016)	(692,571)
Other income (expense)	20,043	(1,599)	(19,265)	27,435
Total other income	236,505	687,990	59,984	592,081
NET LOSS	$ (1,038,875)	$ (6,161,541)	$(11,604,556)	$(23,820,780)
BASIC AND DILUTED LOSS PER SHARE	$ (0.32)	$ (1.14)	$ (2.07)	
BASIC AND DILUTED WEIGHTED AVERAGE COMMON SHARES OUTSTANDING	3,292,663	5,405,831	5,615,449	

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	COMMON STOCK		DEFICIT ACCUMULATED DURING THE DEVELOPMENT STAGE	DEFERRED COMPENSATION AND UNREALIZED GAINS	TOTAL
		SHARES	AMOUNT			
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 on June 30 at $1.25	--	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 on March 18 at $1.35	--	40,000	54,000	--	--	54,000
Common stock issued in exchange for accrued salaries on December 30 at $2.50	--	255,476	638,694	--	--	638,694
Common stock issued in exchange for note payable to President on December 30 at $2.50	--	200,000	500,000	--	--	500,000
Common stock issued in exchange for accrued expenses on December 30 at $2.50	--	20,842	52,104	--	--	52,104
Stock options issued in exchange for accrued professional fees on December 31 at $1.35	--	--	108,000	--	--	108,000
Stock options issued in exchange for future services on December 31 at $1.35	--	--	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	(3,808,088)	(93,749)	(835,077)
Common stock issued for cash at $2.50	--	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	COMMON STOCK SHARES	COMMON STOCK AMOUNT	DEFICIT ACCUMULATED DURING THE DEVELOPMENT STAGE	DEFERRED COMPENSATION AND UNREALIZED GAINS	TOTAL
BALANCE, December 31, 1994	$ 676,000	2,073,019	$ 2,423,260	$ (4,120,430)	$ --	$(1,021,170)
Common stock issued for cash at $2.50	--	22,000	55,000	--	--	55,000
Common stock forfeiture	--	(678,836)	(1,193,943)	--	--	(1,193,943)
Common stock reissued at $2.50	--	678,836	1,697,090	--	--	1,697,090
Stock options issued for services at $2.50	--	--	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 at $2.50 (net of commission)	--	266,800	633,650	--	--	633,650
Stock options issued for services at $2.50	--	--	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 at $7.60, less commissions and 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 at $2.00	--	--	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	(12,665,224)	20,256	10,543,395
Common stock and warrants issued for cash under Line of Equity Agreement, net of issue 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' warrants	--	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
BALANCE, December 31, 1998	$ --	6,146,854	$ 27,535,329	$(24,269,780)	$ 24,207	$ 3,289,756

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,
	1996	1997	1998	1998
CASH FLOWS FROM OPERATING ACTIVITIES:				
Net loss	$ (1,038,875)	$ (6,161,541)	$(11,604,556)	$(23,820,780)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization	7,898	220,950	460,500	865,902
Issuance of common stock options for services	103,950	60,000	422,264	691,214
Amortization of deferred compensation	--	--	--	93,749
Compensation expense for extension of Debt Conversion Agreements, net	--	--	--	503,147
Gain on sale of assets	--	--	--	(5,299)
(Increase) decrease in other receivables	(163,988)	(57,841)	109,277	(112,306)
Increase in prepaid expenses and refundable deposits	(238,187)	(130,402)	(180,715)	(500,285)
Increase in accounts payable and accrued expenses	11,278	630,018	303,615	1,439,054
Increase (decrease) in accrued payroll and related taxes	103,388	(331,175)	81,370	720,064
Increase in deferred rent	--	--	46,308	46,308
Increase (decrease) in accrued interest to related parties	979	(122,396)	--	300,404
Net cash used in operating activities	(1,213,557)	(5,892,387)	(10,361,937)	(19,778,828)
CASH FLOWS FROM INVESTING ACTIVITIES:				
Purchases of property and equipment	(131,600)	(3,563,790)	(236,785)	(4,072,350)
Redemptions (purchases) of marketable securities and short-term investments	(7,448,546)	5,315,171	364,027	(1,769,348)
Unrealized gain on available-for-sale securities	--	20,256	3,951	24,207
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	(7,580,146)	1,771,637	131,193	(5,753,919)

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,
	1996	1997	1998	1998
CASH FLOWS FROM FINANCING ACTIVITIES:				
(Repayment) of notes payable to/ borrowings from related parties, net	$ (22,500)	$ --	$ --	$ 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	1,826,625
Repayment of long-term debt	--	(55,190)	(199,964)	(255,154)
Proceeds from issuance of common stock and warrants, net of related offering costs and expenses	18,810,431	--	3,451,782	22,993,610
Proceeds from exercise of stock options	--	2,600	714,480	717,080
Issuance of notes to officers and directors for exercise of stock options			(286,560)	(286,560)
Proceeds from Revenue Participation Units	--	--	--	676,000
Cash paid out for fractional shares	(25)	--	--	(25)
Cash at acquisition	--	--	--	200,612
Net cash provided by financing activities	18,787,906	189,035	5,264,738	26,630,088
Net increase (decrease) in cash and equivalents	9,994,203	(3,931,715)	(4,966,006)	1,097,341
Cash and equivalents, beginning of period	859	9,995,062	6,063,347	--
Cash and equivalents, end of period	$ 9,995,062	$ 6,063,347	$ 1,097,341	$ 1,097,341
SCHEDULE OF NONCASH 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 Revenue Participation Units into shares of common stock	$ 676,000	$ --	$ --	$ 676,000
Issuance of stock options for services	$ 103,950	$ 60,000	$ 422,264	$ 691,214
Issuance of warrant in connection with equipment financing	$ --	$ --	$ 45,000	$ 45,000
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, 1998

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, 1998, the Company had two wholly owned subsidiaries, Advanced ImmunoTherapeutics, Inc. ("AIT"), incorporated in California in June 1987, and NeoTherapeutics GmbH ("NEOT GmbH"), incorporated in Switzerland in April 1997. 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 and NEOT GmbH 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 neurodegenerative diseases and conditions, such as memory deficits associated with Alzheimer's disease, aging, stroke, spinal cord injuries and Parkinson's disease. The accompanying consolidated financial statements include the results of the Company and its wholly-owned 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 $23.8 million through December 31, 1998, and expects to incur substantial losses over the next several years. While the Company believes that its existing capital resources (including the proceeds from its line of equity financing and the private placement of preferred stock completed in January 1999 - see Note 13) 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 diseases, and the ability to obtain government approval as well as dependency on key personnel.

PRINCIPLES OF CONSOLIDATION

The consolidated financial statements include accounts of the Company and its wholly-owned 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. At December 31, 1997, cash equivalents of $935,000 were pledged as collateral on a bank line of credit and were classified as restricted cash on the balance sheet. The note was repaid and the restricted cash was released during February 1998.

PREPAID EXPENSES AND ADVANCE DEPOSITS

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

MARKETABLE SECURITIES

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, 1998, 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. Securities held-to-maturity are stated at cost, adjusted for amortization of premiums and accretion of discounts, which are recognized as adjustments to interest income on investment securities. A valuation allowance is not established to recognize temporary market value fluctuations as the Company has the intent and ability to hold these investments until maturity. 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 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 Statement of Financial Accounting Standards No. 109 (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 shares outstanding for the period. 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. In 1996 the difference between previously reported EPS and restated EPS in accordance with SFAS No. 128 amounted to an increased loss of $0.01 per share.

NEW PRONOUNCEMENTS

COMPREHENSIVE INCOME. Effective for fiscal years beginning after December 15, 1997, SFAS No. 130 "Reporting Comprehensive Income" requires that comprehensive income and its components, as defined in the statement, be reported in a financial statement. 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. Effective for fiscal years beginning after December 15, 1997, comprehensive income must be reported "in a financial statement that is displayed with the same prominence as other financial statements." While the Company adopted the provisions of SFAS No. 130 for the 1998 fiscal year, the adoption of this standard did not have a material effect on the presentation of the Company's financial statements.

SEGMENT REPORTING. SFAS No. 131, "Disclosure About Segments of an Enterprise and Related Information" is effective for financial statements for periods beginning after December 15, 1997. SFAS No. 131 replaces SFAS No. 14, "Financial Reporting for Segments of a Business Enterprise" and several other pronouncements that amended SFAS No. 14. 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. Adoption of SFAS No. 131 in 1998 did not materially impact the Company's financial statement disclosures.

DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

In June 1998, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards 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. Statement 133 is effective for fiscal years beginning after June 15, 1999, although earlier implementation is allowed. Management plans to adopt the Standard in fiscal 2000 and believes that its adoption will not have a material impact on the Company.

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 8).

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

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. A second payment of $25,000 was made in July 1998. The third patent noted above was also jointly filed by the Company and the University and is subject to the same royalty agreement.

EMPLOYMENT AGREEMENT

Effective July 1, 1996, the Company entered into an employment agreement with the Chief Executive Officer. The agreement, among other things, provides for the grant of incentive stock options, an annual base salary with annual increases and an annual bonus based on the Company's attainment of certain performance objectives. The agreement, which was originally scheduled to terminate on June 30, 1999, was extended to December 31, 1999. 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 incentive option to purchase 75,000 shares of common stock at 110 percent of fair market value at the date of grant ($4.13 per share). This option vests in three equal increments over the life of the original agreement.

3 . MARKETABLE SECURITIES

A summary of marketable securities at December 31, 1997 and 1998 are as follows:

Type of Investment	Cost	Gross Unrealized Gains	Gross Unrealized (Losses)	Market Value
December 31, 1997:				
Held-to-Maturity:				
Corporate Bonds	$ 168,992	$ --	$ --	$ 168,992
Available-for-Sale:				
U.S. Government Treasury Notes and Bonds	1,292,951	10,218	(388)	1,302,781
U.S. Government guaranteed securities	447,900	8,770	--	456,670
Corporate Bonds	203,276	1,656	--	204,932
Total securities available	1,944,127	20,644	(388)	1,964,383
Total Investments	$2,113,119	$ 20,644	$ (388)	$2,133,375
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

The above securities are shown in the accompanying balance sheet at December 31, 1997 and 1998, as follows:

December 31, 1997:	
Marketable securities and short-term investments:	
Held-to-Maturity	$ 168,992
Available-for-Sale	1,964,383
	$ 2,133,375
December 31, 1998:	
Marketable securities and short-term investments:	
Available for Sale	$ 1,769,348

There were no sales of securities for the year ended December 31, 1997. For the year ended December 31, 1998, sales of securities aggregated $1,169,156, realizing net gains of $15,310 therefrom.

4. DEBT

During August 1997, the Company established a Line of Credit Agreement with its bank which expired August 30, 1998. At December 31, 1997, the Company was indebted to the bank for $850,000 under the Agreement. The interest rate was approximately 8% at December 31, 1997. Such debt was collateralized by restricted cash equivalents in the amount of $935,000. During February 1998 the related note was repaid and the restricted cash was released.

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, 1998, the Company borrowed $1,500,000 under the Note for equipment and computer software purchases and has an additional $500,000

available over the next year for similar 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
1999	$ 445,297
2000	460,476
2001	437,433
2002	228,265
	$1,571,471

5. REVENUE FROM GRANTS

In July 1995, a Small Business Innovative Research Grant (the SBIR Grant) from the National Institutes of Health was completed and no additional funds were due or collected. The Company has received an aggregate of $497,128 from the SBIR Grant.

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, 1998. At December 31, 1998, the Company and its domestic subsidiary had approximately $14.7 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 2018. 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, 1998, the effect of such limitation, if imposed, has not been determined. The Company's foreign subsidiary has a loss carryforward of approximately $5.0 million at December 31, 1998, 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 April 1997 through December 1998. 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 its realization.

7. COMMITMENTS AND CONTINGENCIES

FACILITY LEASES

During late 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 follows:

Years ending December 31:	
1999	$ 501,600
2000	517,800
2001	513,400
2002	542,100
2003	554,200
2004	285,400
	$2,914,500

Rent expense for the years ended December 31, 1996 and 1997 and 1998 aggregated approximately $26,800, $372,000 and $572,400 and respectively.

RESEARCH AND FELLOWSHIP GRANTS

At December 31, 1998, the Company has committed to pay approximately $570,000 to a number of universities to conduct general scientific research programs and $50,000 to the Reeve-Irvine Research Center at The University of California Irvine, to provide for a Fellowship Grant. Payment of these grants and the fellowship is anticipated to amount to approximately $442,000 and $178,000 in 1999 and 2000, respectively. Grant expense for 1996, 1997 and 1998 amounted to approximately $60,500, $335,000 and $465,900, respectively.

MAJOR CLINICAL TRIAL

In October 1998 the Company entered into an agreement with a contract research organization to conduct a clinical trial in three countries involving approximately 400 patients. The agreement, which is cancelable by either party upon thirty days notice, is expected to result in aggregate expenditures ranging from $4 to $5 million over the course of one year. Through December 31, 1998, the Company had expended approximately $360,000 in connection with this clinical trial, of which approximately $265,000 was reflected as an advance at December 31, 1998, for services to be rendered in 1999.

LITIGATION

On December 10, 1998, the Company was served with a lawsuit initiated by four former employees of the Company. 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 278,589 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 generally accepted accounting principles. Under the agreements, as amended, the Company was required to achieve total operating revenues from the date of each agreement through December 31, 1995, in a cumulative amount of at least $500,000. When the Company failed to achieve this goal, the agreements were amended to extend the deadline until December 31, 1997 and increase the revenue goal to a cumulative amount of at least $1,000,000. The agreements provide that, if the revenue goals are not achieved by the stated deadline, the shares will be forfeited and the employees will be required to return the shares to the Company. The Company did not achieve the required revenue goals either by December 31,1995, or by December 31, 1997. The Company's total revenues from inception through December 31, 1995, were only $497,128. The Company did not have any revenues in 1996 or 1997, and the total revenues from inception through December 31, 1997 remained at $497,128. In the lawsuit the plaintiffs allege, among other things, that the cumulative revenues of the Company were or should have been in excess of $500,000 as of December 31, 1995, and that the defendants fraudulently induced the plaintiffs into entering into the agreements and the subsequent amendments to the agreements. The lawsuit asks 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 are also seeking 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. The lawsuit is in the early stages of discovery and no trial date has been set. Management of the Company believes that the plaintiffs' claims are without merit and that the resolution of this matter will not have a material adverse effect on the financial condition or operations of the Company. The Company intends to vigorously defend the lawsuit and to pursue the cross-complaint for the return and cancellation of all of the disputed shares. 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 was then and is now an employee 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 400,244 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 have 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. Because the suit is in its early stages, counsel for the Company is unable to opine on the merits of the suit. However, management intends to defend the action, which it believes is without merit, and to vigorously pursue the return and cancellation of all of the disputed shares. Until such time as the matter is finally resolved, the

Company is continuing to account for all of the shares, which it has deemed forfeited, as issued and outstanding.

8. STOCKHOLDERS' EQUITY

REVENUE PARTICIPATION UNITS

In 1988 and 1989, AIT raised private placement funds via a financial instrument specified as a Revenue Participation Unit ("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 shareholder 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 shareholder 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 "Agreement") with a private investor. The Agreement provides for the Company, at its sole discretion, and subject to certain restrictions, to periodically sell ("put") shares of its common stock to the investor. Puts can be made every 15 days in amounts ranging from $250,000

to $2,000,000, depending on the trading volume and the market price of the stock at the time of each put, subject to aggregate minimum puts of $1 million over the life of the Agreement. At the time of each put, the investor receives a discount of 12% from the then current average market price, as determined under the Agreement. Pursuant to the Agreement, the Company also issued to the investor warrants to purchase 25,000 shares of common stock at $11.62 per share. As of December 31, 1998, the Company had put a total of 506,049 shares of its common stock to the investor pursuant to the Agreement resulting in net proceeds of approximately $3,452,000.

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% 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.

9. STOCK OPTIONS

The Company has two stock option plans: the 1991 Stock Incentive Plan (the "1991 Plan") and the 1997 Stock Incentive Plan (collectively, the "Plans"). The Plans were adopted by the Company's shareholders 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 authorizes for issuance up to 500,000 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 at the times 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 at the time the options are granted. An option granted under the Plans is 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 employee and the Company.

Stock options have also been issued outside of the aforementioned plans to various consultants. During the period of December 1993 through December 1996, the Company issued a total of 194,000 options to purchase common stock to two technical 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 an 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 $103,950, $60,000 and $422,264 of compensation expense for these options in 1996, 1997 and 1998, 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:

	1996		1997		1998	
	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
Outstanding at beginning of year	240,173	$0.24	447,173	$3.15	658,173	$4.66
Granted	207,000	3.39	329,000	5.37	331,300	8.03
Exercised	--	--	(104,000)	0.025	(134,000)	2.54
Forfeited	--	--	(14,000)	4.29	(1,600)	8.88
Outstanding, at end of year	447,173	$3.15	658,173	$4.66	853,873	$5.78
Exercisable, at end of year	270,173	$0.21	363,923	$1.18	391,048	$1.95

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

Range of Exercise Prices	Number Outstanding at 12/31/98	Weighted Average Remaining Life	Weighted Average Exercise Price	Number Exercisable 12/31/98	Weighted Average Exercise Price
$ 0.025	30,000	2.00	$0.025	30,000	$0.025
3.75 to 5.625	441,673	6.89	4.16	198,673	3.93
5.626 to 12.88	382,200	8.89	8.53	162,375	9.16

As of December 31, 1998, there were 349,700 options outstanding under the 1997 Plan and 181,000 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 1996, 1997 and 1998, respectively: risk-free interest rates of 6.52% (1996), 6.37% (1997) and 4.96% (1998); zero expected dividend yields; expected lives of 5 years; expected volatility of 50 percent in 1996 and 1997, and 75.26 percent in 1998.

For purposes of the following required pro forma information, the weighted average fair value of stock options granted in 1996, 1997 and 1998 was $2.14, $3.06 and $4.96, respectively. The total estimated fair value is amortized to expense over the vesting period.

	1996	1997	1998
Pro forma net loss	$(1,218,389)	$(6,551,287)	$(12,395,411)
Pro forma basic and diluted loss per share	$ (0.37)	$ (1.21)	$ (2.21)

10. 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.

11. 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 AIT-082 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 AIT-082. The entire cost of these two contracts was funded by the NIA and NIMH directly to the subcontractors.

12. UNAUDITED QUARTERLY FINANCIAL INFORMATION

The following is a summary of the unaudited quarterly results of operations for fiscal 1998, 1997 and 1996 (in thousands except per share data):

	March 31	June 30	September 30	December 31
Fiscal 1998				
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

	March 31	June 30	September 30	December 31
Fiscal 1997				
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

	March 31	June 30	September 30	December 31
Fiscal 1996				
Revenues	$ --	$ --	$ --	$ --
Total operating expenses	60	183	270	762
Net loss	$ (73)	$ (197)	$ (260)	$ (508)
Basic and diluted loss per share	$ (0.03)	$ (0.07)	$ (0.09)	$ (0.13)
Shares used in calculation	2,405	2,767	2,757	3,914

13. EVENTS SUBSEQUENT TO DECEMBER 31, 1998

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 consists 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 is convertible into common stock at a fixed price of $13.06 per share. Thereafter, the preferred stock is 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. In no event can the first tranche be converted into more than 1,450,000 shares. The second tranche of $2.0 million, which is at the Company's option, can be sold approximately 6 months after the effective date of the Preferred Stock Agreement, subject to the satisfaction by the Company of certain conditions. The preferred stock in the second tranche will contain terms and conditions for conversion similar to the first tranche, except that the fixed conversion price will be set at 125% of the average market price of the common stock at the time of the second closing. Dividends on the preferred stock are payable in cash or in common stock, at the option of the Company, at the annual rate of 5%. Additional features of the preferred stock issue include, among other things, a redemption feature at the Company's option if the common stock trades below a floor of $5 per share or above a ceiling of $20 per share. The investors also received warrants to purchase for a period of 5 years, 75,000 shares of the Company's common stock at $12.98 per share.

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 16, 1999, with respect to each person who is an executive officer or a director of the Company:

Name	Age	Position
Alvin J. Glasky, Ph.D.	65	Chairman of the Board, Chief Executive Officer, President and Director
Samuel Gulko.....	67	Chief Financial Officer, Secretary and Treasurer and Director
Stephen Runnels.....	49	Executive Vice President and Director
Michelle S. Glasky, Ph.D.	39	Vice President Scientific Affairs
Mark J. Glasky.....	37	Director
Frank M. Meeks.....	54	Director
Eric L. Nelson, Ph.D.	74	Director
Carol O'Cleireacain, Ph.D.	52	Director
Joseph Rubinfeld, Ph.D.	66	Director
Paul H. Silverman, Ph.D., D.Sc.	74	Director

EXECUTIVE OFFICERS AND DIRECTORS

ALVIN J. GLASKY, PH.D., has been Chief Executive Officer, President and a director of AIT since its inception in June 1987, and has served as the Chairman of the Board, Chief Executive Officer, President and a director of the Company since July 1989, when AIT became a wholly owned subsidiary of the Company. 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 the Company since September 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 the present, Mr. Gulko has been self-employed as a Certified Public Accountant and business consultant, as well as the part-time Chief Financial Officer of several companies. Mr. Gulko obtained his B.S. degree in Accounting from the University of Southern California in 1958.

STEPHEN RUNNELS joined the Company as Executive Vice President in April, 1997, and has been a director of the Company since June 1998. Prior to joining the Company, 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. 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 the Company as Director of Scientific Affairs in July 1996 and was promoted to Vice President, Scientific Affairs in June 1997. Prior to joining the Company, Dr. M. Glasky worked at 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 in 1988. Dr. M. Glasky completed a post-doctoral fellowship at Stanford University School of Medicine.

MARK J. GLASKY has been a director of the Company since August 1994. Since 1982, Mr. Glasky has been employed by Bank of America NT&SA in various corporate lending positions and currently serves as 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 and Dr. Michelle S. Glasky are the adult son and daughter, respectively, of Dr. Alvin Glasky.

FRANK M. MEEKS has been a director of the Company 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 the Company since June 1998 and a member of the Company's Scientific Advisory Board since 1987. Dr. Nelson has been 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 the Company since September 1996. Dr. O'Cleireacain has served as an independent 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. Since 1998, Dr. O'Cleireacain has also served as an adjunct Professor of Urban Studies at Barnard College, Columbia University. 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 Trilliumn 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 the Company since June 1998. Dr. Rubinfeld is the co-founder of publicly held SuperGen, Inc., a pharmaceutical company focused on drugs for life-threatening diseases, particularly cancer, and has served as the Chief Executive Officer, President and a director 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 Antivirals, Inc., 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. From 1987 to 1990, Dr. Rubinfeld was a Senior Director at Cetus Corporation, a former 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 Blemycin. Prior to that time, Dr. Rubinfeld was a research scientist with several pharmaceutical and consumer product companies including Schering-Plough Corporate and Colgate-Palmolive Co.

PAUL H. SILVERMAN, PH.D., D.SC., has been a director of the Company 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 the Company is divided into two classes consisting of five Class I directors and four Class II directors. Each Class is elected in alternate years and serves a term of two years. The Class I directors, whose term expires in 2000, include Mr. Gulko, Mr. Meeks, Dr. Nelson, Mr. Runnels and Dr. Silverman. The Class II directors, whose term expires in 1999, include Dr. A. Glasky, Mr. M. Glasky, Dr. O'Cleireacain and Dr. Rubinfeld. Officers are elected by, and serve at the discretion of, the Board of Directors. The Board of Directors currently has two committees. The Compensation Committee, which consists of Mr. Meeks, Dr. O'Cleireacain and Dr. Silverman, has been established to recommend salaries and incentive compensation for executive officers of the Company. The Audit Committee, which consists of Dr. O'Cleireacain, Mr. Glasky and Mr. Meeks, has been established to review the results and scope of the audit and other services provided by the Company's independent public accountants.

SCIENTIFIC ADVISORY BOARD

The Company has established a Scientific Advisory Board consisting of distinguished scientists whom the Company believes will make a contribution to the development of the Company's business. The Scientific Advisory Board members review the Company's research and development progress, advise the Company of advances in their fields and assist in identifying special product opportunities. Members are compensated on a consulting fee basis for their services and are reimbursed for reasonable travel expenses.

All of the advisors are employed by employers other than the Company and may have commitments to, or consulting or advisory agreements with, other entities, including potential competitors of the Company, that may limit their availability to the Company. Although these advisors may contribute significantly to the affairs of the Company, none is required to devote more than a small portion of his time to the Company in his capacity as a member of the Scientific Advisory Board. The members of the Scientific Advisory Board currently are as follows:

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."

COMPLIANCE WITH SECTION 16(A) OF THE SECURITIES EXCHANGE ACT OF 1934

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, 1998, were satisfied.

ITEM 11. EXECUTIVE COMPENSATION

SUMMARY COMPENSATION

The following table sets forth summary information concerning the compensation of the Company's Chief Executive Officer and the other most highly compensated executive officers of the Company whose total salary and bonuses for services rendered to the Company in all capacities during the fiscal year ended December 31, 1998 exceeded $100,000 (the "Named Executive Officers"). No other executive officer of the Company received compensation in 1998 in excess of $100,000.

SUMMARY COMPENSATION TABLE

					LONG TERM COMPENSATION AWARDS
		ANNUAL COMPENSATION			SECURITIES
NAME AND PRINCIPAL POSITION	YEAR	SALARY	BONUS	OTHER	UNDERLYING OPTIONS
Alvin J. Glasky, Ph.D	1998	199,998	$ --	$ --	65,000
Chairman, Chief Executive	1997	199,992(1)	--	--	--
Officer and President	1996	165,398(2)	--	--	75,000
Stephen Runnels(4)	1998	165,940	--	--	25,000
Executive Vice President	1997	108,513	--	$25,107(3)	62,000
Samuel Gulko	1998	109,250	--	--	25,000
Chief Financial Officer,	1997	78,000	--	--	6,000
Secretary and Treasurer	1996	30,000(5)	--	--	14,000

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(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) Includes an auto allowance of $400 per month. Of the total amounts, $72,998 and $92,400 has been accrued for 1996.

(3) Represents a one-time relocation allowance.

(4) Commenced employment in April 1997.

(5) Employment commenced July 1996 on a part-time basis.

OPTION GRANTS

The following table sets forth information concerning stock options granted during the fiscal year ended December 31, 1998, to the Named Executive Officers:

STOCK OPTIONS GRANTED 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 DATES OF STOCK PRICE APPRECIATION FOR OPTION TERM(2) 5%	10%
Alvin J. Glasky	25,000	8%	$7.25	Feb. 11, 2008	$113,987	$288,866
	40,000	13%	$7.625	Dec. 17, 2008	$191,813	$486,091
Stephen Runnels	10,000	3%	$7.25	Feb. 11, 2008	$ 45,595	$115,546
	15,000	5%	$7.625	Dec. 17, 2008	$ 71,930	$182,284
Samuel Gulko	10,000	3%	$7.25	Feb. 11, 2008	$ 45,595	$115,546
	15,000	5%	$7.625	Dec. 17, 2008	$ 71,930	$182,284

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(1) The above options become exercisable in 25% increments, commencing three months from the date of grant and each three months thereafter.

(2) The potential realizable value is calculated from the exercise price per share, assuming the market price of the Company's 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, 1998, by the Named Executive Officers and the value of such officers' unexercised options at December 31, 1998:

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	12,000	--	17,500	57,500	48,438	178,438
Samuel Gulko	10,000	--	13,000	22,000	46,313	58,563

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(1) Based upon the closing price of the common stock on December 31, 1998, as reported by the NASDAQ National Market ($10.50 per share).

EMPLOYMENT AGREEMENT

The Company has an employment agreement with Dr. Alvin J. Glasky, effective as of July 1, 1996. 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 $200,000 with annual increases and an annual bonus based on the Company's attainment of certain performance objectives. The agreement, as amended, ends on December 31, 1999, and may be terminated by the Company 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 the Company. In connection with entering into this agreement, Dr. Glasky was granted an incentive stock option to purchase 75,000 shares of common stock at an exercise price of $4.13 per share, which vests in three equal annual increments.

COMPENSATION OF DIRECTORS

Each of the Company's 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 February 1998, the Company granted to each non-employee director an option to purchase 10,000 shares of common stock at $8.375 per share. In August 1998, the Company granted to each non-employee director an option to purchase 10,000 shares of common stock at $5.625 per share.

STOCK OPTION PLANS

The Company has 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 the Company's shareholders 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 the Company's 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 employees of the Company and other persons whose participation in the 1991 Plan is determined to be in the Company's best interest. As of December 31, 1998, there were options to purchase 181,000 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 common stock ("Purchase Rights"). The 1997 Plan authorized for issuance up to 500,000 shares of the Company's 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 the capital structure of the Company. Under the 1997 Plan, incentive stock options, nonqualified stock options and Purchase Rights may be granted to employees of the Company and its subsidiaries and affiliates. Nonqualified stock options and Purchase Rights may be granted to employees of the Company and its subsidiaries and affiliates, non-employee directors and officers, consultants and other service providers. As of December 31, 1998, there were options to purchase 349,700 shares of common stock outstanding under the 1997 Plan.

The Plans are administered by a Compensation Committee appointed by the Board of Directors (the "Committee"), which 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 a merger of the Company with or into another corporation or the sale of substantially all of the assets of the Company, all 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 exercisability of options outstanding under the 1997 Plan will accelerate upon a change in control of the Company, 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 the Company or within three months after termination of employment (one year for termination resulting from death or disability).

SECTION 401(K) PLAN

In January 1990, the Company adopted the AIT Cash or Deferred Profit Sharing Plan (the "401(k) Plan") covering the Company's 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 employees or by the Company, and the investment earnings thereon, are not taxable to employees until withdrawn from the 401(k) Plan, and so that contributions by the Company, if any, will be deductible by the Company when made. Pursuant to the 401(k) Plan, employees may elect to reduce their current compensation by up to the statutorily prescribed annual limit ($10,000 in 1998) and to have the amount of such reduction contributed to the 401(k) Plan. The 401(k) Plan permits, but does not require, additional matching contributions to the 401(k) Plan by the Company on behalf of all participants in the 401(k) Plan. The Company has 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 the Company's common stock as of March 16, 1999, by (i) each person (or group of affiliated persons) who is known by the Company to own beneficially 5% or more of the common stock, (ii) each of the Company's directors, (iii) each of the Named Executive Officers, and (iv) all executive officers and directors of the Company 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	1,432,622	22.4%
Samuel Gulko	34,150	*
Stephen Runnels	45,750	*
Michelle S. Glasky, Ph.D.(3)(4)	32,230	*
Mark J. Glasky(5)(6)	43,479	*
Frank M. Meeks(7)	55,460	*
Eric L. Nelson, Ph.D	51,500	*
Carol O'Cleireacain, Ph.D.(8)	35,000	*
Joseph Rubinfeld, Ph.D	5,000	*
Paul H. Silverman, Ph.D., D.Sc.(8)	35,000	*
All Executive Officers and Directors as a group (10 persons)(9)	1,770,191	26.8%

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* 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 16, 1999, 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 85,000 shares subject to options held by Dr. Alvin J. Glasky which are currently exercisable or exercisable within 60 days of March 16, 1999, and 88,173 shares issuable within 60 days of March 16, 1999, upon exercise of the Glasky warrant. Also includes 4,000 shares owned by the NeoTherapeutics, Inc. 401(k) Plan, and 62,493 shares beneficially owned by Dr. Glasky's wife, Rosalie H. Glasky. Does not include 43,479 shares beneficially owned by Mark J. Glasky and 32,230 shares beneficially owned by Dr. Michelle S. Glasky, Dr. Glasky's adult children, for which Dr. Glasky disclaims beneficial ownership.

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

(4) Includes 24,750 shares subject to options held by Dr. Michelle S. Glasky which are currently exercisable or exercisable within 60 days of March 16, 1999, and 500 shares subject to currently exercisable warrants.

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

(6) Includes 25,000 shares subject to options held by Mr. Glasky which are currently exercisable or exercisable within 60 days of March 16, 1999, and 1,000 shares subject to currently exercisable warrants.

(7) Includes 25,000 shares subject to options held by Mr. Meeks which are currently exercisable or exercisable within 60 days of March 16, 1999. Does not include 460 shares beneficially owned by Mr. Meeks' wife, for which Mr. Meeks disclaims beneficial ownership.

(8) Includes 25,000 shares subject to options held by each of Drs. O'Cleireacain and Silverman which are currently exercisable or exercisable within 60 days of March 16, 1998.

(9) Includes 88,173 shares issuable upon the exercise of the Glasky warrant, 289,500 shares subject to options which are currently exercisable or exercisable within 60 days of March 16, 1998, 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.

On June 30, 1990, in exchange for cancellation of $503,144 of indebtedness for unpaid compensation, the Company issued a total of 402,517 shares of common stock in the following amounts: Dr. Alvin Glasky, 184,000 shares; Sanford Glasky (the brother of Dr. Alvin Glasky), 60,013 shares; JoAnne Law, 24,333 shares; Luana Kruse, 19,200 shares; Rosalie Glasky (the wife of Dr. Glasky), 28,065 shares; and John W. Baldridge, 86,906 shares (the "1990 Restricted Stock Exchange"). On December 30, 1993, in exchange for cancellation of $690,798 of indebtedness for unpaid compensation and accrued expenses, the Company issued a total of 276,317 shares of common stock in the following amounts: Dr. Alvin Glasky, 169,001 shares; Sanford Glasky, 49,837 shares; JoAnne Law, 16,559 shares; Luana Kruse, 19,800 shares; Rosalie Glasky, 19,178 shares; and John W. Baldridge, 1,942 shares (the "1993 Restricted Stock Exchange"). Both the 1990 Restricted Stock Exchange and the 1993 Restricted Stock Exchange involved a risk of forfeiture whereby if the Company did not generate a minimum of $500,000 in total operating revenues from inception through December 31, 1995, all shares would be returned to the Company with the holders forfeiting all rights to the shares and forfeiting any claim to the previously accrued but unpaid compensation. Effective December 31, 1995, five of the parties, all of whom were present or past employees of the Company, entered into agreements with the Company whereby the forfeiture date was extended from December 31, 1995 to December 31, 1997 in exchange for increasing the minimum total operating revenues which the Company would need to achieve in order to avoid forfeiture of the shares from $500,000 to $1,000,000, with such revenues to be achieved by December 31, 1997. As of December 31, 1997, when the Agreements terminated, the Company did not achieve the revenue goals set forth in the Agreements, as previously amended. The four former employees who are parties to the Agreements have indicated disagreement with the Company's position and have filed a lawsuit against the Company seeking a determination that they are entitled to keep their shares. The Company has filed a cross-complaint against the four former employees seeking the return and cancellation of the shares. The Company's Chief Executive Officer and his wife have agreed to surrender to the Company for cancellation the same proportion of their shares (a total of 400,244) as the four former employees are required to surrender based on the final resolution of the lawsuit. Until such time as the Company can obtain the surrender of all of these shares and the matter is fully resolved, the Company is accounting for all of the stock, which it has deemed forfeited, as issued and outstanding.

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 licenses to the Company by McMaster University. A third patent, which was issued September 1, 1998, is 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.
3.3	Certificate of Amendment of Bylaws adopted April 21, 1998.
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.)

EXHIBIT NO.	DESCRIPTION
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.)
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 L.P. (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 L.P. (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 L.P. 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.)
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.)

EXHIBIT NO.	DESCRIPTION
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).
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.)
21	Subsidiaries of Registrant.
23	Consent of Arthur Andersen LLP.
27	Financial Data Schedule.

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* Indicates a management contract or compensatory plan or arrangement.

(b) Reports on Form 8-K. The Company filed a Report on Form 8-K on November 12, 1998, to report press releases issued to the public on November 10, November 11 and November 12, 1998.

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: March 29, 1999

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)	March 29, 1999
/s/ Samuel Gulko Samuel Gulko	Chief Financial Officer, Secretary, Treasurer and Director (Principal Accounting and Financial Officer)	March 29, 1999
/s/ Mark J. Glasky Mark J. Glasky	Director	March 29, 1999
/s/ Frank M. Meeks Frank M. Meeks	Director	March 29, 1999
/s/ Carol O'Cleireacain Carol O'Cleireacain, Ph.D.	Director	March 29, 1999
/s/ Paul H. Silverman Paul H. Silverman Ph.D., D.Sc.	Director	March 29, 1999
/s/ Stephen Runnels Stephen Runnels	Executive Vice President and Director	March 29, 1999
/s/ Eric L. Nelson, Ph.D. Eric Nelson, Ph.D.	Director	March 29, 1999
/s/ Joseph Rubinfeld Joseph Rubinfeld, Ph.D.	Director	March 29, 1999

EXHIBIT INDEX

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3.2	Bylaws of the Registrant.
3.3	Certificate of Amendment of Bylaws adopted April 21, 1998.
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.)

EXHIBIT NO.	DESCRIPTION
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.)
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 L.P. (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 L.P. (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 L.P. 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.)
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.)

EXHIBIT NO.	DESCRIPTION
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).
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.)
21	Subsidiaries of Registrant.
23	Consent of Arthur Andersen LLP.
27	Financial Data Schedule.

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* 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. To be properly brought before a 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, (b) otherwise properly brought before the meeting by or at the direction of the Board of Directors, or (c) otherwise properly brought before the meeting by a stockholder entitled to vote at the meeting.

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.

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 3.3

CERTIFICATE OF AMENDMENT
OF THE BYLAWS
OF
NEOTHERAPEUTICS, INC.
A DELAWARE CORPORATION

I, Samuel Gulko, hereby certify that:

1. I am the duly elected and acting Secretary of NeoTherapeutics, Inc., a Delaware corporation; and

2. Section 2 and Section 3 of the Bylaws of this corporation were amended by a resolution duly adopted by the Board of Directors of this corporation on April 21, 1998, to read in their entirety as follows:

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 fixed from time to time by the Board of Directors pursuant to a resolution duly adopted by a majority of the entire Board of Directors, but no decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director. Until changed in the foregoing manner, the number of directors shall be nine (9). Directors shall be elected at each annual meeting of the 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 or her successor is duly elected and qualified, or until his or her 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. 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 (2) classes, as nearly equal in number as possible, designated Class I and Class II. The number of directors constituting each Class shall be fixed from time to time by a resolution duly adopted by a majority of the entire Board of Directors. Class I directors shall hold office for an initial term expiring at the 1998 annual meeting of stockholders. Class II directors shall hold office for a full term expiring at the 1999 annual meeting of stockholders. At each annual meeting of stockholders held thereafter, directors shall be elected for a full term of office to succeed the directors of the Class whose terms then expire.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed the seal of said corporation as of the 19th day of March, 1999.

/s/ Samuel Gulko

Samuel Gulko, Secretary

EXHIBIT 21

SUBSIDIARIES OF REGISTRANT

1. Advanced ImmunoTherapeutics, Inc., a California corporation.

2. NeoTherapeutics GmbH, a Switzerland corporation.

EXHIBIT 23

CONSENT OF INDEPENDENT PUBLIC ACCOUNTANTS

As independent public accountants, we hereby consent to the incorporation of our reports included in this Form 10-K, into the Company's previously filed Registration Statement File No. 333-30321 on Form S-8, Registration Statement File No. 333-30345 on Form S-8, Registration Statement File No. 333-05342-LA on Form S-3, and into Registration Statement File No. 333-37585 on Form S-3.

/s/Arthur Andersen LLP
ARTHUR ANDERSEN LLP

Orange County, California
March 26, 1999

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THIS SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM DECEMBER 31, 1998 FINANCIAL STATEMENTS OF NEOTHERAPEUTICS, INC. AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FORM 10-K YEAR ENDED DECEMBER 31, 1998.

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DEC-31-1998
JAN-01-1998
DEC-31-1998
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(11,604,556)
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