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

FORM 10-K

X	Exchange Act of 193		` '		
	Transition report Exchange Act of 193		Section 13 or	15(d) of th	e Securitie
	For the transition	period from	to		
Commissi	on file number: 0-2	7756.			
	Al	exion Pharma	ceuticals, Inc	. .	
	(Exact name of	registrant a	s specified in	n its charter	.)
•	Delaware or other jurisdiction oration or organizat			13-364831 (I.R.S. Empl Identificati	.oyer
	25 Science Park,	Suite 360,	New Haven, Cor	nnecticut 065	511
	(Address of p	rincipal exe	cutive offices	s) (Zip Code)	
		203-77	6-1790		
	(Registrant's	telephone nu	mber, includir	ng area code)	

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

Securities registered pursuant to Section 12(g) of the Act: Common Stock, Par Value \$0.0001

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes X No

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

The aggregate market value of the Common Stock held by non-affiliates of the registrant, based upon the last sale price of the Common Stock reported on the National Association of Securities Dealers Automated Quotation (NASDAQ) National Market System on October 22, 1998, was approximately \$78,587,000.

The number of shares of Common Stock outstanding as of October 22, 1998 was 11,226,812.

DOCUMENTS INCORPORATED BY REFERENCE

(To the Extent Indicated Herein)

Portions of the registrant's Proxy Statement to be filed with the Securities and Exchange Commission in connection with solicitations of proxies for the Registrant's 1998 Annual Meeting of Stockholders on December 4, 1998 are incorporated by reference in Part III, Item 11 of this Form 10-K.

THIS ANNUAL REPORT ON FORM 10-K AND THE DOCUMENTS INCORPORATED HEREIN BY REFERENCE CONTAIN FORWARD-LOOKING STATEMENTS THAT HAVE BEEN MADE PURSUANT TO THE PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995. SUCH FORWARD LOOKING STATEMENTS ARE BASED ON CURRENT EXPECTATIONS, ESTIMATES AND PROJECTIONS ABOUT THE COMPANY'S INDUSTRY, MANAGEMENT'S BELIEFS, AND CERTAIN ASSUMPTIONS MADE BY THE COMPANY'S MANAGEMENT, WORDS SUCH AS "ANTICIPATES," "EXPECTS," "INTENDS," "PLANS," "BELIEVES," "SEEKS," ESTIMATES," VARIATIONS OF SUCH WORDS AND SIMILAR EXPRESSIONS ARE INTENDED TO IDENTIFY SUCH FORWARD-LOOKING STATEMENTS. THESE STATEMENTS ARE NOT GUARANTEES OF FUTURE PERFORMANCE AND ARE SUBJECT TO CERTAIN RISKS, UNCERTAINTIES AND ASSUMPTIONS THAT ARE DIFFICULT TO PREDICT; THEREFORE, ACTUAL RESULTS MAY DIFFER MATERIALLY FROM THOSE EXPRESSED OR FORECASTED IN ANY SUCH FORWARD-LOOKING STATEMENTS. SUCH RISKS AND UNCERTAINTIES INCLUDE, BUT ARE NOT LIMITED TO, THOSE SET FORTH HEREIN UNDER "IMPORTANT FACTORS REGARDING FORWARD-LOOKING STATEMENTS," ATTACHED HERETO AS EXHIBIT 99, AS WELL AS THOSE NOTED IN THE DOCUMENTS INCORPORATED HEREIN BY REFERENCE. UNLESS REQUIRED BY LAW, THE COMPANY UNDERTAKES NO OBLIGATION TO UPDATE PUBLICLY ANY FORWARD-LOOKING STATEMENTS, WHETHER AS A RESULT OF NEW INFORMATION, FUTURE EVENTS OR OTHERWISE. HOWEVER, READERS SHOULD CAREFULLY REVIEW THE RISK FACTORS SET FORTH IN OTHER REPORTS OR DOCUMENTS THE COMPANY FILES FROM TIME TO TIME WITH THE SECURITIES AND EXCHANGE COMMISSION.

Item 1. BUSINESS

GENERAL

Alexion Pharmaceuticals, Inc. ("Alexion" or the "Company"), a Delaware corporation incorporated in 1992, is a biopharmaceutical company engaged in the research and development of proprietary immunoregulatory compounds for the treatment of autoimmune and cardiovascular diseases. The Company is developing C5 Complement Inhibitors and Apogens, two classes of potential therapeutic compounds designed to selectively target specific disease-causing segments of the immune system. The Company believes that its C5 Complement Inhibitors and Apogens, which are based upon distinct immunoregulatory technologies, may have the advantage of achieving a higher level of efficacy with the potential for reduced side effects when compared to existing therapeutic approaches. The Company will need to undertake and complete further tests in order to confirm its belief, and there can be no assurance as to the results of any such tests. Primary therapeutic targets for the C5 Complement Inhibitor product candidates are acute coronary syndromes including cardiopulmonary bypass ("CPB"), acute myocardial infarction, coronary angioplasty, and unstable angina, and autoimmune disorders including systemic lupus and rheumatoid arthritis. The Company is currently conducting clinical trials in CPB, rheumatoid arthritis, and systemic lupus patients. Key disease targets for the Apogen program include the autoimmune disorders multiple sclerosis and diabetes mellitus.

As an outgrowth of its core technologies, the Company is developing, in collaboration with United States Surgical Corporation ("US Surgical"), non-human cell and UniGraft organ products

designed for transplantation into humans, or xenotransplantation. The Company has also developed proprietary immunoprotected retroviral-based vector particles and producer cells for use in gene therapy.

ALEXION'S DRUG DEVELOPMENT STRATEGY

Alexion's strategy is to develop novel immunoregulatory therapeutics for disease states, disorders and clinical indications for which the Company believes treatment options are either non-existent or inadequate.

Currently available therapies for certain autoimmune, cardiovascular and neurologic diseases, in which the immune system attacks the patient's own tissue, broadly suppress the entire immune system, thus causing potentially severe side effects. In contrast, Alexion's proprietary compounds are designed to be more effective with reduced side effects when compared to currently available therapies by generally targeting only the specific disease-causing segments of the immune system, leaving the remaining segments of the immune system intact to perform their normal protective functions. The Company is developing two classes of potential therapeutic compounds, C5 Complement Inhibitors ("C5 Inhibitors") and Apogens. C5 Inhibitors are designed to specifically block the formation of disease-causing complement proteins, while Apogens are designed to selectively eliminate disease-causing T-cells. In the longer term, as an outgrowth of its core technologies, the Company is developing non-human cell, tissue, and UniGraft organ products which are designed for transplantation into humans, or xenotransplantation, without clinical rejection.

ALEXION DRUG DEVELOPMENT PROGRAMS

The Human Immune System

The role of the human immune system is to defend the body from attack or invasion by infectious agents or pathogens. This is accomplished through a complex system of proteins and cells, primarily complement proteins, antibodies and various types of white blood cells, each with a specialized function. Under normal circumstances, complement proteins, together with antibodies and white blood cells, act beneficially to protect the body by removing pathogenic microorganisms, cells containing antigens (foreign proteins), and disease-causing immune complexes (combinations of antigens and antibodies). However, any number of stimuli, including antibodies, pathogenic microorganisms, injured tissue, normal tissue, proteases (inflammatory enzymes) and artificial surfaces can locally activate complement proteins in a cascade of enzymatic and biochemical reactions (the "complement cascade") to form inflammatory byproducts leading, for example, in the case of cardiovascular disorders such as myocardial infarction (death of heart tissue), to additional significant damage to the heart tissue and, in the case of rheumatoid arthritis, to severe joint inflammation. T-cells, a type of white blood cell, play a critical role in the normal immune response by recognizing cells containing antigens, initiating the immune response, attacking the antigen-containing tissue and directing the production of antibodies targeting the antigens, all of which lead to the elimination of the antigen-bearing foreign organism. When a T-cell mistakenly attacks host tissue, the T-cell may cause an inflammatory response resulting in tissue destruction and severe autoimmune disease leading, for example, in the case of multiple sclerosis, to severe and crippling destruction of nerve fibers in the brain.

Alexion is developing specific and potent biopharmaceutical C5 Inhibitors which are designed to intervene in the complement cascade at what the Company believes to be the optimal point so that the disease-causing actions of complement proteins generally are inhibited while the normal disease-preventing functions of complement proteins generally remain intact. In laboratory and animal models of human disease, Alexion has shown that C5 Inhibitors are effective in substantially preventing inflammation during CPB, reducing tissue damage during myocardial infarction, reducing the incidence and severity of inflammation and joint damage in rheumatoid arthritis, enhancing survival in lupus, and preserving kidney function in nephritis (kidney inflammation). The Company is developing two C5 Inhibitors: (i) a short-acting humanized (compatible for human use) single chain antibody (5G1.1-SC) designed for treating patients with acute coronary syndromes including CPB procedures and myocardial infarction and (ii) a long acting humanized monoclonal antibody (5G1.1) designed for treating chronic disorders such as lupus and rheumatoid arthritis.

Cardiopulmonary Bypass Surgery

In performing certain complex cardiac surgical procedures, it is necessary to divert blood from the patient's heart and lungs to a cardiopulmonary (heart-lung) bypass machine in the operating room which artificially adds oxygen to the blood and then circulates the oxygenated blood to the organs in the patient's body. The Company believes that tissue damage during and after surgery and excessive bleeding during and after surgery, both significant complications of CPB, may be the result of an inflammatory process that begins when CPB is initiated. The CPB-related inflammatory response is associated with the rapid activation of the complement cascade caused when the patient's blood is perfused through the CPB machine and comes into contact with artificial surfaces. The inflammation is also characterized by activation of leukocytes (neutrophils, a type of white blood cell) and platelets (cells responsible for clotting). The Company believes that neutrophil activation is associated with impaired lung, heart, brain and kidney function and that platelet activation and subsequent platelet dysfunction during CPB impair the patient's ability to arrest the bleeding that occurs after extensive surgery.

The short-acting humanized single chain antibody C5 Inhibitor (5G1.1-SC) is designed to inhibit complement activation in patients immediately before and during CPB in order to prevent the cardiovascular damage and bleeding complications associated with CPB. Those effects might reduce the incidence of post-operative complications, the time spent by patients in the intensive care unit, the scope of required treatments associated with CPB, and the need for blood transfusions. Preclinical studies by the Company indicated that the Company's C5 Inhibitor can substantially prevent activation of platelets and neutrophils and the subsequent inflammatory process that occurs during circulation of human blood in a closed-loop CPB circuit.

An Investigational New Drug application ("IND") was filed with the U.S. Food and Drug Administration ("FDA") in March 1996 for the C5 Inhibitor, 5G1.1-SC and, after receiving FDA authorization, a Phase I clinical trial in healthy male volunteers began in June 1996. Results of the Phase I trial indicated that a single dose administration of 5G1.1-SC was safe and well-tolerated in the study population. In September 1996, the Company received FDA authorization for its second clinical trial and in October 1996 commenced a Phase I/II study of 5G1.1-SC in patients undergoing CPB.

In July 1997, preliminary results from this Phase I/II clinical study of 17 patients undergoing CPB were released. Treatment with 5G1.1-SC reduced the more than ten-fold increase in the level of activated complement byproducts experienced by patients on placebo during

CPB in a dose-dependent manner. With FDA approval, the Company initiated a Phase IIa CPB clinical study including an additional 18 patients. In October 1997, additional preliminary results indicated that 5G1.1-SC significantly reduced leukocyte activation (inflammation) as compared to placebo. In April 1998, clinical results from the Phase I/II and Phase IIa CPB studies indicated that 5G1.1-SC significantly reduced cardiac damage, new cognitive (brain) deficits, and blood loss in patients undergoing coronary artery bypass graft surgery.

The Company expects to commence Phase IIb studies with 5G1.1-SC later this year. There can be no guarantees that clinical trials of the Company's product candidates will be commenced or completed in a timely manner or will demonstrate sufficient safety and efficacy to obtain the requisite regulatory approvals or will result in marketable products.

The American Heart Association ("AHA") estimates that almost 500,000 CPB operations are performed in the United States each year.

Myocardial Infarction

Myocardial infarction (heart attack) is an acute cardiovascular disorder where the coronary arteries (the arteries feeding the heart muscle) are blocked to such an extent that the flow of blood is insufficient to supply enough oxygen and nutrients to keep the heart muscle alive. With insufficient supply of blood, oxygen, and nutrients, the underperfused heart muscle may subsequently infarct (die). Myocardial infarction most often occurs due to a blockage in a coronary artery caused by atherosclerosis. Upon the reduction in flow in the coronary artery, a complicated cascade of inflammatory events commences within the blood vessel involving platelets and leukocytes and their secreted factors, complement proteins, and endothelial cells. This severe inflammatory response targeting the area of the underperfused cardiac muscle is associated with subsequent infarction of the heart muscle. Restoration of blood flow is also associated with an additional inflammatory reaction. In addition to the high incidence of sudden cardiac death at the onset, severe complications associated with the initial survival of an acute myocardial infarction include congestive heart failure, stroke, and death.

The Company is developing the C5 Inhibitor, 5G1.1-SC (currently being applied to the treatment of patients undergoing CPB, as discussed above) to inhibit complement activation in patients suffering an acute myocardial infarction in order to reduce the extent of infarcted myocardium. The Company and its collaborators have performed preliminary preclinical studies in rodents which have demonstrated that administration of a C5 Inhibitor, during myocardial ischemia (insufficient supply of blood to the heart muscle) and prior to reperfusion, significantly reduced the extent of subsequent myocardial infarction compared to control studies. There can be no assurance that the results from preclinical studies will be predictive of results that may be obtained in clinical trials. Further, such preclinical results do not necessarily predict or prove safety or efficacy in humans.

As a result of positive results in preclinical studies, the Company plans to file an IND using 5G1.1-SC in another clinical indication for the treatment of acute myocardial infarction (heart attack) near the end of this year or the beginning of next year. There can be no assurance that an IND will be filed on a timely basis, if at all, that the Company will be permitted to commence clinical trials on a timely basis, if at all, or that the results from preclinical studies will be predictive of results that may be obtained in clinical trials. Preclinical results obtained from such studies may not necessarily predict or prove safety or efficacy in humans.

The AHA estimates that approximately 1,000,000 Americans survived a heart attack in 1994 and thus are potentially eligible for such drug treatment.

Rheumatoid Arthritis

Rheumatoid arthritis is an autoimmune disease directed at various organ and tissue linings, including the lining of the joints, causing inflammation and tissue destruction. Clinical signs and symptoms of the disease include weight loss, joint pain, morning stiffness and fatigue. Further, the joint destruction can progress to redness, swelling and pain with frequent, severe joint deformity. Rheumatoid arthritis is generally believed to be due to T-cells which both directly attack the patient's joints and also activate B-cells (a type of white blood cell) to produce antibodies which deleteriously activate complement proteins in the joint, leading to inflammation, with subsequent tissue and joint destruction.

Alexion is developing a long acting humanized recombinant monoclonal antibody (5G1.1), a C5 Inhibitor which is designed to inhibit complement activation and thereby reduce the severity and frequency of flares of joint inflammation and arrest progressive tissue damage in joints caused by complement activation. The Company has performed preclinical studies in rodent models of rheumatoid arthritis. In these preclinical studies, treatment with the Company's specific C5 Inhibitor substantially prevented the onset of inflammation and pathology in the joints, the onset of clinical signs of rheumatoid arthritis, as well as ameliorated established disease.

An IND was filed with the FDA in December 1997 for 5G1.1 in the treatment of rheumatoid arthritis in patients and, after receiving FDA authorization, a Phase I/II multi-center clinical trial in rheumatoid arthritis patients began in July 1998. There can be no guarantees that clinical trials of the Company's product candidates will be completed in a timely manner or will demonstrate sufficient safety and efficacy to obtain the requisite regulatory approvals or will result in marketable products.

In the United States, approximately 2,500,000 patients receive treatment from a physician for rheumatoid arthritis.

Lupus Nephritis

The kidneys are responsible for filtering blood to remove toxic metabolites and maintain the blood minerals that are required for normal metabolism. Each kidney consists of millions of individual filtering units, each filtering unit called a glomerulus. When glomeruli are damaged, the kidney can no longer adequately maintain its normal filtering function. Clinically severe nephritis, found in many patients suffering from systemic lupus erythematosus ("lupus" or "SLE") and other autoimmune diseases, occurs when more than 90% of the kidney is destroyed by disease. Kidney failure is frequently associated with hypertension, strokes, infections, anemia, heart, lung and joint inflammation, coma and death. Most forms of damage to the glomerulus are mediated by the immune system and particularly by antibodies and activated complement proteins.

Alexion is developing the C5 Inhibitor 5G1.1 (also being applied to the treatment of rheumatoid arthritis, as discussed above) for the prevention and treatment of inflammation in lupus patients. The Company has performed preclinical studies in a rodent model of acute nephritis. In this model, the Company's specific C5 Inhibitor substantially prevented inflammation in the kidney tissue. Further, in a separate chronic rodent model that spontaneously develops a disease similar to lupus with concomitant nephritis, substantially more animals treated with the Company's specific C5 Inhibitor survived as compared to untreated control animals.

An IND was filed with the FDA in late December 1997 for 5G1.1 in a second clinical indication, the treatment of patients suffering from Systemic Lupus Erythematosus ("SLE") and,

after receiving FDA authorization, a Phase I/II clinical trial in lupus patients began in July 1998. There can be no guarantees that clinical trials of the Company's product candidates will be completed in a timely manner or will demonstrate sufficient safety and efficacy to obtain the requisite regulatory approvals or will result in marketable products.

Alexion's proposed product to treat and prevent nephritis is directed at a patient population which includes SLE as well as diseases with lower prevalence such as Goodpastures disease and others. According to the Lupus Foundation, approximately 1.4 million, or 1 out of every 185 Americans, suffer from Lupus-related complications. Further, an estimated 70% of individuals afflicted with Lupus suffer nephritis. Although Lupus may affect people of either sex, women are 10-15 times more likely to suffer from the disease than men.

Apogen Immunotherapeutics

The Company's Apogen compounds are based upon discoveries at the National Institutes of Health ("NIH") which are exclusively licensed to Alexion and upon further discoveries by Alexion. The highly specific recombinant Apogens under development by the Company are designed to selectively eliminate disease-causing T-cells in patients with certain autoimmune diseases including multiple sclerosis and diabetes mellitus. The Company has demonstrated that its lead proprietary Apogen, MP4, is effective at preventing neurologic disease in animal models of multiple sclerosis.

Multiple Sclerosis

Multiple Sclerosis ("MS") is an autoimmune disease of the central nervous system which hinders the ability of the brain and spinal cord to control movement, speech and vision. MS can be severely debilitating with long term disability a common outcome. In severe cases, the reduced motor strength may confine the patient to a wheelchair. MS is widely believed to be due to the attack of a patient's antigen-specific T-cells on the protective myelin sheath surrounding nerve cells in the central nervous system.

Preclinical animal studies performed by Alexion in the experimental autoimmune encephalomyelitis ("EAE") mouse model of MS, have demonstrated that administration of the Company's proprietary Apogen MS product candidate, MP4, at the time of disease induction, effectively prevents the development of severe neurologic disease and administration of MP4 after the onset of disease ameliorates established disease. In April 1997, the Company and its collaborators at the NIH disclosed preliminary results of testing of MP4 in a non-human primate model of MS. MP4 therapy substantially reduced the severity and incidence of neurologic symptoms in these preclinical studies. In in vitro studies, Alexion and NIH scientists have observed that MP4 is also capable of eliminating antigen-specific human T-cells from patients with MS.

In February 1998, an IND was filed with the FDA for MP4 for the treatment of patients suffering from MS. After completion of additional preclinical studies and amendment of the clinical protocol in line with the preferred route of administration, a Phase I/II clinical trial in MS patients is expected to be initiated. There can be no guarantee that the results from preclinical studies are predictive of results that may be obtained in clinical trials, that the Company will be permitted to commence clinical trials on a timely basis, if at all, or that clinical trials of the Company's product candidates will be completed in a timely manner or will demonstrate sufficient safety and efficacy to obtain the requisite regulatory approvals or will result in marketable products.

According to the National Multiple Sclerosis Society, there are approximately 250,000 reported cases of MS in the United States alone. But it is estimated that the actual number of Americans with MS may be closer to 500,000 because many people with mild symptoms never seek medical attention (LJ Rosner, S Ross. Multiple Sclerosis. Simon & Schuster, New York; 1992).

Diabetes Mellitus

Type I Diabetes Mellitus, or Insulin Dependent Diabetes Mellitus ("IDDM"), is the most severe form of diabetes and is generally believed to be caused by an autoimmune T-cell attack and destruction of the insulin-producing cells in the pancreas. This process, which usually begins in childhood, causes reduced production of insulin, which is responsible for the breakdown of glucose, resulting in uncontrolled elevations in the patient's blood sugar. Without treatment, IDDM can be fatal.

Alexion is currently developing Apogen DM which is designed to prevent and treat IDDM by eliminating antigen-specific T-cells which are responsible for the pancreatic B-cell destruction. Alexion has established animal models of diabetes and has commenced initial preclinical studies with Apogen DM prototypes. In June 1998 at the American Diabetes Association's 58th Annual Scientific Sessions, the Company presented preclinical data indicating that a new drug candidate, IG2, was highly effective in suppressing the development of IDDM in two different animal models. There can be no assurance that the results from preclinical studies will be predictive of results that may be obtained in clinical trials and do not necessarily predict or prove safety or efficacy in humans

According to the American Diabetes Association, up to 800,000 Americans are insulin-dependent diabetics. The Company intends to design its potential product as a preventative for individuals at high risk of developing the disease and as a therapy for patients who still have a population of insulin producing cells, in order to arrest progression of the disease and the subsequent development of longer term complications.

The UniGraft Program and Gene Transfer Systems

Organ and Tissue Transplantation

As an outgrowth of its core technologies, the Company is also developing, in collaboration with US Surgical, non-human cell and organ UniGraft products which are designed for transplantation, or xenotransplantation, into humans without clinical rejection. Rejection of non-human tissue by patients is generally believed to occur in two stages, a very rapid hyperacute phase extending from minutes to hours and a somewhat less rapid acute phase, extending from days to months. Hyperacute rejection is generally believed to be mediated by naturally-occurring antibodies in the patient, most of which target a carbohydrate antigen uniquely present on the surface of non-human tissue (but not on the patient's own tissue). After binding to the foreign tissue, these antibodies activate the cascade of complement proteins on the surface of the donor tissue with subsequent destruction of the donor tissue. Subsequently, acute rejection of xenografts (tissue from different species) is generally believed to be mediated by T-cells, many of which are specific to the transplanted tissue.

UniGraft products are being designed to resist both complement/antibody-mediated hyperacute rejection and T-cell-mediated acute rejection. Alexion has commenced studies employing the UniGraft technologies during preclinical transplantation of genetically engineered and proprietary porcine cells and organs. Currently, pigs are a preferred source of organ supply

because the anatomy, size, and physiology of their hearts and other organs are similar to human organs. The Company has genetically engineered porcine cells that are resistant to lysis (break-up) and activation by human complement proteins. Alexion has also discovered and designed porcine-specific antibodies which have been demonstrated to selectively and significantly block the human T-cell response to porcine tissue in in vitro studies. Alexion is currently employing its immunoregulatory and molecular engineering technologies in order to develop UniGraft hearts, lungs, livers, pancreases and kidneys. There can be no assurance that the Company's organ, tissue, and cell transplantation technology will result in the development of any therapeutic products, if at all. Although several companies are focusing on xenotransplantation-based products, this area represents a novel therapeutic approach that has not yet been subject to extensive clinical testing.

Xenotransplantation also poses a risk that viruses or other animal pathogens may be unintentionally transmitted not only to a human patient recipient, but there is also a possibility that such viruses or other animal pathogens could be transmitted to all humans. The Company is aware of recent scientific publications by others which demonstrate, under laboratory conditions, that porcine endogenous retroviruses ("PERV") have the potential to infect human cells. While PERV has not been shown to cause any disease in pigs or humans, it is not known what effect, if any, PERV may have on human beings. The Company's porcine organ, tissue and cell product development programs would be negatively impacted by the detection of infectious PERV in porcine cells in the Company's preclinical development program or at other companies focusing in this area.

There can be no guarantees that the results from preclinical studies are predictive of results that may be obtained in clinical trials, that the Company will be permitted to commence clinical trials with a xenotransplant product on a timely basis, if at all, or that clinical trials of the Company's product candidates will be completed in a timely manner or will demonstrate sufficient safety and efficacy to obtain the requisite regulatory approvals or will result in marketable products. No xenotransplantation-based therapeutic product has been approved for sale by the FDA. The FDA has not yet established definitive regulatory guidelines for xenotransplantation, but has proposed interim guidelines in an attempt to reduce the risk of contamination of transplanted organ and cellular products with infectious agents. There can be no assurance that definitive guidelines will be issued, if at all, or that the Company will be able to comply with final definitive guidelines that may be issued. Furthermore, there can be no assurance that any products developed by the Company will be approved by the FDA or regulatory authorities in other countries in a timely manner, if at all, or that xenotransplantation-based products (including products developed by the Company) will be accepted by the medical community or third-party payors or that the degree of acceptance will not limit the size of the market for such products.

According to the United Network of Organ Sharing, there are approximately 20,000 organ transplants performed annually in the U.S. and there are more than 50,000 patients on waiting lists for transplant organs. The Company believes that the availability and viability of xenograft organs for transplantation could increase the transplant market significantly.

Gene Transfer Systems

As an outgrowth of its core technologies, the Company applied its research in and knowledge of the body's rejection response to engineer retroviral vector producer cells and particles which, when employed in gene transfer products, would be able to survive and function in vivo following implantation or direct injection, respectively. The Company has developed proprietary retroviral-based gene transfer vectors, producer cells, and particles which survive in human blood ex vivo.

STRATEGIC ALLIANCES, COLLABORATIONS AND LICENSES

The Company's plan is to develop and commercialize on its own those product candidates for which the clinical trial and marketing requirements can realistically be managed by the Company. For certain of the Company's C5 Inhibitor and Apogen products for which greater resource commitments will be required, a key element of Alexion's strategy is the formation of corporate partnerships with major pharmaceutical companies for product development and commercialization. Alexion has entered into a strategic alliance with US Surgical with respect to transplantation applications of the Company's UniGraft program. The Company intends to develop additional strategic alliances with major pharmaceutical companies for certain of its other technologies. There can be no assurance that the Company will enter into additional strategic alliances, or, if entered into, what the terms of any strategic alliance will be, or how long any strategic alliance would continue.

United States Surgical Corporation

In July 1995, the Company and US Surgical entered into the Joint Development Agreement, pursuant to which the Company and US Surgical agreed to collaborate to jointly develop and commercialize the Company's UniGraft technology for organ transplantation. Pursuant to the Joint Development Agreement, Alexion has primary responsibility for preclinical development, clinical trials and regulatory submissions relating to the UniGraft program, and US Surgical has primary responsibility for production, sales, marketing and distribution of UniGraft products to the extent developed and approved for commercialization. Further, US Surgical has committed to exclusively develop with the Company xenotransplantation products.

In the July 1995 Joint Development Agreement, US Surgical agreed to fund preclinical development of UniGraft products by paying to Alexion up to \$7.5 million. This preclinical funding represented \$4.0 million of the cost of preclinical development in four semi-annual installments of approximately \$1.0 million (the first installment of which was paid in July 1995) and \$3.5 million upon achieving certain milestones involving development of a genetically engineered pig and the transplantation of non-primate tissue into primates (the "Primate Milestone"). If the Primate Milestone is achieved, US Surgical is to advise the Company whether it intends to exercise its priority right to provide all clinical funding for the UniGraft product, and the Company and US Surgical are to agree upon milestone payments to be made by US Surgical to the Company for the first three UniGraft products. Unless and until US Surgical determines to terminate clinical funding for a UniGraft product, US Surgical shall have the exclusive worldwide marketing, sales and distribution rights with respect to such UniGraft product, including market introduction decisions and control of marketing, sales and distribution decisions. In furtherance of the joint collaboration, US Surgical also purchased \$4.0 million of Common Stock of the Company, at a price of \$8.75 per share. Through July 31, 1997, the Company had received \$4.0 million in research and development support under its collaboration with US Surgical. US Surgical also purchased approximately ten percent of the shares of Common Stock offered at the Company's initial public offering.

In September 1997, US Surgical and the Company modified the July 1995 Joint Development Agreement. As part of the modification, US Surgical made an additional \$6.5 million payment to the Company for equity, exclusive licensing rights, and certain xenograft manufacturing assets. Under the modified agreement, the additional \$6.5 million payment comprised: (i) a \$3 million equity investment in the Company through the purchase of 166,945 shares of the Company's Common Stock at a price of \$17.97 per share, which represented a 25%

premium over the market price on the day prior to the date of closing and (ii) a \$3.5 million payment to acquire technology and certain xenograft manufacturing assets. Further, as part of the amended agreement, US Surgical and the Company agreed that the preclinical milestone payments in the original agreement are considered to have been satisfied. As of July 31, 1998, the Company had received all of the preclinical funding under this agreement. At October 1, 1998, US Surgical beneficially owned an aggregate of 824,087 shares of Common Stock or approximately 7.3% of the Company's outstanding shares.

For inventions made by the Company during the performance of the preclinical or clinical programs outlined in the Joint Development Agreement, the Company will own the inventions and US Surgical is granted (i) a worldwide exclusive license to sell transplant products derived from the Company's xenotransplantation technology; (ii) a worldwide exclusive license to sell products (a) in the fields related to businesses in which US Surgical is engaged and (b) not in the fields in which the Company is currently developing its products (i.e., anti-inflammatories and gene therapy systems); and (iii) an option to an exclusive license to sell products in fields outside those related to businesses which US Surgical is engaged but excluding fields which the Company is currently developing its products (e.g., anti-inflammatories and gene therapy systems). US Surgical has agreed to pay to the Company royalties on net sales of products. The Company has retained full rights to inventions in fields of gene therapy systems and anti-inflammatories as well as to inventions in fields for which US Surgical does not exercise its option.

The Joint Development Agreement may be terminated by US Surgical for any or no reason, effective January 1, 1998, if notice is given by US Surgical at least six months prior thereto. In the event of a termination by US Surgical, all rights licensed by Alexion shall revert to Alexion. On October 1, 1998, US Surgical completed a merger with a subsidiary of Tyco International Ltd.

Genetic Therapy, Inc.

In December 1996, Alexion and Genetic Therapy, Inc. ("GTI/Novartis"), a subsidiary of Novartis, Inc., entered into a License and Collaborative Research Agreement with respect to the Company's gene transfer technology. Under the Agreement, GTI/Novartis has been granted a worldwide exclusive license to use the Alexion technology in its gene therapy products.

GTI/Novartis paid Alexion an initial upfront payment of \$850,000 which consisted of a one-time license fee of \$750,000 and a \$100,000 research and development support payment. GTI/Novartis also agreed to fund a minimum of \$400,000 per year for two years for research and development support by Alexion, make payments to Alexion upon achievement of certain product development milestones for gene therapy products utilizing the Alexion technology and pay royalties on net sales, if any. In October 1998, in view of Alexion's increased focus on the advanced clinical development of its anti-inflammatory drug candidates and GTI/Novartis's recently announced restructuring and reorganization, the Company and GTI/Novartis agreed to discontinue the collaborative gene therapy program. Through September 1998, Alexion has received approximately \$1.6 million in license and research payments due from GTI/Novartis with respect to GTI/Novartis's development of immune protected viral gene therapy products.

Licenses and Other Sponsored Research

The Company has obtained licenses with respect to certain issued patents and patent applications, to supplement the research of its own scientists. The Company has agreed to pay to its licensors royalties on sales of certain products based on the licensed technologies, as well as, in some instances, minimum royalty and milestone payments, and patent filing and prosecution costs. The Company has also agreed to indemnify its licensors and, in certain instances, the inventors,

against certain liabilities, including liabilities arising out of product liability claims and, in certain instances, under the securities laws. Because research leading to inventions licensed from domestic licensors are generally supported by the United States Government, the Government has retained certain statutory rights, including a non-exclusive, royalty-free license to use the licensed inventions, and to manufacture and distribute products based thereon, for Government use only. A summary of certain of such licenses, as well as the Company's other material licenses and sponsored research, is presented below.

Yale University and Oklahoma Medical Research Foundation ("OMRF")

The Company has obtained exclusive, worldwide licenses to certain issued patents and patent applications and related technology from Yale and OMRF with respect to complement inhibitors and UniGraft technology. Since obtaining the patent licenses, the Company has made further discoveries relating to complement inhibitors and the UniGraft technology, resulting in the filing by the Company of numerous additional U.S. patent applications. In addition, the Company has provided funding for separate sponsored research by certain of these inventors and, to the extent that an invention would not be covered by an existing license from OMRF to the Company, the Company has the first and prior right to license any inventions in the field arising from the research.

National Institutes of Health ("NIH")

The Company has obtained an exclusive, worldwide license from NIH for rights to two patent applications related to the work performed at NIH on antigen-specific elimination of disease-causing T-cells in patients with certain inflammatory disorders.

In further support of the Company's Apogen program, the Company and the National Institute of Allergy and Infectious Diseases ("NIAID") have entered into a Cooperative Research and Development Agreement (the "NIH CRADA"). The subject matter of the NIH CRADA included preclinical and clinical development based upon discoveries by NIAID regarding the antigen-specific elimination of disease-causing T-cells in patients with certain inflammatory disorders. The principal investigator of the NIH CRADA is the principal inventor of the inventions licensed to the Company by NIH. The NIH is part of the United States Department of Health and Human Services. NIAID has granted the Company the first and prior right to an exclusive commercialization license for any and all inventions or products developed pursuant to the NIH CRADA. Pursuant to the NIH CRADA, the Company paid approximately \$159,000 per year, aggregating \$477,000, for the three-year period through July 31, 1997. In February 1997, the NIH CRADA was amended to extend the term to December 1997 and the Company paid approximately \$170,000 under this amendment. In March 1998, the NIH CRADA was amended to extend the term to August 10, 1998 and the Company committed to pay \$98,000 under this amendment. Through July 31, 1998, the Company has paid \$98,000 under this amendment. In August 1998, the NIH CRADA was further amended to extend the term of the last amendment to November 1998 with no additional funding obligation by the Company.

Biotechnology Research and Development Corporation

The Company has entered into a license agreement with the Biotechnology Research and Development Corporation ("BRDC"), under which the Company has become the worldwide, exclusive licensee of the porcine embryonic stem cell technology developed at the University of Illinois and sponsored by BRDC, and related patent applications for xenotransplantation purposes. The Company believes that this technology may assist it in its UniGraft organ transplantation program.

In connection with the license agreement with BRDC, the Company became a common shareholder of BRDC, which is a research management corporation. At the present time, the Company, Agricultural Research and Development Corporation, American Home Products Corporation, Dalgety, plc., The Dow Chemical Company, Mallinckrodt Inc., McDonald's Corporation, Schering-Plough Animal Health Corporation, and Seminis Vegetable Seeds, Inc. are common shareholders of BRDC. BRDC is currently funding numerous research projects in biotechnology, and each of the common shareholders, including the Company, retains the right to license for commercial development the technologies resulting from substantially all of these research programs. The Company paid \$50,000 for the purchase of its common stock of BRDC and has committed to an annual research contribution to the consortium for four years. For the four-year period through July 31, 1997, the Company paid approximately \$633,000 under the agreement. However, minimum annual royalty payments under the license agreement with BRDC have been waived so long as the Company remains a shareholder of BRDC.

Advanced Technology Program ("ATP") and National Institute of Standards and Technology ("NIST") Grants

In August 1995, the Company was awarded cost-shared funding from the Commerce Department's National Institute of Standards and Technology under its Advanced Technology Program. Through the ATP, the Company may receive up to approximately \$2.0 million over three years to support the Company's UniGraft program in universal donor organs for transplantation. Through July 31, 1998, the Company has received approximately \$1.5 million under this award. In September 1998, the three year period was amended to extend to September 1999.

In November 1997, the Company and US Surgical were awarded a three-year \$2.0 million Cooperative Agreement from NIST under its ATP for funding a joint xenotransplantation project. Through July 31, 1998, the Company and US Surgical have received approximately \$48,000 under this award.

Medical Research Council License

In March 1996, the Company entered into a license agreement with the Medical Research Council under which the Company has become the worldwide non-exclusive licensee of certain patents related to the humanization and production of monoclonal antibodies.

Enzon License

In May 1996, the Company licensed from Enzon, Inc. on a worldwide non-exclusive basis certain patents related to single chain antibodies.

PATENTS AND PROPRIETARY RIGHTS

The Company believes that patents and other proprietary rights are important to its business. The Company's policy is to file patent applications to protect technology, inventions and improvements to its technologies that are considered important to the development of its business. The Company also relies upon trade secrets, know-how, continuing technological innovations and licensing opportunities to develop and maintain its competitive position.

The Company has filed several U.S. patent applications and international (Patent Cooperation Treaty) counterparts of certain of these applications. In addition, the Company has

exclusively licensed several additional U.S. patents and patent applications. Of the Company's owned and exclusively licensed patents and patent applications as of July 31, 1998, approximately 28% relate to technologies or products in the C5 Inhibitor program, 16% relate to the Apogen program, 12% relate to the Gene Transfer program and 44% relate to the UniGraft program.

The Company's success will depend in part on its ability to obtain United States and foreign patent protection for its products, to preserve its trade secrets and proprietary rights, and to operate without infringing on the proprietary rights of third parties or having third parties circumvent the Company's rights. Because of the length of time and expense associated with bringing new products through development and regulatory approval to the marketplace, the health care industry has traditionally placed considerable importance on obtaining patent and trade secret protection for significant new technologies, products and processes. There can be no assurance that any patents will issue from any of the patent applications owned by or licensed to the Company. Further, even if patents are issued, there can be no assurance that such patents would provide the Company with significant protection against competitive products or otherwise be commercially valuable. In addition, patent law relating to certain of the Company's fields of interest, particularly as to the scope of claims in issued patents, is still developing and it is unclear how this uncertainty will affect the Company's patent rights. Litigation, which could be costly and time consuming, may be necessary to enforce patents issued to the Company and/or to determine the scope and validity of others' proprietary rights, in either case in judicial or administrative proceedings. The Company's competitive position is also dependent upon unpatented trade secrets which generally are difficult to protect. There can be no assurance that others will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to the Company's trade secrets, that the Company's trade secrets will not be disclosed or that the Company can effectively protect its rights to unpatented trade secrets. As the biotechnology industry expands and more patents are issued, the risk increases that the s potential products may give rise to claims that they infringe the patents of others. Any such infringement litigation would be costly and time consuming to the Company.

The Company is aware of broad patents owned by third parties relating to the manufacture, use, and sale of recombinant humanized antibodies, recombinant humanized single chain antibodies and genetically engineered animals. The Company has received notice from certain of these parties regarding the existence of certain of these patents which the owners claim may be relevant to the development and commercialization of certain of the Company's proposed products. With respect to certain of these patents which it believes are relevant for the expeditious development and commercialization of certain of its products as currently contemplated, the Company has acquired licenses. With regard to certain other patents, the Company has either determined in its judgment that its products do not infringe the patents or has identified and is testing various approaches which it believes should not infringe the patents and which should permit commercialization of its products. There can be no assurance that the owner of these patents will not seek to enforce the patent against the Company's so-modified commercial products or against the development activities related to the non-modified products.

Although the Company believes that it can obtain licenses to the patents necessary for its contemplated commercial products, there can be no assurance that the Company will be able to obtain licenses on commercially reasonable terms, if at all. If the Company does not obtain necessary licenses, it could encounter delays in product market introductions while it attempts to design around such patents, or could find that the development, manufacture or sale of products requiring such licenses could be foreclosed. Further, there can be no assurance that owners of patents that the Company does not believe are relevant to the Company's product development and commercialization will not seek to enforce their patents against the Company. Such action could result in litigation which would be costly and time consuming. There can be no assurance that the

Company would be successful in such litigations. The Company is currently unaware of any such threatened action.

Certain of the licenses by which the Company obtained its rights in and to certain technologies require the Company to diligently commercialize or attempt to commercialize such technologies. There can be no assurance that the Company will meet such requirements, and failure to do so for a particular technology could result in the Company losing its rights to that technology.

Currently, the Company has not sought to register its potential trademarks and there can be no assurance that the Company will be able to obtain registration for such trademarks.

It is the Company's policy to require its employees, consultants, members of its scientific advisory board, and parties to collaborative agreements to execute confidentiality agreements upon the commencement of employment or consulting relationships or a collaboration with the Company. These agreements provide that all confidential information developed or made known during the course of relationship with the Company is to be kept confidential and not disclosed to third parties except in specific circumstances. In the case of employees, the agreements provide that all inventions resulting from work performed for the Company, utilizing property of the Company or relating to the Company's business and conceived or completed by the individual during employment shall be the exclusive property of the Company to the extent permitted by applicable law. There can be no assurance, however, that these agreements will provide meaningful protection of the Company's trade secrets or adequate remedies in the event of unauthorized use or disclosure of such information.

GOVERNMENT REGULATION

The preclinical and clinical testing, manufacture, labeling, storage, record keeping, advertising, promotion, export, and marketing, among other things, of the Company's proposed products are subject to extensive regulation by governmental authorities in the United States and other countries. In the United States, pharmaceutical products are regulated by the FDA under the Federal Food, Drug, and Cosmetic Act and other laws, including, in the case of biologics, the Public Health Service Act. At the present time, the Company believes that its products will be regulated by the FDA as biologics.

The steps required before a novel biologic may be approved for marketing in the United States generally include (i) preclinical laboratory tests and in vivo preclinical studies, (ii) the submission to the FDA of an IND for human clinical testing, which must become effective before human clinical trials may commence, (iii) adequate and well-controlled human clinical trials to establish the safety and efficacy of the product, (iv) the submission to the FDA of a Biologics License Application ("BLA") and (v) FDA review and approval of the BLA. The testing and approval process requires substantial time, effort and financial resources and there can be no assurance that any approval will be granted on a timely basis, if at all. Following approval, if granted, the establishment or establishments where the product is manufactured are subject to inspection by the FDA and must comply with current good manufacturing practice ("cGMP") regulations, enforced by the FDA through its facilities inspection program. Manufacturers of biologics also may be subject to state regulation.

Preclinical tests include laboratory evaluation of the product, as well as animal studies to assess the potential safety and efficacy of the product. Compounds must be produced according to applicable cGMP regulations and preclinical safety tests must be conducted in compliance with

FDA regulations regarding Good Laboratory Practices. The results of the preclinical tests, together with manufacturing information and analytical data, are submitted to the FDA as part of an IND, which must become effective before human clinical trials may be commenced. The IND will automatically become effective 30 days after receipt by the FDA, unless the FDA before that time requests an extension to review or raises concerns or questions about the conduct of the trials as outlined in the IND. In such latter case, the IND sponsor and the FDA must resolve any outstanding concerns before clinical trials can proceed. There can be no assurance that submission of an IND will result in FDA authorization to commence clinical trials.

Clinical trials involve the administration of the investigational product to healthy volunteers or to patients, under the supervision of a qualified principal investigator. Clinical trials are conducted in accordance with protocols that detail, inter alia, the objectives of the study, the parameters to be used to monitor safety and the efficacy criteria to be evaluated. Each protocol must be submitted to the FDA as part of the IND. Further, each clinical study must be reviewed and approved by an independent Institutional Review Board, prior to the recruitment of subjects.

Clinical trials typically are conducted in three sequential phases, but the phases may overlap. In Phase I, the initial introduction of the drug into human subjects, the drug is tested for safety (adverse effects) and, as appropriate, for absorption, metabolism, distribution, excretion, pharmacodynamics and pharmacokinetics. Phase II usually involves studies in a limited patient population to (i) evaluate preliminarily the efficacy of the drug for specific, targeted indications, (ii) determine dosage tolerance and optimal dosage and (iii) identify possible adverse effects and safety risks. Phase III trials are undertaken to further evaluate clinical efficacy and to test further for safety within an expanded patient population at geographically dispersed clinical study sites. There can be no assurance that Phase I, Phase II, or Phase III testing will be completed successfully within any specific time period, if at all, with respect to any of the Company's product candidates. Furthermore, the FDA may suspend clinical trials at any time on various grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk.

The results of the preclinical studies and clinical studies, together with detailed information on the manufacture and composition of the product, are submitted to the FDA in the form of a BLA requesting approval for the manufacture, marketing and commercial shipment of the product. The FDA may deny a BLA if applicable regulatory criteria are not satisfied, require additional testing or information, or require postmarketing testing and surveillance to monitor the safety or efficacy of a product. There can be no assurance that FDA approval of any BLA submitted by the Company will be granted on a timely basis or at all. Moreover, if regulatory approval of a product is granted, such approval may entail limitations on the indicated uses for which it may be marketed. Finally, product approvals may be withdrawn if compliance with regulatory standards is not maintained or if problems occur following initial marketing. Among the conditions for BLA approval is the requirement that the prospective manufacturer's quality control and manufacturing procedures conform to cGMP regulations, which must be followed at all times in the manufacture of the approved product. In complying with standards set forth in these regulations, manufacturers must continue to expend time, monies and effort in the area of production and quality control to ensure full compliance.

Both before and after approval is obtained, a product, its manufacturer, and the holder or the holders of the BLA for the product are subject to comprehensive regulatory oversight. Violations of regulatory requirements at any stage, including the preclinical and clinical testing process, the review process, or thereafter (including after approval) may result in various adverse consequences, including the FDA's delay in approving or refusal to approve a product, withdrawal of an approved product from the market, and/or the imposition of criminal penalties against the manufacturer and/or BLA holder. In addition, later discovery of previously unknown problems

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may result in restrictions on a product, manufacturer, or BLA holder, including withdrawal of the product from the market. Also, new government requirements may be established that could delay or prevent regulatory approval of the Company's products under development.

For clinical investigation and marketing outside the United States, the Company is also subject to foreign regulatory requirements governing human clinical trials and marketing approval for drugs. The foreign regulatory approval process includes all of the risks associated with FDA approval set forth above as well as country-specific regulations.

No xenotransplantation-based therapeutic product has been approved for sale by the FDA. The FDA has not yet established definitive regulatory guidelines for xenotransplantation, but has proposed interim guidelines in an attempt to reduce the risk of contamination of transplanted organ and cellular products with infectious agents. There can be no assurance that definitive guidelines will be issued, if at all, or that the Company will be able to comply with final definitive guidelines that may be issued. Furthermore, there can be no assurance that any products developed by the Company will be approved by the FDA or regulatory authorities in other countries in a timely manner, if at all, or that xenotransplantation-based products, including products developed by the Company, will be accepted by the medical community or third-party payers or that the degree of acceptance will not limit the size of the market for such products.

COMPETITION

The pharmaceutical and biotechnology industries are characterized by rapidly evolving technology and intense competition. Many companies, including major pharmaceutical and chemical companies, as well as specialized biotechnology companies, are engaged in activities similar to those of the Company. Certain of these companies have substantially greater financial and other resources, larger research and development staffs, and more extensive marketing and manufacturing organizations than the Company. Many of these companies have significant experience in preclinical testing, human clinical trials, product manufacturing, marketing and distribution and other regulatory approval procedures. In addition, colleges, universities, governmental agencies and other public and private research organizations conduct research and may market commercial products on their own or through joint ventures. These institutions are becoming more active in seeking patent protection and licensing arrangements to collect royalties for use of technology that they have developed. These institutions also compete with the Company in recruiting and retaining highly qualified scientific personnel.

The Company competes with large pharmaceutical companies that produce and market synthetic compounds and with specialized biotechnology firms in the United States, Europe and elsewhere, as well as a growing number of large pharmaceutical companies that are applying biotechnology to their operations. Many biotechnology companies have focused their developmental efforts in the human therapeutics area, and many major pharmaceutical companies have developed or acquired internal biotechnology capabilities or have made commercial arrangements with other biotechnology companies. A number of biotechnology and pharmaceutical companies are developing new products for the treatment of the same diseases being targeted by the Company; in some instances such products have already entered clinical trials. Other companies are engaged in research and development based on complement proteins, T-cell therapeutics, gene therapy and xenotransplantation.

T-Cell Sciences, Inc. ("T-Cell Sciences"), Chiron Corporation, Abbott Laboratories, Gliatech, and Biocryst Pharmaceuticals have each publicly announced intentions to develop complement inhibitors to treat diseases related to trauma, inflammation, or neurodegenerative

indications and the Company is aware that SmithKline Beecham PLC, Merck & Co., Inc. and CytoMed Inc. are attempting to develop similar therapies. T-Cell Sciences has initiated clinical trials for a proposed complement inhibitor to treat acute respiratory distress syndrome ("ARDS"), myocardial infarction, and lung transplantation. The Company believes that its potential C5 Inhibitors differ substantially from those of its competitors due to the Company's compounds' demonstrated ability to specifically intervene in the complement cascade at what the Company believes to be the optimal point so that the disease-causing actions of complement proteins generally are inhibited while the normal disease-preventing functions of complement proteins generally remain intact as do other aspects of immune function.

The Company further believes that, under conditions of inflammation, a complement inhibitor compound which only indirectly addresses the harmful activity of complement may be bypassed by pathologic mechanisms present in the inflamed tissue. Each of Bayer, Immunex Corporation, Pharmacia & Upjohn and Rhone-Poulenc Rorer Inc. sells a product which is used clinically to reduce surgical bleeding during CPB, but have little effect on other significant inflammatory morbidities associated with CPB. The Company believes that each of these drugs does not significantly prevent complement activation and subsequent inflammation that lead to organ damage and blood loss during CPB surgery, but instead each drug attempts to reduce blood loss by shifting the normal blood thinning/blood clotting balance in the blood towards enhanced blood clotting.

The Company is also aware of announced and ongoing clinical trials of certain companies, including Autoimmune, Inc., Immune Response Corporation, Neurocrine Biosciences, Inc., and Anergen, Inc. employing T-cell specific tolerance technologies and addressing patients with multiple sclerosis or diabetes mellitus. Baxter Healthcare Corporation and Novartis, Inc., in collaboration with Biotransplant Inc., have publicly announced intentions to commercially develop xenograft organs and the Company is aware that Diacrin Inc. and Genzyme Tissue Repair, Inc. are also working in this field.

MANUFACTURING, MARKETING, SALES, CLINICAL TESTING AND REGULATORY COMPLIANCE

Alexion manufactures its requirements for preclinical and clinical development using both internal and contract manufacturing resources. The Company has pilot manufacturing facilities suitable for the fermentation and purification of certain of its recombinant compounds for clinical studies. The Company's pilot plant has the capacity to manufacture under cGMP regulations. The Company has secured the production of initial clinical supplies of certain other recombinant products through third party manufacturers. In each case, the Company has contracted product finishing, vial filling, and packaging through third parties.

In the longer term, the Company may contract the manufacture of its products for commercial sale or may develop large-scale manufacturing capabilities for the commercialization of some of its products. The key factors which will be given consideration when making the determination of which products will be manufactured internally and which through contractual arrangements will include the availability and expense of contracting this activity, control issues and the expertise and level of resources required for the Company to manufacture products.

The Company has not invested in the development of commercial manufacturing, marketing, distribution or sales capabilities. Although the Company has established a pilot manufacturing facility for the production of material for clinical trials for certain of its potential products, it has insufficient capacity to manufacture more than one product candidate at a time or to

manufacture its product candidates for later stage clinical development or commercialization. If the Company is unable to develop or contract for additional manufacturing capabilities on acceptable terms, the Company's ability to conduct human clinical testing will be materially adversely affected, resulting in delays in the submission of products for regulatory approval and in the initiation of new development programs, which could have a material adverse effect on the Company's competitive position and the Company's prospects for achieving profitability. In addition, as the Company's product development efforts progress, the Company will need to hire additional personnel skilled in clinical testing, regulatory compliance, and, if the Company develops products with commercial potential, marketing and sales. There can be no assurance that the Company will be able to acquire, or establish third-party relationships to provide, any or all of these resources on a timely basis, if at all, or be able to obtain required personnel and resources to manufacture, or perform testing or engage in marketing, distribution and sales on its own.

HUMAN RESOURCES

As of September 30, 1998, the Company had 69 full-time employees, of which 60 were engaged in research, development, manufacturing, and clinical development, and 9 in administration and finance. Doctorates are held by 24 of the Company's employees. Each of the Company's employees has signed a confidentiality agreement.

Item 2. PROPERTIES

The Company's headquarters, research and development facility, and pilot manufacturing facility are located in New Haven, Connecticut, within close proximity to Yale University. At this facility, the Company leases and occupies a total of approximately 39,000 square feet of space, which includes approximately 27,000 square feet of research laboratories and 5,200 square feet of space dedicated to the pilot manufacturing facility. The Company leases its facilities under three operating leases expiring in December 1997, June 1998, and March 1999, each with an option for up to an additional three years. The Company is currently continuing the leases which expired in December 1997 and June 1998 on a month-to-month basis while lease extensions are under discussion. Current monthly rental on the facilities is approximately \$35,000. The Company's pilot manufacturing plant is currently being utilized for producing compounds for the Company's current clinical trials (See "Item 1. Business -- Manufacturing, Marketing, Sales, Clinical Testing and Regulatory Compliance."). The Company believes the laboratory space will be adequate for its existing research and development activities.

Item 3. LEGAL PROCEEDINGS

The Company is not a party to any material legal proceeding.

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

None.

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

The Company's Common Stock is quoted on the National Association of Securities Dealers Automated Quotation System ("Nasdaq") National Market System under the symbol ALXN. The following table sets forth the range of high and low sales prices for the Common Stock on the Nasdaq National Market System for the periods indicated since August 1, 1996.

Fiscal 1997	High 	Low
First Quarter (August 1, 1996 - October 31, 1996) Second Quarter (November 1, 1996 - January 31, 1997) Third Quarter (February 1, 1997 - April 30, 1997) Fourth Quarter (May 1, 1997 - July 31, 1997)	\$10.50 \$13.00 \$12.50 \$11.63	\$ 6.00 \$ 8.38 \$ 8.38 \$ 7.69
Fiscal 1998	High 	Low
First Quarter (August 1, 1997 - October 31, 1997) Second Quarter (November 1, 1997 - January 31, 1998) Third Quarter (February 1, 1998 - April 30, 1998)	\$16.00 \$14.88 \$15.00	\$ 9.25 \$ 9.88 \$ 12.13
Fourth Quarter (May 1, 1998 - July 31, 1998)	\$13.75	\$ 8.00

As of October 22, 1998, the Company had 169 stockholders of record of the Company's Common Stock and an estimated 2,200 beneficial owners. The closing sale price of the Company's Common Stock on October 22, 1998 was \$7.00 per share.

RECENT SALES OF UNREGISTERED SECURITIES

On September 8, 1997, the Company completed the private placement of 400,000 shares of Series B Preferred Stock for aggregate consideration of \$10.0 million to a single institutional investor, BB Biotech. The aggregate proceeds to the Company was approximately \$9.5 million, net of issuance costs, including a \$400,000 fee paid by the Company to Robertson, Stephens & Company LLC who served as an advisor to the Company in connection with this transaction. The Series B Preferred Stock was automatically convertible into 935,782 shares of Common Stock on March 4, 1998 or at anytime prior thereto at the election of the holder. The conversion price of \$10.686 per share represented a 3% premium to the closing bid of price (\$10.375) on the day of pricing. The Series B Preferred Stock carried an obligation to pay a dividend of \$2.25 per share on March 4, 1998, payable in cash or the Company's Common Stock at the discretion of the Company. The Company relied on the exemption afforded by Section 4(2) of, and Regulation D promulgated under, the Act.

On September 30, 1997, the Company sold 166,945 shares of its Common Stock, par value \$0.0001, to United States Surgical Corporation ("US Surgical") for aggregate consideration of \$3.0 million which represents a price of \$17.97 per share (representing a 25% premium over the market price on the day prior to the date of closing). The sale of Common Stock was made in connection with the modification of a joint development agreement by and between the Company and US Surgical. No entity acted as placement agent or an advisor in connection with this sale. The Company relied on the exemption afforded by Section 4(2) under the Act.

In connection with its private placements in fiscal 1993 and 1994, the Company had issued warrants to purchase Common Stock. These warrants were exercisable at any time prior to the close of business on December 4, 1997. All such warrants had expired or were exercised. Warrants were exercised for the purchase of 551,719 shares of the Company's Common Stock, par value \$0.0001, aggregating approximately \$4.14 million of proceeds to the Company. The Company relied on the exemption afforded by Section 4(2) under the Act.

On March 4, 1998, the Company's Series B Convertible Preferred Stock was automatically converted into 935,782 shares of the Company's Common Stock, par value \$0.0001. The Company satisfied its dividend payment obligation, aggregating \$900,000, by delivery of 70,831 shares of the Company's Common Stock to BB Biotech. In addition, on March 17, 1998, the Company completed a private placement of 670,000 shares of its Common Stock, par value \$0.0001, to the same institutional investor, BB Biotech. The aggregate offering price for the Common Stock sold was approximately \$8.82 million, or \$13.175 per share, and the aggregate proceeds to the Company was \$8.78 million net of issuance costs of \$46,000. The Company relied on the exemption afforded by Section 4(2) of, and Regulation D promulgated under, the Act.

DIVIDEND POLICY

The Company has never paid cash dividends. The Company does not expect to declare or pay any dividends on the Company's Common Stock in the foreseeable future, but instead intends to retain all earnings, if any, to invest in the Company's operations. The payment of future dividends is within the discretion of the Board of Directors and will depend upon the Company's future earnings, if any, its capital requirements, financial condition and other relevant factors.

Item 6. SELECTED FINANCIAL DATA

Amounts in thousands, except per share data

	For the Fiscal Years Ended July 31					
Statements of Operations Data:	1998	1997	1996	1995		
Contract research revenues	\$5,037	\$3,811	\$2,640	\$136	\$ -	
Operating expenses: Research and development General and administrative	12,323 2,666	9,079 2,827	6,629 1,843	5,637 1,592	5,519 1,861	
Total operating expenses	14,989	11,906		7,229	7,380	
Operating loss			(5,832)		(7,380)	
Other income (expense), net	2,087	843	397	(29)	94	
Net loss	\$(7,865)	\$(7,252)	\$(5,435)	\$(7,122)	\$(7,286)	
Net loss per common share - basic and diluted (1)	\$(.87)	\$(.97)	\$(1.02)	\$(2.02)	\$(2.19)	
Shares used in computing net loss per Common Share (1)	10,056	7,451	5,351	3,528	3,329	
Balance Sheet Data:	July 31, 1998	July 31, 1997	July 31, 1996	July 31, 1995	July 31, 1994	
Cash, cash equivalents, and marketable securities	\$37,494	\$22,749	\$18,598	\$5,701	\$4,209	
Working capital	35,777	20,567	17,032	3,559	3,014	
Total assets	42,085	24,260	20,454	7,927	6,983	
Accumulated deficit	(40,592)	(31,827)	(24,575)	(19,140)	(12,018)	
Stockholders' equity	39,190	21,846	18,285	5,119	4,700	

⁽¹⁾ Net Loss per Common Share has been restated in accordance with SFAS No.128 and SAB No.98 as described in Note 2 of Notes to Financial Statements.

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

This report contains forward-looking statements which involve risks and uncertainties. Such statements are subject to certain factors which may cause the Company's plans and results to differ significantly from plans and results discussed in forward-looking statements. Factors that might cause or contribute to such differences include, but are not limited to, those discussed in "Important Factors Regarding Forward-Looking Statements" attached hereto as Exhibit 99.

Overview

Since its inception in January 1992, Alexion has devoted substantially all of its resources to its drug discovery, research and product development programs. To date, Alexion has not received any revenues from the sale of products. The Company has been unprofitable since inception, and expects to incur substantial and increasing operating losses for the next several years due to expenses associated with product research and development, preclinical and clinical testing, regulatory activities and manufacturing development and scale-up. As of July 31, 1998, the Company has an accumulated deficit of \$40.6 million.

The Company's plan is to develop and commercialize on its own those product candidates for which the clinical trial and marketing requirements can be funded by the Company. For certain of the Company's C5 Inhibitor and Apogen products for which greater resources will be required, Alexion's strategy is to form corporate partnerships with major pharmaceutical companies for product development and commercialization. Alexion has entered into a strategic alliance with US Surgical with respect to the Company's UniGraft program and intends to seek additional strategic alliances with major pharmaceutical companies although no assurances can be given that such alliances will be successfully entered into.

The Company recognizes research and development revenues when the development expenses are incurred and the related work is performed under the terms of the contracts. Any revenue contingent upon future expenditures by the Company is deferred and recognized as the expenditures are incurred. Any revenues contingent upon the achievement of milestones will be recognized when the milestones are achieved.

RESULTS OF OPERATIONS

Years Ended July 31, 1998, 1997, and 1996

The Company earned grant, license, and contract research revenues of \$5.0 million, \$3.8 million, and \$2.6 million for the fiscal years ended July 31, 1998, 1997, and 1996, respectively. The increase in fiscal 1998 was primarily due to revenues the Company received from US Surgical of \$3.5 million which represented a one-time license fee in connection with the companies' collaborative research and development agreement. The increase in fiscal 1997 revenues as compared to fiscal 1996 resulted principally from Company's revenues received from GTI/Novartis of \$1.1 million which represented a one-time upfront license fee of \$750,000 and contract research and development revenues of \$350,000. The revenues in fiscal 1996 resulted from the receipt of funds from US Surgical of approximately \$2.0 million from a collaborative research and development agreement and the \$246,000 in funding received from the NIST's ATP grant. See "Item 1. Business--Strategic Alliances, Collaborations and Licenses."

During the fiscal years ended July 31, 1998, 1997, and 1996, the Company expended \$12.3 million, \$9.1 million, and \$6.6 million, respectively, on research and development activities. Increases in research and development spending were primarily attributable to the Company's clinical trials of the Company's lead C5 inhibitor product candidate and expanded preclinical development of the company's research programs which included the manufacturing product development for the Company's C5 Inhibitor and Apogen product candidates. See Item 1. "Business--Alexion's Drug Development Programs, Cardiopulmonary Bypass Surgery".

The Company's general and administrative expenses were \$2.7 million, \$2.8 million, and \$1.8 million for the fiscal years ended July 31, 1998, 1997 and 1996, respectively. The decrease in general and administrative expenses in fiscal 1998 was primarily related to lower legal and patent costs in fiscal 1998 as compared to fiscal 1997. The increase in general and administrative expenses in fiscal 1997 as compared to fiscal 1996 consisted of \$523,000 related to increased expenses related to facilities' expansion, other employee benefits, and increased travel and administrative costs attributable to increased clinical, regulatory, and scientific conference activities. The remaining balance \$477,000 of the increase was related to increased costs for outside professional services and insurance related to business development, recruiting, patent and legal activities as a public company.

Other income (expense), net, representing primarily net investment income, was \$2.1 million, \$843,000, and \$397,000 for the fiscal years ended July 31, 1998, 1997, and 1996, respectively. The increase over the past three years was due primarily to greater investment income from higher cash balances available for investment during fiscal year 1998 as compared to the prior two fiscal years.

As a result of the above factors, the Company had incurred net losses of \$7.9 million, \$7.3 million, and \$5.4 million for the fiscal years ended July 31, 1998, 1997 and 1996, respectively.

LIQUIDITY AND CAPITAL RESOURCES

Since its inception through July 31, 1998, the Company has financed its operations and capital expenditures primarily through its private placements and initial public offering of equity securities resulting in approximately \$77.6 million of aggregate net proceeds. The Company has financed the purchase of certain equipment through \$1.2 million of secured notes payable to a financing institution and \$378,000 of capital lease obligations. Through July 31, 1998, the Company has also received approximately \$9.1 million in research and development support under its collaborations with US Surgical and GTI/Novartis. The Company has also received \$1.1 million from its SBIR grants from the NIH and \$1.5 million under the ATP grant from NIST. In addition, the Company and US Surgical were awarded in November 1997, a three-year \$2.0 million Cooperative Agreement under another ATP grant from NIST.

All of the foregoing proceeds have been used to fund operating activities of approximately \$34.5 million and investments of approximately \$5.0 million and \$980,000 in equipment and licensed technology rights and patents, respectively, through July 31, 1998. As of July 31, 1998, the Company had working capital of approximately \$35.8 million and total cash, cash equivalents, and marketable securities amounted to approximately \$37.5 million.

At July 31, 1998, approximately \$31.5 million of cash is held in short-term highly liquid investments with original maturities of less than three months. The Company increased its cash and cash equivalents by \$14.8 million during the twelve months ended July 31, 1998. This

increase resulted principally from cash flows provided by financing activities which provided \$25.2 million from the net proceeds received from the issuance of common stock offset by \$130,000 in repayments of notes payable, capital equipment purchases of approximately \$2.1 million, and the \$8.0 million cash outflow used in operating activities primarily as a result of \$7.9 million of operating losses.

The Company leases its administrative and research and development facilities under three operating leases expiring in December 1997, June 1998, and March 1999. The Company is currently continuing the leases which expired in December 1997 and June 1998 on a month-to-month basis while discussions for lease extensions are on going.

The Company is obligated to make payments pursuant to certain of its licensing and research and development agreements. The Company is scheduled to pay \$265,000, \$254,000 and \$249,000 (assuming no termination of these agreements) during the fiscal years ending July 31, 1999, 2000 and 2001, respectively. In addition, the Company is obligated to make certain future milestone payments to certain of its licensors, contingent upon receiving regulatory approval on certain patent issuances as well as on certain of the Company's possible product PLAs, if and when approved. See "Item 1. Business--Strategic Alliances, Collaborations and Licenses."

The Company anticipates that its existing available capital resources and interest earned on available cash and marketable securities should be sufficient to fund its operating expenses and capital requirements as currently planned for at least the next eighteen months. While the Company currently has no material commitments for capital expenditures, the Company's future capital requirements will depend on many factors, including the progress of the Company's research and development programs, progress in clinical trials, the time and costs involved in obtaining regulatory approvals, the costs involved in obtaining and enforcing patents and any necessary licenses, the ability of the Company to establish development and commercialization relationships, and the costs of manufacturing scale-up. See "Item 1. Business -- Alexion's Drug Development Strategy."

The Company expects to incur substantial additional costs, including costs associated with research, preclinical and clinical testing, manufacturing process development, and additional capital expenditures associated with facility expansion and manufacturing requirements in order to commercialize its products currently under development. The Company will need to raise substantial additional funds through additional financings including public or private equity offerings and collaborative research and development arrangements with corporate partners. There can be no assurance that funds will be available on terms acceptable to the Company, if at all, or that discussions with potential collaborative partners will result in any agreements on a timely basis, if at all. The unavailability of additional financing could require the Company to delay, scale back or eliminate certain of its research and product development programs or to license third parties to commercialize products or technologies that the Company would otherwise undertake itself, any of which could have a material adverse effect on the Company.

As of July 31, 1998, the Company had approximately \$37.5 million and \$1.4 million of net operating loss and tax credit carryforwards for tax reporting purposes, respectively, which expire commencing in fiscal 2008. The Tax Reform Act of 1986 (the "Tax Act") contains certain provisions that may limit the Company's ability to utilize net operating loss and tax credit carryforwards in any given year if certain events occur, including cumulative changes in ownership interests in excess of 50% over a three-year period. There can be no assurance that ownership changes in future periods will not significantly limit the Company's use of its existing net operating loss and tax credit carryforwards.

The "Year 2000" (or "Y2K") issue affects computer and information technology ("IT") systems, as well as non-IT systems which include embedded technology such as micro-processors and micro-controllers (or micro-chips) that have date sensitive programs that may not properly recognize the year 2000. Systems that do not properly recognize such information could generate inaccurate data or cause a system to fail, resulting in business interruption. The Company is currently developing a plan to provide measured assurances that its computer and IT-systems, non-IT systems, including embedded systems such as HVAC (heating, ventilation and air conditioning) systems and other analytical instruments and equipment, and those of third parties which have a material relationship with the Company are or will be Y2K compliant.

The Company expects to complete in November 1998 a comprehensive inventory and assessment of its existing IT and non-IT systems and those of third parties, as well as planned and anticipated systems, and third parties' services which the Company may purchase or use. Assessment will include identifying critical systems --internal and external (including third parties) --- in order to formulate a remediation and verification plan. The Company currently believes that remediation and verification, which include obtaining written assurances from key vendors and suppliers, as well as testing, will be complete by July 1999.

The Company believes, based on preliminary information, that the costs associated with remediation and verification to become Y2K compliant will not have a material adverse impact on the Company's financial position, results of operations, or cash flow. In the event that the Company's Y2K compliance plan is not successfully implemented, the Company may experience temporary disruptions of the Company's clinical trial sites as well as external contract manufacturing of the Company's therapeutic products -- presuming broad Y2K compliance by general service providers such as utilities, telephone, data transfer, and other government and private entities. While the Company has not yet developed contingency plans for such event, the Company expects to prepare such plans by August 1999.

Although the Company has taken steps to address the Y2K problem, there can be no assurance that the failure of the Company and/or its material third parties to timely attain Y2K compliance or that the failures and/or the impacts of broader compliance failures by telephone, mail, data transfer or other utility or general service providers or government or private entities will not have a material adverse effect on the Company. Further, there can be no assurance that the costs associated with achieving such compliance or any failure to become Y2K compliant will not be material to the Company's financial position, its results of operations, or its cash flow.

Item 7A. QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK Not applicable.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The consolidated financial statements and supplementary data of the Company required in this item are set forth at the pages indicated in Item 14(a)(1).

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

Not applicable.

Item 10. DIRECTORS, EXECUTIVE OFFICERS, AND KEY EMPLOYEES

Name	Age	Position
John H. Fried, Ph.D.	69	Chairman of the Board of Directors
Leonard Bell, M.D.	40	President, Chief Executive Officer, Secretary, Treasurer, Director
David W. Keiser	47	Executive Vice President, Chief Operating Officer
Timothy F. Howe	40	Director
Max Link, Ph.D.	58	Director
Joseph A. Madri, Ph.D., M.D.	52	Director
Leonard Marks, Jr., Ph.D.	77	Director
Eileen M. More	52	Director
Louis A. Matis, M.D.	48	Senior Vice President, Chief Scientific Officer
Stephen P. Squinto, Ph.D.	42	Senior Vice President, Chief Technology Officer
Barry P. Luke	40	Vice President of Finance and Administration, Assistant Secretary
James A. Wilkins, Ph.D.	46	Vice President of Process Sciences and Manufacturing
Christopher F. Mojcik, M.D., Ph.D.	39	Senior Director of Clinical Development

John H. Fried, Ph.D. has been the Chairman of the Board of Directors of the Company since April 1992. Since 1992, Dr. Fried has been President of Fried & Co., Inc., a health technology venture firm. Dr. Fried was a director of Syntex Corp. ("Syntex"), a life sciences and health care company, from 1982 to 1994 and he served as Vice Chairman of Syntex from 1985 to January 1993 and President of the Syntex Research Division from 1976 to 1992. Dr. Fried has originated more than 200 U.S. Patents and has authored more than 80 scientific publications. Dr. Fried is also the Chairman of the Board of Directors of Corvas International Incorporated, a development stage company principally engaged in research in the field of cardiovascular therapeutics. Dr. Fried received his B.S. in Chemistry and Ph.D. in Organic Chemistry from Cornell University.

Leonard Bell, M.D. is the principal founder of the Company, and has been a Director of the Company since February 1992 and the Company's President and Chief Executive Officer, Secretary and Treasurer since January 1992. From 1991 to 1992, Dr. Bell was an Assistant Professor of Medicine and Pathology and co-Director of the Program in Vascular Biology at the Yale University School of Medicine. From 1990 to 1992, Dr. Bell was an attending physician at the Yale-New Haven Hospital and an Assistant Professor in the Department of Internal Medicine at the Yale University School of Medicine. Dr. Bell was the recipient of the Physician Scientist Award from the National Institutes of Health and Grant-in-Aid from the American Heart Association as well as various honors and awards from academic and professional organizations. His work has resulted in more than 20 scientific publications and three patent applications. Dr. Bell is a director of the Connecticut Technology Council and Connecticut United for Reseach Excellence, Inc. ("CURE"). He also served as a director of the Biotechnology Research and

Development Corporation ("BRDC") from 1993 to 1997. Dr. Bell received his A.B. from Brown University and M.D. from Yale University School of Medicine. Dr. Bell is currently an Adjunct Assistant Professor of Medicine and Pathology at Yale University School of Medicine.

David W. Keiser has been Executive Vice President and Chief Operating Officer of the Company since July 1992. From 1990 to 1992, Mr. Keiser was Senior Director of Asia Pacific Operations for G.D. Searle & Company Limited ("Searle"), a manufacturer of pharmaceutical products. From 1986 to 1990, Mr. Keiser was successively Licensing Manager, Director of Product Licensing and Senior Director of Product Licensing for Searle. From 1984 to 1985, Mr. Keiser was New Business Opportunities Manager for Mundipharma AG, a manufacturer of pharmaceutical products, in Basel, Switzerland where he headed pharmaceutical licensing and business development activities in Europe and the Far East. From 1978 to 1983, he was Area Manager for F. Hoffmann La Roche Ltd., a manufacturer of pharmaceutical products, in Basel, Switzerland. Mr. Keiser received his B.A. from Gettysburg College.

Timothy F. Howe has been a Director of the Company since April 1995. Mr. Howe is a principal of Collinson Howe Venture Partners, Inc. ("CHVP") where he has been a Vice President since 1990. CHVP is a venture capital management firm specializing in life sciences investments and as a result of the stock ownership of certain funds advised by it, CHVP is a principal stockholder of the Company. From 1985 to 1990, Mr. Howe was employed by Schroders Incorporated specializing in venture capital investing. Mr. Howe received his B.A. from Columbia College and M.B.A. from Columbia Graduate School of Business.

Max Link, Ph.D. has been a Director of the Company since April 1992. From May 1993 to June 1994, Dr. Link was Chief Executive Officer of Corange (Bermuda), the parent company of Boehringer Mannheim Therapeutics, Boehringer Mannheim Diagnostics and DePuy Orthopedics. From 1992 to 1993, Dr. Link was Chairman of the Board of Sandoz Pharma, Ltd. ("Sandoz"), a manufacturer of pharmaceutical products. From 1987 to 1992, Dr. Link was the Chief Executive Officer of Sandoz Pharma and a member of the Executive Board of Sandoz, Ltd., Basel. Prior to 1987, Dr. Link served in various capacities with the United States operations of Sandoz, including as President and Chief Executive Officer. Dr. Link is also a director of Protein Design Labs, Inc., Cell Therapeutics, Inc., and Procept, Inc., each a publicly held pharmaceutical company, as well as Human Genome Sciences Inc., a genomics company.

Joseph A. Madri, Ph.D., M.D. is a founder of the Company and has been a Director of the Company since February 1992. Since 1980, Dr. Madri has been on the faculty of the Yale University School of Medicine and is currently a Professor of Pathology. Dr. Madri serves on the editorial boards of numerous scientific journals and he is the author of over 160 scientific publications. Dr. Madri works in the areas of regulation of angiogenesis, vascular cell-matrix interactions, cell-cell interactions, lymphocyte-endothelial cell interactions and endothelial and smooth muscle cell biology. Dr. Madri received his B.S. and M.S. in Biology from St. John's University and M.D. and Ph.D. in Biological Chemistry from Indiana University.

Leonard Marks, Jr., Ph.D. has been a Director of the Company since April 1992. Since 1985 Dr. Marks has served as an independent corporate director and management consultant. Dr. Marks served as a director of Airlease Management Services, an aircraft leasing company (a subsidiary of Bank America Leasing & Capital Corporation), from 1986 to March 1998, and Northern Trust Bank of Arizona, a commercial and trust bank subsidiary of Northern Trust of Chicago, from 1985 to March 1998. Prior to 1985, Dr. Marks held various positions in academia and in the corporate sector including Executive Vice President, Castle & Cooke, Inc. from 1972 to 1985. Dr. Marks received his B.A. in Economics from Drew University and an M.B.A. and Doctorate in Business Administration from Harvard University.

Eileen M. More has been a Director of the Company since December 1993. Ms. More has been associated since 1978 with Oak Investment Partners ("Oak") and has been a General Partner of Oak since 1980. Oak is a venture capital firm and a principal stockholder of the Company. Ms. More is currently a director of several private high technology and biotechnology firms including Instream Corporation, OraPharma, Inc., Femme Pharma, Halox Technologies, and Teloquent Communication Corporation. Ms. More studied mathematics at the University of Bridgeport and is a Chartered Financial Analyst.

Louis A. Matis, M.D. has been the Senior Vice President and Chief Scientific Officer since March 1998 and Vice President of Research, Immunobiology, of the Company from August 1994 to March 1998. From January 1993 to July 1994, Dr. Matis served as the Director of the Company's Program in Immunobiology. Prior to joining the Company, from 1977 to 1992, Dr. Matis held various appointments at the NIH and the FDA. From 1990 to 1992, Dr. Matis was a Senior Investigator in the Laboratory of Immunoregulation at the National Cancer Institute and from 1987 to 1990 he was a Senior Staff Fellow in the Molecular Immunology Laboratory at the Center for Biologics Evaluation and Research associated with the FDA. Dr. Matis is the author of more than 100 scientific papers in the fields of T-cell biology. Dr. Matis has received numerous awards including the NIH Award of Merit. Dr. Matis received his B.A. from Amherst College and M.D. from the University of Pennsylvania Medical School.

Stephen P. Squinto, Ph.D. is a founder of the Company and has held the positions of Senior Vice President and Chief Technical Officer since March 1998, Vice President of Research, Molecular Sciences, from August 1994 to March 1998, Senior Director of Molecular Sciences from July 1993 to July 1994 and Director of Molecular Development from April 1992 to July 1993. From 1989 to 1992, Dr. Squinto held various positions at Regeneron Pharmaceuticals, Inc., most recently serving as Senior Scientist and Assistant Head of the Discovery Group. From 1986 to 1989, Dr. Squinto was an Assistant Professor of Biochemistry and Molecular Biology at Louisiana State University Medical Center. Dr. Squinto's work has led to over 70 scientific papers in the fields of gene regulation, growth factor biology and gene transfer. Dr. Squinto's work is primarily in the fields of regulation of eukaryotic gene expression, mammalian gene expression systems and growth receptor and signal transduction biology. Dr. Squinto also serves as a Director of the BRDC since 1997. Dr. Squinto received his B.A. in Chemistry and Ph.D. in Biochemistry and Biophysics from Loyola University of Chicago.

Barry P. Luke has been Vice President of Finance and Administration since September 1998 and Senior Director of Finance and Administration of the Company from August 1995 to September 1998 and prior thereto was Director of Finance and Accounting of the Company from May 1993. From 1989 to 1993, Mr. Luke was Chief Financial Officer, Secretary and Vice President--Finance and Administration at Comtex Scientific Corporation, a publicly held distributor of electronic news and business information. From 1985 to 1989, he was Controller and Treasurer of Softstrip, Inc., a manufacturer of computer peripherals and software. From 1980 to 1985, Mr. Luke was employed by the General Electric Company ("GE") where he held positions at GE's Corporate Audit Staff after completing GE's Financial Management Program. Mr. Luke received a B.A. in Economics from Yale University and an M.B.A. in management and marketing from the University of Connecticut.

James A. Wilkins, Ph.D. has been Vice President of Process Sciences and Manufacturing of the Company since September 1998 and has held the positions of Senior Director of Process Sciences from August 1996 to September 1998, Senior Director of Process Development from August 1995 to August 1996, and Director of Process Development from September 1993 to August 1995. From 1989 to 1993, Dr. Wilkins was Group Leader of the Protein Chemistry

Department at Otsuka America Pharmaceutical, Inc. From 1987 to 1989, Dr. Wilkins was a Scientist in Recovery Process Development at Genentech, Inc. and from 1982 to 1987, he was an Associate Research Scientist in the Thomas C. Jenkins Department of Biophysics at Johns Hopkins University. He is the author of more than 25 presentations and scientific articles in the fields of protein refolding and protein biochemistry. Dr. Wilkins received a B.A. in Biology from University of Texas and a Ph.D. in Biochemistry from University of Tennessee.

Christopher F. Mojcik, M.D., Ph.D., has been Senior Director of Clinical Development since joining the Company in July 1998. From 1996 until July 1998, he was an Associate Director in the Metabolics/Rheumatics Department at Bayer Corporation's Pharmaceuticals Division. Dr. Mojcik was responsible for Phase II and III development of a matrix metalloproteinase inhibitor for osteoarthritis, and oversaw the Phase IV program for Trasylol[r], which is used in cardiopulmonary bypass as a hemostatic agent. From 1993 to 1996, he was a Senior Staff Fellow in the Cellular Immunology Section of the Laboratory of Immunology in the NIAID at the NIH. From 1991 to 1993, he completed his Fellowship in Rheumatology in the National Institute of Arthritis and Musculoskeletal and Skin Diseases at the NIH. He received his B.A. from Washington University in St. Louis, MO, and his M.D. and Ph.D. from the University of Connecticut.

The Company and each of the executive officers are parties to employment agreements.

Item 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated by reference from the information under the caption "Compensation of Executive Officers and Directors" contained in the Proxy Statement.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information as of October 1, 1998 (except as otherwise noted in the footnotes) regarding the beneficial ownership (as defined by the Securities and Exchange Commission (the "SEC")) of the Company's Common Stock of: (i) each person known by the Company to own beneficially more than five percent of the Company's outstanding Common Stock; (ii) each director and each named executive officer; and (iii) all directors and named executive officers of the Company as a group.

Name and Address of Beneficial Owner (1)	Number of Shares Beneficially Owned (2)	Percentage of Outstanding Shares of Common Stock
BB Biotech AG Vordergrasse 3 8200 Schaffhausen CH/Switzerland (3)		16.2%
Scudder Kemper Investments, Inc. 345 Park Avenue New York, NY 10154 (4)	911,000	8.1%
United States Surgical Corporation 150 Glover Avenue Norwalk, Connecticut 06856 (5)	824,087	7.3%
OrbiMed Advisors, LLC (formerly Mehta and Isaly Asset Management, Inc.) 767 Third Avenue, Sixth Floor New York, NY 10017 (6)	773,500	6.9%
Eileen M. More (7) Timothy F. Howe (8) Leonard Bell, M.D. (9) Stephen P. Squinto, Ph.D. (10) David W. Keiser (11) Louis A. Matis, M.D. (12) John H. Fried, Ph.D. (13) Joseph A. Madri, Ph.D., M.D. (14) Max Link, Ph.D. (15) Leonard Marks, Jr., Ph.D. (16)	454,129 449,600 143,575 126,050 111,025 88,636 55,100 23,123	4.6% 4.0% 3.9% 1.3% 1.1% 1.0% * *
Directors and Executive Officers as a group (10 persons) (17)	1,985,822	16.8%

^{*} Less than one percent

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- (1) Unless otherwise indicated, the address of all persons is 25 Science Park, Suite 360, New Haven, Connecticut 06511.
- (2) To the Company's knowledge, except as set forth below, the persons named in the table have sole voting and investment power with respect to all shares of Common Stock shown as beneficially owned by them, subject to community property laws where applicable and the information contained in the footnotes in this table.
- (3) This figure is based upon information set forth in Amendment No. 3 to Schedule 13D dated May 27, 1998, filed jointly by BB Biotech AG and Biotech Target, S.A.. Biotech Target, S.A., a Panamanian corporation, is a wholly-owned subsidiary of BB Biotech AG. BB Biotech AG is a holding company incorporated in Switzerland.
- (4) This figure is based upon a Report on Form 13F for the quarter ended June 30, 1998, filed by Scudder Kemper Investments, Inc. ("SKII") with the Securities and Exchange Commission on August 14, 1998. Of these shares, SKII claims sole voting authority for 207,900 shares, shared voting authority for 572,900 shares, and no voting authority for 130,200 shares.
- (5) This figure is based upon information set forth in Amendment No. 2 to Schedule 13D dated December 12, 1997. United States Surgical Corporation completed a merger with a subsidiary of Tyco International Ltd. on October 1,1998.
- (6) This figure is based upon information set forth in Amendment No. 1 to Schedule 13D dated July 25, 1997, filed by a group consisting of Samuel D. Isaly, Viren Mehta and certain entities affiliated with these individuals including Pharma/Health, M and I Investors, Inc., Caduceus Capital, L.P., Caduceus Capital Management, Inc. and Worldwide Health Services Portfolio.
- (7) Includes 25,100 shares of Common Stock which may be acquired upon the exercise of options within 60 days of October 1, 1998 granted to Eileen More. Also includes 484,977 shares owned by Oak Investment V Partners and 10,907 shares owned by Oak Investment V Affiliates, two affiliated limited partnerships (collectively, "Oak Investments"). Ms. More is a General Partner at Oak Investments. Excludes 3,700 shares obtainable through the exercise of options granted to Ms.
 More which are not exercisable within 60 days of October 1, 1998.
- (8) Includes shares of Common Stock beneficially owned by Collinson Howe Venture Partners, Inc. ("CHVP") (see paragraph below). Includes 5,100 shares which may be acquired upon the exercise of options within 60 days of October 1, 1998 granted to Mr. Howe. Excludes 3,700 shares obtainable through the exercise of options granted to Mr. Howe which are not exercisable within 60 days of October 1, 1998. Mr. Howe disclaims beneficial ownership of shares held or beneficially owned by CHVP.
 - CHVP is a venture capital investment management firm which is the managing member of Biotechnology Investment Group, L.L.C. ("BIG"), and Schroders, Inc.. As such, CHVP shares beneficial ownership of 417,575 shares and 28,864 shares of Common Stock owned by BIG and Schroders, Inc., respectively. Mr. Howe, a director of the Company, is the Vice President and a minority stockholder of CHVP. As such, he has shared investment and voting power over the shares beneficially owned by CHVP.
- (9) Includes 290,000 shares of Common Stock that may be acquired upon the exercise of options within 60 days of October 1, 1998 and 300 shares, in aggregate, held in the names of Dr. Bell's three minor children. Excludes 195,000 shares obtainable through the exercise of options granted to Dr. Bell which are not exercisable within 60 days of October 1, 1998 and 90,000 shares held in

trust for Dr. Bell's children of which Dr. Bell disclaims beneficial ownership. Also excludes 60,000 shares obtainable through the exercise of options granted to Dr. Bell which are not exercisable within 60 days of October 1, 1998 and are subject to shareholders' approval to increase the authorized number of shares in the Company's 1992 Stock Option Plan. Dr. Bell disclaims beneficial ownership of the shares held in the name of his minor children.

- (10) Includes 86,875 shares of Common Stock which may be acquired upon the exercise of options granted to Dr. Squinto within 60 days of October 1, 1998 and 6,200 shares, in aggregate, held in the names of Dr. Squinto's two minor children of which 6,000 shares are in two trusts managed by his wife. Excludes 53,125 shares obtainable through the exercise of options granted to Dr. Squinto which are not exercisable within 60 days of October 1, 1998. Also excludes 25,000 shares obtainable through the exercise of options granted to Dr. Squinto which are not exercisable within 60 days of October 1, 1998 and are subject to shareholders' approval to increase the authorized number of shares in the Company's 1992 Stock Option Plan. Dr. Squinto disclaims beneficial ownership of the shares held in the name of his minor children and the foregoing trusts.
- (11) Includes 83,750 shares of Common Stock which may be acquired upon the exercise of options within 60 days of October 1, 1998 and 300 shares, in aggregate, held in the names of Mr. Keiser's three minor children. Excludes 66,250 shares obtainable through the exercise of options granted to Mr. Keiser, which are not exercisable within 60 days of October 1, 1998. Also excludes 25,000 shares obtainable through the exercise of options granted to Mr. Keiser which are not exercisable within 60 days of October 1, 1998 and are subject to shareholders' approval to increase the authorized number of shares in the Company's 1992 Stock Option Plan. Mr. Keiser disclaims beneficial ownership of the shares held in the name of his minor children.
- (12) Includes 96,875 shares of Common Stock which may be acquired upon the exercise of options granted to Dr. Matis within 60 days of October 1, 1998 and 150 shares, in aggregate, held in the names of Dr. Matis' three minor children. Excludes 53,125 shares obtainable through the exercise of options, granted to Dr. Matis, which are not exercisable within 60 days of October 1, 1998. Also excludes 25,000 shares obtainable through the exercise of options granted to Dr. Matis which are not exercisable within 60 days of October 1, 1998 and are subject to shareholders' approval to increase the authorized number of shares in the Company's 1992 Stock Option Plan. Dr. Matis disclaims beneficial ownership of the shares held in the name of his minor children.
- (13) Includes 12,600 shares of Common Stock that may be acquired on the exercise of options that are exercisable within 60 days of October 1, 1998. Excludes 3,700 shares obtainable through the exercise of options granted to Dr. Fried which are not exercisable within 60 days of October 1. 1998.
- (14) Includes 10,100 shares of Common Stock that may be acquired upon the exercise of options within 60 days of October 1, 1998. Excludes 3,700 shares obtainable through the exercise of options granted to Dr. Madri which are not exercisable within 60 days of October 1, 1998.
- (15) Excludes 2,000 shares obtainable through the exercise of options, granted to Dr. Link, which are not exercisable within 60 days of October 1, 1998.
- (16) Includes 12,600 shares of Common Stock which may be acquired upon the exercise of options within 60 days of October 1, 1998. Excludes 3,700 shares obtainable through the exercise of options granted to Dr. Marks, which are not exercisable within 60 days of October 1, 1998.
- (17) Consists of shares beneficially owned by Drs. Bell, Fried, Link, Madri, Marks, Matis and Squinto and Mr. Keiser, Mr. Howe and Ms. More. Includes 623,000 shares of Common Stock which may

be acquired upon the exercise of options within 60 days of October 1, 1998. Excludes shares beneficially owned by Dr. Bernadette Alford, a named executive officer, who resigned from the Company in September 1998.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

In March 1998, BB Biotech, a single institutional investor, purchased 670,000 shares of the Company's Common Stock, par value \$0.0001, in a private placement at \$13.175 per share, aggregating \$8.827 million. At October 1, 1998, BB Biotech beneficially owned 1,824,113 shares of Common Stock, or approximately 16.2%, of the Company's outstanding shares of common stock.

In September 1997, US Surgical and the Company modified the July 1995 Joint Development Agreement (described below). As part of the modification, US Surgical made an additional \$6.5 million payment to the Company for equity, exclusive licensing rights, and certain manufacturing assets. Under the modified agreement, the additional \$6.5 million payment comprised: (i) a \$3 million equity investment in the Company through the purchase of 166,945 shares of the Company's Common Stock at a price of \$17.97 per share, which represented a 25% premium over the market price on the day prior to the date of closing and (ii) a \$3.5 million payment to acquire technology and certain xenograft manufacturing assets. Further, as part of the amended agreement, US Surgical and the Company agreed that the preclinical milestone payments in the original agreement are considered to have been satisfied. At October 1, 1998, US Surgical beneficially owned an aggregate of 824,087 shares of Common Stock or approximately 7.3% of the Company's outstanding shares of common stock.

In September 1997, BB Biotech, a single institutional investor, purchased 400,000 shares of Series B Preferred Stock at \$25.00 per share, convertible automatically in six months, or at the election of the holder at any time after the date of issuance, into 935,782 shares of common stock at \$10.686 per share. The conversion price represented a 3% premium to the closing bid of \$10.375 on the day of pricing. The Series B Preferred Stock would pay a dividend of \$2.25 per share of Series B Preferred Stock on March 4, 1998, payable in cash or the Company's Common Stock at the discretion of the Company. In March 1998, the Series B Preferred Stock was converted to 935,782 shares of the Company's Common Stock, par value \$0.0001, and the Company elected to pay the dividend on the preferred stock in shares of common stock, aggregating 70,831 shares.

In July 1995, the Company entered into a series of agreements with US Surgical relating to a collaboration for the development of non-human UniGraft organ products designed for transplantation into humans. In furtherance of the joint collaboration, US Surgical also purchased \$4.0 million of the Company's Common Stock, at a price of \$8.75 per share and agreed to fund up to \$7.5 million for the completion of preclinical research and development of the UniGraft program, a portion of which is dependent on the achievement of development milestones. US Surgical, a principal stockholder of the Company, purchased approximately ten percent of the shares of Common Stock offered at the Company's initial public offering. Through July 31, 1997, the Company has received \$4.0 million in research and development support under its collaboration with US Surgical.

In June and October 1992, the Company entered into certain patent licensing agreements with Oklahoma Medical Research Foundation ("OMRF") and Yale University ("Yale"). The agreements provide that the Company agreed to pay such institutions royalties based on sales of

products incorporating technology licensed thereunder and also license initiation fees, including annual minimum royalties that increase in amount based on the status of product development and the passage of time. Under policies of OMRF and Yale, the individual inventors of patents are entitled to receive a percentage of the royalties and other license fees received by the licensing institution. Certain founders of and scientific advisors to the Company are inventors under such patent and patent applications (including Drs. Bell and Madri, directors of the Company, and Dr. Squinto, the Senior Vice President and Chief Technology Officer of the Company, with respect to patent applications licensed from Yale) and, therefore, entitled to receive a portion of such royalties and other fees payable by the Company.

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

(a) (1) Financial Statements

The financial statements required by this item are submitted in a separate section beginning on page F-1 of this report.

(2) Financial Statement Schedules

Schedules have been omitted because of the absence of conditions under which they are required or because the required information is included in the financial statements or notes thereto.

(3) Exhibits:

- 3.1 Certificate of Incorporation, as amended.*(1)
- 3.2 Bylaws.*(1)
- 4.1 Specimen Common Stock Certificate.*(1)
- 10.1 Employment Agreement, dated April 1, 1997, between the Company and Dr. Leonard Bell.(2)
- 10.2 Employment Agreement, dated October 22, 1997, between the Company and David W. Keiser.*(4)
- 10.3 Employment Agreement, dated October 22, 1997, between the Company and Dr. Stephen P. Squinto.*(4)
- 10.4 Employment Agreement, dated October 22, 1997, between the Company and Dr. Louis A. Matis.*(4)
- 10.5 Employment Agreement, dated July 1993, between the Company and Dr. James A. Wilkins, as amended.*(1)
- 10.6 Employment Agreement, dated July 1994, between the Company and Dr. Bernadette L. Alford, as amended.*(1)
- 10.7 Administrative Facility Lease, dated August 23, 1995, between the Company and Science Park Development Corporation.*(1)
- 10.8 Research and Development Facility Lease, dated August 23, 1995, between the Company and Science Park Development Corporation.*(1)
- 10.9 Option Agreement, dated April 1, 1992 between the Company and Dr. Leonard Bell.*(1)

- 10.10 Company's 1992 Stock Option Plan, as amended.*(1)
- 10.11 Company's 1992 Outside Directors Stock Option Plan, as amended.*(1)
- 10.12 Registration Agreement, dated December 4, 1992, by the Company for the benefit of certain individuals listed on schedules thereto, as amended.*(1)
- 10.13 Amendment to Registration Agreement, dated July 31, 1995, between the Company and United States Surgical Corporation.*(1)
- 10.14 Agreement, dated June 15, 1993, by the Company for the benefit of certain individuals listed on schedules thereto, as amended.*(1)
- 10.15 Form of Investor Rights Agreement, dated December 23, 1994, between the Company and the purchasers of the Company's Series A Preferred Stock, as amended.*(1)
- 10.16 Stock Purchase Agreement, dated July 31, 1995, between the Company and United States Surgical Corporation.*(1)
- 10.17 Form of Warrant to purchase shares of the Company's Common Stock issued pursuant to certain of the Company's private placements.*(1)
- 10.18 Form of Warrant to purchase shares of the Company's Common Stock issued to the Placement Agent of certain of the Company's private placements.*(1)
- 10.19 Form of Warrant to purchase shares of the Company's Common Stock issued to certain warrantholders of the Company in connection with a Warrant Exchange.*(1)
- 10.20 License Agreement dated as of May 27, 1992 between the Company and Yale University, as amended September 23, 1992.*(1)+
- 10.21 Exclusive License Agreement dated as of June 19, 1992 among the Company, Yale University and Oklahoma Medical Research Foundation.**(2)
- 10.22 Research & Development Agreement dated as of June 19, 1992 between the Company and Oklahoma Medical Research Foundation.*(1)+
- 10.23 License Agreement dated as of September 30, 1992 between the Company and Yale University, as amended July 2, 1993.*(1)+
- 10.24 License Agreement dated as of August 1, 1993 between the Company and Biotechnology Research and Development Corporation ("BRDC"), as amended as of July 1, 1995.*(1)+
- 10.25 Cooperative Research and Development Agreement dated December 10, 1993 between the Company and the National Institutes of Health.*(1)+ *
- 10.26 License Agreement dated January 25, 1994 between the Company and The
 Austin Research Institute.*(1)+

10.27	Exclusive Patent License Agreement dated April 21, 1994 between the Company and the National Institutes of Health.*+
10.28	License Agreement dated July 22, 1994 between the Company and The Austin Research Institute.*+
10.29	License Agreement dated as of January 10, 1995 between the Company and Yale University.*+ $$
10.30	Joint Development Agreement dated as of July 31, 1995 between the Company and United States Surgical Corporation.*(1)+
10.31	Advanced Technology Program ("ATP"), Cooperative Agreement 70NANB5H, National Institute of Standards and Technology, entitled "Universal Donor Organs for Transplantation," dated September 15, 1995.*(1)+
10.32	U.S. Department of Health and Human Services, National Heart, Lung and Book Institute, Small Business Research Program, Phase II Grant Application, entitled "Role of Complement Activation in Cardiopulmonar

- Bypass," dated December 14, 1994; and Notice of Grant Award dated September 21, 1995.*(1)+
- 10.33 Research Subcontract Agreement dated as of October 1, 1995 between the Company and Tufts University.*(1)+
- 10.34 Agreement to be Bound by Shareholders Agreement dated as of August 1, 1993 between the Company and BRDC.*(1)
- 10.35 Agreement to be Bound by Master Agreement dated as of August 1, 1993 between the Company and BRDC.*(1)
- Research and Development Facility Lease, dated April 1, 1996, between the Company and Science Park Development Corporation.**(2) 10.36
- License Agreement dated March 27, 1996 between the Company and Medical 10.37 Research Council. **(2)+
- License Agreement dated May 8, 1996 between the Company and Enzon, 10.38 Inc.**(2)+
- License and Collaborative Research Agreement between Alexion 10.39 Pharmaceuticals, Inc. and Genetic Therapy, Inc.*(2)+
- 10.40 Amended Joint Development Agreement as of September 4, 1997 between the Company and United States Surgical Corporation.*(4)++
- Stock Purchase Agreement dated September 8, 1997 by and between the 10.41 Company and Biotech Target S.A. *(4)++
- Stock Purchase Agreement dated March 4, 1998 by and between the Company and Biotech Target S.A. $^{\star}(8)++$ 10.42

23.1 Consent of Arthur Andersen LLP

99 Risk Factors

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- * Previously filed
- (1) Incorporated by reference to the Company's Registration Statement on Form S-1 (Reg. No. 333-00202).
- (2) Incorporated by reference to the Company's Amendment No. 1 to Registration Statement on Form S-1 (Reg. No. 333-19905) filed on April 4, 1997.
- (3) Incorporated by reference to the Company's Annual report on Form 10-K for the fiscal year ended July 31, 1996.
- (4) Incorporated by reference to the Company's Annual report on Form 10-K for the fiscal year ended July 31, 1997.
- (5) Incorporated by reference to the Company's Registration Statement on Amendment No. 1 to Form S-3 (Reg. No. 333-29617) filed on July 7, 1997.
- (6) Incorporated by reference to the Company's Registration Statement on Post Effective Amendment to Form S-1 (Reg. No. 333-19905) filed on July 18, 1997.
- (7) Incorporated by reference to the Company's Registration Statement on Form S-3 (Reg. No. 333-41397) filed on December 11, 1997.
- (8) Incorporated by reference to the Company's Registration Statement on Form S-3 (Reg. No. 333-47645) filed on March 17, 1998.
- + Confidential treatment was granted for portions of such document.
- ++ A request for confidential treatment was granted for portions of such document, Confidential Portions have been omitted and filed separately with the Commission as required by Rule 24b-2.

(b) Reports on Form 8-K

Current Report on Form 8-K dated July 7, 1998 relating to the Company's commencement of dosing in Rheumatoid Arthritis patients in a Phase I/II clinical trial of its anti-inflammatory complement inhibitor drug candidate, 5G1.1.

Current Report on Form 8-K dated October 8, 1998 relating to the Company's Fourth Quarter and Year End Results.

(c) Exhibits.

See (a) (3) above

(d) Financial Statement Schedules

See (a) (2) above

SIGNATURES

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

ALEXION PHARMACEUTICALS, INC.

/s/ LEONARD BELL

By: Leonard Bell, M.D. President, Chief Executive Officer, Secretary and Treasurer

/s/ DAVID W. KEISER

By: David W. Keiser

Executive Vice President and Chief Operating Officer

Pursuant to the requirements of the Securities Act of 1934 this Registration Statement has been signed by the following persons in the $\,$ capacities and on the dates indicated.

/s/ LEONARD BELL Leonard Bell, M.D	President, Chief Executive Officer, Secretary, Treasurer and Director (principal executive officer)	October 22, 1998
/s/ DAVID W. KEISER David W. Keiser	Executive Vice President and Chief Operating Officer (principal financial officer)	October 22, 1998
/s/ BARRY P. LUKE	Vice President of Finance and Administration (principal	October 22, 1998
Barry P. Luke	accounting officer)	
/s/ JOHN H. FRIED	Chairman of the Board of	October 22, 1998
John H. Fried, Ph.D.	Directors	
/s/ TIMOTHY F. HOWE	Director	October 22, 1998
Timothy F. Howe		
/s/ MAX LINK	Director	October 22, 1998
Max Link, Ph.D.		
/s/ JOSEPH A. MADRI	Director	October 22, 1998
Joseph A. Madri, Ph.D., M.D.		
/s/ LEONARD MARKS	Director	October 22, 1998
Leonard Marks, Jr., Ph.D.		
/s/ EILEEN M. MORE Eileen M. More	Director	October 22, 1998

ALEXION PHARMACEUTICALS, INC. INDEX TO FINANCIAL STATEMENTS

	PAGE
Report of Independent Public Accountants	F-2
Balance Sheets as of July 31, 1998 and 1997	F-3
Statements of Operations for the Years Ended July 31, 1998, 1997 and 1996	F-4
Statements of Stockholders' Equity for the Years Ended July 31, 1998, 1997, and 1996	F-5
Statements of Cash Flows for the Years Ended July 31, 1998, 1997 and 1996	F-6
Notes to Financial Statements	F-7

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

To the Board of Directors and Stockholders of

Alexion Pharmaceuticals, Inc.:

We have audited the accompanying balance sheets of Alexion Pharmaceuticals, Inc. (a Delaware corporation) as of July 31, 1998 and 1997, and the related statements of operations, stockholders' equity and cash flows for each of the three years in the period ended July 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 Alexion Pharmaceuticals, Inc. as of July 31, 1998 and 1997, and the results of its operations and its cash flows for each of the three years in the period ended July 31, 1998, in conformity with generally accepted accounting principles.

/s/Arthur Andersen LLP

Hartford, Connecticut August 28, 1998

BALANCE SHEETS

(DOLLARS IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)

	JULY	31,
	1998	1997
ASSETS		
CURRENT ASSETS: Cash and cash equivalents. Marketable securities. Prepaid expenses. Other current assets.	\$ 31,509 5,985 209 137	6,006 232
Total current assets		22,981
EQUIPMENT, net	2,357	786
OTHER ASSETS: Licensed technology rights, net	1,888	\$ 24,260
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES: Current portion of notes payable	810 818 67	728 1,202 346
Total current liabilities		
NOTES PAYABLE, less current portion included above COMMITMENTS AND CONTINGENCIES (Notes 1, 8, 10 and 13)	832	
STOCKHOLDERS' EQUITY: Preferred stock, \$.0001 par value; 5,000,000 shares authorized; none issued at July 31, 1998 and 1997 Common stock \$.0001 par value; 25,000,000 shares authorized; 11,236,987 and 8,858,012		
shares issued at July 31, 1998 and 1997, respectively	1 79,781 (40,592)	
Total stockholders' equity	39,190	21,846
Total liabilities and stockholders' equity	\$ 42,085	

STATEMENTS OF OPERATIONS

(DOLLARS IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)

FOR THE YEARS ENDED JULY 31,

	ENDED COLL CIT							
		1998		1998		1997 		1996
CONTRACT RESEARCH REVENUES	\$	5,037	\$	3,811	\$	2,640		
OPERATING EXPENSES: Research and development		12,323		9,079		6,629		
General and administrative		2,666		2,827		1,843		
Total operating expenses		14,989		11,906		8,472		
OPERATING LOSS		(9,952)		(8,095)		(5,832)		
OTHER INCOME, net		2,087		843		397		
Net loss						(5,435)		
PREFERRED STOCK DIVIDENDS		(900)						
NET LOSS APPLICABLE TO COMMON SHAREHOLDERS								
BASIC AND DILUTED NET LOSS PER COMMON SHARE (NOTE 2)	\$	(.87)	\$	(.97)	\$	(1.02)		
SHARES USED IN COMPUTING NET LOSS PER COMMON SHARE	1	0,056,339	,056,339 7,450,762 5,35		350,598			

STATEMENTS OF STOCKHOLDERS' EQUITY

(DOLLARS IN THOUSANDS)

	CONVERTI PREFERRED		COMMON S	тоск	ADDITIONAL	ACCUMULATED	TREA STO AT C	CK,	TOTAL
	SHARES	AMOUNT	SHARES	AMOUNT	PAID-IN CAPITAL	ACCUMULATED DEFICIT		AMOUNT	STOCKHOLDERS' EQUITY
BALANCE, July 31, 1995 Issuance of common stock in initial public offering, net of issuance costs of	1,986,409	\$	3,996,913	\$ 1	\$24,259	\$(19,140)	11,875	\$	\$ 5,120
\$2,469 Conversion of Series A convertible preferred			2,530,000		18,403				18,403
stock into common stock Issuance of common stock from exercise of stock	(1,986,409)		794,554						
options Net change in unrealized losses on marketable			13,442		70				70
securities Compensation expense related to grant of stock					4				4
options Net loss					123 	(5,435)			123 (5,435)
BALANCE, July 31, 1996 Issuance of common stock, net of issuance costs of			7,334,909	1	42,859	(24,575)	11,875		18,285
\$814 Issuance of common stock from exercise of			1,450,000		10,424				10,424
warrants Issuance of common stock from exercise of stock			38,166		286				286
options Net change in unrealized gains on marketable			34,937		83				83
securities Net loss					20	 (7,252)			20 (7,252)
BALANCE, July 31, 1997 Issuance of Series B convertible preferred stock, net of issuance			8,858,012	1	53,672	(31,827)	11,875		21,846
costs of \$493 Issuance of common stock in payment of preferred stock	400,000				9,507				9,507
dividend Conversion of Series B convertible preferred			70,831		900	(900)			
stock into common stock Issuance of common stock, net of issuance costs of	(400,000)		935,782						
\$49			836,945		11,779				11,779
warrants			513,553		3,858				3,858
options Net change in unrealized gains on marketable			21,864		67				67
securities					(2)	 (7,865)			(2) (7,865)
BALANCE, July 31, 1998		\$ 	11,236,987	\$ 1 	\$79,781 	\$(40,592) 	11,875 	\$ 	\$39,190

ALEXION PHARMACEUTICALS, INC. STATEMENTS OF CASH FLOWS (dollars in thousands)

	FOR THE YEARS ENDED JULY 31,					Y 31,
		1998		1997		1996
CASH FLOWS FROM OPERATING ACTIVITIES: Net loss		(7,865)				
Depreciation and amortization		598 		698 		811 123 9
Prepaid expenses Other current assets Accounts payable Accrued expenses Deferred revenue.		23 (137) 82 (384) (279)		235 447 801 (653)		(294) (38) (175)
Net cash used in operating activities		(7,962)		(5,724)		(4,999)
CASH FLOWS FROM INVESTING ACTIVITIES: Proceeds from (purchases of) marketable securities, net		20 (2,057) (5)		3,119 (749) (23)		(8, 443) (332) (42)
Net cash (used in) provided by investing activities				2,347		(8,817)
CASH FLOWS FROM FINANCING ACTIVITIES: Net proceeds from issuance of preferred and common stock		25,211 (8) 1,200 (130) (1,503)		10,793 (29) (321) 186		18,474 (104) (322) 180
Net cash provided by financing activities		24,770		10,629		18,228
NET INCREASE IN CASH AND CASH EQUIVALENTS		14,766		7,252 9,491		4,412 5,079
CASH AND CASH EQUIVALENTS, end of period	\$		\$	16,743	\$	9,491
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION: Cash paid for interest expense		42		47		109
SUPPLEMENTAL DISCLOSURE OF NONCASH FINANCING ACTIVITIES						
Preferred stock dividend	\$	900			\$ 	

NOTES TO FINANCIAL STATEMENTS

1. ORGANIZATION AND OPERATIONS:

Alexion Pharmaceuticals, Inc. ("Alexion" or "the Company") was organized in 1992 and is a biopharmaceutical company engaged in the research and development of proprietary immunoregulatory compounds for the treatment of acute coronary syndromes (cardiopulmonary bypass, acute myocardial infarction, coronary angioplasty, and unstable angina) and autoimmune diseases (systemic lupus, rheumatoid arthritis, multiple sclerosis, and diabete mellitus). As an outgrowth of its core technologies, the Company is developing, in collaboration with third parties (see Note 9), non-human organ ("xernograft" organs) products designed for transplantation into humans without clinical rejection and immunoprotected retroviral vector particles and producer cells for use in gene therapy.

The Company has incurred losses since inception and has an accumulated deficit of \$40.6 million through July 31, 1998. The Company has made no product sales to date and has recognized cumulative revenue from research grants and funding of \$11.6 million through July 31, 1998. During 1996, the Company completed an initial public offering (IPO) of 2,530,000 shares of common stock resulting in net proceeds of approximately \$18.4 million. The Company completed additional equity offerings resulting in aggregate net proceeds of \$21.3 million and \$10.4 million during fiscal 1998 and 1997, respectively.

The Company will need additional financing to obtain regulatory approvals, fund operating losses, and, if deemed appropriate, establish a manufacturing, sales and marketing capability. In addition, the Company operates in an environment of rapid change in technology, substantial competition from pharmaceutical and biotechnology companies and is dependent upon the services of its employees and its consultants.

The Company expects to incur substantial expenditures in the foreseeable future for the research and development and commercialization of its products. The Company's management believes that, based upon its current business plans, the cash and marketable securities aggregating \$37.5 million as of July 31, 1998 will be sufficient to fund operations of the Company through at least calendar year 1999.

The Company will require funds in addition to those previously described, which it will seek to raise through public or private equity or debt financings, collaborative or other arrangements with corporate sources, or through other sources of financing. During 1998, the Company obtained a term loan facility for up to \$1.2 million with a commercial bank for the financing of capital expenditures principally related to facilities manufacturing scale-up equipment (see Note 7). The Company has no other capital sources and no arrangements or commitments with regard to obtaining any further funds.

Prior to July 31, 1998, the Company reported as a development stage entity.

NOTES TO FINANCIAL STATEMENTS

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

CASH AND CASH EQUIVALENTS--

Cash and cash equivalents are stated at cost, which approximates market, and include short-term highly liquid investments with original maturities of less than three months.

MARKETABLE SECURITIES --

The Company invests in marketable securities of highly rated financial institutions and investment-grade debt instruments and limits the amount of credit exposure with any one entity.

The Company has classified its marketable securities as "available for sale" and, accordingly, carries such securities at aggregate fair value. Unrealized gains or losses are included in stockholders' equity as a component of additional paid-in capital. At July 31, 1998, the Company's marketable securities had a maximum maturity of less than one year. The following is a summary of marketable securities at July 31, 1998 and 1997 (dollars in thousands):

	 ORTIZED COST	 EALIZED GAINS	FAIR VALUE
U.S. government obligations. Federal agency obligations. Corporate bonds.	\$ 500 2,000 3,480	\$ 5	\$ 500 2,000 3,485
Total marketable securities at July 31, 1998	\$ 5,980	\$ 5	\$ 5,985
U.S. government obligations	\$ 498 4,001 1,500	\$ 3 4	\$ 501 4,005 1,500
Total marketable securities at July 31, 1997	\$ 5,999	\$ 7	\$ 6,006

EQUIPMENT - -

Equipment is recorded at cost and is depreciated over the estimated useful lives of the assets involved. Depreciation commences at the time the assets are placed in service and is computed using the straight-line method over the useful lives of the equipment of three to five years. Maintenance and repairs are charged to expense when incurred.

Equipment under capital leases is depreciated over the lesser of the lease term or the estimated useful life. $\,$

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)

LONG-LIVED ASSETS --

The Company accounts for its investments in long-lived assets in accordance with Statement of Financial Accounting Standard No. 121, "Accounting for the Impairment of Long-Lived Assets and Long-Lived Assets to be Disposed of" (SFAS 121). SFAS 121 requires a company to review long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable.

LICENSED TECHNOLOGY RIGHTS --

Licensed technology rights are amortized over the shorter of the license term or seven years, using the straight-line method. The Company reviews licensed technology rights on a periodic basis and capitalized costs which provide no future benefit are expensed. Accumulated amortization as of July 31, 1998 and 1997 amounted to \$462,000 and \$374,000, respectively (see Note 8).

PATENT APPLICATION COSTS--

Costs incurred in filing for patents are capitalized. Capitalized costs related to unsuccessful patent applications are expensed when it becomes determinable that such applications will not be successful. Capitalized costs related to successful patent applications are amortized over a seven year period or the remaining life of the patent, whichever is shorter, using the straight-line method. Accumulated amortization as of July 31, 1998 and 1997 amounted to \$215,000 and \$190,000, respectively.

REVENUE RECOGNITION --

Contract research revenues are recognized as the related work is performed under the terms of the contracts and expenses for development activities are incurred. Any revenue contingent upon future funding by the Company is deferred and recognized as the future funding is expended. Any revenues resulting from the achievement of milestones would be recognized when the milestone is achieved.

RESEARCH AND DEVELOPMENT EXPENSES --

Research and development costs are expensed in the period incurred.

USE OF ESTIMATES IN THE PREPARATION OF FINANCIAL STATEMENTS--

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.

NEW ACCOUNTING PRONOUNCEMENT --

In July 1997, the Financial Accounting Standards Board issued SFAS No. 130 "Reporting Comprehensive Income", which establishes standards for reporting and display of comprehensive income and its components in a full set of general purpose financial statements. The objective of the statement is to report a measure of all changes in equity of an enterprise that result from transactions and other economic events of the period other than transactions with owners ("comprehensive income").

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)

SFAS No. 130 is effective for financial statements issued for fiscal years beginning after December 15, 1997 with earlier application permitted. The Company adopted this standard effective August 1, 1998. The impact of adoption of this statement will not have a significant effect on the Company's financial position and results of operations.

NET LOSS PER COMMON SHARE--

In February 1997, the Financial Accounting Standards Board issued SFAS No. 128, "Earnings Per Share", which superceded Accounting Principles Board Opinion 15. Additionally, on February 4, 1998, the Securities and Exchange Commission released Staff Accounting Bulletin (SAB) No. 98 on computations of earnings per share, which changed the guidance on how cheap stock is treated in earnings per share computations. This new standard and SAB No. 98 replace the computation of primary earnings (loss) per share with a new computation of "basic earnings (loss) per share". Accordingly, period earnings per share data presented is in accordance with SFAS No. 128 and SAB No. 98. There was no effect on previously reported net loss per common share for the years ended July 31, 1998 and 1997. The effect of the restatement on the previously reported year ended July 31, 1996 was an increase in the net loss per common share of \$.07. There is no difference in basic and diluted net loss per common share as the effect of exercising outstanding stock options, warrants, and converting preferred stock to common stock is anti-dilutive for all periods presented. These outstanding stock options and warrants entitled holders to purchase 1,947,986, 2,410,953 and 2,172,169 shares of common stock at July 31, 1998, 1997 and 1996, respectively.

3. EQUIPMENT:

A summary of equipment is as follows (dollars in thousand):

	 JULY	31	,
	1998	:	1997
Laboratory equipment	\$ 4,523 352 104 378	\$	2,646 230 46 378
LessAccumulated depreciation and amortization	 5,357 3,000		3,300 2,514
	\$ 2,357	\$	786

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

4. SECURITY DEPOSITS AND OTHER:

A summary of security deposits and other assets is as follows (dollars in thousands):

	 JULY	31,	
	1998	19	997
Restricted cash held as collateral for note payable (see Note 7)	\$ 1,500 85	\$	82
	\$ 1,585	\$	82

5. ACCRUED EXPENSES:

A summary of accrued expenses is as follows (dollars in thousands):

		L,		
	1998			1997
Research and development	\$	159	\$	590
Payroll and employee benefits		477		354
Professional fees		77		185
Other		105		73
	\$	818	\$	1,202

6. DEFERRED REVENUE:

Deferred revenue results from cash received in advance of revenue recognition under research and development contracts (see Notes 1 and 9).

7. NOTES PAYABLE:

Notes payable at July 31, 1998 consist of a \$1.2 million term loan used to finance the purchase of capital equipment. The term loan requires quarterly principal payments of \$92,000 commencing August 3, 1998 and payable through August 2001. Interest is due with principal at a variable rate to be repriced quarterly. The rate as of July 31, 1998 (date last repriced) was 7.647%. The term loan agreement requires the Company to maintain a restricted cash balance of \$1.5 million as collateral for the note.

Future repayments of the term loan are scheduled as follows (dollars in thousands):

YEAR ENDING JULY 31,

1999 2000.	368 368
2001	464
	\$ 1,200

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

8. LICENSE AND RESEARCH & DEVELOPMENT AGREEMENTS:

The Company has entered into a number of license and research & development agreements since its inception. These agreements have been made with various research institutions, universities, and government agencies in order to advance and obtain technologies management believes important to the Company's overall business strategy.

License agreements generally provide for an initial fee followed by annual minimum royalty payments. Additionally, certain agreements call for future payments upon the attainment of agreed to milestones, such as, but not limited to, Investigational New Drug (IND) application or Product License Approval (PLA). These agreements require minimum royalty payments based upon sales developed from the applicable technologies, if any. The Company's policy is to amortize capitalized licensed technology over a seven year period or under the license term, whichever is shorter, using the straight-line method.

Research & development agreements generally provide for the Company to fund future project research for one to four years. Based upon these agreements, the Company may obtain exclusive and non-exclusive rights and options to the applicable technologies developed as a result of the applicable research. The Company's policy is to expense research and development payments as incurred.

The minimum payments (assuming non-termination of the above agreements) as of July 31, 1998, for each of the next five years are as follows (dollars in thousands):

LICENSE AGREEMENTS	RESEARCH & DEVELOPMENT AGREEMENTS
209	\$ 56
204	50
199	50
292	50
107	50
	AGREEMENTS 209 204 199 292

Should the Company achieve certain milestones related to product development and product license applications and approvals, additional payments would be required if the Company elects to continue and maintain its licenses. The agreements also require the Company to fund certain costs associated with the filing of patent applications.

9. CONTRACT RESEARCH REVENUES:

Contract research revenues recorded by the Company during the year ended July 31, 1998 consisted of research and development support under collaborations with third parties and various government grants from the National Institutes of Health and the Commerce Department's National Institute of Standards and Technology (NIST).

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

9. CONTRACT RESEARCH REVENUES: (CONTINUED)

In July 1995, the Company entered into a research and development agreement with United States Surgical Corporation ("US Surgical"). US Surgical agreed to fund pre-clinical development of the Company's xenotransplant products in return for exclusive worldwide manufacturing, marketing and distribution rights of such products by paying the Company up to \$7.5 million. This pre-clinical funding represented \$4.0 million paid through July 31, 1997 and \$3.5 million upon achieving certain milestones.

In September 1997, the Company modified its July 1995 research and development agreement with US Surgical. As part of the modification agreement, US Surgical purchased 166,945 shares of common stock for \$3.0 million and made a payment of \$3.5 million to acquire exclusive licensing rights and certain xenograft manufacturing assets. Further, as part of the modified agreement, US Surgical and the Company agreed that the preclinical milestone payments in the original agreement are considered to have been satisfied. For the years ended July 31, 1998, 1997 and 1996, the Company recognized \$3.7 million, \$1.8 million, and \$2.0 million, respectively of revenue related to this agreement. As of July 31, 1998, the Company had received all of the preclinical funding available under this agreement.

In December 1996, the Company entered into a license and collaborative research agreement with Genetics Therapy Inc. ("GTI/Novartis"), a subsidiary of Novartis, Inc., relating to the Company's gene transfer technology. Under the agreement, GTI/Novartis has been granted a worldwide exclusive license to use the Company's technology in its gene therapy products. GTI/Novartis agreed to pay the Company an initial payment of \$850,000 (consisting of a non-refundable license fee of \$750,000 and a one-time research support payment of \$100,000) and to fund a minimum of \$400,000 per year for two years for research and development support by the Company. GTI/Novartis will also make payments to the Company upon achievement of certain product development milestones for gene therapy products utilizing the Company's technology and pay royalties on net sales, if any. For the years ended July 31, 1998 and 1997, the Company recognized approximately \$400,000 and \$1.1 million, respectively, of revenue related to this agreement.

In November 1997, the Company and US Surgical were awarded a three-year, \$2.0 million cooperative agreement from NIST to fund a joint xenotransplantation project.

10. COMMITMENTS:

The Company has entered into three-year and five-year employment agreements with its executives. These agreements provide that these individuals will receive aggregate annual base salaries of approximately \$952,000 as of July 31, 1998. These individuals may also receive discretionary bonus awards, as determined by the Board of Directors.

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

10. COMMITMENTS: (CONTINUED)

As of July 31, 1998, the Company leases its administrative and research and development facilities under three operating leases expiring in December 1997, June 1998, and March 1999, each with an option for up to an additional three years. The Company is currently continuing the leases that expired in December 1997 and June 1998 on a month-to-month basis while discussions for lease extensions are on-going.

Future minimum annual rental payments as of July 31, 1998, under these leases and other noncancellable operating leases (primarily for equipment) are approximately \$56,000, \$17,000, \$17,000, \$17,000, and \$4,000, for the five years ended July 31, 2003, respectively.

11. COMMON STOCK AND PREFERRED STOCK:

FISCAL 1996 INITIAL PUBLIC OFFERING--

During fiscal 1996, the Company completed an IPO of 2,530,000 shares of common stock resulting in net proceeds of approximately \$18.4 million. In connection with the Company's IPO, the Series A preferred stockholders converted all of their shares into 794,554 shares of common stock.

FISCAL 1997 PRIVATE PLACEMENT --

In July 1997, the Company completed a private placement offering for 1,450,000 shares of common stock, resulting in net proceeds of approximately \$10.4 million.

FISCAL 1998 PRIVATE PLACEMENTS --

In September 1997, the Company completed the private placement of 400,000 shares of Series B convertible preferred stock for aggregate consideration of \$10 million to a single institutional investor, Biotech Target S.A. The net proceeds to the Company were approximately \$9.5 million. The investor was entitled to a dividend of \$2.25 per share of Series B convertible preferred stock if this stock was held through March 4, 1998. In March 1998 the investor converted the preferred stock into 935,782 shares of common stock and dividends of \$900,000 were paid by the delivery of an additional 70,831 shares of the Company's common stock.

In September 1997, the Company sold 166,945 shares of its common stock to U.S. Surgical for aggregate consideration of \$3.0 million. The sale of common stock was made in connection with the modification of the joint development agreement between the Company and U.S. Surgical (see Note 9). In March 1998, Biotech Target S.A. purchased an additional 670,000 shares of common stock for aggregate consideration of approximately \$8.8 million.

12. STOCK OPTIONS AND WARRANTS:

STOCK OPTIONS--

Under the Company's 1992 Stock Option Plan and 1992 Stock Option Plan for Directors (the Plans), as amended, incentive and nonqualified stock options may be granted for up to a maximum of 1.8 million shares of common stock to directors, officers, key employees and consultants of the Company at no less than fair market value on the date of grant. Options generally become exercisable in equal proportions over three to four years and remain exercisable for up to ten years after the grant date, subject to certain conditions.

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

12. STOCK OPTIONS AND WARRANTS: (CONTINUED)

In October 1995, the Financial Accounting Standards Board issued SFAS No. 123, Accounting for Stock-Based Compensation (SFAS 123). SFAS 123 requires the measurement of the fair value of stock options or warrants to be included in the statement of income or disclosed in the notes to financial statements. The Company has determined that it will continue to account for stock-based compensation for employees under Accounting Principles Board Opinion No. 25 and elect the disclosure-only alternative under SFAS 123. The Company has computed the pro forma disclosure required under SFAS 123 for options granted using the Black-Scholes option pricing model prescribed by SFAS 123. The weighted average assumptions used are as follows:

	1998	1997	1996
Risk free interest rate	5.25%	6.25%	6.25%
Expected dividend yield	0%	0%	0%
Expected lives	5 years	5 years	5 years
Expected volatility	61%	53%	53%

Had compensation cost for the Company's stock option Plans been determined based on the fair value at the grant dates of awards under these Plans consistent with the method of SFAS 123, the Company's net loss and pro forma net loss per common share would have been increased to the pro forma amounts indicated below (dollars in thousands, except per share amounts):

	1998	1997	1996	
Net loss:				
As reported	\$(8,765)	\$ (7,252)	\$ (5,435)	
Pro forma	(9,958)	(7,815)	(5,541)	
Pro forma net loss per common share:				
As reported	(.87)	(.97)	(1.02)	
Pro forma	(.99)	(1.05)	(1.03)	

Because the SFAS 123 method of accounting has not been applied to options granted prior to August 1, 1995, the result pro forma compensation cost may not be representative of that to be expected in future years.

A summary of the status of the Company's stock option Plans at July 31, 1998, 1997 and 1996 and changes during the years then ended is presented in the table and narrative below:

	1998		19	1997		1996			
	OPTIONS	A EX	EIGHTED AVERAGE ERCISE PRICE	OPTIONS	A\ EXI	IGHTED VERAGE ERCISE PRICE	OPTIONS	AV EXE	GHTED ERAGE RCISE
Outstanding at August 1	1,484,284 279,750 (21,864) (14,184)	\$ \$ \$	6.63 11.31 3.16 11.29	1,207,334 337,250 (34,937) (25,363)		5.46 10.37 2.38 6.19	842,324 405,800 (13,442) (27,348)	\$	3.45 9.62 5.23 5.46
Outstanding at July 31	1,727,986	\$	7.40	1,484,284	\$	6.63	1,207,334	\$	5.46
Options exercisable at July 31	883,063	\$	5.73	574,690	\$	4.98	363,492	\$	4.43
granted during the year		\$	6.42		\$	5.40		\$	5.38

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

12. STOCK OPTIONS AND WARRANTS: (CONTINUED)

During 1996, options to purchase 388,300 shares of common stock were granted at an exercise price equal to the fair value of the stock at the date of grant. The weighted average exercise price of these options was \$9.94 per share. The weighted average fair value of these options at the date of grant was \$5.27 per option. In addition, options to purchase 17,500 shares of common stock were granted to non-management employees at an exercise price of \$2.50 per share which was less than the fair value of the stock at the date of grant. The weighted average fair value of these options at the date of grant was \$7.73 per ontion.

The Company recorded compensation expense of \$123,000 on certain nonqualified stock options which were granted to non-management employees during fiscal 1996 and immediately vested. This charge was based on the difference between the fair value of the Company's common stock on the date of grant and the option exercise price.

The following table presents weighted average price and life information about significant option groups outstanding at July 31, 1998.

RANGE OF EXERCISE PRICES	NUMBER OUTSTANDING	WEIGHTED AVERAGE REMAINING CONTRACTUAL LIFE (YRS)	A\ EXI	IGHTED VERAGE ERCISE PRICE	NUMBER EXERCISABLE	A\ EXI	IGHTED VERAGE ERCISE PRICE	
			-					-
\$ 2.375-\$ 2.50	604,698	6.4	\$	2.38	452,522	\$	2.38	
\$ 2.51 -\$ 8.24	150,000	3.9	\$	7.57	150,000	\$	7.57	
\$ 8.25 -\$10.50	823,738	8.5	\$	10.03	278,841	\$	10.12	
\$10.51 -\$13.25	149,550	9.4	\$	13.01	1,700	\$	12.13	
	1,727,986	7.4	\$	7.40	883,063	\$	5.73	

During the year ended July 31, 1998, options to purchase 267,250 shares of common stock were granted to employees at an exercise price of \$9.00 per share. These options were granted subject to shareholders' approval of an increase in the number of shares authorized under the Company's 1992 Stock Option Plan. For financial statement purposes, these options are not considered granted until the prerequisite approvals have been obtained. Accordingly, these options have been excluded from the tables above.

WARRANTS - -

In connection with its private placements in fiscal 1993 and 1994, the Company had issued warrants to purchase common stock. These warrants were exercisable at any time prior to the close of business on December 4, 1997. All such warrants held expired or were exercised. Warrants were exercised for the purchase of 551,719 shares of common stock aggregating approximately \$4.1 million of proceeds to the Company.

In connection with the Company's initial public offering, the Company sold to its underwriter for nominal consideration, warrants to purchase 220,000 shares of common stock. These warrants are initially exercisable at a price of \$9.90 per share for a period of forty-two (42) months commencing on August 27, 1997. None of these warrants have been exercised as of July 31, 1998.

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

13. RIGHTS TO PURCHASE PREFERRED STOCK:

In February 1997, the Board of Directors of the Company declared a dividend of one preferred stock purchase right for each outstanding share of common stock. Under certain conditions, each right may be exercised to purchase one one-hundredth of a share of a new series of preferred stock at an exercise price of \$75, subject to adjustment. The rights may be exercised only after a public announcement that a party acquired 20% or more of the Company's common stock or after commencement or public announcement to make a tender offer for 20% or more of the Company's common stock. The rights, which do not have voting rights, expire on March 6, 2002, and may be redeemed by the Company at a price of \$.01 per right at any time prior to their expiration or the acquisition of 20% or more of the Company's stock. The preferred stock purchasable upon exercise of the rights will have a minimum preferential dividend of \$10 per year, but will be entitled to receive, in the aggregate, a dividend of 100 times the dividend declared on a share of common stock. In the event of a liquidation, the holders of the shares of preferred stock will be entitled to receive a minimum liquidation payment of \$100 per share, but will be entitled to receive an aggregate liquidation payment equal to 100 times the payment to be made per share of common stock.

In the event that the Company is acquired in a merger, other business combination transaction, or 50% or more of its assets, cashflow, or earning power are sold, proper provision shall be made so that each holder of a right shall have the right to receive, upon exercise thereof at the then current exercise price, that number of shares of common stock of the surviving company which at the time of such transaction would have a market value of two times the exercise price of the right.

14. 401(K) PLAN:

The Company has a 401(k) plan. Under the plan, employees may contribute up to 15 percent of their compensation with a maximum of \$10,000 per employee in calendar year 1998. Effective January 1998 Company matching contributions of \$.50 for each dollar deferred (up to the first 6% deferred) have been authorized by the Board of Directors. The Company had matching contributions of approximately \$48,000, \$31,000 and \$6,000 for the years ended July 31, 1998, 1997 and 1996, respectively.

15. FEDERAL INCOME TAXES:

At July 31, 1998, the Company has available for tax reporting purposes, net operating loss carryforwards of approximately \$37.5 million which expire commencing in fiscal 2008. The Company also has research and development credit carryovers of approximately \$1.4 million which expire commencing in fiscal 2008. The Tax Reform Act of 1986 contains certain provisions that may limit the Company's ability to utilize net operating loss and tax credit carryforwards in any given year if certain events occur, including cumulative changes in ownership interests in excess of 50% over a three-year period. There can be no assurance that ownership changes in future periods will not significantly limit the Company's use of its existing net operating loss and tax credit carryforwards.

The Company follows SFAS No. 109, "Accounting for Income Taxes". This statement requires that deferred income tax assets and liabilities reflect the impact of "temporary differences" between the amount of assets and liabilities for financial reporting purposes and such amounts as measured by tax laws and regulations.

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

15. FEDERAL INCOME TAXES: (CONTINUED)

Deferred tax assets: Net operating loss carryforwards	1,367
Total deferred tax assets	,
Net deferred tax assets	\$

The Company has not yet achieved profitable operations. Accordingly, management believes the tax benefits as of July 31, 1998 do not satisfy the realization criteria set forth in SFAS No. 109 and has recorded a valuation allowance for the entire deferred tax asset.

CONSENT OF INDEPENDENT PUBLIC ACCOUNTANTS

As independent public accountants, we hereby consent to the incorporation of our report included in this Form 10-K, into the Company's previously filed Registration Statements File numbers 333-19905, 333-24863, 333-29617, 333-41397 and 333-47645.

ARTHUR ANDERSEN LLP

Hartford, Connecticut October 27, 1998

Important Factors Regarding Forward-Looking Statements

IN ADDITION TO OTHER INFORMATION IN THIS ANNUAL REPORT ON FORM 10-K AND IN THE DOCUMENTS INCORPORATED BY REFERENCE HEREIN, THE FOLLOWING RISK FACTORS SHOULD BE CAREFULLY CONSIDERED IN EVALUATING THE COMPANY AND ITS BUSINESS BECAUSE SUCH FACTORS CURRENTLY HAVE A SIGNIFICANT IMPACT OR MAY HAVE A SIGNIFICANT IMPACT ON THE COMPANY'S BUSINESS, OPERATING RESULTS OR FINANCIAL CONDITION. THIS FORM 10-K CONTAINS FORWARD-LOOKING STATEMENTS THAT HAVE BEEN MADE PURSUANT TO THE PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995. ACTUAL RESULTS COULD DIFFER MATERIALLY FROM THOSE PROJECTED IN THE FORWARD-LOOKING STATEMENTS AS A RESULT OF THE RISK-FACTORS SET FORTH BELOW AND ELSEWHERE IN THIS FORM.

Operating Losses; Uncertainty of Future Profitability. Alexion has generated no revenues from product sales and is dependent upon its research and development contracts, including the agreement with US Surgical, external financing, other research and development contracts and research and development grants to the extent that they can be obtained and interest income to pursue its intended business activities. The Company has incurred losses since inception and has an accumulated deficit of approximately \$40.6 million through July 31, 1998. Losses have resulted principally from costs incurred in research activities aimed at identifying and developing the Company's product candidates and from general and administrative costs. The Company expects to incur substantial additional operating losses over the next several years and expects losses to increase as the Company's research and development efforts expand and clinical trials continue and potentially expand. The Company's ability to achieve profitability is dependent on its ability to obtain patent protection and regulatory approval for its products, to obtain licenses from third parties to use technology which it may need, to enter into agreements for product development and commercialization with corporate partners and to develop the capacity to manufacture and sell products. There can be no assurance that the $\,$ Company will successfully develop, commercialize, manufacture or market any of its potential products, obtain required regulatory approvals, patents or third party licenses to technology or ever achieve profitability.

Early Stage of Product Development; Risks of Clinical Trials. The Company's research and development programs are at an early stage. There can be no assurance that the Company's drug discovery efforts will result in the development of commercially successful therapeutic drugs. Potential products which have been identified will require significant additional development, preclinical and clinical testing, regulatory approval, and additional investment prior to their commercialization, which may never be achieved. Potential products may be found to be ineffective or cause harmful side effects or unexpected results during preclinical testing or clinical trials, fail to receive necessary regulatory approvals, be difficult to manufacture on a large scale, fail to achieve market acceptance, be uneconomical or be precluded from commercialization by proprietary rights of third parties. The results from preclinical studies and early clinical trials may not be predictive of results that will be obtained in large-scale clinical trials and do not necessarily predict or prove safety or efficacy in humans.

In addition, the Company has commenced clinical trials. There can be no assurance that clinical trials of the Company's product candidates will demonstrate sufficient safety and efficacy to obtain the requisite regulatory approvals or will result in marketable products. Clinical trials are often conducted with patients that are critically ill. During the course of treatment, these patients can die or suffer other adverse medical effects for reasons that may not be related to the pharmaceutical agent being tested but which can nevertheless affect clinical trial results. A number of companies in the pharmaceutical industry have suffered significant setbacks in advanced clinical trials, even after promising results in earlier trials. Any such setback could have a material adverse effect on the Company's business, financial condition and results of operations. The completion of clinical trials of the Company's product candidates may be delayed by many factors and there can be no assurance that delays or terminations will not occur. One such factor is the rate of enrollment of patients, which generally varies throughout the course of a clinical trial and which depends on the size of the patient population, the number of clinical trial sites, the proximity of patients to clinical trial sites, the performance of the clinical sites, the eligibility criteria for the trial and the existence of competing clinical trials. The Company cannot control the rate at which patients present themselves for enrollment, and there can be no assurance that the rate of patient enrollment will be consistent with the Company's expectations or be sufficient to enable clinical trials of the Company's product candidates to be completed in a timely manner. Further, there can be no assurance that clinical trial materials will be produced in a timely manner, if at all.

Need for Additional Funds. The Company will require substantial additional funds for its research and product development programs, for operating expenses, for pursuing regulatory approval and for developing required production, sales and marketing capabilities. With the exception of the Company's agreements with US Surgical and certain research grants, the Company does not have any commitments or arrangements to obtain any such funds and there can be no assurance that funds for these purposes, whether through additional sales of securities or collaborative or other arrangements with corporate partners or from other sources, will be available to the Company when needed or on terms favorable to the Company. The unavailability of additional financing could require the Company to delay, scale back or eliminate certain of its research and product development programs or to license third parties to commercialize products or technologies that the Company would otherwise undertake itself, any of which would have a material adverse effect on the Company. The Company believes that its existing available resources, together with anticipated future funding from US Surgical and certain other research grants, and interest income should be sufficient to fund its operating expenses and capital requirements as currently planned for at least 18 months through April 2000. However, the Company's cash requirements may vary materially from those now planned because of results of research and development, results of product testing, relationships with strategic partners, changes in the focus and direction of the Company's research and development programs, competitive and technological factors, developments in the regulatory process and other factors, none of which can be predicted.

To the extent Alexion is the recipient of awards from government agencies to fund research and development, the actual timing and receipt of funding with respect to those awards may be dependent on periodically approved government budgets and appropriations, all of which is outside the control of the Company. Any change in governmental needs and priorities or any delay in legislative or other governmental action with respect to budgets and appropriations could have a material adverse effect on the Company.

Year 2000 ("Y2K") Compliance. The "Year 2000" (or "Y2K") issue affects computer and information technology ("IT") systems, as well as non-IT systems which include embedded technology such as micro-processors and micro-controllers (or micro-chips) that have date sensitive programs that may not properly recognize the year 2000. Systems that do not properly

recognize such information could generate inaccurate data or cause a system to fail, resulting in business interruption. The Company is currently developing a plan and taking steps to provide measured assurances that its computer and IT-systems, non-IT systems including embedded systems such as HVAC systems and other analytical instruments and equipment, and the Company's third parties which have a material relationship with the Company are or will be Y2K compliant. Although the Company has taken steps to address the Y2K problem, there can be no assurance that the failure of the Company and/or its material third parties to timely attain Y2K compliance or that the failures and/or the impacts of broader compliance failures by telephone, mail, data transfer or other utility or general service providers or government or private entities will not have a material adverse effect on the Company.

Rapid Technological Change. The Company is engaged in pharmaceutical fields characterized by extensive research efforts, rapidly evolving technology and intense competition from numerous organizations, including pharmaceutical companies, biotechnology firms, academic institutions and others. New developments are expected to continue at a rapid pace in both industry and academia. There can be no assurance that research and discoveries by others will not render any of the Company's programs or potential products obsolete or uneconomical. In order to compete successfully, the Company will need to complete development of and obtain regulatory approval of products that keep pace with technological developments on a timely basis. Any failure by the Company to anticipate or respond adequately to technological developments will have a material adverse effect on the Company's business, financial condition and results of operations.

Patent, License and Proprietary Rights Uncertainties. The Company's success will depend in part on its ability to obtain United States and foreign patent protection for its products, preserve its trade secrets and proprietary rights, and operate without infringing on the proprietary rights of third parties or having third parties circumvent the Company's rights. Because of the length of time and expense associated with bringing new products through development and regulatory approval to the marketplace, the health care industry has traditionally placed considerable importance on obtaining patent and trade secret protection for significant new technologies, products and processes. There can be no assurance that any patents will issue from any of the patent applications owned by or licensed to the Company. Further, even if patents were to issue, there can be no assurance that they will provide the Company with significant protection against competitive products or otherwise be commercially valuable. In addition, patent law relating to certain of the Company's fields of interest, particularly as to the scope of claims in issued patents, is still developing and it is unclear how this uncertainty will affect the Company's patent rights. Litigation, which could be costly and time consuming, may be necessary to enforce patents issued to the Company and/or to determine the scope and validity of others' proprietary rights, in either case in judicial or administrative proceedings. The Company's competitive position is also dependent upon unpatented trade secrets which generally are difficult to protect. There can be no assurance that others will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to the Company's trade secrets, that the Company's trade secrets will not be disclosed or that the Company can effectively protect its rights to unpatented trade secrets. As the biotechnology industry expands and more patents are issued, the risk increases that the Company's potential products may give rise to claims that they infringe the patents of others. Any such infringement litigation would be costly and time consuming to the Company.

The Company is aware of broad patents owned by third parties relating to the manufacture, use, and sale of recombinant humanized antibodies, recombinant humanized single chain antibodies and genetically engineered animals. The Company has received notice from certain of these parties regarding the existence of certain of these patents which the owners claim may be relevant to the development and commercialization of certain of the Company's proposed products.

With respect to certain of these patents which it believes are relevant for the expeditious development and commercialization of certain of its products as currently contemplated, the Company has acquired licenses. With regard to certain other patents, the Company has either determined in its judgement that its products do not infringe the patents or has identified and is testing various approaches which it believes should not infringe the patents and which should permit commercialization of its products. There can be no assurance that the owner of these patents will not seek to enforce the patent against the Company's so-modified commercial products or against the development activities related to the non-modified products. To the extent it becomes necessary, there can be no assurance that the Company will be able to obtain a license on commercially reasonable terms. If the Company does not obtain necessary licenses, it could encounter delays in product market introductions while it attempts to design around such patent, or could find that the development, manufacture or sale of products requiring such a license could be foreclosed. Further, there can be no assurance that owners of patents that the Company does not believe are relevant to the Company's product development and commercialization will not seek to enforce their patents against the Company Such action could result in litigation which would be costly and time consuming. There can be no assurance that the Company would be successful in such litigations. The Company is currently unaware of any such threatened action.

Certain of the licenses by which the Company obtained its rights in and to certain technologies require the Company to diligently commercialize or attempt to commercialize such technologies. There can be no assurance that the Company will meet such requirements, and failure to do so for a particular technology could result in the Company losing its rights to that technology.

Currently, the Company has not sought to register its potential trademarks and there can be no assurance that the Company will be able to obtain registration for such trademarks.

No Assurance of FDA Approval; Government Regulation. The preclinical and clinical testing, manufacturing, and marketing of the Company's products are subject to extensive regulation by numerous government authorities in the United States and other countries, including, but not limited to, the FDA. Among other requirements, FDA approval of the Company's products, including a review of the manufacturing processes and facilities used to produce such products, will be required before such products may be marketed in the United States. Similarly, marketing approval by a foreign governmental authority is typically required before such products may be marketed in a particular foreign country. In order to obtain FDA approval of a product, the Company must, among other things, demonstrate to the satisfaction of the FDA that the product is safe and effective for its intended uses and that the Company is capable of manufacturing the product with procedures that conform to the FDA's then current good manufacturing practice ("CGMP") regulations, which must be followed at all times. The process of seeking FDA approvals can be costly, time consuming, and subject to unanticipated and significant delays. There can be no assurance that such approvals will be granted to the Company on a timely basis, or at all. Any delay in obtaining or any failure to obtain such approvals would adversely affect the Company's ability to introduce and market products and to generate product revenue.

The Company's research and development processes involve the controlled use of hazardous materials. The Company is subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposing of such materials and certain waste products. 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. There can be no assurance that the Company will not be required to incur significant costs to comply with the environmental laws and regulations in the future, or that the business, financial condition and

results of operations of the Company will not be materially adversely affected by current or future environmental laws or regulations.

No Currently Approved Xenotransplantation-Based Products. As an outgrowth of its core technologies, the Company is developing non-human organ and cell products designed for transplantation into humans. The Company's approach involves xenotransplantation -- the transplantation or use of live organs, tissue, and cells from one species into another. Xenotransplantation technology is an emerging technology with, as yet, limited clinical applications. There can be no assurance that the Company's organ, tissue, and cell transplantation technology will result in the development of any therapeutic products, if at all. Although several companies are focusing on xenotransplantation-based products, this area represents a novel therapeutic approach that has not yet been subject to extensive clinical testing.

Xenotransplantation also poses a risk that viruses or other animal pathogens may be unintentionally transmitted not only to a human patient recipient, but there is also a possibility that such viruses or other animal pathogens could be transmitted to all human beings. The Company is aware of recent scientific publications by others which demonstrate, under laboratory conditions, that porcine endogenous retroviruses ("PERV") have the potential to infect human cells. While PERV has not been shown to cause any disease in pigs or humans, it is not known what effect, if any, PERV may have on humans. The Company's porcine organ, tissue, and cell product development programs would be negatively impacted by the detection of infectious PERV in porcine cells in the Company's preclinical or clinical development program or at other companies focusing in this area.

No xenotransplantation-based therapeutic product has been approved for sale by the FDA. The FDA has not yet established definitive regulatory guidelines for xenotransplantation, but has proposed interim guidelines in an attempt to reduce the risk of contamination of transplanted organ and cellular products with infectious agents. There can be no assurance that definitive guidelines will be issued, if at all, or that the Company will be able to comply with final definitive guidelines that may be issued. Furthermore, there can be no assurance that any products developed by the Company will be approved by the FDA or regulatory authorities in other countries in a timely manner, if at all, or that xenotransplantation-based products, including products developed by the Company, will be accepted by the medical community or third-party payers or that the degree of acceptance will not limit the size of the market for such products.

Substantial Competition. The pharmaceutical and biotechnology industries are characterized by intense competition. Many companies, including major pharmaceutical and chemical companies, as well as specialized biotechnology companies, are engaged in activities similar to those of the Company. Certain of these companies have substantially greater financial and other resources, larger research and development staffs, and more extensive marketing and manufacturing organizations than the Company. Many of these companies have significant experience in preclinical testing, human clinical trials, product manufacturing, marketing and distribution and other regulatory approval procedures. In addition, colleges, universities, governmental agencies and other public and private research organizations conduct research and may market commercial products on their own or through joint ventures. These institutions are becoming more active in seeking patent protection and licensing arrangements to collect royalties for use of technology that they have developed. These institutions also compete with the Company in recruiting and retaining highly qualified scientific personnel.

In particular, T-Cell Sciences, Inc. ("T-Cell Sciences"), Chiron Corporation, Abbott Laboratories, Gliatech, and Biocryst Pharmaceuticals have each publicly announced intentions to develop complement inhibitors to treat diseases related to trauma, inflammation, or

neurodegenerative indications and the Company is aware that SmithKline Beecham PLC, Merck & Co., Inc. and CytoMed Inc. are attempting to develop similar therapies. In addition, each of Bayer A.G. ("Bayer"), Immunex Corporation, Pharmacia & Upjohn and Rhone-Poulenc Rorer, Inc. sells a product which is used to reduce surgical bleeding during CPB. The Company is also aware of announced and ongoing clinical trials of certain companies, including Autoimmune, Inc., Immune Response Corporation, Neurocrine Biosciences, Inc., and Anergen, Inc. employing T-cell specific tolerance technologies and addressing patients with multiple sclerosis or diabetes mellitus. Baxter Healthcare Corporation and Novartis, Inc., in collaboration with Biotransplant Inc., have publicly announced intentions to commercially develop xenograft organs and the Company is aware that Diacrin Inc. and Genzyme Tissue Repair, Inc. are also working in this field. These companies may succeed in developing products that are more effective or less costly than any that may be developed by Alexion and may also prove to be more successful than Alexion in production and marketing. Competition may increase further as a result of potential advances in the commercial applicability of biotechnology and greater availability of capital for investment in these fields.

Dependence on Qualified Personnel. The Company is highly dependent upon the efforts of its senior management and scientific personnel including its consultants, generally, and Dr. Leonard Bell, its President and Chief Executive Officer, in particular. The loss of the services of one or more of these individuals could have a material adverse effect on the Company's ability to achieve its development objectives on a timely basis or at all. The Company and Dr. Bell are parties to an employment agreement which expires on April 1, 2000. The Company has a \$2,000,000 key man life insurance policy on the life of Dr. Bell of which the Company is the beneficiary. Because of the specialized scientific nature of its business, Alexion is also highly dependent upon its ability to continue to attract and retain qualified scientific and technical personnel. There is intense competition for qualified personnel in the areas of the Company's activities, and there can be no assurance that Alexion will be able to continue to attract and retain the qualified personnel necessary for the development of its business. Loss of the services of, or failure to recruit, key scientific and technical personnel would be significantly detrimental to the Company's product development programs.

All of the Company's scientific consultants are employed on a full-time basis by academic or research institutions or may have their own professional practices or firms on a full-time basis. Accordingly, such advisors and consultants will be able to devote only a small portion of their time to the Company. In addition, in certain circumstances, inventions or processes discovered by them may not become the property of the Company but may be the property of their full-time employers or of other companies and institutions for which they now consult. There can be no assurance that the interests and motivations of the Company's collaborators are or will remain consistent with those of the Company. Furthermore, there can be no assurance that the Company will be able to successfully negotiate license rights to the results of collaborations or that such licenses will be on commercially reasonable terms.

Dependence on Outside Parties and Collaborators. The Company's strategy for the research, development, manufacture and commercialization of certain of its products contemplates that it will enter into various arrangements with corporate partners, licensors, licensees, outside researchers, consultants and others and, therefore, the success of the Company is, and will be, dependent in part upon the efforts of outside parties. There can be no assurance that the Company will be able to negotiate acceptable collaborative arrangements to develop or commercialize its products, that arrangements or other collaborations entered into, if any, will be successful, or that current or potential collaborators will not pursue treatments for other diseases or seek alternative means of developing treatments for the diseases targeted by programs with the Company.

The Company has entered into research and development agreements with US Surgical to commercialize potential products to be developed in the UniGraft program. The amount and timing of resources which US Surgical or any other potential parties to collaboration arrangements devote to these activities may not be within the control of the Company. There can be no assurance that outside parties and collaborators will perform their obligations as expected or that any revenue will be derived from outside arrangements. The Joint Development Agreement with US Surgical may be terminated by US Surgical for any or no reason, effective January 1, 1998, if notice is given by US Surgical at least six months prior thereto. US Surgical completed a merger with a subsidiary of Tyco International Ltd. on October 1, 1998. The Company believes that the completed merger will not have a material adverse effect on its currently anticipated plans for development of the Company's Unigraft technologies, although no assurances can be given.

If any of the Company's collaborators breaches or terminates its agreement with the Company or otherwise fails to conduct its collaborative activities in a timely manner, the development or commercialization of the product candidate or the research program which is the subject of the agreement may be delayed and the Company may be required to undertake unforeseen additional responsibilities or to devote additional resources to development or commercialization or terminate the development or commercialization. This could have a material adverse effect on the Company's prospects, financial condition, intellectual property position and results of operations.

Limited Manufacturing, Marketing, Sales, Clinical Testing and Regulatory Compliance Capability. The Company has not invested in the development of commercial manufacturing, marketing, distribution or sales capabilities. Moreover, the Company has insufficient capacity to manufacture more than one product candidate at a time or to manufacture its product candidates for later stage clinical development or commercialization. If the Company is unable to develop or contract for additional manufacturing capabilities on acceptable terms, the Company's ability to conduct human clinical testing will be materially adversely affected, resulting in delays in the submission of products for regulatory approval and in the initiation of new development programs, which could have a material adverse effect on the Company's competitive position and the Company's prospects for achieving profitability. In addition, as the Company's product development efforts progress, the Company will need to hire additional personnel skilled in clinical testing, regulatory compliance, and, if the Company develops products with commercial potential, marketing and sales. There can be no assurance that the Company will be able to acquire, or establish third-party relationships to provide, any or all of these resources or be able to obtain required personnel and resources to manufacture, or perform testing or engage in marketing, distribution and sales on its own in a timely manner, or at all.

Uncertainty of Availability of Health Care Reimbursement. The Company's ability to commercialize its products successfully may depend in part on the extent to which reimbursement for the cost of such products and related treatments will be available from government health administration authorities, private health insurers and other organizations. Third-party payors are attempting to control costs by limiting coverage of products and treatments and the level of reimbursement for medical products and services. Significant uncertainty exists as to the reimbursement status of newly approved health care products, and if the Company succeeds in bringing one or more products to market, there can be no assurance that these products will be considered cost-effective, that reimbursement will be available, or, if available, that the payor's reimbursement policies will not materially adversely affect the Company's ability to sell its products on a profitable basis.

Product Liability; Potential Liability for Human Clinical Trials. The Company's business exposes it to potential product liability risks which are inherent in the testing, manufacturing,

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marketing and sale of human therapeutic products and there can be no assurance that the Company will be able to avoid significant product liability exposure. With respect to the Company's UniGraft program, little is known about the potential long-term health risks of transplanting non-human tissue into humans. In addition to product liability risks associated with sales of products, the Company may be liable to the claims of individuals who participate in human clinical trials of its products. While the Company has obtained, and will seek, waivers of liability from all persons who participated or may in the future participate in human clinical trials conducted by or on behalf of the Company, there can be no assurance that waivers will be effective to protect the Company from liability or the costs of product liability litigation. The Company currently has product liability insurance to cover certain liabilities relating to the conduct of human clinical trials. However, there can be no assurance that it will be able to maintain such insurance on acceptable terms or that the insurance will provide adequate protection against potential liabilities. An inability to maintain sufficient insurance coverage at an acceptable cost or otherwise to protect against potential product liability claims could prevent or limit the commercialization of products developed by the Company. Furthermore, a product liability related claim or recall could have a material adverse effect on the business, financial condition and results of operations of the Company.

Volatility of Share Price. The market prices for securities of biopharmaceutical companies have been volatile. Factors such as announcements of technological innovations or new commercial products by the Company or its competitors, government regulation, patent or proprietary rights developments, public concern as to the safety or other implications of biopharmaceutical products, results of preclinical or clinical trials, positive or negative developments related to the Company's collaborators and market conditions in general may have a significant impact on the market price of the Company's

Dilutive Effect of Stock Issuances, Grants, Options and Warrants. As of July 31, 1998, Alexion has granted options to purchase an aggregate of approximately 1,728,000 shares of the Company's Common Stock under certain stock option plans. Warrants to purchase an aggregate of 220,000 shares of the Company's Common Stock, are also outstanding under previous financing arrangements and other transactions. Many of these options have exercise prices below the current market price of the Company's Common Stock. In addition, the Company may issue additional stock, warrants and/or options to raise capital in the future. The Company regularly examines opportunities to expand its technology base through means such as licenses, joint ventures and acquisition of assets or ongoing businesses and may issue securities in connection with such transactions. The Company may also issue additional securities in connection with its stock option plans. During the terms of such options and warrants, the holders thereof are given the opportunity to profit from a rise in the market price of the Company's Common Stock. The exercise of such options and warrants may have an adverse effect on the market value of the Company's Common Stock. The existence of such options and warrants may adversely affect the terms on which the Company can obtain additional equity financing. To the extent the exercise prices of such options and warrants are less than the net tangible book value of the Company's Common Stock at the time such options and warrants are exercised, the Company's stockholders will experience an immediate dilution in the net tangible book value of their investment.

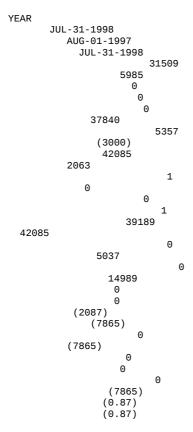
Possible Adverse Impact on Holders of Common Stock; Anti-takeover Provisions; Rights Plan. The Board of Directors may issue one or more series of Preferred Stock, without any action on the part of the stockholders of the Company, the terms of which may adversely affect the rights of holders of Common Stock. Issuance of Preferred Stock, which may be accomplished through a public offering or a private placement, may dilute the voting power of holders of Common Stock (such as by issuing Preferred Stock with super voting rights) and may render more difficult the removal of current management, even if such removal may be in the stockholders' best interests. Further, the issuance of Preferred Stock may be used as an "anti-takeover" device without further

action on the part of the stockholders. On February 14, 1997, the Board of Directors of Alexion declared a dividend distribution of one preferred stock purchase right (a "Right") for each outstanding share of Common Stock of the Company. The Rights are not exercisable until the date of the earlier to occur of (i) ten business days following the time of a public announcement or notice to the Company that a person or group of affiliated or associated persons has acquired beneficial ownership of 20% or more of the outstanding shares of Common Stock of the Company (such 20% beneficial owner, an "Acquiring Person"), or (ii) ten business days, or such later date as may be determined by the Board of Directors of the Company, after the date of the commencement or announcement by a person of an intention to make a tender offer or exchange offer for an amount of Common Stock which, together with the shares of such stock already owned by such person, constitutes 20% or more of the outstanding shares of such Common Stock. The Rights and the Rights Agreement, as well as certain provisions of Delaware law are designed to prevent any unsolicited acquisitions of the Company's Common Stock. These provisions and any issuance of Preferred Stock could prevent the holders of Common Stock from realizing a premium on their shares.

Ownership by Management and Principal Stockholders. On October 1, 1998, directors and officers of the Company and certain principal stockholders and their affiliates beneficially owned (as defined by the Securities and Exchange Commission (the "SEC")) in the aggregate approximately 1,985,800 shares of Common Stock, representing 16.8% of the outstanding shares of Common Stock. Accordingly, they have the ability to influence significantly the affairs of the Company and matters requiring a stockholder vote, including the election of the Company's directors, the amendment of the Company's charter documents, the merger or dissolution of the Company and the sale of all or substantially all of the Company's assets. The voting power of these holders may also discourage or prevent any proposed takeover of the Company pursuant to a tender offer.

THIS SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM THE BALANCE SHEET, THE STATEMENT OF OPERATIONS AND STATEMENT OF CASHFLOWS AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIAL STATEMENTS.

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JULY-31-1998 NET EARNINGS (LOSS) PER COMMON SHARE ARE STATED IN ACCORDANCE WITH SFAS NO. 128 AND SAB NO. 98.