

REGISTRATION NO. 333-89343

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

AMENDMENT NO. 1  
TO  
FORM S-3  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933

ALEXION PHARMACEUTICALS, INC.  
(Exact Name of Registrant as Specified in Its Charter)

DELAWARE 13-3648318  
(State or Other Jurisdiction (I.R.S. Employer  
of Identification Number)  
Incorporation or Organization)

25 SCIENCE PARK  
NEW HAVEN, CT 06511  
(203) 776-1790  
(Address, Including Zip Code, and Telephone Number, Including  
Area Code, of Registrant's Principal Executive Offices)

LEONARD BELL, M.D.  
ALEXION PHARMACEUTICALS, INC.  
25 SCIENCE PARK  
NEW HAVEN, CT 06511  
(203) 776-1790  
(Name, Address, Including Zip Code, and Telephone Number,  
Including Area Code, of Agent for Service)

Copies of all communications, including all communications sent to the agent for  
service, should be sent to:

MERRILL M. KRAINES, ESQ.  
LAWRENCE A. SPECTOR, ESQ.  
FULBRIGHT & JAWORSKI L.L.P.  
666 FIFTH AVENUE  
NEW YORK, NEW YORK 10103  
(212) 318-3000

DAVID R. KING, ESQ.  
MICHAEL J. SHIM, ESQ.  
MORGAN, LEWIS & BOCKIUS LLP  
1701 MARKET STREET  
PHILADELPHIA, PENNSYLVANIA 19103  
(215) 963-5000

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: From time to  
time after the effective date of this Registration Statement.

If the only securities being registered on this Form are being offered pursuant  
to dividend or interest reinvestment plan, please check the following box: / /

If any of the securities being registered on this Form are to be offered on a  
delayed or continuous basis pursuant to Rule 415 under the Securities Act of  
1933, as amended, other than securities offered only in connection with dividend  
or interest reinvestment plans, check the following box. / /

If this Form is filed to register additional securities for an offering pursuant  
to Rule 462(b) under the Securities Act, please check the following box and list  
the Securities Act registration statement number of the earlier effective  
registration statement for the same offering. / / \_\_\_\_\_

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under  
the Securities Act, check the following box and list the Securities Act  
registration statement number of the earlier effective registration statement  
for the same offering. / / \_\_\_\_\_

If delivery of the prospectus is expected to be made pursuant to Rule 434,

please check the following box. /X/

-----

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

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

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. WE MAY NOT SELL THESE SECURITIES UNTIL THE SECURITIES AND EXCHANGE COMMISSION DECLARES OUR REGISTRATION STATEMENT EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

PRELIMINARY PROSPECTUS

2,500,000 SHARES

[LOGO]

ALEXION PHARMACEUTICALS, INC.

COMMON STOCK

\$ PER SHARE

-----

- - Alexion Pharmaceuticals, Inc. is offering 2,500,000 shares.
- - Trading symbol: Nasdaq National Market--ALXN
- - Closing price on October 26, 1999:  
\$14.63 per share.

-----

THIS INVESTMENT INVOLVES RISKS. SEE "RISK FACTORS" BEGINNING ON PAGE 5.

-----  
-----

	PER SHARE	TOTAL
	-----	-----
Public offering price.....	\$	\$
Underwriting discount.....	\$	\$
Proceeds to Alexion.....	\$	\$

-----  
-----

THE UNDERWRITERS HAVE A 30-DAY OPTION TO PURCHASE UP TO 375,000 ADDITIONAL SHARES OF COMMON STOCK FROM US TO COVER OVER-ALLOTMENTS, IF ANY. THE UNDERWRITERS EXPECT TO DELIVER THE SHARES TO PURCHASERS ON OR ABOUT , 1999.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

U.S. BANCORP PIPER JAFFRAY

HAMBRECHT & QUIST

THE DATE OF THIS PROSPECTUS IS , 1999.

TABLE OF CONTENTS

	PAGE
	-----
Summary.....	1
Risk Factors.....	5
Use of Proceeds.....	17
Price Range of Common Stock.....	17
Dividend Policy.....	17
Forward-Looking Statements.....	18
Capitalization.....	19
Dilution.....	20
Selected Consolidated Financial Data.....	21
Management's Discussion and Analysis of Financial Condition and Results of Operations.....	22
Business.....	27
Management.....	48
Certain Transactions.....	52
Principal Stockholders.....	53
Description of Capital Stock.....	56
Underwriting.....	61
Legal Matters.....	62
Experts.....	62
Where You Can Find More Information.....	62
Index to Consolidated Financial Statements.....	F-1

-----

You should rely only on the information contained in this prospectus and incorporated by reference in this prospectus. We have not, and the underwriters have not, authorized any other person to provide you with different information. This prospectus is not an offer to sell, nor is it seeking an offer to buy, these securities in any state where the offer or sale is not permitted. The information in this prospectus is complete and accurate as of the date on the front cover, but the information may have changed since that date.

## SUMMARY

THE ITEMS IN THE FOLLOWING SUMMARY ARE DESCRIBED IN MORE DETAIL LATER IN THIS PROSPECTUS. THIS SUMMARY PROVIDES AN OVERVIEW OF SELECTED INFORMATION AND DOES NOT CONTAIN ALL THE INFORMATION YOU SHOULD CONSIDER. THEREFORE, YOU SHOULD ALSO READ THE MORE DETAILED INFORMATION SET OUT IN THIS PROSPECTUS, THE FINANCIAL STATEMENTS AND THE OTHER INFORMATION INCORPORATED BY REFERENCE INTO THIS PROSPECTUS. UNLESS OTHERWISE SPECIFIED, ALL INFORMATION IN THIS PROSPECTUS ASSUMES NO EXERCISE OF THE UNDERWRITERS' OVER-ALLOTMENT OPTION.

### BUSINESS OF ALEXION

We are engaged in the development of products for the treatment of cardiovascular, autoimmune and neurologic diseases caused by undesired effects of the human immune system. Our product development programs are based on proprietary technologies which are designed to block selected components of the human immune system in order to reduce undesired inflammation while allowing other beneficial aspects of the immune system to remain functional. We are currently conducting Phase II clinical trials of our two lead product candidates, 5G1.1-SC for the treatment of acute inflammation caused by cardiopulmonary bypass surgery and 5G1.1 for the chronic treatment of the autoimmune diseases rheumatoid arthritis and membranous nephritis.

5G1.1-SC and 5G1.1 are C5 Complement Inhibitors designed to selectively block the production of inflammation-causing proteins in a process of the human immune system known as the complement cascade. We believe that selective suppression of this immune response will provide a significant therapeutic advantage relative to existing therapies.

We are currently developing 5G1.1-SC in collaboration with Procter & Gamble Pharmaceuticals Inc. for the treatment of inflammation in patients undergoing cardiopulmonary bypass surgery and patients suffering acute myocardial infarction, or heart attack. In the initial Phase I/II and IIa clinical trials treating 35 cardiopulmonary bypass patients, as compared to placebo, 5G1.1-SC:

- was safe and well tolerated in the study population; and
- produced statistically significant results in the following adverse clinical effects of cardiopulmonary bypass surgery in the study population:
  - 40% less heart tissue damage;
  - 80% less new cognitive deficits; and
  - 400 ml. less blood loss.

In order to augment and extend previous findings regarding the safety and efficacy of 5G1.1-SC, together with our partner Procter & Gamble, we:

- commenced in January 1999, a multi-center, double-blinded, randomized, placebo-controlled Phase IIb clinical trial in which we expect to enroll 1,000 cardiopulmonary bypass patients; and
- filed in October 1999, an investigational new drug application for use of 5G1.1-SC in two Phase II clinical trials with approximately 1,000 patients each for the treatment of acute myocardial infarction.

The American Heart Association estimates that in the United States, approximately 500,000 cardiopulmonary bypass operations were performed in 1996 and approximately 1.0 million people will have a heart attack in 1999.

In January 1999, we entered into a collaboration with Procter & Gamble to develop and commercialize 5G1.1-SC. Under this collaboration, we intend to initially pursue the development of 5G1.1-SC for the treatment of inflammation caused by cardiopulmonary bypass surgery, myocardial infarction and

angioplasty. Procter & Gamble has agreed to fund all clinical development and manufacturing costs relating to 5G1.1-SC for these indications. In addition, under this agreement, Procter & Gamble has agreed to pay us up to \$95 million in license, milestone and additional research and development fees. We will also receive royalties on worldwide sales of 5G1.1-SC for all indications. We share co-promotion rights with Procter & Gamble to sell, market and distribute 5G1.1-SC in the United States, and have granted Procter & Gamble the exclusive rights to sell, market and distribute 5G1.1-SC outside of the United States.

We are currently developing 5G1.1 for the chronic treatment of autoimmune diseases such as rheumatoid arthritis, lupus, and a kidney disease known as membranous nephritis. In the initial Phase I/II clinical trial treating rheumatoid arthritis patients and a Phase I clinical trial in lupus patients, a single dose of 5G1.1:

- was safe and well tolerated in each study population as compared to placebo;
- significantly reduced C-reactive protein, an objective measurement of disease activity, in rheumatoid arthritis patients; and
- resulted in significantly lower incidence of proteinuria, a measure of kidney disease, in lupus patients as compared to placebo.

In order to augment and extend previous findings regarding the safety and efficacy of 5G1.1, we:

- commenced in August 1999, a multi-center, double-blinded, randomized, placebo-controlled Phase II clinical trial in which we expect to enroll 200 rheumatoid arthritis patients; and
- commenced in August 1999, a multi-center, double-blinded, randomized, placebo-controlled Phase II clinical trial in which we expect to enroll 150 membranous nephritis patients.

It is estimated that more than 2.0 million people are currently affected by rheumatoid arthritis in the United States. We estimate that there are approximately 100,000 to 300,000 people afflicted with membranous nephritis in the United States.

We are also developing a second type of anti-inflammatory drug, known as Apogens. In contrast to our C5 Complement Inhibitors, Apogens are designed to affect disease-causing T-cells. We are currently conducting preclinical studies of our first Apogen, known as MP4, targeting the treatment of patients with multiple sclerosis.

In addition, we are developing methods of blocking the immune system which are designed to permit the transplantation of cells from other species into humans, known as xenotransplantation, that may be useful in treating several neurologic diseases. Through a series of preclinical models, our scientists are currently developing two xenotransplant product candidates, UniGraft-PD and UniGraft-SCI, which are designed to permit the replacement of damaged human brain and other neurologic cells with potentially genetically modified and proprietary porcine, or pig, cells. Our UniGraft program is initially targeting the treatment of patients with Parkinson's disease and patients with spinal cord injury. On October 25, 1999 we announced the results of two UniGraft preclinical studies for Parkinson's disease and spinal cord injury. In the Parkinson's disease study, transplantation of porcine neurons, immunoprotected with our UniGraft technology, into a primate model resulted in successful engraftment and restored dopamine production locally and selectively in the affected part of the primate's brain. Similarly, in the spinal cord injury study, transplantation of porcine cells, immunoprotected with our UniGraft technology, into a primate model resulted in successful engraftment and restored a normal myelin covering of the damaged nerve fibers.

OFFICE LOCATION

Our principal executive offices are located at 25 Science Park, New Haven, Connecticut 06511, and our telephone number is (203) 776-1790.

THE OFFERING

Common stock offered.....	2,500,000 shares
Common stock outstanding after the offering.....	13,831,947 shares
Offering price.....	\$ per share
Use of proceeds.....	We intend to use the proceeds from the offering for the clinical and manufacturing development of 5G1.1, preclinical research, drug discovery, clinical and manufacturing development in our other programs, and other general corporate purposes.
Nasdaq National Market symbol.....	ALXN

The number of shares of our common stock outstanding after the offering does not take into account, as of October 26, 1999:

- 2,315,600 shares of common stock issuable upon the exercise of outstanding stock options at a weighted average exercise price of \$8.16 per share;
- 220,000 shares of common stock issuable upon the exercise of outstanding warrants at an exercise price of \$9.90 per share;
- 375,000 shares issuable upon the exercise of the underwriters' over-allotment option; and
- 11,875 shares of our common stock held in treasury.

CORPORATE INFORMATION

We were incorporated in Delaware in January 1992.



SUMMARY CONSOLIDATED FINANCIAL DATA

(IN THOUSANDS, EXCEPT PER SHARE DATA)

CONSOLIDATED STATEMENT OF OPERATIONS DATA:	FISCAL YEAR ENDED JULY 31,				
	1999	1998	1997	1996	1995
Contract research revenues.....	\$18,754	\$ 5,037	\$ 3,811	\$ 2,640	\$ 136
Operating expenses:					
Research and development.....	23,710	12,323	9,079	6,629	5,637
General and administrative.....	2,953	2,666	2,827	1,843	1,592
Total operating expenses.....	26,663	14,989	11,906	8,472	7,229
Operating loss.....	(7,909)	(9,952)	(8,095)	(5,832)	(7,093)
Other income (expense), net.....	1,514	2,087	843	397	(29)
Net loss.....	(6,395)	(7,865)	(7,252)	(5,435)	(7,122)
Preferred stock dividends.....	--	(900)	--	--	--
Net loss applicable to common shareholders.....	\$(6,395)	\$(8,765)	\$(7,252)	\$(5,435)	\$(7,122)
Net loss per common share, basic and diluted....	\$ (0.57)	\$ (0.87)	\$ (0.97)	\$ (1.02)	\$ (2.02)
Shares used in computing net loss per common share	11,265	10,056	7,451	5,351	3,528

AS OF JULY 31, 1999

CONSOLIDATED BALANCE SHEET DATA:	ACTUAL	AS ADJUSTED (1)
Cash, cash equivalents, and marketable securities.....	\$28,328	\$62,322
Total current assets.....	35,622	69,616
Total assets.....	44,374	78,368
Notes payable, less current portion.....	4,383	4,383
Total stockholders' equity.....	33,301	67,295

(1) Gives effect to the sale of 2,500,000 shares of our common stock offered by this prospectus at an assumed public offering price of \$14.63 per share, less underwriting discounts and estimated offering expenses.

## RISK FACTORS

YOU SHOULD CAREFULLY CONSIDER THE FOLLOWING RISK FACTORS BEFORE YOU DECIDE TO BUY OUR COMMON STOCK. YOU SHOULD ALSO CONSIDER THE OTHER INFORMATION IN THIS PROSPECTUS AND INFORMATION INCORPORATED BY REFERENCE IN THIS PROSPECTUS. IN ADDITION, THE RISKS AND UNCERTAINTIES DESCRIBED BELOW ARE NOT THE ONLY ONES FACING ALEXION BECAUSE WE ARE ALSO SUBJECT TO ADDITIONAL RISKS AND UNCERTAINTIES NOT PRESENTLY KNOWN TO US. IF ANY OF THESE RISKS ACTUALLY OCCUR, OUR BUSINESS, FINANCIAL CONDITION, OPERATING RESULTS OR CASH FLOWS COULD BE HARMED. THIS COULD CAUSE THE TRADING PRICE OF OUR COMMON STOCK TO DECLINE, AND YOU MAY LOSE PART OR ALL OF YOUR INVESTMENT.

### RISKS RELATED TO OUR BUSINESS

IF WE CONTINUE TO INCUR OPERATING LOSSES, WE MAY BE UNABLE TO CONTINUE OUR OPERATIONS.

We have incurred losses since our inception. As of July 31, 1999, we had an accumulated deficit of approximately \$47.0 million. If we continue to incur operating losses and fail to become profitable or are unable to sustain profitability, we may be unable to continue our operations. Since we began our operations in January 1992, we have been engaged primarily in the research and development of potential drug products. We currently have no products that are available for commercial sale. We expect to continue to operate at a net loss for at least the next several years as we increase our research and development efforts, continue to conduct clinical trials and develop manufacturing, sales, marketing and distribution capabilities. Our future profitability depends on our receiving regulatory approval of our product candidates and our ability to successfully manufacture and market approved drugs, either by ourselves or jointly with others. The extent of our future losses and the timing of our profitability are highly uncertain.

IF WE FAIL TO OBTAIN REGULATORY APPROVAL OF OUR PRODUCT CANDIDATES, OR IF REGULATORY APPROVAL IS DELAYED FOR ANY REASON, WE WILL BE UNABLE TO COMMERCIALIZE AND SELL OUR PRODUCTS AS WE EXPECT.

WE MUST OBTAIN REGULATORY APPROVAL TO MARKET OUR PRODUCTS IN THE U.S. AND FOREIGN JURISDICTIONS.

We must obtain regulatory approval before marketing or selling our products. In the United States, we must obtain approval from the U.S. Food and Drug Administration, or FDA, for each product that we intend to commercialize. The FDA approval process is typically lengthy and expensive, and approval is highly uncertain. Products distributed outside the United States are also subject to foreign government regulation. None of our product candidates has received regulatory approval to be commercially marketed and sold and we do not anticipate receiving approval of any of our product candidates for at least the next several years. If we fail to obtain regulatory approval we will be unable to market and sell our future products. Because of the risks and uncertainties in biopharmaceutical development, our product candidates could take a significantly longer time to gain regulatory approval than we expect or may never gain approval. If regulatory approval is delayed, the value of our company and our results of operations may be harmed.

The process of obtaining FDA and other required regulatory approvals, including foreign approvals, often takes many years and can vary substantially based upon the type, complexity and novelty of the products involved. Furthermore, this approval process is extremely expensive and uncertain. We cannot guarantee that any of our products under development will be approved for marketing by the FDA. Even if regulatory approval of a product is granted, we cannot be certain that we will be able to obtain the labeling claims necessary or desirable for the promotion of that product.

WE MAY NEED TO CONDUCT ADDITIONAL PRECLINICAL STUDIES AND WILL NEED TO CONDUCT COSTLY AND LENGTHY CLINICAL TRIALS BEFORE ANY OF OUR PRODUCT CANDIDATES CAN BE COMMERCIALIZED; THE RESULTS OF THESE STUDIES AND TRIALS ARE HIGHLY UNCERTAIN.

Many of our product candidates are in an early stage of development. As part of the regulatory approval process, we may need to conduct preclinical studies on animals and will need to conduct clinical trials in humans with each product candidate and for each clinical indication. We may need to perform multiple preclinical studies using various doses and formulations both before and after we have commenced clinical trials, which could result in delays in our ability to market any of our product candidates. Furthermore, even if we obtain favorable results in preclinical studies on animals, the results in humans may be different.

After we have conducted preclinical studies in animals we must, among other requirements, demonstrate that our product candidates are safe and effective for use in humans suffering from targeted indications in order to receive regulatory approval for commercial sale. Currently, only two of our product candidates are being tested in clinical trials. Adverse or inconclusive preclinical or clinical results could cause us to abandon a product development program.

The completion of clinical trials of our potential products may be delayed or terminated by many other factors. One factor is the rate of enrollment of patients, which can vary greatly. Enrollment depends on many factors, including:

- patient receptivity to participate in experimental clinical trials;
- the size of the patient population and the number of clinical trial sites;
- the proximity of patients to clinical trial sites;
- the performance of the clinical trial sites;
- the eligibility criteria for the clinical trial;
- the existence of competing clinical trials;
- the emergence of newly improved competing products; and
- the performance and reliability of contract research organizations.

We cannot control the rate of patient enrollment. For example, we are conducting clinical trials in patients with acute cardiovascular conditions, the timing and frequency of which cannot be predicted. The rate of patient enrollment may not be sufficient to enable our clinical trials to be completed as expected, if at all. Further, we cannot be certain that clinical trial research results will be analyzed or produced in a timely manner, if at all.

Additional factors that can cause delay or termination of our clinical trials include:

- longer treatment time required to demonstrate efficacy;
- lack of sufficient supplies of the product candidate;
- adverse medical events or side effects in treated patients;

- lack of effectiveness of the product candidate being tested; and
- lack of sufficient funds.

Typically, if a drug product is intended to treat a chronic disease, safety and efficacy data must be gathered over an extended period of time. In addition, clinical trials on humans are typically conducted in three phases. In the final phase of clinical testing, the FDA generally requires two pivotal clinical trials that demonstrate substantial evidence of safety and efficacy and appropriate dosing in a broad patient population at multiple sites to support an application for regulatory approval.

Results from initial clinical trials may not reflect results that are obtained in later stage clinical trials. Further, clinical trials of our product candidates may demonstrate that our product candidates are not sufficiently safe or effective to obtain the requisite regulatory approvals. Ultimately, our product candidates may not result in marketable products.

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

Before we can begin commercially manufacturing our products we must either secure manufacturing in an approved manufacturing facility or obtain regulatory approval of our own manufacturing facility and process. In addition, manufacture of our drug products must comply with the FDA's current Good Manufacturing Practices requirements, commonly known as cGMP. The cGMP requirements govern, among other things, quality control and documentation policies and procedures. Our manufacturing facilities are continuously subject to inspection by the FDA, before and after product approval. We cannot guarantee that we, or any third-party manufacturer of our drug products, will be able to comply with cGMP requirements. Material changes to the manufacturing processes of our drug products after approvals have been granted are also subject to review and approval by the FDA or other regulatory agencies.

IF WE FAIL TO OBTAIN THE CAPITAL NECESSARY TO FUND OUR OPERATIONS, WE WILL BE UNABLE TO COMPLETE OUR PRODUCT DEVELOPMENT PROGRAMS.

In the future, we will need to raise substantial additional capital to fund operations and complete our product development programs. Funding, whether from a public or private offering of debt or equity, a bank loan or a collaborative agreement, may not be available when needed or on favorable terms. If we raise additional funds by selling stock, the percentage ownership of our then current stockholders will be reduced. If we cannot raise adequate funds to satisfy our capital requirements, we may have to limit, delay, scale-back or eliminate our research and development activities or future operations. We might be forced to license our technology or to commercialize our products with the help of others when it would be more profitable or strategically important for us to not take these actions. Any of these actions may harm our business.

We expect to continue to spend substantial amounts of capital for our operations for the foreseeable future, including funds for:

- research and development programs;
- preclinical studies and clinical trials;
- regulatory approval processes;

- production of product candidates for clinical trials;
- establishment of commercial scale manufacturing capabilities; and
- establishment of sales and marketing capabilities.

The amount of capital we may need depends on many factors, including:

- the progress, timing and scope of our research and development programs;
- the progress, timing and scope of our preclinical studies and clinical trials;
- the time and cost necessary to obtain regulatory approvals;
- the time and cost necessary to further develop manufacturing processes, arrange for contract manufacturing or build manufacturing facilities and obtain the necessary regulatory approvals for those facilities;
- the time and cost necessary to respond to technological and market developments;
- the time and cost necessary to develop sales, marketing and distribution capabilities;
- any changes made or new developments in our existing collaborative, licensing and other commercial relationships; and
- any new collaborative, licensing and other commercial relationships that we may establish.

We believe that the net proceeds of the offering, together with our available cash, cash equivalents, marketable securities and investment income, may not be sufficient to meet our operating and capital requirements beyond the next 36 months. This estimate is based on current assumptions made by management that may prove to be wrong. As a result, we may need additional financing prior to that time.

IF OUR COLLABORATION WITH PROCTER & GAMBLE IS TERMINATED, WE MAY BE UNABLE TO COMMERCIALIZE 5G1.1-SC IN THE TIME EXPECTED, IF AT ALL.

We rely exclusively on Procter & Gamble to provide funding and additional resources for the development and commercialization of 5G1.1-SC. These include funds and resources for:

- clinical development and manufacturing;
- obtaining regulatory approvals; and
- sales, marketing and distribution efforts worldwide.

We cannot guarantee that Procter & Gamble will devote the resources necessary to successfully develop and commercialize 5G1.1-SC. Either party may terminate the agreement for specified reasons, including if the other party is in material breach of the agreement or has experienced a change of control. In addition, pursuant to the collaboration agreement, Procter & Gamble has the right to develop 5G1.1-SC

for any other indication, including those that we may be pursuing independently with other product candidates.

If our agreement with Procter & Gamble is terminated, we will need to fund the development and commercialization of 5G1.1-SC on our own or identify a new development partner, either of which would cause significant delays and result in additional development costs. A termination may also require us to repeat development stages already completed with Procter & Gamble, which could result in significant additional delay or costs.

IF WE ARE UNABLE TO ENGAGE AND RETAIN THIRD-PARTY COLLABORATORS, OUR RESEARCH AND DEVELOPMENT EFFORTS MAY BE DELAYED.

We depend upon third-party collaborators, including manufacturers, to assist us in the development of our product candidates. If any of our collaborators breaches or terminates its agreement with us or otherwise fails to conduct its collaborative activities in a timely manner, we may experience significant delays in the development or commercialization of the product candidate or the research program covered by the agreement. In addition, we may be required to devote additional funds or other resources to these activities or to terminate them.

Our continued success will depend in large part upon the efforts of outside parties. For the research, development, manufacture and commercialization of our products, we will likely enter into various arrangements with other corporations, licensors, licensees, outside researchers, consultants and others. However, we cannot assure you that:

- we will be able to negotiate acceptable collaborative arrangements to develop or commercialize our products;
- any arrangements with third parties will be successful; or
- current or potential collaborators will not pursue treatments for other diseases or seek alternative means of developing treatments for the diseases targeted by our programs.

IF WE ARE UNABLE TO PROTECT OUR PROPRIETARY TECHNOLOGY, WE MAY BE UNABLE TO COMPETE EFFECTIVELY.

Our ability to secure patent protection and the extent of protection can be very limited. Patent protection only currently lasts approximately 17 to 20 years depending on the time of filing and, sometimes, the time required for FDA approval. However, it can take many more years than offered by patent protection to transform a drug discovery through testing and development into a commercially-viable product. Moreover, once a drug has hit the marketplace, it is often forced to compete not only with different drugs treating the same ailments, but also with "copy-cat" drug products or even generic versions of the same drug if the drug has lost its patent protection. Consequently, protection of our patents and trade secrets and those of our licensors, is very important to our ability to commercially succeed. Other pharmaceutical companies are similarly very focused on protecting their patents and technology, so it is also very important for us to avoid infringing the rights of others while developing our own drug discoveries.

Patent applications filed by us or on our behalf may not result in patents being issued to us. Even if a patent is issued, the patent may not afford protection against competitors with similar technology. Furthermore, others may independently develop similar technologies or duplicate any of our technology. It is possible that before any of our potential product candidates can be commercialized, their related patents may expire, or remain in existence for only a short period following commercialization, thus

reducing any advantage of the patent. Moreover, composition of matter patent protection, which gives patent protection for a compound or a composition per se, may not be available for some of our product candidates.

Our processes and potential product candidates may conflict with patents that have been or may be granted to competitors, universities or others. As the biopharmaceutical industry expands, more patents are issued. Thus, the risk increases that our processes and potential product candidates may give rise to claims that they infringe the patents of others. These other patent holders could bring legal actions against us claiming damages and seeking to prevent clinical testing, manufacturing and marketing of the affected product or process. If any of these actions are successful, in addition to any potential liability for damages, we could be required to obtain a license in order to continue to conduct clinical tests, manufacture or market the affected product or use the affected process. Required licenses may not be available on acceptable terms, if at all. Moreover, if we become involved in litigation or legal disputes, it could consume a substantial portion of our financial resources and the efforts of our personnel for uncertain results. In addition, we may have to expend resources to protect our interests from possible infringement by others.

We are 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. We have 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 our proposed product candidates. We have acquired licenses with respect to certain of these patents, which we believe are relevant for the timely development and commercialization of certain of our product candidates. With regard to certain other patents, we have either determined in our judgment that:

- our products do not infringe the patents;
- we do not believe the patents are valid; and/or
- we have identified and are testing various modifications which we believe should not infringe the patents and which should permit commercialization of our product candidates.

However, owners of these patents might still seek to enforce their patents against our so-modified commercial products or against the development activities related to the non-modified products. If we are unable to obtain necessary licenses on commercially reasonable terms, we could encounter delays in product market introductions while we attempt to design around such patent or could find that the development, manufacture or sale of products requiring such a license could be nearly impossible. Further, owners of patents that we do not believe are relevant to our product development and commercialization might seek to enforce their patents against us. Such action could result in litigation which would be costly and time consuming.

In addition, our business requires using sensitive technology, techniques, proprietary compounds, as well as cultivating relationships with outside parties, including suppliers, outside scientists and potential customers and sources of funding. Moreover, since we are a small pharmaceutical company with no commercial products and limited resources, we rely heavily on collaboration with other companies and other scientists in our research and development efforts and expect to continue to do so since collaboration is important for scientific research. Unfortunately, such arrangements and relationships carry with them a strong risk of exposing our trade secrets often to the scrutiny of others. As a result, we are susceptible to the loss of our trade secrets.

We cannot assure you that:

- others will not independently develop substantially equivalent proprietary information and techniques;
- others will not gain access to our trade secrets;
- our trade secrets will not be disclosed; or
- we can effectively protect our rights to unpatented trade secrets.

IF THE TESTING OR USE OF OUR PRODUCTS HARMS PEOPLE, WE MAY BE SUBJECT TO COSTLY AND DAMAGING PRODUCT LIABILITY CLAIMS.

Our business exposes us to product liability risks that are inherent in the testing, manufacturing, marketing and sale of drugs for use in humans, including but not limited to, unacceptable side effects. Such side effects and other risks could give rise to product liability claims against us or force us to recall our products, if any, from the marketplace. Some of these risks are unknown at this time. For example, little is known about the potential long-term health risks of transplanting non-human tissue into humans, a goal of our UniGraft program.

In addition to product liability risks associated with sales of products, we may be liable to the claims of individuals who participate in clinical trials of our products. A number of patients who participate in such trials are already critically ill when they enter a study. We cannot assure you that any waivers we may obtain will protect us from liability or the costs of product liability litigation. Our product liability insurance may not provide adequate protection against potential liabilities. Moreover, we may not be able to maintain our insurance on acceptable terms. As a result of these factors, a product liability claim, even if successfully defended, could have a material adverse effect on our business, financial condition and results of operations.

IF WE ARE UNABLE TO MANUFACTURE OUR DRUG PRODUCTS IN SUFFICIENT QUANTITIES AND AT ACCEPTABLE COST, WE MAY BE UNABLE TO MEET DEMAND FOR OUR PRODUCTS WHICH WOULD RESULT IN A LOSS OF POTENTIAL REVENUES.

We have no experience manufacturing drug products in volumes that will be necessary to support commercial sales. Our unproven manufacturing process may not meet initial expectations as to schedule, reproducibility, yields, purity, costs, quality, and other measurements of performance. Improvements in manufacturing processes typically are very difficult to achieve and are often very expensive. We cannot know with any certainty how long it might take to make improvements if it became necessary to do so. If we contract for manufacturing services with an unproven process, our contractor is subject to the same uncertainties, high standards and regulatory controls. If we are unable to establish and maintain commercial scale manufacturing within our planned time and cost parameters, sales of our products and our financial performance will be adversely affected.

We may encounter problems with any of the following if we attempt to increase the scale, process or size of manufacturing:

- design, construction and qualification of manufacturing facilities that meet regulatory requirements;
- production yields from the manufacturing process;



- purity of our drug products;
- quality control and assurance;
- shortages of qualified personnel; and
- compliance with FDA regulations.

IF WE ARE UNABLE TO ESTABLISH SALES, MARKETING AND DISTRIBUTION CAPABILITIES OR TO ENTER INTO AGREEMENTS WITH THIRD PARTIES TO DO SO, WE MAY BE UNABLE TO SUCCESSFULLY MARKET AND SELL ANY FUTURE DRUG PRODUCTS.

We currently have no sales, marketing or distribution capabilities. If we are unable to establish sales, marketing or distribution capabilities either by developing our own sales, marketing and distribution organization or by entering into agreements with others, we may be unable to successfully sell our products. If we are unable to effectively sell our drug products, our ability to generate revenues will be harmed. We cannot guarantee that we will be able to hire in a timely manner, the qualified sales and marketing personnel we need, if at all. In addition, we cannot guarantee that we will be able to enter into any marketing or distribution agreements on acceptable terms, if at all. If we cannot establish sales, marketing and distribution capabilities as we intend, either by developing our own capabilities or entering into agreements with third parties, sales of our future drug products may be harmed.

We have recently entered into a collaboration with Procter & Gamble relating to 5G1.1-SC. Under the agreement, Procter & Gamble will be responsible for selling, marketing and distributing 5G1.1-SC. We cannot guarantee Procter & Gamble or any future collaborators will successfully sell any of our future drug products.

EVEN IF OUR PRODUCT CANDIDATES RECEIVE REGULATORY APPROVAL, WE MAY STILL FACE DEVELOPMENT AND REGULATORY DIFFICULTIES RELATING TO THE DRUG PRODUCTS IN THE FUTURE.

If we receive regulatory approval of any of our product candidates, the FDA or a comparable foreign regulatory agency may, nevertheless, limit the indicated uses of the product candidate. In addition, a marketed product, its manufacturer and the manufacturer's facilities are subject to continual review and periodic inspections by regulatory agencies. The discovery of previously unknown problems with a product, manufacturer or facility may result in restrictions on the product or manufacturer, including withdrawal of the product from the market. The failure to comply with applicable regulatory requirements can, among other things, result in:

- warning letters;
- fines and other civil penalties;
- suspended regulatory approvals;
- refusal to approve pending applications or supplements to approved applications;
- refusal to permit exports from the United States;
- product recalls;
- seizure of products;

- injunctions;
- operating restrictions;
- total or partial suspension of production; and/or
- criminal prosecutions.

Even if we obtain regulatory approval, we may be required to undertake post-marketing trials. In addition, identification of side effects after a drug is on the market or the occurrence of manufacturing problems could result in withdrawal of approval, or require reformulation of the drug, additional preclinical testing or clinical trials, changes in labeling of the product, and/or additional marketing applications.

If we receive regulatory approval, we will also be subject to ongoing FDA obligations and continued regulatory review. In particular, we or our third-party manufacturers will be required to adhere to requirements pertaining to cGMP. Under cGMP, we are required to manufacture our products and maintain our records in a prescribed manner with respect to manufacturing, testing and quality control activities. Furthermore, we or our third-party manufacturers must pass a preapproval inspection of manufacturing facilities by the FDA before the product can obtain marketing approval. We will also be subject to ongoing FDA requirements for submission of safety and other post-market information.

We have not made significant investments in the development of commercial manufacturing, marketing, distribution or sales capabilities. Moreover, we have insufficient capacity to manufacture more than one product candidate at a time or to manufacture our product candidates for later stage clinical development or commercialization. If we are unable to find an acceptable outside manufacturer on reasonable terms, we will have to divert resources. As a result, our ability to conduct human clinical testing would be materially adversely affected, resulting in delays in the submission of products for regulatory approval and in the initiation of new development programs. Our competitive position and our prospects for achieving profitability could be materially and adversely affected.

In addition, as our product development efforts progress, we may need to hire additional personnel skilled in, or enter into collaborations with corporate partners for, clinical testing, regulatory compliance and, if we develop products with commercial potential, manufacturing, marketing and sales. We cannot assure you that we will be able to acquire, or establish third-party relationships to provide, any or all of these resources on a timely or economically feasible basis, if at all.

IF WE ARE UNABLE TO OBTAIN ADEQUATE REIMBURSEMENT FROM GOVERNMENT HEALTH ADMINISTRATION AUTHORITIES, PRIVATE HEALTH INSURERS AND OTHER ORGANIZATIONS, OUR FUTURE BUSINESS, RESULTS OF OPERATIONS AND FINANCIAL CONDITION COULD BE HARMED.

Our ability to commercialize our 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 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 healthcare products. If we succeed in bringing any products to market, these products may not be considered cost-effective and reimbursement may not be available. If reimbursement becomes available, the payor's reimbursement policies may affect the market for our product, thus materially adversely affecting the profitability of our products.

XENOTRANSPLANTATION IS AN UNPROVEN TECHNOLOGY AND MAY ACHIEVE LIMITED MARKET ACCEPTANCE DUE TO ETHICAL CONCERNS.

Our UniGraft Program may never result in the development of any therapeutic products. Xenotransplantation technology is subject to extensive clinical testing. We are not aware of any xenotransplantation technology that has been approved for sale by the FDA or comparable foreign regulatory authorities. In addition, there is currently very little regulatory guidance for how to conduct research or use products developed in this area since the FDA has only issued interim guidelines.

Xenotransplantation also poses a risk that viruses, prions or other animal pathogens may be unintentionally transmitted not only to a human patient recipient, but other human beings. While these viruses have not been shown to cause any disease in pigs or humans, it is not known what effect, if any, such viruses might have on humans. Recent scientific publications by others demonstrate, under laboratory conditions, that porcine retroviruses have the potential to infect human cells. The introduction of previously non-transmittable viruses to the human species poses ethical concerns. Further detection of infection of porcine virus in our preclinical and clinical testing or the testing by our competitors in this field could adversely affect the commercial acceptability of this research and our future ability to secure research dollars.

Consequently, even if we succeed in developing xenotransplantation products, our products may not be widely accepted by the medical community or third-party payors until more facts are established and ethical consensus is reached. In addition, such concerns may also create additional regulatory hurdles for FDA approval or for consideration in use of our products by hospital ethics committees. If accepted, the degree of acceptance may limit the size of the market for our products. Moreover, due to the controversial nature of xenotransplantation, our stock price may be subject to increased volatility.

IF WE FAIL TO COMPETE SUCCESSFULLY WITH OUR COMPETITORS, OUR REVENUES AND OPERATING RESULTS WILL BE HARMED.

Our competitors may develop, manufacture and market products that are more effective or less expensive than ours, or simply market their products more successfully to patients or doctors. They may also obtain regulatory approvals faster than we can obtain them or commercialize products before we do. These companies also compete with us to attract qualified personnel and parties for acquisitions, joint ventures or other collaborations. They also compete with us to attract academic research institutions as partners and to license these institutions' proprietary technology. If our competitors successfully enter into such arrangements with academic institutions, we will then be precluded from pursuing those specific unique opportunities and may not be able to find equivalent opportunities elsewhere. In addition, products or treatments developed in the future by third parties may adversely affect the marketability of our products by rendering them less competitive or obsolete. For example, the recent development of tumor necrosis factor inhibitors for rheumatoid arthritis may render obsolete a number of current drugs used for treating such ailment from the marketplace.

IF WE FAIL TO RECRUIT AND RETAIN PERSONNEL, OUR RESEARCH AND PRODUCT DEVELOPMENT PROGRAMS MAY BE DELAYED.

We are highly dependent upon the efforts of our senior management and scientific personnel. There is intense competition for qualified scientific and technical personnel. Since our business is very science-oriented and specialized, we need to continue to attract and retain such people. We may not be able to continue to attract and retain the qualified personnel necessary for developing our business. If we lose the services of, or fail to recruit, key scientific and technical personnel, our research and product development programs would be significantly and detrimentally affected.

In particular, we highly value the services of Dr. Leonard Bell, our President and Chief Executive Officer. The loss of his services could materially and adversely affect our ability to achieve our development objectives.

IF WE EXPERIENCE ANY PROBLEMS WITH YEAR 2000 COMPLIANCE, OUR OPERATIONS MAY BE DISRUPTED.

Beginning in the year 2000, the date fields coded in certain software products and computer systems will need to accept four-digit entries in order to distinguish 21(st) century dates from 20(th) century dates, commonly known as the year 2000 problem. It is not clear what potential problems may arise as the biotechnology industry, and other industries, try to resolve this year 2000 problem.

It is possible that our currently installed computer systems, software applications or other business systems, or those of our suppliers or service providers, working either alone or in conjunction with other software or systems, will not accept input of, store, manipulate and output dates for the years 1999, 2000 or subsequent years without error or interruption. We have formed a team to review and resolve those aspects of the year 2000 problem that are within our direct control and adjust to or influence those aspects that are not within our direct control. The team has reviewed our software applications, including those under development, and determined that most of our software applications do not use date data and are year 2000 compliant or will be by December 31, 1999. Our product candidates do not have any year 2000 exposure. Based on representations from our vendors, the team has reviewed the year 2000 compliance status of our major internal information technology programs and systems used for administrative requirements and determined that they are or are expected to be year 2000 compliant by December 31, 1999. However, a number of our vendors have not been able to guarantee such timely compliance.

Some risks associated with the year 2000 problem are beyond our ability to control, including the extent to which our suppliers and service providers can address the year 2000 problem. The failure by a third party to adequately address the year 2000 issue could have an adverse effect on their operations, which could have an adverse effect on us. We are assessing the possible effects on our operations of the possible failure of our key suppliers and providers, contractors and collaborators to identify and remedy potential year 2000 problems.

#### RISKS RELATED TO THE OFFERING

OUR COMMON STOCK PRICE MAY CONTINUE TO BE HIGHLY VOLATILE.

The market prices for our common stock and for securities of many biotechnology companies have been volatile. The following factors may have a significant impact on the market price of our common stock:

- announcements of technical innovations or new commercial products by us or our competitors;
- government regulation;
- public concern as to the safety or other implications of biotechnology products;
- patent or proprietary rights development;
- results of preclinical studies or clinical trials;
- positive or negative developments related to our collaborators;

- conditions affecting the biotechnology industry; and/or
- stock market conditions.

FUTURE ACQUISITIONS OF OUR COMPANY MAY BE DISCOURAGED DUE TO ANTI-TAKEOVER MEASURES ADOPTED BY OUR BOARD OF DIRECTORS, PROVISIONS OF DELAWARE LAW AND FUTURE ISSUANCES OF PREFERRED STOCK.

Anyone seeking to acquire control of our company may encounter difficulties as a result of our anti-takeover measures. Our board of directors has adopted a shareholder rights plan, or "poison pill," which enables our board of directors to issue preferred stock purchase rights triggered by an acquisition of 20% or more of the outstanding shares of our common stock. In addition, our board of directors is authorized to issue one or more series of preferred stock with those preferences and rights that it may designate. These provisions and specific provisions of Delaware Law relating to business combinations with interested stockholders are intended to encourage any person interested in acquiring us to negotiate with and obtain the approval of our board of directors in connection with an acquisition or merger. However, these provisions could have an opposite effect of delaying, deterring or preventing a merger or change in control. Some of these provisions may discourage a future acquisition of our company even if stockholders would receive an attractive value for their shares or if a significant number of our stockholders believed such a proposed transaction to be in their best interest. As a result, stockholders who desire to participate in such a transaction may not have the opportunity to do so.

FUTURE SALES OF OUR COMMON STOCK MAY DEPRESS OUR STOCK PRICE.

If our existing shareholders or holders of securities exercisable for our common stock sell a substantial number of these shares in the public market during a relatively short period, our stock price may be depressed. Following the offering, 13,831,947 shares of our common stock will be outstanding. If the underwriters exercise their entire over-allotment option, we will have 14,206,947 shares of our common stock outstanding. All the shares sold in the offering will be freely tradable, except for any shares purchased by an affiliate of ours, which would be subject to the limitations of Rule 144 under the Securities Act of 1933. In addition, our directors and officers have agreed not to sell their shares for 90 days following the offering.

As of October 26, 1999, we have granted options to purchase an aggregate of approximately 2,315,600 shares of our common stock under our stock option plans. Warrants to purchase an aggregate of 220,000 shares of our 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 our common stock. If the exercise prices of these options and warrants are less than the net tangible book value of our common stock at the time these options and warrants are exercised, our stockholders will experience an immediate dilution in the net tangible book value of their investment. Many of the shares not currently available for sale are subject to vesting restrictions and the holding period, volume and other restrictions of Rule 144 under the Securities Act. These restrictions have the effect of staggering the dates on which the shares become available for sale and the number of shares that become available for sale.

In addition, we may issue additional stock, warrants and/or options to raise capital in the future or compensate employees or third parties. We regularly examine opportunities to expand our technology base through means such as licenses, joint ventures and acquisition of assets or ongoing businesses and may issue securities in connection with these transactions. We may also issue additional securities in connection with our stock option plans.

USE OF PROCEEDS

We estimate that the net proceeds from the sale of the 2,500,000 shares of common stock offered by us, at an assumed offering price of \$14.63 per share, and after deducting underwriting discounts and commissions and other estimated offering expenses, will be approximately \$34.0 million (\$39.1 million if the underwriters' over-allotment option is exercised in full).

We intend to use the proceeds from the offering for the clinical and manufacturing development of 5G1.1, preclinical research, drug discovery, clinical and manufacturing development in our other programs, and other general corporate purposes. Our management will retain broad discretion in the allocation of the net proceeds of the offering. Pending such uses, we intend to invest the net proceeds in short-term, investment grade, interest-bearing securities.

PRICE RANGE OF COMMON STOCK

Our common stock is quoted on The Nasdaq National Market under the symbol "ALXN." The following table sets forth the range of high and low sales prices for our common stock on The Nasdaq National Market for the periods indicated since August 1, 1997.

FISCAL YEAR ENDED JULY 31, 1998	COMMON STOCK PRICE	
	HIGH	LOW
First Quarter (August 1, 1997 to October 31, 1997).....	\$16.00	\$ 9.25
Second Quarter (November 1, 1997 to January 31, 1998).....	\$14.88	\$ 9.88
Third Quarter (February 1, 1998 to April 30, 1998).....	\$15.00	\$12.13
Fourth Quarter (May 1, 1998 to July 31, 1998).....	\$13.75	\$ 8.00
FISCAL YEAR ENDED JULY 31, 1999		
First Quarter (August 1, 1998 to October 31, 1998).....	\$10.25	\$ 5.50
Second Quarter (November 1, 1998 to January 31, 1999).....	\$17.75	\$ 8.38
Third Quarter (February 1, 1999 to April 30, 1999).....	\$14.25	\$ 8.38
Fourth Quarter (May 1, 1999 to July 31, 1999).....	\$12.75	\$ 8.75
FISCAL YEAR ENDED JULY 31, 2000		
First Quarter (August 1, 1999 to October 26, 1999).....	\$16.25	\$10.00

As of October 26, 1999, we had 156 stockholders of record of our common stock and an estimated 3,000 beneficial owners. The closing sale price of our common stock on October 26, 1999 was \$14.63 per share.

DIVIDEND POLICY

We have never paid cash dividends. We do not expect to declare or pay any dividends on our common stock in the foreseeable future. We intend to retain all earnings, if any, to invest in our operations. The payment of future dividends is within the discretion of our board of directors and will depend upon our future earnings, if any, our capital requirements, financial condition and other relevant factors.

FORWARD-LOOKING STATEMENTS

This prospectus contains certain "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995 and information relating to us that are based on the beliefs of our management, as well as assumptions made by and information currently available to our management. When used in this prospectus, the words "estimate," "project," "believe," "anticipate," "intend," "expect" and similar expressions are intended to identify forward-looking statements. These forward-looking statements reflect our current views with respect to future events and are subject to risks and uncertainties that could cause actual results to differ materially from those contemplated in these forward-looking statements, including those risks discussed in this prospectus.

You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date on this prospectus. We have no obligation to publicly release any revisions to these forward-looking statements to reflect events or circumstances after the date of this prospectus or to reflect the occurrence of unanticipated events.

CAPITALIZATION

The following table sets forth our capitalization as of July 31, 1999 (1) on an actual basis and (2) on an as adjusted basis to reflect the sale of 2,500,000 shares of our common stock in the offering at an assumed offering price of \$14.63 per share and the receipt of the estimated net proceeds of \$34.0 million from the sale, after deducting the underwriting discount and estimated offering expenses payable by us. The following table should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the financial statements and related notes included elsewhere in this prospectus.

	AS OF JULY 31, 1999	
	----- ACTUAL	AS ADJUSTED -----
	(IN THOUSANDS, EXCEPT SHARE DATA)	
Notes payable, less current portion.....	\$ 4,383	\$ 4,383
Stockholders' equity:		
Preferred stock, \$.0001 par value; 5,000,000 shares authorized; no shares issued and outstanding, actual and as adjusted; 120,000 shares preferred stock designated as junior participating cumulative preferred stock, \$1.00 par value; no shares issued and outstanding, actual and as adjusted.....	--	--
Common stock, \$.0001 par value; 25,000,000 shares authorized; 11,303,574 shares issued and 11,291,699 shares outstanding, actual; 13,803,574 shares issued, as adjusted; 13,791,699 shares outstanding, as adjusted....	1	1
Additional paid in capital.....	80,287	114,281
Accumulated deficit.....	(46,987)	(46,987)
Treasury stock, at cost, 11,875 shares.....	--	--
	-----	-----
Total stockholders' equity.....	\$ 33,301	\$ 67,295
	-----	-----
Total capitalization.....	\$ 37,684	\$ 71,678
	=====	=====

This table is based on the number of outstanding shares as of July 31, 1999 and does not include the following:

- 2,348,587 shares of common stock issuable upon exercise of outstanding stock options at a weighted average exercise price of \$8.10 per share; and
- 220,000 shares of common stock issuable upon exercise of outstanding warrants at an exercise price of \$9.90.

As of October 26, 1999, there were 2,315,600 shares of common stock issuable upon the exercise of outstanding stock options at a weighted average exercise price of \$8.16 per share.



DILUTION

Our net tangible book value as of July 31, 1999 was approximately \$33,035,000 or \$2.93 per share of common stock. Net tangible book value per share is determined by dividing our net tangible book value, which consists of tangible assets less total liabilities, by the number of shares of common stock outstanding at that date. Without taking into account any other changes in the net tangible book value after July 31, 1999, other than to give effect to our receipt of the estimated net proceeds from the sale of the 2,500,000 shares of common stock from the offering at an assumed public offering price of \$14.63 per share, less underwriting discounts and estimated offering expenses, our net tangible book value as of July 31, 1999 after giving effect to the items above would have been \$67,029,000 or \$4.86 per share. This represents an immediate increase in the net tangible book value per share of \$1.93 per share to existing stockholders and an immediate dilution of \$9.77 per share to new investors. The following table illustrates this per share dilution:

Assumed public offering price.....		\$14.63
Net tangible book value per share.....	2.93	
Increase in net tangible book value per share after the offering.....	1.93	
		----
Net tangible book value per share after the offering.....		4.86
		-----
Dilution per share to new investors.....		\$ 9.77
		=====

This table is based on the number of outstanding shares as of July 31, 1999 and does not include the following:

- 2,348,587 shares of common stock issuable upon exercise of outstanding stock options at a weighted average exercise price of \$8.10 per share; and
- 220,000 shares of common stock issuable upon exercise of outstanding warrants at an exercise price of \$9.90.

As of October 26, 1999, there were 2,315,600 shares of common stock issuable upon the exercise of outstanding stock options at a weighted average exercise price of \$8.16 per share.

If the underwriters' over-allotment option is exercised in full, the net tangible book value per share of our common stock as of July 31, 1999 after giving effect to the assumed sale of 2,875,000 shares of common stock in the offering price of \$14.63 per share, less underwriting discounts and estimated offering expenses, would have been \$72,184,000 or \$5.10 per share, representing an immediate dilution of \$9.53 per share to new investors purchasing the shares of common stock in the offering and an immediate increase in net tangible book value per share of our common stock of \$2.17 per share to existing stockholders.

SELECTED CONSOLIDATED FINANCIAL DATA  
(IN THOUSANDS, EXCEPT PER SHARE DATA)

The following selected consolidated financial data for the periods ended July 31, 1995 through July 31, 1999 are derived from our consolidated financial statements, which statements have been audited by Arthur Andersen LLP, independent public accountants, as indicated in their report included elsewhere or incorporated by reference in this prospectus. The selected consolidated financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere or incorporated by reference in this prospectus.

	FISCAL YEAR ENDED JULY 31,				
CONSOLIDATED STATEMENTS OF OPERATIONS DATA:	1999	1998	1997	1996	1995
Contract research revenues.....	\$18,754	\$ 5,037	\$ 3,811	\$ 2,640	\$ 136
Operating expenses:					
Research and development.....	23,710	12,323	9,079	6,629	5,637
General and administrative.....	2,953	2,666	2,827	1,843	1,592
Total operating expenses.....	26,663	14,989	11,906	8,472	7,229
Operating loss.....	(7,909)	(9,952)	(8,095)	(5,832)	(7,093)
Other income (expense), net.....	1,514	2,087	843	397	(29)
Net loss.....	(6,395)	(7,865)	(7,252)	(5,435)	(7,122)
Preferred stock dividends.....	--	(900)	--	--	--
Net loss applicable to common shareholders.....	\$ (6,395)	\$ (8,765)	\$ (7,252)	\$ (5,435)	\$ (7,122)
Net loss per common share, basic and diluted....	\$ (0.57)	\$ (0.87)	\$ (0.97)	\$ (1.02)	\$ (2.02)
Shares used in computing net loss per common share.....	11,265	10,056	7,451	5,351	3,528

	AS OF JULY 31,				
CONSOLIDATED BALANCE SHEET DATA:	1999	1998	1997	1996	1995
Cash, cash equivalents, and marketable securities.....	\$28,328	\$37,494	\$22,749	\$18,598	\$5,701
Total current assets.....	35,662	37,840	22,981	19,064	5,874
Total assets.....	44,374	42,085	24,260	20,454	7,927
Notes payable, less current portion.....	4,383	832	--	128	456
Total stockholders' equity.....	33,301	39,190	21,846	18,285	5,119

MANAGEMENT'S DISCUSSION AND ANALYSIS  
OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

OVERVIEW

Since our inception in January 1992, we have devoted substantially all of our resources to drug discovery, research and product development. In 1998, we began to focus more of our resources to clinical testing and trials. We are conducting clinical trials of our two lead product candidates, 5G1.1-SC for the treatment of inflammation caused by cardiopulmonary bypass surgery and 5G1.1 for the chronic treatment of rheumatoid arthritis and membranous nephritis. To date, we have not received any revenues from the sale of products. We have incurred operating losses since our inception. As of July 31, 1999, we had an accumulated deficit of \$47.0 million. We expect to incur substantial and increasing operating losses for the next several years due to expenses associated with:

- product research and development;
- preclinical studies and clinical testing;
- regulatory activities;
- manufacturing development and scale-up; and
- developing a sales and marketing force.

RESULTS OF OPERATIONS

FISCAL YEARS ENDED JULY 31, 1999, 1998 AND 1997

We earned contract research revenues of \$18.8 million for the fiscal year ended July 31, 1999, \$5.0 million for the fiscal year ended July 31, 1998, and \$3.8 million for the fiscal year ended July 31, 1997. The increase in the fiscal year ended July 31, 1999 as compared to the fiscal year ended July 31, 1998 was primarily due to a non-refundable license fee of \$10.0 million which we received from Procter & Gamble in February 1999 in exchange for rights to sell, market and distribute 5G1.1-SC. Additionally, during fiscal year ended July 31, 1999, we received \$7.8 million in contract revenues from Procter & Gamble under our collaborative research and development agreement. The increase in the fiscal year ended July 31, 1998 as compared to the fiscal year ended July 31, 1997 was primarily due to revenues of \$3.5 million which we received from United States Surgical Corporation in exchange for licensing rights and other xenotransplantation manufacturing assets. The revenues in the fiscal year ended July 31, 1997 consisted principally of contract revenues of \$1.8 million from US Surgical and \$1.1 million from Genetic Therapy, Inc., a subsidiary of Novartis.

During the fiscal year ended July 31, 1999, we incurred expenses of \$23.7 million, on research and development activities. In the fiscal year ended July 31, 1998, we incurred expenses of \$12.3 million, and in the fiscal year ended July 31, 1997 we incurred expenses of \$9.1 million in research and development activities.

Our increase in research and development expenses in the fiscal year ended July 31, 1999 as compared to the fiscal year ended July 31, 1998 was primarily attributable to an expansion of the clinical trials of our lead C5 Inhibitor product candidates and process manufacturing development for our C5 Inhibitor product candidates. In the fiscal year ended July 31, 1998, research and development expenses increased \$3.2 million as compared to the fiscal year ended July 31, 1997 due principally to expanded preclinical

development of our research programs and process development for our C5 Inhibitor and Apogen product candidates.

Our general and administrative expenses were \$3.0 million for the fiscal year ended July 31, 1999, \$2.7 million for the fiscal year ended July 31, 1998, and \$2.8 million for the fiscal year ended July 31, 1997. The increase in general and administrative expenses in the fiscal year ended July 31, 1999 was primarily related to higher recruiting expenses, legal expenses related to business development and patent costs in the fiscal year ended July 31, 1999 as compared to the fiscal year ended July 31, 1998. The decrease in general and administrative expenses in the fiscal year ended July 31, 1998 was primarily related to lower legal and patent costs in the fiscal year ended July 31, 1998 as compared to the fiscal year ended July 31, 1997.

Other income (expense), net, representing primarily net investment income, was \$1.5 million for the fiscal year ended July 31, 1999, \$2.1 million for the fiscal year ended July 31, 1998, and \$843,000 for the fiscal year ended July 31, 1997. The decrease in the fiscal year ended July 31, 1999 was due to lower cash balances available for investment as compared to the fiscal year ended July 31, 1998. The increase in the fiscal year ended July 31, 1998 was due to higher cash balances available for investment as compared to the fiscal year ended July 31, 1997.

As a result of the above factors, we had incurred net losses of \$6.4 million for the fiscal year ended July 31, 1999, \$7.9 million for the fiscal year ended July 31, 1998, and \$7.3 million for the fiscal year ended July 31, 1997.

#### LIQUIDITY AND CAPITAL RESOURCES

Since our inception in January 1992, we have financed our operations and capital expenditures principally through private placements of our common and preferred stock, an initial public offering of our common stock, equipment and leasehold improvements financing, other debt financing and payments under corporate collaborations.

In the fiscal year ended July 31, 1998, we financed the purchase of laboratory and process development equipment and leasehold improvements through a \$1.2 million secured term loan from a commercial bank. Principal payments of \$92,000 are payable quarterly through August 2001. As of July 31, 1999, the outstanding balance on this term loan was \$831,000. Principal is due with interest at a variable rate which is reset quarterly. As of July 31, 1999, the annualized interest rate was 7.1%. The term loan agreement requires us to maintain a restricted cash balance equal to 115.0% of the outstanding loan balance plus accrued interest in an interest earning money market account as security for the note.

In February 1999, we acquired the manufacturing assets, principally land, buildings and laboratory equipment, for the xenotransplantation program developed by US Surgical. We financed the purchase of the manufacturing assets through a \$3.9 million term note payable to US Surgical. Interest is 6.0% per annum and is payable quarterly. The principal balance under the note is due in May 2005. Security for this term note is the manufacturing assets that we purchased.

As of July 31, 1999, our cash, cash equivalents, and marketable securities totaled \$28.3 million. At July 31, 1999, our cash and cash equivalents consisted of \$24.2 million of cash we hold in short-term highly liquid investments with original maturities of less than three months. As of July 31, 1999, we have invested \$10.8 million in property and equipment to support our research and development efforts. We anticipate our research and development expense will increase significantly for the foreseeable future to support our clinical and manufacturing development of our product candidates.

We lease our administrative office and research and development facilities under three operating leases which expired in December 1997, June 1998 and March 1999. We are currently continuing the leases on a month-to-month basis while participating in ongoing discussions for new leases of our current facilities.

Procter & Gamble has agreed to fund all clinical testing of our C5 Inhibitor, 5G1.1-SC, initially for use in cardiopulmonary bypass surgery, myocardial infarction and angioplasty. The Procter & Gamble collaboration does not involve any of our other product candidates.

We anticipate that our existing available capital resources and interest earned on available cash and marketable securities should be sufficient to fund our operating expenses and capital requirements as currently planned for at least the next 18 months and, with the net proceeds from the offering, for at least the next 36 months. While we currently have no material commitments for capital expenditures, our future capital requirements will depend on many factors, including:

- progress of our research and development programs;
- progress and results of clinical trials;
- time and costs involved in obtaining regulatory approvals;
- costs involved in obtaining and enforcing patents and any necessary licenses;
- our ability to establish development and commercialization relationships; and
- costs of manufacturing scale-up.

We expect to incur substantial additional costs, for:

- research;
- preclinical studies and clinical testing;
- manufacturing process development;
- additional capital expenditures related to personnel, and facilities expansion; and
- manufacturing requirements.

In addition to funds we may receive from our collaboration with Procter & Gamble, we will need to raise or generate substantial additional funding in order to complete the development and commercialization of our product candidates. In addition, if and when we achieve contractual milestones related to product development and product license applications and approvals, additional payments would be required if we elect to continue and maintain our licenses with our licensors, aggregating up to a maximum of \$2.0 million. Our additional financing may include public or private debt or equity offerings, bank loans and/or collaborative research and development arrangements with corporate partners.

For tax reporting purposes, as of July 31, 1999, we had approximately \$44.1 million of federal net operating loss carryforwards which expire through 2019 and \$2.2 million of tax credit carryforwards which expire commencing in fiscal 2008. Provisions of the Tax Reform Act of 1986 may limit our ability

to utilize net operating loss and tax credit carryforwards in any given year if certain events occur, including a provision relating to cumulative changes in ownership interests in excess of 50% over a three-year period. We cannot assure you that our ability to utilize the net operating loss and tax credit carry forwards in future years will not be limited as a result of a change in ownership.

#### YEAR 2000

The Year 2000 issue, or Y2K, refers to potential problems with computer systems or any equipment with computer chips or software that use dates where the date has been stored as just two digits. On January 1, 2000, any clock or date recording mechanism incorporating date sensitive software which uses only two digits to represent the year may recognize a date using "00" as the Year 1900 rather than the Year 2000. This could result in a system failure or miscalculations causing disruption of operations, including, among other things, a temporary inability to process transactions, perform laboratory analyses, or engage in similar business activities.

We are a biotechnology company and our proposed product candidates are not software or computer based. Therefore, our proposed products are not directly impacted by the Y2K problem. Our exposure to potential risks from this problem involves computer and information technology systems, and other systems which include embedded technology using date sensitive programs such as for:

- heating, ventilation, air conditioning, or HVAC;
- scientific instrumentation; and
- laboratory facilities.

Our internal information systems consist of off-the-shelf accounting and e-mail systems, off-the-shelf application programs such as spreadsheet, word processing, graphics, database management, and presentation software, and certain instrumentation/data acquisition software. Non-informational technology systems consist of HVAC and telecommunications.

We have taken actions to minimize the impact of the Y2K problem on our systems and operations, excluding a systemic failure outside our control, such as a prolonged loss of electrical or telephone service. We have inventoried and reviewed our systems, scientific instrumentation, and laboratory facilities, including querying third parties that have a material relationship with us, to ascertain Y2K compliance. Our review included examining information from our equipment and software vendors, literature supplied with software, and test evaluations of our systems. Based upon our work and knowledge to date, which included updating various software programs, we believe that the risk is minimal that our internal systems, scientific instrumentation, and laboratory facilities will be materially impacted by Y2K non-compliance disruptions. Most of our existing systems, scientific instrumentation, and laboratory facilities are Y2K compliant or are expected to be Y2K compliant by December 31, 1999.

Vendors for our off-the-shelf applications, including our accounting and e-mail systems, have informed us that their products are Y2K compliant. To date, our review has not disclosed otherwise. We have no reason to believe that these applications are not Y2K compliant. If these applications are not Y2K compliant, we expect, but cannot be certain, that the vendors will make appropriate upgrades available to all of their customers at no cost or at minimal cost. We believe that if it were necessary to replace our off-the-shelf software applications, such software could be replaced at reasonable costs. For example, the approximate replacement cost of our e-mail system would be \$10,000.

We have identified a Y2K problem in our HVAC system. We have engaged an outside contractor to correct the Y2K problem. We believe that the cost of correcting this problem will be approximately \$20,000 and expect the problem to be corrected in December 1999 during a regularly scheduled maintenance cycle. As a result of our personnel expansion, we upgraded our telecommunication system, whether or not it had a Y2K problem. The cost of this upgrade, which is Y2K compliant, was approximately \$35,000 and also provided for future enhancements.

With regard to third-party risks, we continue to assess Y2K risks. Third parties include research suppliers and partners, manufacturers, research organizations and clinical study administrators. Our vendors and suppliers have indicated that they will make every effort to be Y2K compliant before December 31, 1999, but that no guarantees can be given. We have, for example, been informed by our outside payroll processor that their payroll system is Y2K compliant. We expect third parties to honor their contractual obligations.

The majority of our material third-party contracts relate to sites for clinical trials of our product candidates, research and development, and our collaboration with Procter & Gamble. We believe that there is no readily available replacement for our collaboration agreement with Procter & Gamble. We further believe that it would be difficult, time consuming, and costly to find alternative clinical sites and research arrangements. We will continue to work with third parties to identify and resolve any problems with Y2K compliance.

In a worst case scenario, we could experience delays in receiving research and development and manufacturing supplies as well as managing and accessing data on patients enrolled in clinical studies. These delays could slow clinical development and research and development programs, or impact our ability to effectively manage and monitor these programs. These delays could also have an adverse impact on our stock price. Based on the information and assessments to date, no contingency plans have been developed.

Any Y2K compliance problems which arise could materially and adversely affect our business, results of operations, or cash flow. We will continue to identify all Y2K problems that could materially adversely affect our business operations. However, it is not possible to determine with complete certainty that all Y2K problems affecting us or third parties which have a material relationship with us, have been identified. It is not possible to insure economically against all conceivable risks.

To date, we have incurred less than \$5,000 in costs associated with our Y2K program. This excludes the costs of older computer and scientific instrumentation that have been replaced in the ordinary course as such systems are upgraded or expanded. We believe that the costs associated with repairs or upgrades and verification of our internal systems to become Y2K compliant will not be more than \$50,000. We believe that all such repairs or upgrades and verification will be complete in December 1999 with the repair and upgrade to our HVAC system discussed above. We expect to fund all these expenses from working capital.

## OVERVIEW

We are engaged in the development of products for the treatment of cardiovascular, autoimmune and neurologic diseases caused by undesired effects of the human immune system. Our product development programs are based on proprietary technologies which are designed to block selected components of the human immune system in order to reduce undesired inflammation while allowing other beneficial aspects of the immune system to remain functional. Our two lead product candidates are:

- 5G1.1-SC, in Phase II trials for the treatment of acute inflammation caused by cardiopulmonary bypass surgery, which is being developed in collaboration with Procter & Gamble; and
- 5G1.1, in Phase II trials for the chronic treatment of rheumatoid arthritis and membranous nephritis, which we are developing ourselves.

In addition, we are developing our Apogen and UniGraft technologies in preclinical studies. We are targeting our first Apogen product candidate, known as MP4, for the treatment of patients with multiple sclerosis. We are also developing our two UniGraft xenotransplantation product candidates, UniGraft-PD and UniGraft-SCI, for the treatment of Parkinson's disease and spinal cord injury.

## THE IMMUNE SYSTEM

The human immune system defends 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 white blood cells, each with a specialized function. Under normal circumstances, complement proteins, together with antibodies and white blood cells, act to protect the body by removing:

- harmful microorganisms;
- cells containing foreign proteins known as antigens; and
- disease-causing combinations of antigens and antibodies known as immune complexes.

When activated by stimuli, the immune system triggers a series of enzymatic and biochemical reactions called the complement cascade that results in an inflammatory response. This inflammatory response is one of the immune system's weapons against foreign pathogens or otherwise diseased tissue. However, under certain circumstances, the complement cascade may be activated inappropriately to direct an inflammatory response at healthy tissue, which may result in acute and chronic inflammatory conditions.

Common heart diseases and procedures in which the complement cascade is activated include:

- cardiopulmonary bypass surgery;
- myocardial infarction;
- unstable angina;
- angioplasty; and
- stroke and other peripheral vascular diseases.

Common autoimmune diseases in which the complement cascade is activated include:

- rheumatoid arthritis;
- kidney diseases;
- lupus;



- inflammatory bowel diseases;
- inflammatory skin disorders; and
- multiple sclerosis.

T-cells, a type of white blood cell, play a critical role in the normal immune response by recognizing cells containing antigens and initiating the immune response. This response results in T-cells:

- attacking the antigen-containing tissue; and
- directing the production of antibodies by white blood cells to eliminate the antigen-bearing foreign organism.

In autoimmune diseases, T-cells may mistakenly attack healthy host tissue and may cause an inflammatory response resulting in tissue destruction. In the case of multiple sclerosis, this may cause paralysis due to destruction of nerve fibers in the brain.

#### PRODUCT DEVELOPMENT PROGRAMS

We have focused our product development programs on anti-inflammatory therapeutics for diseases for which we believe current treatments are either non-existent or inadequate. Currently available drugs for certain autoimmune, cardiovascular and neurologic diseases, in which the immune system attacks the patient's own tissue, broadly suppress the entire immune system, and may also cause potentially severe side effects. Our lead product candidates, known as C5 Complement Inhibitors, are designed to selectively block the production of inflammation-causing proteins in the complement cascade. We believe that selective suppression of this immune response will provide a significant therapeutic advantage relative to existing therapies.

Additionally, we are developing selective T-cell inhibitors known as Apogens and UniGraft xenotransplants for neurologic disorders.

#### C5 COMPLEMENT INHIBITORS

Complement proteins are a series of inactive proteins circulating in the blood. When activated by stimuli, including those associated with both acute and chronic inflammatory disorders, these inactive complement proteins are split by enzymes known as convertases into activated byproducts through the complement cascade.

Some of these byproducts, notably C3b, are helpful in fighting infections and inhibiting autoimmune disorders. However, the byproducts generated by the cleavage of C5, known as C5a and C5b-9, generally cause harmful inflammation. The inflammatory byproducts of C5 cause:

- activation of white blood cells;
- attraction of white blood cells;
- production of injurious cytokines including tumor necrosis factor-alpha;
- activation of blood vessel-lining cells called endothelial cells, allowing leakage of white blood cells into tissue; and
- activation of blood-clotting cells called platelets.

The following diagram describes the complement cascade:

[DIAGRAM]

Because of the generally beneficial effects of the components of the complement cascade prior to C5 and the greater inflammatory disease-promoting effects of the cleavage products of C5, we have identified C5 as a potentially effective anti-inflammatory drug target. Our first two C5 Inhibitors specifically and tightly bind to C5 blocking its cleavage into harmful byproducts and are designed to inhibit subsequent damage from the inflammatory response.

In laboratory and animal models of human disease, we have shown that the administration of C5 Inhibitor, as compared to placebo, is effective in:

- preventing inflammation during cardiopulmonary bypass;
- reducing heart tissue damage during myocardial infarction;
- reducing brain damage in cerebral ischemia;
- enhancing survival in a model of lupus; and
- preserving kidney function in nephritis.

In addition, in initial human clinical trials, we have shown that C5 Inhibitors can reduce:

- inflammation during cardiopulmonary bypass surgery;
- heart tissue damage during cardiopulmonary bypass surgery;
- new cognitive deficits after cardiopulmonary bypass surgery;
- an objective measure of disease activity in rheumatoid arthritis patients; and
- the incidence of proteinuria in lupus patients.

Our product candidates are as follows:

PRODUCT CANDIDATE	TECHNOLOGY	INDICATION	STATUS
5G1.1-SC	C5 Complement Inhibitor (single chain antibody)	Cardiopulmonary bypass Myocardial infarction (1) Thrombolysis (2) PTCA	Phase IIb ongoing Filed IND to commence Phase II
5G1.1	C5 Complement Inhibitor (antibody)	Rheumatoid arthritis Membranous nephritis  Lupus	Phase II ongoing Phase II ongoing  Completed Phase I
MP4	Apogen	Multiple sclerosis	Preclinical
UniGraft-SCI	Cell replacement	Spinal cord injury	Preclinical
UniGraft-PD	Cell replacement	Parkinson's disease	Preclinical

#### C5 INHIBITOR IMMUNOTHERAPEUTIC PRODUCT CANDIDATES

We are developing one of our two lead C5 Inhibitor product candidates, 5G1.1-SC, for the treatment of inflammation related to acute cardiovascular diseases and procedures. Our initial indications for 5G1.1-SC are cardiopulmonary bypass surgery and myocardial infarction. We are developing our other C5 Inhibitor product candidate, 5G1.1, for the treatment of inflammation related to chronic autoimmune disorders. Our initial indications for 5G1.1 are rheumatoid arthritis and membranous nephritis. We have selected these four initial indications because we believe each represents a clinical condition which is:

- closely tied to the production of activated complement byproducts;
- characterized by clear development pathways;
- inadequately treated by current therapies;
- associated with substantial health care costs; and
- a significant market opportunity.

To date, 5G1.1-SC and 5G1.1 have been observed to be safe and well tolerated in completed and ongoing controlled clinical trials in over 250 individuals treated with either C5 Inhibitor or placebo.

#### 5G1.1-SC

5G1.1-SC is a humanized, single chain antibody that has been shown to block complement activity for up to 20 hours at doses tested and is designed for the treatment of acute inflammatory conditions. In January 1999, we entered into a collaboration with Procter & Gamble to develop and commercialize 5G1.1-SC. Under this collaboration, we will initially pursue the development of 5G1.1-SC for the treatment of inflammation caused by various acute cardiovascular indications and procedures such as cardiopulmonary bypass surgery, myocardial infarction and angioplasty. Procter & Gamble has agreed to fund all clinical development and manufacturing costs relating to 5G1.1-SC for these indications.

## CARDIOPULMONARY BYPASS SURGERY

In cardiopulmonary bypass surgery, blood is diverted from a patient's heart and lungs to a cardiopulmonary, heart-lung, bypass machine in the operating room. The machine adds oxygen to the blood and circulates the oxygenated blood to the organs in the patient's body. Significant side effects of cardiopulmonary bypass surgery include tissue damage and excessive bleeding during and after the procedure. We believe these side effects may result from activation of the complement cascade when the patient's blood comes into contact with the plastic lining of the machine, when insufficient blood flows through the heart as a result of the procedure and after blood flow through the heart is reintroduced following completion of the procedure. Activated complement byproducts may be increased by over 1,000% in patients undergoing cardiopulmonary bypass surgery. The inflammation is also characterized by activation of leukocytes, a type of white blood cell, and platelets, cells responsible for clotting. We believe that this leukocyte activation is associated with impaired lung, heart, brain and kidney function. We further believe that platelet activation and subsequent platelet dysfunction during the procedure impair a patient's ability to stop the bleeding that occurs after extensive surgery.

5G1.1-SC is designed to rapidly penetrate the patient's tissues and to inhibit complement activation in patients immediately before, during and after cardiopulmonary bypass in order to reduce the cardiovascular and brain tissue damage and bleeding complications. We believe inhibition of the inflammatory response might reduce:

- incidence of death;
- incidence of heart tissue damage;
- incidence of stroke;
- post-operative complications;
- the time spent by patients in the intensive care unit;
- the scope of required treatments associated with cardiopulmonary bypass; and
- the need for blood transfusions.

The American Heart Association estimates that in 1996, approximately 500,000 cardiopulmonary bypass operations were performed in the United States. Currently, products utilized in patients undergoing cardiopulmonary bypass are designed to enhance the coagulation of blood so as to reduce the need for blood transfusions. However, we believe these products have little beneficial effect on the heart and brain inflammatory complications associated with the surgery.

Our preclinical studies indicated that C5 Inhibitors can prevent activation of platelets and leukocytes and the subsequent inflammatory response that occurs during circulation of human blood in a closed-loop cardiopulmonary bypass machine. These preclinical studies additionally indicated that administration of a C5 Inhibitor reduces cardiac damage associated with reduced heart blood flow.

## CLINICAL TRIALS

In March 1996, we filed an investigational new drug application, or IND, with the FDA for 5G1.1-SC, targeting the treatment of patients undergoing cardiopulmonary bypass surgery. To date, we have initiated and completed four human clinical trials of 5G1.1-SC administered intravenously. Although we designed these early clinical studies primarily to assess dosing and safety, we also collected biological and clinical results. These trials are described below.

- In June 1996, we commenced a Phase I clinical trial in 33 healthy volunteers receiving a single bolus administration of 0.5 to 2.0 mg/kg of 5G1.1-SC or placebo. In this trial, 5G1.1-SC:
  - was safe and well tolerated in this study population as compared to placebo; and
  - showed dose-dependent reduction in complement activity in study subjects.
- In October 1998, we commenced a Phase I clinical trial in 49 healthy volunteers receiving a single bolus dose, double bolus dose, and single bolus dose followed by continuous infusion administration of up to 6.8 mg/kg of 5G1.1-SC or placebo. In this trial, 5G1.1-SC:
  - was safe and well tolerated in this study population as compared to placebo; and
  - showed dose-dependent reduction in complement activity in study subjects.
- In October 1996, we commenced a Phase I/II clinical trial in 17 patients undergoing cardiopulmonary bypass surgery receiving a single bolus administration of 0.5 to 2.0 mg/kg of 5G1.1-SC or placebo. In this trial, 5G1.1-SC:
  - was safe and well tolerated in this study population as compared to placebo; and
  - showed a dose-dependent reduction in the more than ten-fold increase in activated complement byproducts experienced by placebo-treated patients.
- In August 1997, we commenced a Phase IIa clinical trial in 18 patients undergoing cardiopulmonary bypass surgery receiving a single bolus administration of 1.0 or 2.0 mg/kg of 5G1.1-SC or placebo. In this trial, 5G1.1-SC:
  - was safe and well tolerated in this study population as compared to placebo; and
  - showed dose-dependent reductions in activated complement byproducts.

In April 1998, we announced the combined results of our Phase I/II and Phase IIa trials in cardiopulmonary bypass surgery patients. The results for patients treated with either a 2.0 mg/kg bolus of 5G1.1-SC or placebo are shown in the table below.

CLINICAL RESULTS OF A SINGLE 2.0 MG/KG DOSE OF 5G1.1-SC  
IN PATIENTS UNDERGOING CARDIOPULMONARY BYPASS

BIOLOGICAL AND CLINICAL MEASUREMENTS	5G1.1-SC VS. PLACEBO
C5 complement activation	100% less*
C3 complement activation	No difference
Leukocyte activation	60% to 70% less**
Heart tissue damage	40% less*
New cognitive deficits	80% less*
Blood loss	400 ml less*

\* P less than or equal to .05 vs. placebo

+ Includes both patients treated with 1.0 mg/kg 5G1.1-SC and patients treated with 2.0 mg/kg 5G1.1-SC

In January 1999, we announced that we had commenced dosing patients undergoing coronary artery bypass graft surgery with or without accompanying valve surgery during cardiopulmonary bypass in a Phase IIb clinical trial with 5G1.1-SC. This multi-center, double-blinded, randomized, placebo-controlled study is expected to enroll approximately 1,000 patients and is designed to gather clinical data to augment and extend previous findings regarding the safety profile and pharmacokinetics of 5G1.1-SC and its efficacy in reducing the life-threatening inflammatory complications, such as mortality, myocardial infarction, heart failure and stroke, that can be triggered by cardiopulmonary bypass procedures.

#### ACUTE MYOCARDIAL INFARCTION

Myocardial infarction is an acute cardiovascular disorder in which the coronary arteries, the blood vessels that supply nutrients to 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 heart muscle may subsequently infarct or die. Upon the reduction in flow in the coronary artery, a complex cascade of inflammatory events involving complement proteins, platelets and leukocytes and their secreted factors, and endothelial cells commences within the blood vessel. In patients suffering a myocardial infarction, activated complement byproducts are significantly elevated. This severe inflammatory response targeting the area of insufficient blood flow to cardiac muscle is associated with subsequent death of heart muscle. Restoration of blood flow is also associated with an additional inflammatory reaction with concomitant production of activated complement byproducts. 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 American Heart Association estimates that approximately 1.0 million people in the United States will have a heart attack in 1999.

We are developing 5G1.1-SC to inhibit inflammation associated with complement activation in order to reduce the extent of death of heart muscle in patients suffering an acute myocardial infarction. In contrast, most drugs currently being developed or on the market to treat myocardial infarction are designed to improve blood flow through the heart, rather than treating the damaging effects of inflammation caused by myocardial infarction. We and our scientific collaborators have performed preclinical studies in rodents which have demonstrated that administration of a C5 Inhibitor during periods of insufficient supply of blood to the heart muscle and prior to restoration of normal flow to

the heart muscle significantly reduced the extent of subsequent death of heart muscle compared to control animal studies. Additionally, administration of a C5 Inhibitor significantly reduced the extent of cardiac damage associated with reduced heart blood flow without subsequent restoration of blood flow. The results of these preclinical studies are shown in the table below.

PRECLINICAL RESULTS WITH C5 INHIBITOR ADMINISTRATION  
IN ANIMAL MODELS OF MYOCARDIAL INFARCTION

BIOLOGICAL AND CLINICAL MEASUREMENTS -----	C5 INHIBITOR VS. PLACEBO -----
Complement activity	100% less*
Leukocyte activation	greater than 90% less*
Heart tissue damage	50% less*

-----  
\* P less than or equal to .05 vs. placebo

CLINICAL TRIALS

In October 1998, we commenced dosing subjects in a Phase I clinical trial in healthy individuals that was designed to evaluate dosing regimens for subsequent cardiopulmonary bypass and myocardial infarction clinical trials. We have used the results of this trial to select dosing regimens for subsequent clinical trials in acute myocardial infarction patients. The results of this trial indicated that 5G1.1-SC was well tolerated at doses more than three times as high as had been previously administered. Together with our collaborator Procter & Gamble, we filed in October 1999 an IND for use of 5G1.1-SC in two Phase II trials with approximately 1,000 patients each for the treatment of acute myocardial infarction.

5G1.1

5G1.1 is a humanized, monoclonal antibody that blocks complement activity for one to two weeks at doses tested and is designed for the chronic treatment of autoimmune diseases such as rheumatoid arthritis and nephritis. 5G1.1 is not included in the collaboration with Procter & Gamble, and we have retained full rights to 5G1.1.

RHEUMATOID ARTHRITIS

Rheumatoid arthritis is an autoimmune disease directed at various organ and tissue linings, including the lining of the joints, causing inflammation and joint 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 and severe joint deformity. Diagnostic procedures, which may include obtaining a sample of joint fluid, routinely demonstrate substantial elevations in the levels of activated complement byproducts in the joint fluid of affected rheumatoid arthritis patients. Rheumatoid arthritis is generally believed to be caused by different types of white blood cells, including T-cells, which both directly attack the patient's joints and also activate B-cells to produce antibodies which activate complement proteins in the joint leading to inflammation with subsequent tissue and joint destruction. It is estimated that more than 2.0 million people are currently affected by rheumatoid arthritis in the United States.

We are developing 5G1.1 for the treatment of patients with chronic inflammatory diseases, including rheumatoid arthritis. We have performed preclinical studies in rodent models of rheumatoid arthritis which have shown that C5 Inhibitor administration, as compared to placebo-treated subjects:

- reduced the swelling in joints;
- prevented the onset of erosion of joints;
- reduced the inflammatory white blood cell infiltration into the joints;
- prevented the spread of disease to additional joints;
- blocked the onset of clinical signs of rheumatoid arthritis; and
- ameliorated established disease.

Currently, there are a large number of anti-inflammatory drugs under development or on the market for the treatment of patients with rheumatoid arthritis. These drugs include non-steroidal anti-inflammatory drugs, and their more recent analog the COX-2 inhibitors, which generally treat the symptoms of the disease, but do not alter disease progression. There are also several currently available drugs that are disease-modifying agents, but these are associated with undesirable side effects. More recently, tumor necrosis factor, or TNF, inhibitors have been approved or are under development to reduce the inflammatory response. TNF is one of the many injurious substances that may be generated downstream of the complement cascade. In contrast to these single agent inhibitors like TNF inhibitors, by acting at C5 of the complement cascade, we expect 5G1.1 both to block complement activation and reduce the production of many of these downstream harmful substances. Because of this dual action, we believe that 5G1.1 may provide a more potent anti-inflammatory effect.

#### CLINICAL TRIALS

In December 1997, we filed an IND with the FDA for 5G1.1 in the treatment of rheumatoid arthritis patients.

- In July 1998, we commenced a Phase I/II multi-center, clinical trial in 42 rheumatoid arthritis patients receiving a single bolus administration of 0.1 to 8.0 mg/kg of 5G1.1. In this trial, 5G1.1:
  - was safe and well tolerated in this study population as compared to placebo;
  - showed dose-dependent reduction in complement activity in study subjects; and
  - at 8.0 mg/kg, showed a reduction in C-reactive protein blood levels in study subjects.

C-reactive protein is considered by many physicians to be the most objective component of the American College of Rheumatology's definition of efficacy criteria for rheumatoid arthritis drug trials. Although this initial clinical trial was designed to primarily assess dosing and safety, biological and clinical results were collected. These results in the patients treated with a 8.0 mg/kg bolus of 5G1.1, announced in April 1999, are shown in the table below.



CLINICAL RESULTS OF A SINGLE 8.0 MG/KG DOSE OF 5G1.1  
IN PATIENTS WITH RHEUMATOID ARTHRITIS

BIOLOGICAL AND CLINICAL MEASUREMENTS -----	AFTER 5G1.1 TREATMENT VS. BEFORE 5G1.1 TREATMENT -----
Complement activity	100% reduction*
C-reactive protein blood level	30% decrease*

-----  
\* P less than or equal to .05 vs. before treatment

In August 1999, we initiated a Phase II multi-center, double-blinded, randomized, placebo-controlled clinical safety and efficacy trial with multiple doses of 5G1.1 at one to four week dosing intervals that is intended to enroll 200 rheumatoid arthritis patients.

#### MEMBRANOUS NEPHRITIS

The kidneys are responsible for filtering blood to remove toxic metabolites and maintaining the minerals and proteins in the blood that are required for normal metabolism. Each kidney consists of millions of individual filtering units, or glomeruli. When glomeruli are damaged, the kidney can no longer adequately maintain its normal filtering function. This may result in the build-up of toxins in the blood and the loss of valuable minerals and proteins in the urine. Clinically severe nephritis, or kidney inflammation, is found in many patients suffering from lupus and other autoimmune diseases. This condition 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.

Many forms of damage to the glomeruli are mediated by the immune system, particularly by antibodies and activated complement proteins. Membranous nephritis is a form of kidney inflammation that is believed to be caused by a chronic autoimmune disorder that targets the kidney. We estimate that there are approximately 100,000 to 300,000 people currently afflicted with membranous nephritis in the United States.

Membranous nephritis is characterized by kidney inflammation and dysfunction that may eventually progress to kidney failure. Diagnostic criteria for membranous nephritis include kidney biopsies that may demonstrate the presence of antibodies and activated complement byproducts in the kidneys of affected patients. The subsequent kidney inflammation leads to the abnormal loss of substantial amounts of protein in the patient's urine; this condition is known as proteinuria and is recognized as an objective measurement of kidney disease. Loss of protein in the urine disturbs the normal control of water in the blood vessels and also is believed to directly further injure the kidney. Moreover, clinical studies by others have shown that the degree of proteinuria is associated with the incidence of subsequent kidney failure. Additional clinical signs associated with proteinuria may include:

- abnormally low levels of protein in the blood;
- a propensity for abnormal clotting;

- abnormal lipid elevations; and
- substantial swelling in the abdomen and under the skin.

Current therapies for membranous nephritis include potentially toxic drugs more frequently used in other indications such as cancer. These drugs generally act to suppress broadly the proliferation of many types of cells, including white blood cells. We believe that the use of such therapies is generally limited due to their unfavorable side effects. Even with current therapies, in such a severe disease population more than 30% of the patients are expected to progress to renal failure, which may require dialysis or transplantation. In contrast, 5G1.1 directly targets the inhibition of deleterious complement activation. We believe 5G1.1 may exert more selective and effective anti-inflammatory activity without the adverse effects associated with current therapies.

We have performed preclinical studies in rodent models of nephritis and observed that C5 Inhibitor administration, as compared to placebo-treated subjects, substantially reduced:

- scarring of the kidney;
- breakdown of kidney tissue into the urine;
- clogging of the kidney filtering units; and
- proteinuria.

#### CLINICAL TRIALS

We are developing 5G1.1 for a family of kidney and kidney-related chronic autoimmune disorders, which include membranous nephritis, lupus nephritis, and lupus. Our strategy is to develop 5G1.1 in kidney disease by initially obtaining safety data in the more readily available lupus patient population and then to commence efficacy trials in patients with a kidney disorder known as membranous nephritis. We are initially starting efficacy trials with 5G1.1 for the treatment of membranous nephritis patients because of the more uniform clinical presentations of membranous nephritis patients as compared to lupus patients. We then intend to expand our efforts to conduct advanced clinical trials in other kidney diseases and lupus.

The results of our initial clinical trial in lupus patients are described below.

- In July 1998, we commenced a Phase I single-center, clinical study in 24 lupus patients receiving a single bolus administration of 0.1 to 8.0 mg/kg of 5G1.1 or placebo. In this trial, 5G1.1:
  - was safe and well tolerated in this study population as compared to placebo;
  - showed dose-dependent reduction in complement activity in study subjects; and
  - at 8.0 mg/kg, resulted in significantly lower incidence of proteinuria in study subjects as compared to placebo.

Although we designed this initial clinical trial to assess primarily dosing and safety, we also collected biological and clinical results. These results in the patients treated with a 8.0 mg/kg bolus of 5G1.1, announced in June 1999, are shown in the table below.

CLINICAL RESULTS OF A SINGLE 8.0 MG/KG DOSE  
OF 5G1.1 IN PATIENTS WITH LUPUS

BIOLOGICAL AND CLINICAL MEASUREMENTS	5G1.1 VS. PLACEBO
Complement activity	100% less*
Incidence of proteinuria	100% less*

\* P less than or equal to .05 vs. placebo

In August 1999, we commenced a Phase II multi-center, double-blinded, randomized, placebo-controlled clinical safety and efficacy trial with multiple doses of 5G1.1 at two to four week dosing intervals that is intended to enroll 150 membranous nephritis patients.

#### LUPUS

Lupus is an autoimmune disorder that damages the brain, lungs, heart, joints and especially the kidneys. In lupus, antibodies deposit within particular organs causing complement activation, inflammation and tissue destruction. For decades, clinical studies by others have demonstrated the presence of complement activation in lupus patients undergoing flares. Studies have further shown an abundant deposition of activated complement proteins with localized inflammation in tissue biopsies from kidney or other tissues in lupus patients. The Lupus Foundation estimates that approximately 1.4 million people in the United States have lupus. Further, an estimated 70% of individuals afflicted with lupus have nephritis. Although lupus may affect people of either sex, women are 10 to 15 times more likely to suffer from the disease than men.

Patients with active lupus may have a broad range of symptoms related to the antibody and activated complement deposition and inflammation. Inflammation of the brain may cause seizures and other neurologic abnormalities. Inflammation of the heart may cause heart failure or sudden death. Lung inflammation causes shortness of breath. Lupus may also cause the swollen joints and arthritis. One of the most common complications associated with lupus, however, is kidney disease, which often leads to kidney failure requiring dialysis or transplantation.

Current therapies generally act to suppress broadly the proliferation of many types of cells, including white blood cells. In contrast, 5G1.1 directly targets the inhibition of deleterious complement activation. We believe 5G1.1 may exert more selective and effective anti-inflammatory activity without the adverse effects associated with current therapies.

We are developing 5G1.1 for the prevention and treatment of inflammation in lupus patients. We have performed preclinical studies in a rodent model of lupus. In this chronic rodent model that spontaneously develops a disease similar to lupus, substantially more animals treated with a C5 Inhibitor survived as compared to untreated control animals.

#### CLINICAL TRIALS

We filed an IND with the FDA in late December 1997 for 5G1.1 in the treatment of patients suffering from lupus and began a Phase I clinical trial in lupus patients in July 1998. As discussed above, in the Clinical Trials section of Membranous Nephritis, we announced results of a 24 patient, placebo-controlled clinical study in June 1999. This trial showed that a single dose of 5G1.1 was safe and well tolerated, reduced complement activity in a dose-dependent manner, and a single 8.0 mg/kg dose significantly lowered incidence of proteinuria.

## MP4

MP4 is a recombinant protein consisting of two brain-derived proteins. These two proteins are believed to be major targets of disease-causing T-cells in patients with multiple sclerosis. MP4 is designed to bind specifically to, and induce cell suicide in, the small population of T-cells in multiple sclerosis patients which are responsible for attacking the patient's brain cells, while leaving the vast majority of uninvolved T-cells unaffected. In addition, MP4 is designed to induce other white blood cells to suppress other inflammatory cells.

## MULTIPLE SCLEROSIS

Multiple sclerosis 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. Multiple sclerosis can be severely debilitating; long-term disability is a common outcome. In severe cases, reduced motor strength may confine the patient to a wheelchair. Multiple sclerosis is widely believed to be caused by the attack of a patient's antigen-specific T-cells on the protective myelin sheath surrounding nerve cells in the central nervous system. According to the National Multiple Sclerosis Society, there are approximately 250,000 reported cases of multiple sclerosis in the United States.

Preclinical animal studies which we performed in an experimental rodent model of multiple sclerosis have demonstrated that administration of our proprietary Apogen multiple sclerosis drug candidate, MP4, at the time of disease induction, effectively prevents the development of severe neurologic disease. These studies also demonstrated that administration of MP4 after the onset of disease ameliorates established disease by both eliminating disease-causing T-cells and by inducing other T-cells to further suppress inflammation.

In February 1998, we filed an IND with the FDA for MP4 for the treatment of patients suffering from multiple sclerosis. After completion of additional preclinical studies and amendment of the clinical protocol in line with the preferred route of administration, we may initiate a Phase I/II clinical trial in multiple sclerosis patients.

## THE UNIGRAFT XENOTRANSPLANTATION PROGRAM

Most transplant procedures today are whole organ transplants. We believe that there is a far greater number of patients with medical disorders, such as Parkinson's disease and spinal cord injury, that are caused by the functional loss of highly specialized cells. The number of these patients is likely to grow due to both the aging of the population, with subsequent increase in the incidence of degenerative diseases, as well as the increasing incidence of trauma. Therefore, cell transplantation could be an important benefit to a large number of previously untreated, or severely under-treated patients suffering from severe medical disorders. However, since there are no human donors of such specialized cells, there is currently no available supply of such cells for replacement therapy. Further, the immune system prevents the transplantation of cells from other species, known as xenografts, as they are recognized by the immune system as foreign and they are rejected. We are developing a portfolio of UniGraft immunoregulatory technologies designed to permit the therapeutic transplantation of such cells without rejection.

Although approximately 20,000 people received whole organ transplants in the United States in 1998, there are many times that number of patients who have disorders that may be amenable to cell or tissue transplantation. It is estimated that this broader population includes approximately 200,000 patients suffering from spinal cord injury and 1.0 million individuals with Parkinson's disease. In particular, we

believe that use of a safe and effective cell transplantation therapy for patients with spinal cord injury or Parkinson's disease would represent major therapeutic advances.

In February 1999, we terminated our collaboration agreement with US Surgical under which we were jointly developing a xenotransplantation program. As part of the termination, we obtained the exclusive rights to that program. We also acquired manufacturing assets that had been developed by US Surgical in connection with the program. We financed the purchase of the manufacturing assets through a \$3.9 million term note payable to US Surgical. Interest is 6.0% per year and is payable quarterly. The principal balance under the note is due in May 2005. Security for this term note is the manufacturing assets that we purchased.

#### NEUROLOGIC CELL TRANSPLANTATION

We have developed methods of blocking the immune system which are designed to permit the replacement of damaged human brain and other neurologic cells with potentially highly therapeutic genetically modified porcine cells.

Rejection of non-human tissue by patients is generally believed to occur in two stages:

- hyperacute phase, which is very rapid, extending from minutes to hours; and
- acute phase, which is somewhat less rapid, 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 sugar 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 stimulate the activation of the recipient's inactive complement proteins on the surface of the donor tissue with subsequent destruction of the donor tissue. Subsequently, acute rejection of xenografts is generally believed to be mediated by white blood cells.

We are designing UniGraft cell products to resist complement/antibody-mediated hyperacute rejection. We have commenced preclinical studies employing the UniGraft technologies during transplantation of genetically modified and proprietary porcine cells that are resistant to destruction by human complement proteins. We are currently focusing our immunoregulatory and molecular engineering technologies primarily on the development of UniGraft cells to treat Parkinson's disease and injuries to the spinal cord.

#### SPINAL CORD INJURY

In spinal cord injury patients, conduction of nerve signals between the brain and those nerve cells below the injury site in the spinal cord is blocked. These patients experience impaired or loss of normal bodily functions, including the sense of touch and the ability to move. Since the level of injury differs between patients, the degree and type of impairment also differs. Motor vehicle crashes are the leading cause of spinal cord injury in the U.S. Additionally, patients may develop spinal cord injury following traumatic injuries or, less commonly, following an autoimmune disorder known as transverse myelitis. According to the National Spinal Cord Injury Association, approximately 200,000 individuals in the United States suffer from debilitating spinal cord injury.

Steroids are the most common therapy for patients with spinal cord injury. If administered to a patient within a very short time following the injury, steroids are believed to limit initial swelling in the area of the injury. However, steroid administration is not believed to allow nerve cells to regenerate nor is it believed to reverse existing clinical disability.

Our UniGraft spinal cord injury cell therapy candidate, UniGraft-SCI, consists of genetically modified pig cells. In preclinical rodent and primate models of spinal cord injury, these cells have been shown to:

- engraft at sites of spinal cord injury; and
  
- ensheath damaged nerve cells with a protective myelin sheath.

In completed rodent studies, these cells have been shown to restore conduction following partial cutting of the spinal cord.

We are currently performing additional preclinical studies in this program and optimizing manufacturing methods.

#### PARKINSON'S DISEASE

Parkinson's disease is a progressive neurological disorder that is characterized by a decrease in spontaneous movements and an increase in tremor. Nerve cells in the brain which produce dopamine degenerate in these patients. Dopamine is an important messenger in the brain without which normal neurological activities are impaired. According to the National Parkinson Foundation, Parkinson's disease is currently believed to affect over 1.0 million Americans.

The current drugs for Parkinson's disease act to non-specifically increase dopamine throughout the body but can cause harmful side effects. We believe that these therapies are unable to adequately restore levels of dopamine specifically in damaged areas of the brain.

Our UniGraft Parkinson's disease cell therapy candidate, UniGraft-PD, consists of genetically modified pig cells that, after transplant into rodents and primates with Parkinson's disease-like lesions:

- engraft into the brain;
  
- extend and make connections with the damaged areas of the brain; and
  
- locally produce enzymes to restore dopamine levels.

In completed rodent studies, these cells have been shown to restore brain function.

We are currently performing additional preclinical studies in this program and optimizing manufacturing methods.

#### STRATEGIC ALLIANCE WITH PROCTER & GAMBLE

In January 1999, we entered into an exclusive collaboration with Procter & Gamble to develop and commercialize 5G1.1-SC. Under this collaboration, we will initially pursue the development of 5G1.1-SC for the treatment of inflammation caused by cardiopulmonary bypass surgery, myocardial infarction and angioplasty. Procter & Gamble has agreed to fund all clinical development and manufacturing costs relating to 5G1.1-SC for these indications. In addition, under this agreement, Procter & Gamble has agreed to pay us up to \$95 million in payments, which include a non-refundable upfront license fee, as well as milestone and research and development support payments. In addition, we will receive royalties on worldwide sales of 5G1.1-SC for all indications. We also have a preferred position relative to third-party manufacturers to manufacture 5G1.1-SC worldwide. We share co-promotion rights with Procter & Gamble to sell, market and distribute 5G1.1-SC in the United States, and have granted Procter & Gamble the exclusive rights to sell, market and distribute 5G1.1-SC outside of the United States. Through July 31, 1999, we received \$17.8 million from Procter & Gamble, including a non-refundable upfront license fee of \$10.0 million and \$7.8 million in research and development support payments. Our collaboration with Procter & Gamble does not involve any of our other product candidates.

GRANTS FROM ADVANCED TECHNOLOGY PROGRAM AND NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

In August 1995, we were awarded cost-shared funding from the U.S. Commerce Department's National Institute of Standards and Technology under its Advanced Technology Program. Through the program, we may receive up to approximately \$2.0 million over three years to support our UniGraft cell, tissue, and organ transplantation programs. Through July 31, 1999, we have received approximately \$1.9 million under this award. In September 1998, the three-year period was amended to extend to September 1999.

In November 1997, both ourselves and US Surgical were awarded a three-year \$2.0 million cooperative agreement from NIST under its Advanced Technology Program for funding a joint xenotransplantation project. In February 1999, this funding was amended to a single company award to us with our reacquisition of the rights to all aspects of our xenotransplantation program from US Surgical which had been acquired by Tyco International Ltd. Through July 31, 1999, we had received approximately \$322,000 under this award.

In October 1998, we were granted our third award under this program, a three-year grant supporting product development within our neurologic disorder transplantation program. Through the program, we may receive up to approximately \$2.0 million over three years to support our UniGraft program to develop a spinal cord injury product within our neurologic disorder xenotransplantation program.

In October 1999, we were granted our fourth award under this program, a three-year grant supporting product development within our UniGraft program. Through the program, we may receive up to approximately \$2.0 million over three years to support our production of UniGraft products.

MANUFACTURING

We obtain drug product to meet our requirements for preclinical studies using both internal and third-party contract manufacturing capabilities. At our headquarters in New Haven, Connecticut, we have pilot manufacturing facilities suitable for the fermentation and purification of certain of our recombinant compounds for clinical studies. Our pilot plant has the capacity to manufacture under cGMP regulations. We have also secured the production of clinical supplies of certain other recombinant products through third-party manufacturers. In each case, we have contracted product finishing, vial filling, and packaging through third parties.

To date, we have not invested in the development of commercial manufacturing capabilities. Although we have established a pilot manufacturing facility for the production of material for clinical trials for certain of our potential products, we do not have sufficient capacity to manufacture more than one drug candidate at a time or to manufacture our drug candidates for later stage clinical development or commercialization. In the longer term, we may contract the manufacture of our products for commercial sale or may develop large-scale manufacturing capabilities for the commercialization of some of our 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 us to manufacture products. If we are unable to develop or contract for additional manufacturing capabilities on acceptable terms, our 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 our competitive position and our prospects for achieving profitability. In addition, as our product development efforts progress, we will need to hire additional personnel skilled in product testing and regulatory compliance.

## SALES AND MARKETING

We currently have no sales, marketing, or distribution capabilities. We will need to establish or contract these capabilities to commercialize successfully any of our drug candidates. We may promote our products in collaboration with marketing partners or rely on relationships with one or more companies with established distribution systems and direct sales forces. Under our collaboration agreement, Procter & Gamble is obligated to sell, market and distribute worldwide 5G1.1-SC for all approved indications. We share with Procter & Gamble co-promotion rights for 5G1.1-SC in the United States. For other future drug products, as well as for 5G1.1-SC in the United States, we may elect to establish our own specialized sales force and marketing organization to market our products.

## PATENTS AND PROPRIETARY RIGHTS

We believe that patents and other proprietary rights are important to our business. Our policy is to file patent applications to protect technology, inventions and improvements to our technologies that are considered important to the development of our business. We also rely upon trade secrets, know-how, continuing technological innovations and licensing opportunities to develop and maintain our competitive position.

We have filed several U.S. patent applications and international counterparts of certain of these applications. In addition, we have exclusively licensed several additional U.S. patents and patent applications. Of our owned and exclusively licensed patents and patent applications as of July 31, 1999, 13 relate to technologies or products in the C5 Inhibitor program, seven relate to the Apogen program, and 21 relate to the UniGraft program.

Our success will depend in part on our ability to obtain United States and foreign patent protection for our products, to preserve our trade secrets and proprietary rights, and to operate without infringing on the proprietary rights of third parties or having third parties circumvent our 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.

We are 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. We have 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 our proposed products. With respect to certain of these patents which we believe are relevant for the expeditious development and commercialization of certain of our products as currently contemplated, we have acquired licenses. With regard to certain other patents, we have either determined in our judgment that our products do not infringe the patents or have identified and are testing various approaches which we believe should not infringe the patents and which should permit commercialization of our products.

It is our policy to require our employees, consultants, members of our scientific advisory board, and parties to collaborative agreements to execute confidentiality agreements upon the commencement of employment or consulting relationships or collaborations with us. These agreements provide that all confidential information developed or made known during the course of relationship with us is to be kept confidential and not to be disclosed to third parties except in specific circumstances. In the case of employees, the agreements provide that all inventions resulting from work performed for us, utilizing our property or relating to our business and conceived or completed by the individual during employment shall be our exclusive property to the extent permitted by applicable law.



## GOVERNMENT REGULATION

The preclinical studies and clinical testing, manufacture, labeling, storage, record keeping, advertising, promotion, export, and marketing, among other things, of our 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, we believe that our 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:

- (1) preclinical laboratory tests and IN VIVO preclinical studies;
- (2) the submission to the FDA of an IND for human clinical testing, which must become effective before human clinical trials may commence;
- (3) adequate and well-controlled human clinical trials to establish the safety and efficacy of the product;
- (4) the submission to the FDA of a biologics license application or BLA; and
- (5) FDA review and approval of such application.

The testing and approval process requires substantial time, effort and financial resources. We cannot be certain that any approval will be granted on a timely basis, if at all. Prior to and following approval, if granted, the establishment or establishments where the product is manufactured are subject to inspection by the FDA and must comply with cGMP requirements enforced by the FDA through its facilities inspection program. Manufacturers of biological materials also may be subject to state regulation.

Preclinical studies include animal studies to evaluate the mechanism of action 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 requirements 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 about the conduct of the trials as outlined in the application. In such latter case, the sponsor of the application and the FDA must resolve any outstanding concerns before clinical trials can proceed. We cannot assure you 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 many items, including:

- 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 and, as appropriate, for absorption, metabolism, distribution, excretion, pharmacodynamics and pharmacokinetics. Phase II usually involves studies in a limited patient population to:

- evaluate preliminarily the efficacy of the drug for specific, targeted indications;
- determine dosage tolerance and optimal dosage; and
- 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. Phase I, Phase II or Phase III testing may not be completed successfully within any specific time period, if at all, with respect to any products being tested by a sponsor. 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 trials, together with detailed information on the manufacture and composition of the product, are submitted to the FDA as part of a BLA requesting approval for the marketing of the product. The FDA may deny approval of the application if applicable regulatory criteria are not satisfied, or if additional testing or information is required. Post-marketing testing and surveillance to monitor the safety or efficacy of a product may be required. FDA approval of any application may include many delays or never be granted. 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 safety or manufacturing problems occur following initial marketing. Among the conditions for approval is the requirement that the prospective manufacturer's quality control and manufacturing procedures conform to cGMP requirements. These requirements must be followed at all times in the manufacture of the approved product. In complying with these requirements, 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 the FDA approves a product, the manufacturer and the holder or 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 at any time afterward, 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 the license holder. In addition, later discovery of previously unknown problems may result in restrictions on a product, its manufacturer, or the license holder, including withdrawal of the product from the market. Also, new government requirements may be established that could delay or prevent regulatory approval of our products under development.

For clinical investigation and marketing outside the United States, we are 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. Definitive guidelines in the United States may never be issued, if at all. Current

companies involved in this field, including ourselves, may not be able to comply with any federal final definitive guidelines that may be issued.

#### COMPETITION

Currently, many companies, including major pharmaceutical and chemical companies as well as specialized biotechnology companies, are engaged in activities similar to our activities. Universities, governmental agencies and other public and private research organizations also conduct research and may market commercial products on their own or through joint ventures. Many of these entities may have:

- substantially greater financial and other resources;
- larger research and development staffs;
- in the case of universities, lower labor costs; and/or
- more extensive marketing and manufacturing organizations.

Many of these companies have significant experience in preclinical testing, human clinical trials, product manufacturing, marketing and distribution and other regulatory approval procedures. They may also have a greater number of significant patents and greater legal resources to seek remedies for cases of alleged infringement of their patents by us to block, delay, or co-opt our own drug development process.

We compete 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 us; in some instances these 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.

Each of Avant Immunotherapeutics, Inc., Leukosite Inc., Abbott Laboratories, Gliatech Inc. and Biocryst Pharmaceuticals Inc. has publicly announced intentions to develop complement inhibitors to treat diseases related to trauma, inflammation or certain brain or nervous system disorders. Avant has initiated clinical trials for a proposed complement inhibitor to treat acute respiratory distress syndrome, myocardial infarction, and lung transplantation. We are aware that Pfizer, Inc., SmithKline Beecham Plc, and Merck & Co., Inc. are also attempting to develop complement inhibitor therapies. We believe that our potential C5 Inhibitors differ substantially from those of our competitors due to our compounds' demonstrated ability to specifically intervene in the complement cascade at what we believe 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.

We further believe 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 AG, Immunex Corp., Pharmacia & Upjohn Inc. and Rhone-Poulenc SA sells a product which is used clinically to reduce surgical bleeding during cardiopulmonary bypass surgery, but has little beneficial effect on other significant inflammatory morbidities associated with cardiopulmonary bypass surgery. We believe that each of these drugs does not significantly prevent complement activation and subsequent inflammation that lead to organ damage and blood loss during cardiopulmonary bypass 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.

Nextran Inc., a subsidiary of Baxter International Inc., and Imutran Ltd., a wholly-owned subsidiary of Novartis Pharma AG, are seeking to develop pig cell xenograft technology. Novartis Pharma AG is also collaborating with Biotransplant Inc. to commercially develop xenograft organs. We are aware that Diacrin Inc. and Genzyme Tissue Repair, Inc. are working in this field.

#### FACILITIES

Our headquarters, research and development facility, and pilot manufacturing facility are located in New Haven, Connecticut, within close proximity to Yale University. At this facility, we lease and occupy a total of approximately 60,000 square feet of space, which includes approximately 30,000 square feet of research laboratories and 10,000 square feet of space dedicated to the pilot manufacturing facility. We lease our facilities under three operating leases which expired in December 1997, June 1998, and March 1999. We are currently continuing the leases on a month-to-month basis while lease extensions are under discussion. Current monthly rental on the facilities is approximately \$36,000.

Our pilot manufacturing plant is currently being utilized for producing compounds for our current clinical trials. We believe the laboratory space will be adequate for our current research and development activities. In addition through a wholly-owned subsidiary, we own a transgenic manufacturing facility located in the Northeast.

#### EMPLOYEES

As of October 26, 1999, we had 89 full-time employees, of which 80 were engaged in research, development, manufacturing, and clinical development, and nine in administration and finance. Doctorates are held by 28 of our employees. Each of our employees has signed a confidentiality agreement.

#### LEGAL PROCEEDINGS

We are not a party to any material legal proceeding.

MANAGEMENT

EXECUTIVE OFFICERS, DIRECTORS AND KEY EMPLOYEES

Set forth below is certain information regarding our executive officers, directors and key employees:

NAME - - - - -	AGE -----	POSITION WITH ALEXION -----
John H. Fried, Ph.D.(1) .....	70	Chairman of the Board of Directors
Leonard Bell, M.D.(1) .....	41	President, Chief Executive Officer, Secretary, Treasurer, Director
David W. Keiser.....	48	Executive Vice President, Chief Operating Officer
Louis A. Matis, M.D. ....	49	Senior Vice President, Chief Scientific Officer
Stephen P. Squinto, Ph.D. ....	43	Senior Vice President, Chief Technology Officer
Barry P. Luke.....	41	Vice President of Finance and Administration, Assistant Secretary
Nancy Motola, Ph.D. ....	47	Vice President of Regulatory Affairs and Quality Assurance
James A. Wilkins, Ph.D. ....	47	Vice President of Process Sciences and Manufacturing
William Fodor, Ph.D.(2) .....	41	Senior Director of Xenotransplantation
Christopher F. Mojcik, M.D., Ph.D.(2) ....	39	Senior Director of Clinical Development
Scott A. Rollins, Ph.D.(2) .....	36	Senior Director of Project Management and Drug Development
Jerry T. Jackson.....	58	Director
Max Link, Ph.D.(1)(3) .....	59	Director
Joseph A. Madri, Ph.D., M.D. ....	53	Director
Leonard Marks, Jr., Ph.D.(3) .....	78	Director
Eileen M. More.....	53	Director
R. Douglas Norby.....	64	Director
Alvin S. Parven(3).....	59	Director

- 
- (1) Member of our nominating committee.
  - (2) Key employee.
  - (3) Member of our audit committee and our compensation committee.

Each director will hold office until the next annual meeting of stockholders and until his or her successor is elected and qualified or until his or her earlier resignation or removal. Each officer serves at the discretion of the board of directors. Each of our executive officers is a party to an employment agreement with us.

JOHN H. FRIED, PH.D. has been the Chairman of our board of directors of Alexion 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., 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 received his B.S. in Chemistry and Ph.D. in Organic Chemistry from Cornell University.

LEONARD BELL, M.D. is the principal founder of Alexion, and has been a director of Alexion 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 Research Excellence, Inc. He also served as a director of the Biotechnology Research and Development Corporation 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 Alexion since July 1992. From 1990 to 1992, Mr. Keiser was Senior Director of Asia Pacific Operations for G.D. Searle & Company Limited, 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.

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 Alexion from August 1994 to March 1998. From January 1993 to July 1994, Dr. Matis served as the Director of our Program in Immunobiology. Prior to joining Alexion, 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 Alexion 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 Alexion 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 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.

NANCY MOTOLA, PH.D. has been the Vice President of Regulatory Affairs and Quality Assurance since 1998. From 1991 to 1998, Dr. Motola served as Assistant, Associate, and then Deputy Director, Regulatory Affairs for the Bayer Corporation Pharmaceutical Division where she was responsible for regulatory aspects of product development programs for cardiovascular, neuroscience, metabolic and oncology drugs and included drugs targeting arthritis, cardiac disorders, stroke and cognitive dysfunction. Dr. Motola has been responsible for the filing of numerous INDs, other regulatory submissions and has filed New Drug Applications for marketing approval resulting in three currently marketed drugs. Dr. Motola held regulatory affairs positions of increasing responsibility at Abbott Laboratories from 1989 to 1991 and at E.R. Squibb and Sons, Inc. from 1983 to 1989. She has also served as past Chairperson of the Regulatory Affairs Section of the American Association of Pharmaceutical Scientists. Dr. Motola received her B.A. from Central Connecticut State University and M.S. and Ph.D. degrees in medicinal chemistry from the University of Rhode Island.

JAMES A. WILKINS, PH.D. has been Vice President of Process Sciences and Manufacturing of Alexion 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.

WILLIAM FODOR, PH.D. has been Senior Director of Xenotransplantation since 1997. After joining Alexion in 1992, Dr. Fodor was a Staff Scientist from 1992 to 1994, Principal Scientist from 1994 to 1996, and Director of Xenotransplantation from 1996 to 1997. Dr. Fodor has been responsible for managing the preclinical development and manufacturing of our xenotransplantation product candidates. Prior to 1992, Dr. Fodor was a postdoctoral research fellow in the Section of Immunobiology at Yale University School of Medicine and at Biogen, Inc., a biopharmaceutical firm. Dr. Fodor's work has led to over 30 scientific papers and patents in the fields of immunobiology and molecular biology. Dr. Fodor received his B.S. in Genetics and Ph.D. in Molecular Genetics from the Ohio State University.

CHRISTOPHER F. MOJCIK, M.D., PH.D. has been Senior Director of Clinical Development since joining Alexion in July 1998. From 1996 until July 1998, he was an Associate Director in the Metabolics/ Rheumatology Department at Bayer Corporation's Pharmaceuticals Division. Dr. Mojciak was responsible for Phase II and III development of certain arthritis programs and certain Phase IV programs in cardiopulmonary bypass. 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, Missouri, and his M.D. and Ph.D. from the University of Connecticut.

SCOTT A. ROLLINS, PH.D. is a co-founder of Alexion and has been Senior Director of Project Management and Drug Development since August 1999, Senior Director of Complement Biology from 1997 to 1999, Director of Complement Biology from 1996 to 1997, Principal Scientist from 1994 to 1996, and Staff Scientist from 1992 to 1994. Since 1994, Dr. Rollins has been responsible for the preclinical development

of our anti-inflammatory compound 5G1.1-SC. Since 1999, Dr. Rollins has been additionally responsible for the project management functions of 5G1.1-SC, currently under joint development with Procter & Gamble Pharmaceuticals. Prior to 1992, Dr. Rollins was a postdoctoral research fellow in the Department of Immunobiology at Yale University School of Medicine. Dr. Rollins' work has led to over 50 scientific papers and patents in the fields of complement biology. He received his B.S. in Cytotechnology and Ph.D. in Microbiology and Immunology from the University of Oklahoma Health Sciences Center.

JERRY T. JACKSON has been a director of Alexion since September 1999. He was employed by Merck & Co. Inc., a major pharmaceutical company, from 1965 until his retirement in 1995. During this time, he had extensive experience in sales, marketing and corporate management, including joint ventures. From 1993 until 1995, Mr. Jackson served as Executive Vice President of Merck with broad responsibilities for numerous operating groups--including Merck's International Human Health, Worldwide Human Vaccines, the AgVet Division, Astra/Merck U.S. Operations, as well as worldwide marketing. During 1993, he was also President of the Worldwide Human Health Division in 1993. He served as Senior Vice President of Merck from 1991 to 1992 responsible for Merck's Specialty Chemicals and previously, he was President of Merck's Sharp & Dohme International. Mr. Jackson serves as a director of Cor Therapeutics, Inc., Molecular Biosystems, Inc., SunPharm Corporation, and Crescendo Pharmaceuticals Corporation. Mr. Jackson received his B.A. from University of New Mexico.

MAX LINK, PH.D. has been a director of Alexion 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., 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 Alexion and has been a director of Alexion 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 175 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 and has been awarded a Merit award from the National Institutes of Health. 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 Alexion since April 1992. Since 1985 Dr. Marks has served as an independent corporate director and management consultant. Dr. Marks serves on the board of directors of Netvision Technologies Inc. Dr. Marks served as a director of Airlease Management Services, an aircraft leasing company (a subsidiary of Bank America Leasing & Capital Corporation), from 1995 to March 1998, and Northern Trust Bank of Arizona, a commercial and trust bank subsidiary of Northern Trust of Chicago, from 1995 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 Alexion since December 1993. Ms. More has been associated since 1978 with Oak Investment Partners and has been a General Partner of Oak since 1980. Oak is a venture capital firm and a stockholder of Alexion. Ms. More is currently a director of several private high



technology and biotechnology firms including OraPharma, Inc., Halox Technologies, Psychiatric Solutions and Teloquent Communication Corporation. Ms. More studied mathematics at the University of Bridgeport and is a Chartered Financial Analyst.

R. DOUGLAS NORBY has been a director of Alexion since September 1999. Since 1996, Mr. Norby has been the Executive Vice President and Chief Financial Officer of LSI Logic Corporation, a semiconductor company, and he also serves on the Board of LSI. From September 1993 until November 1996, he served as Senior Vice President and Chief Financial Officer of Mentor Graphics Corporation, a software company. Mr. Norby served as President of Pharmedix Corporation, a drug delivery company, from July 1992 to September 1993, and from 1985 to 1992, he was President and Chief Operating Officer of Lucasfilm, Ltd., an entertainment company. From 1979 to 1985, Mr. Norby was Senior Vice President and Chief Financial Officer of Syntex Corporation, a pharmaceutical company. Mr. Norby received a B.A. in Economics from Harvard University and an M.B.A. from Harvard Business School.

ALVIN S. PARVEN has been a director of Alexion since May 1999. Since 1997, Mr. Parven has been President of ASP Associates, a management and strategic consulting firm. From 1994 to 1997, Mr. Parven was Vice President at Aetna Business Consulting, reporting to the Office of the Chairman of Aetna. From 1987 to 1994, Mr. Parven was Vice President, Operations at Aetna Health Plans. Prior to 1987, he served in various capacities at Aetna including Vice President, Pension Services from 1983 to 1987. Mr. Parven received his B.A. from Northeastern University.

#### CERTAIN TRANSACTIONS

In March 1998, through its wholly-owned subsidiary Biotech Target, S.A., BB Biotech AG, a single institutional investor, purchased 670,000 shares of our common stock in a private placement at \$13.18 per share, aggregating \$8.8 million. At October 1, 1999, BB Biotech beneficially owned 1,824,113 shares of common stock, or approximately 16.1% of our outstanding shares of common stock.

In September 1997, BB Biotech, through Biotech Target, 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 \$10.69 per share. The net proceeds from this private placement were approximately \$9.5 million. The conversion price represented a 3.0% premium to the closing bid of \$10.38 on the day of pricing. The Series B Preferred Stock paid a dividend of \$2.25 per share of Series B Preferred Stock on March 4, 1998. In March 1998, the Series B Preferred Stock was converted to 935,782 shares of our common stock, and we elected to pay the dividend on the preferred stock in shares of common stock, aggregating 70,831 shares.

In June and October 1992, we entered into patent licensing agreements with Oklahoma Medical Research Foundation and Yale University. The agreements provide that we will pay to these 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. Some of our founders and scientific advisors are inventors under patent and patent applications, including Dr. Bell, one of our directors and our President and Chief Executive Officer, Dr. Madri, one of our directors, Dr. Squinto, Senior Vice President and Chief Technology Officer, and Dr. Rollins, Senior Director of Project Management and Drug Development with respect to patent applications licensed from Yale and, therefore, entitled to receive a portion of royalties and other fees payable by us.

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information with respect to the beneficial ownership of our common stock as of October 1, 1999, except as otherwise noted in the footnotes and as adjusted to reflect the sale of 2,500,000 shares of common stock in the offering: (1) each person known by us to own beneficially more than 5.0% percent of our outstanding common stock; (2) each director and each named executive officer; and (3) all directors and executive officers of Alexion as a group.

NAME OF BENEFICIAL OWNER(1) -----	NUMBER OF SHARES BENEFICIALLY OWNED(2) -----	PERCENTAGE OF SHARES BENEFICIALLY OWNED -----	
		BEFORE OFFERING	AFTER OFFERING
BB Biotech AG Vordergrasse 3 8200 Schaffhausen CH/Switzerland(3).....	1,824,113	16.1%	13.2%
Scudder Kemper Investments, Inc. 345 Park Avenue New York, NY 10154(4).....	869,500	7.6%	6.2%
Zesiger Capital 320 Park Avenue, 30th floor New York, NY 10022(5).....	845,000	7.5%	6.1%
The Kaufmann Fund, Inc. 140 E. 45th Street, 43rd floor New York, NY 10017(6).....	837,300	7.4%	6.1%
T. Rowe Price Associates 100 East Pratt Street Baltimore, MD 21205(7).....	828,600	7.3%	6.0%
OrbiMed Advisers, Inc. 41 Madison Avenue, 40th floor New York, NY 10010(8).....	750,500	6.6%	5.4%
Leonard Bell, M.D.(9).....	583,850	5.0%	4.1%
Stephen P. Squinto, Ph.D.(10).....	180,450	1.6%	1.3%
David W. Keiser(11).....	167,300	1.5%	1.2%
Louis A. Matis, M.D.(12).....	147,900	1.3%	1.1%
Eileen M. More(13).....	114,780	1.0 %	*
John H. Fried, Ph.D.(14).....	91,003	*	*
James A. Wilkins, Ph.D.(15).....	60,000	*	*
Joseph A. Madri, Ph.D., M.D.(16).....	57,467	*	*
Max Link, Ph.D.(17).....	25,490	*	*
Leonard Marks, Jr., Ph.D.(18).....	15,967	*	*
Jerry T. Jackson(19).....	--	*	*
R. Douglas Norby(20).....	--	*	*
Alvin S. Parven(21).....	--	*	*
Directors and Executive Officers as a group (15 persons)(22).....	1,501,257	12.2%	10.1%

\* Less than one percent

(1) Unless otherwise indicated, the address of all persons is 25 Science Park, New Haven, Connecticut 06511.

- (2) To our knowledge, except as set forth below, the persons named in the table have sole voting and investment power with respect to all shares of our 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 filed on 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 information set forth in a Report on Form 13F as of June 30, 1999 filed with the SEC.
- (5) This figure is based upon information set forth in Schedule 13G filed on January 21, 1999.
- (6) This figure is based upon information set forth in Schedule 13G filed on August 20, 1999.
- (7) This figure is based upon information set forth in Schedule 13G filed on February 5, 1999.
- (8) This figure is based upon information set forth in Schedule 13G filed on March 25, 1999.
- (9) Includes 423,750 shares of our common stock that may be acquired upon the exercise of options within 60 days of October 1, 1999 and 300 shares, in aggregate, held in the names of Dr. Bell's three minor children. Excludes 161,250 shares obtainable through the exercise of options granted to Dr. Bell which are not exercisable within 60 days of October 1, 1999 and 90,000 shares held in trust for Dr. Bell's children of which Dr. Bell disclaims beneficial ownership. Dr. Bell disclaims beneficial ownership of the shares held in the name of his minor children.
- (10) Includes 123,750 shares of our common stock which may be acquired upon the exercise of options within 60 days of October 1, 1999 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 58,750 shares obtainable through the exercise of options granted to Dr. Squinto which, are not exercisable within 60 days of October 1, 1999. Dr. Squinto disclaims beneficial ownership of the shares held in the name of his minor children and the foregoing trusts.
- (11) Includes 125,000 shares of our common stock which may be acquired upon the exercise of options within 60 days of October 1, 1999 and 300 shares, in aggregate, held in the names of Mr. Keiser's three minor children. Excludes 72,500 shares obtainable through the exercise of options granted to Mr. Keiser, which, are not exercisable within 60 days of October 1, 1999. Mr. Keiser disclaims beneficial ownership of the shares held in the name of his minor children.
- (12) Includes 133,750 shares of our common stock which may be acquired upon the exercise of options granted to Dr. Matis within 60 days of October 1, 1999 and 150 shares, in aggregate, held in the names of Dr. Matis' three minor children. Excludes 58,750 shares obtainable through the exercise of options, granted to Dr. Matis, which, are not exercisable within 60 days of October 1, 1999. Dr. Matis disclaims beneficial ownership of the shares held in the name of his minor children.
- (13) Includes 27,467 shares of our common stock which may be acquired upon the exercise of options within 60 days of October 1, 1999 granted to Eileen More. Also includes 76,406 shares owned by Oak Investment V Partners and 10,907 shares owned by Oak Investment V Affiliates, two affiliated limited partnerships. Ms. More is a General Partner of these entities. Excludes 3,333 shares obtainable through the exercise of options granted to Ms. More which are not exercisable within 60 days of October 1, 1999.
- (14) Includes 14,967 shares of our common stock that may be acquired on the exercise of options that are exercisable within 60 days of October 1, 1999. Excludes 3,333 shares obtainable through the exercise of options granted to Dr. Fried, which are not exercisable within 60 days of October 1, 1999.
- (15) Excludes 45,000 shares obtainable through the exercise of options granted to Dr. Wilkins, which are not exercisable within 60 days of October 1, 1999.
- (16) Includes 12,467 shares of our common stock that may be acquired upon the exercise of options within 60 days of October 1, 1999. Excludes 3,333 shares obtainable through the exercise of options granted to Dr. Madri, which are not exercisable within 60 days of October 1, 1999.

- (17) Includes 167 shares of our common stock which, may be acquired upon the exercise of options within 60 days of October 1, 1999. Excludes 3,333 shares obtainable through the exercise of options, granted to Dr. Link, which are not exercisable within 60 days of October 1, 1999.
- (18) Includes 14,967 shares of our common stock which, may be acquired upon the exercise of options within 60 days of October 1, 1999. Excludes 3,333 shares obtainable through the exercise of options granted to Dr. Marks, which are not exercisable within 60 days of October 1, 1999.
- (19) Excludes 7,500 shares obtainable through the exercise of options granted to Mr. Jackson, which are not exercisable within 60 days of October 1, 1999.
- (20) Excludes 7,500 shares obtainable through the exercise of options granted to Mr. Norby, which are not exercisable within 60 days of October 1, 1999.
- (21) Excludes 7,500 shares obtainable through the exercise of options granted to Mr. Parven, which are not exercisable within 60 days of October 1, 1999.
- (22) Consists of shares beneficially owned by Drs. Bell, Fried, Link, Madri, Marks, Matis, Motola, Squinto, and Wilkins, Messrs. Jackson, Keiser, Luke, Norby and Parven, and Ms. More. Includes 993,335 shares of our common stock which, may be acquired upon the exercise of options within 60 days of October 1, 1999.

## DESCRIPTION OF CAPITAL STOCK

Our authorized capital stock will consist of 25,000,000 shares of common stock, \$.0001 par value, and 5,000,000 shares of preferred stock, \$.0001 par value. As of October 26, 1999, and after giving effect to the issuance of 2,500,000 shares of common stock offered by us in the offering, there will be:

- 13,831,947 shares of common stock outstanding;
- no shares of preferred stock issued or outstanding;
- 120,000 shares of preferred stock designated as junior participating cumulative preferred stock, \$1.00 par value;
- options to purchase 2,315,600 shares of common stock; and
- warrants to purchase 220,000 shares of common stock.

### COMMON STOCK

Holders of common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders. Cumulative voting for the election of directors is not authorized by our certificate of incorporation, which means that the holders of a majority of the shares voted can elect all of the directors then standing for election. Subject to preferences that may be applicable to any preferred stock outstanding at the time, the holders of outstanding shares of common stock are entitled to receive dividends out of assets legally available at times and in amounts as the board of directors from time to time may determine. The common stock is not entitled to preemptive rights and is not subject to conversion or redemption. Upon our liquidation, dissolution or winding-up, the assets legally available for distribution to stockholders shall be distributed ratably among the holders of our common stock after payment of liquidation preferences, if any, on any outstanding shares of preferred stock and payment of other claims of creditors. Each outstanding share of common stock is, and each share of common stock to be outstanding upon completion of the offering will be upon payment, duly and validly issued, fully paid and non-assessable.

### PREFERRED STOCK

The authorized shares of preferred stock may be issued in one or more series without further stockholder authorization, and the board of directors is authorized to fix and determine the terms, limitations and relative rights and preferences of the preferred stock, to establish series of preferred stock and to fix and determine the variations among series. If we issue preferred stock, it would have priority over our common stock with respect to dividends and to other distributions, including the distribution of assets upon liquidation, and we may be obligated to repurchase or redeem it. The board of directors can issue preferred stock without the approval of our common stockholders. Preferred stock may have voting and conversion rights, including multiple voting rights, which could adversely affect the rights of holders of common stock. In addition to having a preference with respect to dividends or liquidation proceeds, if preferred stock is issued, it may be entitled to the allocation of capital gains from the sale of our assets. Pursuant to our rights agreement, dated February 14, 1997, we designated 120,000 shares of our preferred stock as junior participating cumulative preferred stock. We do not have any present plans to issue any more shares of preferred stock.

## STOCK OPTIONS

As of October 26, 1999, we have outstanding options to purchase 2,315,600 shares of common stock at a weighted average exercise price of \$8.16 per share. Of these options, we issued options to purchase 2,258,600 shares pursuant to our 1992 Stock Option Plan and options to purchase 57,000 shares pursuant to our 1992 Stock Option Plan for Outside Directors.

The 1992 Stock Option Plan, as currently in effect, permits the granting of options to purchase up to an aggregate of 3,100,000 shares of our common stock. Under this plan, we may grant incentive stock options and non-incentive stock options. The exercise price for shares covered by an incentive stock option may not be less than 100% of the fair market value of our common stock on the date of grant (110% in the case of a grant to an employee who owns stock possessing more than 10% of the combined voting power of all classes of our stock or any subsidiary entitled to vote). The exercise price for shares covered by a non-incentive stock option may not be less than the par value of our common stock at the date of grant. All options must expire no later than 10 years (five years in the case of an incentive stock option granted to a 10% stockholder) from the date of grant.

The 1992 Stock Option Plan for Outside Directors provides for the automatic grant of options to our directors who are not our officers, employees or consultants, other than the Chairman of the Board. Each of these directors receives options on the date of his or her election and on the date of each annual meeting of stockholders at which he or she is reelected as a director.

## WARRANTS

We have outstanding warrants to purchase 220,000 shares of our common stock at an initial exercise price of \$9.90 per share which were issued to Josephthal Lyon & Ross Incorporated, the underwriter of our initial public offering, for a nominal consideration in connection with our initial public offering. These warrants are initially exercisable at a price of \$9.90 per share for a period of 42 months starting on August 27, 1997.

## REGISTRATION RIGHTS

Dr. Leonard Bell has rights to include in a registration statement of ours 585,000 shares of our common stock issuable upon exercise of his stock options. If we grant to any other person or entity registration rights more favorable than those granted to Dr. Bell, we are obligated to amend Dr. Bell's piggyback registration rights to include the more favorable rights. Dr. Bell has waived his registration rights in connection with the offering.

In addition, holders of approximately 150,000 shares of our common stock have piggyback registration rights. These holders may include shares in the offering in amounts the underwriters determine acceptable given prevailing market conditions. We are currently seeking waivers of these registration rights.

## ANTI-TAKEOVER PROVISIONS

### "POISON PILL" RIGHTS TO SPECIAL PREFERRED STOCK

On February 14, 1997, our board of directors adopted a "poison pill" by declaring a dividend distribution of one preferred stock purchase right for each outstanding share of our common stock. Each right entitles the registered holder to purchase from us one one-hundredth of a share of junior participating cumulative preferred stock, par value \$1.00 per share, at a price of \$75.00 per

one-hundredth of a share, subject to adjustment. The description and terms of the rights are set forth in a rights agreement which we entered into with Continental Stock Transfer & Trust Company, as rights agent.

The rights are not exercisable until the distribution date, which means the date of the earlier to occur of:

- 10 business days following the time of a public announcement or notice to us that a person or group of affiliated or associated persons has acquired beneficial ownership, as defined in the rights agreement, of 20% or more of our outstanding shares of common stock; or
- 10 business days, or such later date as may be determined by our board of directors, 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 stock already owned by such person, constitutes 20% or more of our outstanding shares of common stock.

The rights will expire on March 6, 2002, unless we decided to redeem them earlier as described below.

In the event that after the stock acquisition date, we are acquired in a merger or other business combination transaction or if 50% or more of our assets, cash flow or earning power are sold or otherwise transferred, each right holder shall have the right to receive, upon the exercise thereof at the then current exercise price of the right, that number of shares of common stock of the acquiring company which at the time of such transaction would have a market value of two times the exercise price of the right. In the event that we were the surviving corporation of a merger and our common stock were changed or exchanged, each right holder will thereafter have the right to receive upon exercise that number of shares of common stock of the other party to the transaction having a market value of two times the exercise price of the right.

In the event that a person or group acquires 20% or more of our outstanding shares, otherwise than pursuant to a tender offer or exchange offer for all outstanding shares of common stock at a price and on terms which are determined to be fair and in our best interests and the best interests of our stockholders by a majority of the members of our board of directors who are not acquiring persons or representatives or nominees of or affiliated or associated with the acquiring person, each right holder, except for any acquiring person holding rights, will be able to receive upon exercise that number of shares of common stock having a market value of two times the exercise price of the right. A person or group will not be deemed to be an acquiring person if our board of directors determines that such person or group became an acquiring person inadvertently and such person or group promptly divests itself of a sufficient number of shares of common stock so that such person or group no longer has 20% or more of our outstanding shares.

Upon specified conditions, at any time prior to the earlier of 10 business days after the stock acquisition date or March 6, 2002, by a resolution of our board of directors, we may redeem the rights in whole, but not in part, at a price of \$0.01 per right.

At any time after a person acquires 20% of our outstanding shares of common stock and prior to the acquisition by that person of 50% or more of our outstanding common stock, our board of directors, with the agreement of a majority of the continuing directors, may exchange the rights, in whole or in part, for our common stock at an adjustable exchange ratio initially set at one share of common stock per right. However, rights beneficially owned by a person who acquires 20% of our outstanding shares of common stock become void.

Each share of the junior participating cumulative preferred stock purchasable upon exercise of the rights will have a minimum preferential dividend of \$10.00 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 liquidation, these preferred stockholders will be entitled to receive a minimum liquidation payment of \$100.00 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. Each share will have 100 votes, voting together with the shares of common stock. In addition, if dividends are in arrears for four consecutive quarterly payment periods, these stockholders be entitled to vote as a class to elect two members of the board of directors. In the event of any merger, consolidation or other transaction in which our common stock shares are exchanged, each share of the junior participating cumulative preferred stock will be entitled to receive 100 times the amount and type of consideration received per share of common stock. The dividend and liquidation rights of these shares and the rights of these shares relating to mergers and consolidations are protected by anti-dilution provisions.

Until a right is exercised, the right holder will have no rights as a stockholder of Alexion, including, without limitation, the right to vote or to receive dividends.

#### DELAWARE ANTI-TAKEOVER LAW

Under Section 203 of the Delaware General Corporation, certain "business combinations" between a Delaware corporation, whose stock generally is publicly traded or held of record by more than 2,000 stockholders, and an "interested stockholder" are prohibited for a three-year period following the date that such stockholder became an interested stockholder, unless:

- the corporation has elected in its certificate of incorporation or bylaws not to be governed by this Section 203. We have not made such an election;
- the business combination was approved by the board of directors of the corporation before the other party to the business combination became an interested stockholder;
- upon consummation of the transaction that made it an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the commencement of the transaction, excluding voting stock owned by directors who are also officers or held in employee stock plans in which the employees do not have a right to determine confidentially whether to tender or vote stock held by the plan; or
- the business combination was approved by the board of directors of the corporation and ratified by 66 2/3% of the voting stock which the interested stockholder did not own. The three-year prohibition does not apply to certain business combinations proposed by an interested stockholder following the announcement or notification of certain extraordinary transactions involving the corporation and a person who had not been an interested stockholder during the previous three years or who became an interested stockholder with the approval of a majority of the corporation's directors. The term "business combination" is defined generally to include mergers or consolidations between a Delaware corporation and an interested stockholder, transactions with an interested stockholder involving the assets or stock of the corporation or its majority-owned subsidiaries and transactions which increase an interested stockholder's percentage ownership of stock. The term "interested stockholder" is defined generally as a stockholder who becomes beneficial owner of 15% or more of a Delaware corporation's voting stock. Section 203 could have the effect of delaying, deferring or preventing a change in control of Alexion.



AUTHORIZED BUT UNISSUED SHARES

The authorized but unissued shares of common stock and preferred stock are available for future issuance without stockholder approval. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of authorized but unissued common stock and preferred stock could render more difficult or discourage an attempt to obtain control of our company by means of a proxy contest, tender offer, merger or otherwise.

TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar for our common stock is Continental Stock Transfer & Trust Company, 2 Broadway, New York, New York 10004.

UNDERWRITING

The underwriters named below have agreed to buy, subject to the terms of the purchase agreement, the number of shares listed opposite their names below. The underwriters are committed to purchase and pay for all of the shares if any are purchased.

UNDERWRITERS - - - - -	NUMBER OF SHARES -----
U.S. Bancorp Piper Jaffray Inc.....	
Hambrecht & Quist LLC.....	
 Total.....	

The underwriters have advised us that they propose to offer the shares to the public at \$ \_\_\_\_\_ per share. The underwriters propose to offer the shares to certain dealers at the same price less a concession of not more than \$ \_\_\_\_\_ per share. The underwriters may allow and the dealers may reallocate a concession of not more than \$ \_\_\_\_\_ per share on sales to certain other brokers and dealers. After the offering, these figures may be changed by the underwriters.

We have granted to the underwriters an option to purchase up to an additional 375,000 shares of common stock from us at the same price to the public, and with the same underwriting discount, as set forth in the table above. The underwriters may exercise this option any time during the 30-day period after the date of this prospectus, but only to cover over-allotments, if any. To the extent the underwriters exercise the option, each underwriter will become obligated, subject to certain conditions, to purchase approximately the same percentage of the additional shares as it was obligated to purchase under the purchase agreement.

The following table shows the underwriting fees to be paid to the underwriters in connection with the offering. These amounts are shown assuming both no exercise and full exercise of the over-allotment option.

	NO EXERCISE -----	FULL EXERCISE -----
Per share.....	\$	\$
Total.....	\$	\$

We have agreed to indemnify the underwriters against certain liabilities, including civil liabilities under the Securities Act, or to contribute to payments that the underwriters may be required to make in respect of those liabilities.

We and each of our directors, executive officers and certain key employees have agreed to restrictions on our ability to sell additional shares of our common stock for a period of 90 days after the date of this prospectus. We have agreed not to directly or indirectly offer for sale, sell, contract to sell, grant any option for the sale of, or otherwise issue or dispose of, any shares of common stock, options or warrants to acquire shares of common stock, or any related security or instrument, without the prior written consent of U.S. Bancorp Piper Jaffray Inc. The agreements provide exceptions for:

- sales to underwriters pursuant to the purchase agreement; and

- our sales in connection with the exercise of options granted, the granting of options to purchase up to an additional 613,822 shares under the 1992 Stock Option Plan and the granting of options to purchase shares under the 1992 Stock Option Plan for Outside Directors.

To facilitate the offering, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock during and after the offering. Specifically, the underwriters may over-allot or otherwise create a short position in the common stock for their own account by selling more shares of common stock than have been sold to them by us. The underwriters may elect to cover any such short position by purchasing shares of common stock in the open market or by exercising the over-allotment option granted to the underwriters. In addition, the underwriters may stabilize or maintain the price of the common stock by bidding for or purchasing shares of common stock in the open market and may impose penalty bids. If penalty bids are imposed, selling concessions allowed to syndicate members or other broker-dealers participating in the offering are reclaimed if shares of common stock previously distributed in the offering are repurchased, whether in connection with stabilization transactions or otherwise. The effect of these transactions may be to stabilize or maintain the market price of the common stock at a level above that which might otherwise prevail in the open market. The imposition of a penalty bid may also affect the price of the common stock to the extent that it discourages resales of the common stock. The magnitude or effect of any stabilization or other transactions is uncertain. These transactions may be effected on The Nasdaq National Market or otherwise and, if commenced, may be discontinued at any time.

In connection with the offering, some underwriters and selling group members may also engage in passive market making transactions in the common stock on The Nasdaq National Market. Passive market making consists of displaying bids on The Nasdaq National Market limited by the prices of independent market makers and effecting purchases limited by those prices in response to order flow. Rule 103 of Regulation M promulgated by the SEC limits the amount of net purchases that each passive market maker may make and the displayed size of each bid. Passive market making may stabilize the market price of the common stock at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

#### LEGAL MATTERS

Legal matters relating to the common stock have been passed upon for Alexion by Fulbright & Jaworski L.L.P., New York, New York. Legal matters in connection with the offering will be passed upon for the underwriters by Morgan, Lewis & Bockius LLP, Philadelphia, Pennsylvania.

#### EXPERTS

The audited consolidated financial statements included in this prospectus and elsewhere in the registration statement have been audited by Arthur Andersen LLP, independent public accountants, as indicated in their report with respect thereto, and are included herein in reliance upon the authority of said firm as experts in accounting and auditing in giving said reports.

#### WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission. You may read and copy any reports, statements or other information filed by us at the Commission's public reference room at Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549 and the regional offices of the Commission located at Seven World Trade Center, 13th Floor, New York, New York 10048, and 500 West Madison Street, Chicago, Illinois 60661. Copies of such material can be also obtained from the Public Reference Section of the Commission at

450 Fifth Street, N.W., Washington, D.C. 20549, and its public reference rooms in New York, New York and Chicago, Illinois, at prescribed rates. Please call the Commission at 1-800-SEC-0330 for further information on the public reference rooms. Copies of such information may also be inspected at the reading room of the library of the National Association of Securities Dealers, Inc., 1735 K Street, N.W., Washington, D.C. 20006. Our filings with the Commission are also available to the public from commercial document retrieval services and at the Commission's web site at "<http://www.sec.gov>."

We are allowed to "incorporate by reference" the information we file with the Commission (File No. 0-27756), which means that we can disclose important information to you by referring you to another document we filed with the Commission. The information incorporated by reference is an important part of this prospectus, and information that we file later with the Commission will automatically update and supersede this information. We incorporate by reference the documents listed below and any filings made with the Commission under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, after the date of this prospectus but before the end of any offering made under this prospectus:

- our annual report on Form 10-K for the fiscal year ended July 31, 1999;
- our registration statement on Form 8-A, filed on February 21, 1997; and
- our registration statement on Form 8-A, filed on February 12, 1996.

You should read the information relating to us in this prospectus together with the information in the documents incorporated by reference.

Any statement contained in a document incorporated by reference herein, unless otherwise indicated therein, speaks as of the date of the document. Statements contained in this prospectus may modify or replace statements contained in the documents incorporated by reference.

We will furnish without charge to you, upon written or oral request, a copy of any or all of the documents described above, except for exhibits to such documents, unless such exhibits are specifically incorporated by reference into such documents. Requests should be addressed to: Alexion Pharmaceuticals, Inc., 25 Science Park, New Haven, Connecticut 06511, (203) 776-1790, Attention: David W. Keiser, Executive Vice President and Chief Operating Officer. We furnish our stockholders with an annual report containing audited financial statements. In addition, we may furnish such other reports as may be authorized, from time to time, by our board of directors.

This prospectus is part of a registration statement we filed with the Commission. You should rely only on the information incorporated by reference or provided in this prospectus or any supplement. We have not authorized anyone else to provide you with different information. We will not make an offer of the shares of common stock in any state where the offer is not permitted. You should not assume that the information in this prospectus or any supplement is accurate as of any date other than the date on the front of those documents.

ALEXION PHARMACEUTICALS, INC.  
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	PAGE
	-----
Report of Independent Public Accountants.....	F-2
Consolidated Balance Sheets as of July 31, 1999 and 1998....	F-3
Consolidated Statements of Operations for the Years Ended July 31, 1999, 1998 and 1997.....	F-4
Consolidated Statements of Stockholders' Equity for the Years Ended July 31, 1999, 1998, and 1997.....	F-5
Consolidated Statements of Cash Flows for the Years Ended July 31, 1999, 1998 and 1997.....	F-6
Notes to Consolidated 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 consolidated balance sheets of Alexion Pharmaceuticals, Inc. (a Delaware corporation) and subsidiary as of July 31, 1999 and 1998, and the related consolidated statements of operations, stockholders' equity and cash flows for each of the three years in the period ended July 31, 1999. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated 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 consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Alexion Pharmaceuticals, Inc. and subsidiary as of July 31, 1999 and 1998, and the consolidated results of their operations and their cash flows for each of the three years in the period ended July 31, 1999, in conformity with generally accepted accounting principles.

/s/ ARTHUR ANDERSEN LLP

Hartford, Connecticut  
August 27, 1999

## ALEXION PHARMACEUTICALS, INC.

## CONSOLIDATED BALANCE SHEETS

(amounts in thousands)

	JULY 31,	
	1999	1998
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents.....	\$ 24,238	\$ 31,509
Marketable securities.....	4,090	5,985
Reimbursable contract costs:		
Billed.....	4,577	--
Unbilled.....	2,285	137
Prepaid expenses.....	472	209
	-----	-----
Total current assets.....	35,662	37,840
PROPERTY, PLANT, AND EQUIPMENT, net.....	7,413	2,357
SECURITY DEPOSITS AND OTHER ASSETS.....	1,299	1,888
	-----	-----
Total assets.....	\$ 44,374	\$ 42,085
	=====	=====
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Current portion of notes payable.....	\$ 368	\$ 368
Accounts payable.....	3,544	810
Accrued expenses.....	2,328	818
Deferred revenue.....	450	67
	-----	-----
Total current liabilities.....	6,690	2,063
	-----	-----
NOTES PAYABLE, less current portion included above.....	4,383	832
	-----	-----
COMMITMENTS AND CONTINGENCIES (Notes 1, 7, 9 and 12)		
STOCKHOLDERS' EQUITY:		
Preferred stock, \$.0001 par value; 5,000 shares authorized; none issued at July 31, 1999 and 1998.....	--	--
Common stock \$.0001 par value; 25,000 shares authorized; 11,304 and 11,237 shares issued at July 31, 1999 and 1998, respectively.....	1	1
Additional paid-in capital.....	80,287	79,781
Accumulated deficit.....	(46,987)	(40,592)
Treasury stock, at cost, 12 shares.....	--	--
	-----	-----
Total stockholders' equity.....	33,301	39,190
	-----	-----
Total liabilities and stockholders' equity.....	\$ 44,374	\$ 42,085
	=====	=====

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

ALEXION PHARMACEUTICALS, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

(amounts in thousands, except per share amounts)

	FOR THE YEARS ENDED JULY 31,		
	1999	1998	1997
CONTRACT RESEARCH REVENUES.....	\$18,754	\$ 5,037	\$ 3,811
OPERATING EXPENSES:			
Research and development.....	23,710	12,323	9,079
General and administrative.....	2,953	2,666	2,827
Total operating expenses.....	26,663	14,989	11,906
OPERATING LOSS.....	(7,909)	(9,952)	(8,095)
OTHER INCOME, net.....	1,514	2,087	843
Net loss.....	(6,395)	(7,865)	(7,252)
PREFERRED STOCK DIVIDENDS.....	--	(900)	--
NET LOSS APPLICABLE TO COMMON SHAREHOLDERS.....	\$ (6,395)	\$ (8,765)	\$ (7,252)
NET LOSS PER COMMON SHARE--			
BASIC AND DILUTED (NOTE 2).....	\$ (0.57)	\$ (0.87)	\$ (0.97)
SHARES USED IN COMPUTING			
NET LOSS PER COMMON SHARE.....	11,265	10,056	7,451

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



ALEXION PHARMACEUTICALS, INC.  
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY  
(amounts in thousands)

	CONVERTIBLE PREFERRED STOCK		COMMON STOCK		ADDITIONAL PAID-IN CAPITAL	ACCUMULATED DEFICIT	TREASURY STOCK, AT COST	
	SHARES	AMOUNT	SHARES	AMOUNT			SHARES	AMOUNT
BALANCE, July 31, 1996.....	--	\$ --	7,335	\$ 1	\$42,859	\$ (24,575)	12	\$ --
Issuance of common stock, net of issuance costs of \$814.....	--	--	1,450	--	10,424	--	--	--
Issuance of common stock from exercise of warrants.....	--	--	38	--	286	--	--	--
Issuance of common stock from exercise of stock options.....	--	--	35	--	83	--	--	--
Net change in unrealized gains on marketable securities.....	--	--	--	--	20	--	--	--
Net loss.....	--	--	--	--	--	(7,252)	--	--
<b>BALANCE, July 31, 1997.....</b>	<b>--</b>	<b>--</b>	<b>8,858</b>	<b>1</b>	<b>53,672</b>	<b>(31,827)</b>	<b>12</b>	<b>--</b>
Issuance of Series B convertible preferred stock, net of issuance costs of \$493.....	400,000	--	--	--	9,507	--	--	--
Issuance of common stock in payment of preferred stock dividend.....	--	--	71	--	900	(900)	--	--
Conversion of Series B convertible preferred stock into common stock.....	(400,000)	--	936	--	--	--	--	--
Issuance of common stock, net of issuance costs of \$49.....	--	--	837	--	11,779	--	--	--
Issuance of common stock from exercise of warrants.....	--	--	513	--	3,858	--	--	--
Issuance of common stock from exercise of stock options.....	--	--	22	--	67	--	--	--
Net change in unrealized gains on marketable securities.....	--	--	--	--	(2)	--	--	--
Net loss.....	--	--	--	--	--	(7,865)	--	--
<b>BALANCE, July 31, 1998.....</b>	<b>--</b>	<b>--</b>	<b>11,237</b>	<b>1</b>	<b>79,781</b>	<b>(40,592)</b>	<b>12</b>	<b>--</b>
Issuance of common stock from exercise of stock options.....	--	--	67	--	383	--	--	--
Compensation expense, related to grant of stock options.....	--	--	--	--	132	--	--	--
Net change in unrealized gains on marketable securities.....	--	--	--	--	(9)	--	--	--
Net loss.....	--	--	--	--	--	(6,395)	--	--
<b>BALANCE, July 31, 1999.....</b>	<b>--</b>	<b>\$ --</b>	<b>11,304</b>	<b>\$ 1</b>	<b>\$80,287</b>	<b>\$ (46,987)</b>	<b>12</b>	<b>\$ --</b>

TOTAL  
STOCKHOLDERS'  
EQUITY

BALANCE, July 31, 1996.....	\$18,285
Issuance of common stock, net of issuance costs of \$814.....	10,424
Issuance of common stock from exercise of warrants.....	286
Issuance of common stock from exercise of stock options.....	83
Net change in unrealized gains on marketable securities.....	20
Net loss.....	(7,252)
<b>BALANCE, July 31, 1997.....</b>	<b>21,846</b>
Issuance of Series B convertible preferred stock, net of issuance costs of \$493.....	9,507
Issuance of common stock in payment of preferred stock dividend.....	--
Conversion of Series B convertible preferred stock into common stock.....	--
Issuance of common stock, net of issuance costs of \$49.....	11,779
Issuance of common stock from exercise of warrants.....	3,858
Issuance of common stock from exercise of stock options.....	67
Net change in unrealized gains on	

marketable securities.....	(2)
Net loss.....	(7,865)
	-----
BALANCE, July 31, 1998.....	39,190
Issuance of common stock from exercise of stock options.....	383
Compensation expense, related to grant of stock options.....	132
Net change in unrealized gains on marketable securities.....	(9)
Net loss.....	(6,395)
	-----
BALANCE, July 31, 1999.....	\$33,301
	=====

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

ALEXION PHARMACEUTICALS, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(amounts in thousands)

	FOR THE YEARS ENDED JULY 31,		
	1999	1998	1997
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>			
Net loss.....	\$ (6,395)	\$ (7,865)	\$ (7,252)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization.....	889	598	698
Compensation expense related to grant of stock options.....	132	--	--
Change in assets and liabilities--			
Reimbursable contract costs.....	(6,725)	(137)	--
Prepaid expenses.....	(263)	23	235
Accounts payable.....	2,734	82	447
Accrued expenses.....	1,510	(384)	801
Deferred revenue.....	383	(279)	(653)
Net cash used in operating activities.....	(7,735)	(7,962)	(5,724)
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>			
Proceeds from marketable securities, net.....	1,895	20	3,119
Purchases of property, plant, and equipment.....	(1,912)	(2,057)	(749)
Net cash (used in) provided by investing activities.....	(17)	(2,037)	2,370
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>			
Net proceeds from issuance of preferred and common stock.....	383	25,211	10,793
Repayments of capital lease obligations.....	--	(8)	(29)
Borrowings under notes payable.....	--	1,200	--
Repayments of notes payable.....	(369)	(130)	(321)
Security deposits and other.....	467	(1,508)	163
Net cash provided by financing activities.....	481	24,765	10,606
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS.....	(7,271)	14,766	7,252
CASH AND CASH EQUIVALENTS, beginning of period.....	31,509	16,743	9,491
CASH AND CASH EQUIVALENTS, end of period.....	\$ 24,238	\$ 31,509	\$ 16,743
<b>SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:</b>			
Cash paid for interest expense	\$ 188	\$ 42	\$ 47
<b>SUPPLEMENTAL DISCLOSURE OF NONCASH FINANCING ACTIVITIES:</b>			
Fixed assets acquired pursuant to seller financing.....	\$ 3,920	\$ --	\$ --
Preferred stock dividends.....	\$ --	\$ 900	\$ --

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. ORGANIZATION AND OPERATIONS:

Alexion Pharmaceuticals, Inc. ("Alexion" or the "Company") was organized in 1992 and is a company engaged in the development of proprietary products for the treatment of cardiovascular, autoimmune and neurologic diseases and disorders. The Company is currently conducting Phase II clinical trials for its two lead C5 Inhibitor product candidates, 5G1.1-SC and 5G1.1. The Company is also developing Apogen immunotherapeutic products affecting disease-causing T-cells. In addition, the Company is developing therapies to permit transplantation of cells from other species into humans known as xenotransplantation.

The Company has incurred consolidated losses since inception and has made no product sales to date.

The Company will continue to need additional financing to obtain regulatory approvals for its product candidates, fund operating losses, and, if deemed appropriate, establish manufacturing, sales, marketing and distribution capabilities. In addition, the Company operates in an environment of rapid changes in technology, FDA guidelines and regulations, healthcare regulations and competition from pharmaceutical and biotechnology companies and is dependent upon the services of its employees and other third parties.

The Company expects to incur substantial expenditures in the foreseeable future for the research and development and commercialization of its products. The Company will seek to raise necessary funds through public or private equity or debt financings, bank loans, collaborative or other arrangements with corporate sources, or through other sources of financing.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

PRINCIPLES OF CONSOLIDATION--

The accompanying consolidated financial statements include Alexion Pharmaceuticals, Inc. and its wholly-owned subsidiary Columbus Farming Corporation ("Columbus"). Columbus was formed on February 9, 1999 to acquire certain manufacturing assets from United States Surgical Corporation ("US Surgical") (See Notes 3 and 6). All significant inter-company balances and transactions have been eliminated in consolidation.

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

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)

component of additional paid-in capital. At July 31, 1999, the Company's marketable securities had a maximum maturity of less than two years with an average of approximately six months. The following is a summary of marketable securities at July 31, 1999 and 1998 (dollars in thousands):

	AMORTIZED COST	UNREALIZED GAINS (LOSSES)	FAIR VALUE
	-----	-----	-----
Federal agency obligations.....	\$2,088	\$ (9)	\$2,079
Corporate bonds.....	2,006	5	2,011
	-----	---	-----
Total marketable securities at July 31, 1999.....	\$4,094	\$ (4)	\$4,090
	=====	===	=====
U.S. government obligations.....	\$ 500	\$--	\$ 500
Federal agency obligations.....	2,000	--	2,000
Corporate bonds.....	3,480	5	3,485
	-----	---	-----
Total marketable securities at July 31, 1998	\$5,980	\$ 5	\$5,985
	=====	===	=====

## PROPERTY, PLANT, AND EQUIPMENT--

Property, plant, and 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 estimated useful lives of the assets (see Note 3). Maintenance and repairs are charged to expense when incurred.

ASSET	ESTIMATED USEFUL LIFE
- - - - -	-----
Building and building improvements.....	15 years
Laboratory equipment.....	5 years
Office equipment.....	3 years
Furniture.....	3 years

## 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. The Company has reviewed its long-lived assets and determined that no impairments exist.

## REVENUE RECOGNITION--

Contract research revenues recorded by the Company consist of research and development support payments, license fees, and milestone payments under collaborations with third parties and amounts received under various government grants.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)

Research and development support revenues are recognized as the related work and expenses are incurred under the terms of the contracts for development activities. Revenues derived from the achievement of milestones are recognized when the milestone is achieved. Non-refundable license fees received in exchange for specific rights to the Company's technologies, research, potential products and markets are recognized as revenues as earned in accordance with the terms of the contracts.

Unbilled reimbursable contract costs as shown on the accompanying consolidated balance sheets represent reimbursable costs incurred in connection with research contracts which have not yet been billed. The Company bills these costs and recognizes the costs and related revenues in accordance with the terms of the contracts.

Deferred revenue results from cash received in advance of revenue recognition under research and development contracts (see Note 8).

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.

COMPREHENSIVE INCOME--

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 (loss) 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 (loss)").

The impact of adoption of this statement did not have a significant effect on the Company's financial position and results of operations, as there was no significant difference in comprehensive income (loss) and net loss represented a gain (loss) on marketable securities of \$(9,000), \$(2,000), and \$20,000 for the years ended July 31, 1999, 1998 and 1997, respectively.

NET LOSS PER COMMON SHARE--

The Company computes and presents net loss per common share in accordance with SFAS No. 128, "Earnings Per Share." There is no difference in basic and diluted net loss per common share as the effect

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)

of stock options and warrants is anti-dilutive for all periods presented. These outstanding stock options and warrants entitled holders to purchase 2,568,587, 1,947,986, and 2,410,953 shares of common stock at July 31, 1999, 1998 and 1997, respectively.

## 3. PROPERTY, PLANT, AND EQUIPMENT:

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

	JULY 31,	
	1999	1998
Land.....	\$ 364	\$ --
Building and building improvements.....	3,080	--
Laboratory equipment.....	6,013	4,523
Office equipment.....	648	352
Furniture.....	695	104
Equipment under capital leases.....	--	378
	-----	-----
	10,800	5,357
Less--Accumulated depreciation and amortization.....	(3,387)	(3,000)
	-----	-----
	\$ 7,413	\$ 2,357
	=====	=====

During 1999, the Company acquired land, building, and additional laboratory equipment at a total cost of approximately \$3.9 million financed with a note payable to US Surgical (see Note 6).

## 4. SECURITY DEPOSITS AND OTHER:

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

	JULY 31,	
	1999	1998
Restricted cash held as collateral for note payable (see Note 6).....	\$ 955	\$1,500
Other.....	344	388
	-----	-----
	\$1,299	\$1,888
	=====	=====

ALEXION PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

5. ACCRUED EXPENSES:

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

	JULY 31,	
	1999	1998
Research and development expenses.....	\$1,333	\$ 159
Payroll and employee benefits.....	617	477
Professional fees.....	91	77
Other.....	287	105
	-----	-----
	\$2,328	\$ 818
	=====	=====

6. NOTES PAYABLE:

A summary of notes payable is as follows (dollars in thousands):

	1999	1998
	-----	-----
Term loan payable to a bank requiring quarterly principal payments of \$92 payable through August 2001 bearing interest at a variable rate which is repriced quarterly. The rate as of July 31, 1999 was 7.1%. The term loan agreement requires the Company to maintain a restricted cash balance equal to 115% of the outstanding loan balance plus accrued interest in an interest bearing account as collateral for the note.....	\$ 831	\$1,200
Term note payable to US Surgical bearing interest at 6% per annum, payable quarterly. The principal balance under the note matures in May 2005. The note payable is secured by certain manufacturing assets of Columbus.....	3,920	--
	-----	-----
Less--Current portion.....	4,751	1,200
	368	368
	-----	-----
Total long--term.....	\$4,383	\$ 832
	=====	=====

Future repayments of the notes payable are scheduled as follows (dollars in thousands):

YEAR ENDING JULY 31,  
-----

2000.....	\$ 368
2001.....	463
2005.....	3,920
	-----
	\$4,751
	=====



## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 7. LICENSE AND RESEARCH &amp; 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 over 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, 1999, for each of the next five years are as follows (dollars in thousands):

YEAR ENDING JULY 31, -----	LICENSE AGREEMENTS -----	RESEARCH DEVELOPMENT AGREEMENTS -----
2000.....	\$296	\$50
2001.....	296	50
2002.....	389	50
2003.....	389	50
2004.....	274	--

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.

## 8. CONTRACT RESEARCH REVENUES:

During the three years ended July 31, 1999, the Company recorded contract research revenues from the Commerce Department's National Institute of Standards and Technology (NIST) and National Institutes of Health (NIH).

In July 1995, the Company entered into a collaborative research and development agreement in connection with its xenotransplantation program with US Surgical. In September 1997, the Company modified its 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. In February 1999, as part of the termination of this agreement, the Company purchased certain manufacturing assets and

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 8. CONTRACT RESEARCH REVENUES: (CONTINUED)

effected the return of all technology rights of its xenotransplantation program from US Surgical. The Company financed the asset purchase with a \$3.9 million note payable (see Note 6).

In December 1996, the Company entered into a license and collaborative research agreement with Genetic Therapy Inc. ("GTI/Novartis"), a subsidiary of Novartis, Inc., relating to the Company's gene transfer technology. In October 1998, in view of Alexion's increased focus on the advanced clinical development of its anti-inflammatory drug candidates and GTI/Novartis' announced restructuring and reorganization, the Company and GTI/Novartis agreed to discontinue the collaborative gene therapy program.

In August 1995, the Company was awarded a three-year agreement, for approximately \$2 million, from NIST to fund a xenotransplantation project. In November 1997, the Company and US Surgical were awarded a three-year, \$2 million cooperative agreement from NIST to fund a joint xenotransplantation project. This agreement was modified into a single entity agreement in February 1999. In October 1998, the Company was awarded another three-year \$2 million agreement from NIST to fund a xenotransplantation project.

In January 1999, the Company and Procter & Gamble Pharmaceuticals Inc. ("P&G") entered into an exclusive collaboration to develop and commercialize 5G1.1-SC, one of the Company's lead product candidates. Under this collaboration, the Company will initially pursue the development of 5G1.1-SC for the treatment of inflammation caused by cardiopulmonary bypass surgery, heart attack, and angioplasty. P&G has agreed to fund all clinical development and manufacturing costs relating to 5G1.1-SC for these indications. Additionally, P&G has agreed to pay the Company up to \$95 million in payments, which include a non-refundable upfront license fee, milestone payments, and research and development support payments. The Company will also receive royalties on worldwide sales of 5G1.1-SC, if any, for all indications. The Company also has a preferred position relative to third-party manufacturers to manufacture 5G1.1-SC worldwide. The Company shares co-promotion rights with P&G to sell, market and distribute 5G1.1-SC in the United States, and has granted P&G the exclusive rights to sell, market and distribute 5G1.1-SC outside of the United States. Through July 31, 1999, the Company recorded revenues of \$17.8 million from P&G, including receiving a non-refundable upfront license fee of \$10 million and \$7.8 million for research and development support expenses.

A summary of revenues generated from contract research collaboration and grant awards is as follows for the years ended July 31, (dollars in thousands):

COLLABORATION/GRANT AWARDS	1999	1998	1997
P&G.....	\$17,753	\$ --	\$ --
NIST and NIH.....	834	857	924
US Surgical.....	--	3,780	1,804
GTI/Novartis.....	167	400	1,083
	-----	-----	-----
	\$18,754	\$5,037	\$3,811
	=====	=====	=====

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 9. 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 \$827,000 as of July 31, 1999. These individuals may also receive discretionary bonus awards, as determined by the Board of Directors.

As of July 31, 1999, the Company leases its administrative and research & development facilities under three operating leases which expired in December 1997, June 1998, and March 1999. The Company is currently continuing the leases on a month-to-month basis while discussions for new lease arrangements continue. The Company believes it will reach an agreement regarding such facilities on commercially adequate terms.

Lease expense for the Company's facilities was \$420,000, \$415,000 and \$216,000 for the years ended July 31, 1999, 1998, and 1997, respectively.

Future minimum annual rental payments as of July 31, 1999, under other noncancellable operating leases (primarily for equipment) are approximately \$36,000, \$34,000, \$30,000, \$30,000, and \$30,000 for the five years ended July 31, 2004, respectively.

## 10. COMMON STOCK AND PREFERRED 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., a wholly-owned subsidiary of BB Biotech AG. 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. Also, in March 1998, Biotech Target S.A. purchased an additional 670,000 shares of common stock for aggregate consideration of approximately \$8.8 million.

In September 1997, the Company sold 166,945 shares of its common stock to US 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 US Surgical.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 11. STOCK OPTIONS AND WARRANTS:

## STOCK OPTIONS--

Under the Company's 1992 Stock Option Plan, as amended, incentive and nonqualified stock options may be granted for up to a maximum of 3.1 million shares of common stock to directors, officers, key employees and consultants of the Company. Under the Company's 1992 Stock Option Plan for Outside Directors, as amended, the Company has registered an additional 200,000 shares of common stock for issuance upon exercise of options granted under the plan. 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.

Statement of Financial Accounting Standard No. 123, Accounting for Stock-Based Compensation (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:

	1999	1998	1997
	-----	-----	-----
Risk free interest rate.....	5.00%	5.25%	6.25%
Expected dividend yield.....	0%	0%	0%
Expected lives.....	5 years	5 years	5 years
Expected volatility.....	65%	61%	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):

	1999	1998	1997
	-----	-----	-----
Net loss:			
As reported.....	\$(6,395)	\$(8,765)	\$(7,252)
Pro forma.....	(8,419)	(9,958)	(7,815)
Net loss per common share:			
As reported.....	\$ (0.57)	\$ (0.87)	\$ (0.97)
Pro forma.....	(0.74)	(0.99)	(1.05)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

11. STOCK OPTIONS AND WARRANTS: (CONTINUED)

A summary of the status of the Company's stock option plans at July 31, 1999, 1998 and 1997 and changes during the years then ended is presented in the table and narrative below:

	1999		1998		1997	
	OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE	OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE	OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE
Outstanding at August 1.....	1,727,986	\$7.40	1,484,284	\$ 6.63	1,207,334	\$ 5.46
Granted.....	780,750	9.64	279,750	\$11.31	337,250	\$10.37
Exercised.....	(66,587)	5.75	(21,864)	\$ 3.16	(34,937)	\$ 2.38
Cancelled.....	(93,562)	9.73	(14,184)	\$11.29	(25,363)	\$ 6.19
Outstanding at July 31.....	2,348,587	\$8.10	1,727,986	\$ 7.40	1,484,284	\$ 6.63
Options exercisable at July 31.....	1,238,398	\$6.46	883,063	\$ 5.73	574,690	\$ 4.98
Weighted-average fair value of options granted during the year.....		\$6.52		\$ 6.42		\$ 5.40

During fiscal 1999, options to purchase 513,500 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 \$9.98 per share. The weighted average fair value of these options at the date of grant was \$5.89 per option. In addition, options to purchase 267,250 shares of common stock were granted subject to shareholders' approving an increase in total shares available to be granted under the plan. These options were granted at an exercise price of \$9.00 per share which was equal to the fair value of the common stock at the date of grant. The exercise price of these options was less than the fair value of the stock at the date of shareholder approval. Accordingly, the Company is recording compensation expense based upon this difference over the vesting period associated with these options. Compensation expense associated with these options was \$132,000 for the year ended July 31, 1999. Aggregate compensation expense of approximately \$600,000 associated with these option grants is expected to be recognized over the next three years. The weighted average fair value of these options at the date of shareholder approval was \$7.73 per option.

The following table presents weighted average price and life information about significant option groups outstanding at July 31, 1999:

RANGE OF EXERCISE PRICES	NUMBER OUTSTANDING	WEIGHTED AVERAGE REMAINING CONTRACTUAL LIFE (YRS)	WEIGHTED AVERAGE EXERCISE PRICE	NUMBER EXERCISABLE	WEIGHTED AVERAGE EXERCISE PRICE
\$2.37-\$2.50	555,448	5.4	\$ 2.38	536,698	\$ 2.38
\$2.51-\$8.24	166,000	3.5	7.47	152,250	7.54
\$8.25-\$10.50	1,359,839	8.4	9.69	512,552	9.95
\$10.51-\$13.25	267,300	8.7	12.25	36,898	12.87
	2,348,587	7.4	\$ 8.10	1,238,398	\$ 6.46

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 11. STOCK OPTIONS AND WARRANTS: (CONTINUED)

## WARRANTS--

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 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, 1999.

## 12. 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 \$75.00, 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 \$0.01 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 \$10.00 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.

## 13. 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 1999. Effective January 1998, Company matching contributions of \$0.50 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 \$85,000, \$48,000 and \$31,000 for the years ended July 31, 1999, 1998 and 1997, respectively.

## 14. INCOME TAXES:

At July 31, 1999, the Company has available for federal tax reporting purposes, net operating loss carryforwards of approximately \$44.1 million which expire through 2019. The Company also has research and development credit carryovers of approximately \$2.2 million which begin to expire commencing in fiscal 2008. The Tax Reform Act of 1986 contains certain provisions that may limit the

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

## 14. INCOME TAXES: (CONTINUED)

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. Accordingly there can be no assurance that the Company's ability to utilize its existing net operating loss and tax credit carryforwards in future periods will not be limited as a result of the effect of changes in ownership in excess of 50% over a three-year period.

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.

The components of deferred income taxes as of July 31, 1999 are as follows (dollars in thousands):

Deferred tax assets:	
Net operating loss carryforwards.....	\$16,801
Tax credit carryforwards.....	2,218
Other.....	144
	-----
Total deferred tax assets.....	19,163
Less: Valuation allowance for deferred tax assets.....	19,163
	-----
Net deferred tax assets.....	\$ --
	=====

The Company has not yet achieved profitable operations. Accordingly, management believes the tax benefits as of July 31, 1999 do not satisfy the realization criteria set forth in SFAS No. 109 and has recorded a valuation allowance for the entire deferred tax asset.

2,500,000 SHARES

ALEXION PHARMACEUTICALS, INC.  
COMMON STOCK

[LOGO]

-----  
PROSPECTUS  
-----

U.S. BANCORP PIPER JAFFRAY  
HAMBRECHT & QUIST

OCTOBER , 1999



PART II

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth Alexion Pharmaceuticals, Inc. (the "Company") estimates (other than the SEC registration fee, NASD filing fee and Nasdaq listing fee) of the expenses in connection with the issuance and distribution of the shares of common stock being registered.

SEC registration fee.....	\$ 10,541.00
NASD filing fee.....	\$ 4,291.41
Nasdaq listing fee.....	\$ 17,500.00
Legal fees and expenses.....	\$120,000.00
Accounting fees and expenses.....	\$ 50,000.00
Printing expenses.....	\$ 75,000.00
Miscellaneous expenses.....	\$ 97,667.59
	-----
Total:.....	\$375,000.00
	=====

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Section 145 of the Delaware General Corporation Law (the "DGCL") empowers a Delaware corporation to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation) by reason of the fact that such person is or was a director, officer, employee or agent of such corporation, or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation or enterprise. A corporation may, in advance of the final disposition of any civil, criminal, administrative or investigative action, suit or proceeding, pay the expenses (including attorneys' fees) incurred by any officer, director, employee or agent in defending such action, provided that the director or officer undertakes to repay such amount if it shall ultimately be determined that he is not entitled to be indemnified by the corporation. A corporation may indemnify such person against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful.

A Delaware corporation may indemnify officers and directors in an action by or in the right of the corporation to procure a judgment in its favor under the same conditions, except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him against the expenses (including attorneys' fees) which he actually and reasonably incurred in connection therewith. The indemnification provided is not deemed to be exclusive of any other rights to which an officer or director may be entitled under any corporation's by-law, agreement, vote or otherwise.

In accordance with Section 145 of the DGCL, Section EIGHTH of the Company's Certificate of Incorporation, as amended (the "Certificate") provides that the Company shall indemnify each person who is or was a director, officer, employee or agent of the Company (including the heirs, executors, administrators or estate of such person) or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, to the fullest extent permitted. The indemnification provided by the Certificate shall not be

deemed exclusive of any other rights to which any of those seeking indemnification or advancement of expenses may be entitled under any by-law, agreement, vote of shareholders or disinterested directors or otherwise, both as to action in his official capacity and as to action in another capacity while holding such office, and shall continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person. Expenses (including attorneys' fees) incurred in defending a civil, criminal, administrative or investigative action, suit or proceeding shall be paid by the Company in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of the indemnified person to repay such amount if it shall ultimately be determined that he is not entitled to be indemnified by the Company. Section NINTH of the Certificate provides that a director of the Company shall not be personally liable to the Company or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the Company or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit.

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a) Exhibits.

1.1 Form of Underwriting Agreement.\*

5.1 Opinion of Fulbright & Jaworski L.L.P. regarding legality.\*

23.1 Consent of Fulbright & Jaworski L.L.P. (included in Exhibit 5).\*

23.2 Consent of Arthur Andersen LLP, Independent Auditors.

24.1 Power of Attorney (included on signature page).

\* To be filed by amendment.

(b) Financial Statement Schedules.

None.

ITEM 17. UNDERTAKINGS.

(a) The undersigned Registrant hereby undertakes:

- (1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial BONA FIDE offering thereof.

- (b) The undersigned registrant hereby undertakes to deliver or cause to be delivered with the prospectus, to each person to whom the prospectus is sent or given, the latest annual report, to security holders that is incorporated by reference in the prospectus and furnished pursuant to and meeting the requirements of Rule 14a-3 or Rule 14c-3 under the Securities Exchange Act of 1934; and, where interim financial information required to be presented by Article 3 of Regulation S-X is not set forth in the prospectus, to deliver, or cause to be delivered to each person to whom the prospectus is sent or given, the latest quarterly report that is specifically incorporated by reference in the prospectus to provide such interim financial information.
- (c) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (d) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions described under Item 15 above, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

PURSUANT TO THE REQUIREMENTS OF THE SECURITIES ACT OF 1933, AS AMENDED, THE REGISTRANT HAS DULY CAUSED THIS AMENDMENT NO. 1 TO THE REGISTRATION STATEMENT TO BE SIGNED ON ITS BEHALF BY THE UNDERSIGNED, THEREUNTO DULY AUTHORIZED, IN THE CITY OF NEW HAVEN AND STATE OF CONNECTICUT ON THE 27TH DAY OF OCTOBER, 1999.

ALEXION PHARMACEUTICALS, INC.

By: /s/ LEONARD BELL  
-----  
Leonard Bell, M.D.  
PRESIDENT, CHIEF EXECUTIVE OFFICER,  
SECRETARY AND TREASURER

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each individual whose signature appears below constitutes and appoints LEONARD BELL, M.D. and DAVID W. KEISER, or either of them, his true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission, granting said attorney-in-fact and agent, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Amendment No. 1 to 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 27, 1999
/s/ DAVID W. KEISER ----- David W. Keiser	Executive Vice President and Chief Operating Officer (principal financial officer)	October 27, 1999
* ----- Barry P. Luke	Vice President of Finance and Administration (principal accounting officer)	October 27, 1999



EXHIBIT INDEX

EXHIBIT  
NUMBER

EXHIBIT

EXHIBIT NUMBER	EXHIBIT
1.1	Form of Underwriting Agreement.*
5.1	Opinion of Fulbright & Jaworski L.L.P.*
23.1	Consent of Fulbright & Jaworski L.L.P. (included in Exhibit 5.1).*
23.2	Consent of Arthur Andersen LLP, Independent Auditors.
24.1	Power of Attorney (included in signature page).

\* To be filed by amendment.

CONSENT OF INDEPENDENT PUBLIC ACCOUNTANTS

As independent public accountants, we hereby consent to the use of our report included in this registration statement and to the incorporation by reference in this registration statement of our report dated August 27, 1999 included in Alexion Pharmaceuticals, Inc.'s Form 10-K for the year ended July 31, 1999 and to all references to our Firm included in this registration statement.

/s/ ARTHUR ANDERSEN LLP

Hartford, Connecticut  
October 27, 1999