SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

ALEXION PHARMACEUTICALS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of Incorporation or Organization)

13-3648318

(I.R.S. Employer Identification Number)

352 Knotter Drive Cheshire, Connecticut 06410 (203) 272-2596 (Address of Principal Executive Offices)

Alexion Pharmaceuticals, Inc. 2000 Stock Option Plan Alexion Pharmaceuticals, Inc. 1992 Stock Option Plan for Outside Directors (Full Title of the Plan)

Thomas I.H. Dubin
Vice President and General Counsel
Alexion Pharmaceuticals, Inc.
352 Knotter Drive
Cheshire, Connecticut 06410
(203) 272-2596

(Name, Address 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 10103-3198 (212) 318-3000

CALCULATION OF REGISTRATION FEE

Title Of Securities To Be Registered	Amount To Be Registered (1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$.0001 par value per share(2)	256,117	\$10.74(3)	\$2,750,697	\$222.53
Common Stock, \$.0001 par value per share(4)	643,883	\$16.81(5)	\$10,823,673	\$875.64
Common Stock, \$.0001 par value per share(6)	350,000	\$16.81(5)	\$5,883,500	\$475.98
Total	1,250,000		\$19,457,870	\$1,574.15

- (1) In addition, pursuant to Rule 416(c) under the Securities Act of 1933, this registration statement also covers an indeterminate amount of interests to be offered or sold pursuant to the employee benefit plans described herein.
- (2) Represents the number of shares of common stock under this registration statement that may be issued upon the exercise of options previously granted under the Alexion Pharmaceuticals, Inc. 2000 Stock Option Plan, as amended (and not previously registered).
- (3) The price is estimated in accordance with Rule 457(h)(1) under the Securities Act of 1933, as amended, solely for the purpose of calculating the registration fee. Such computation is based on the weighted average exercise price of \$10.74 per share with respect to outstanding options to purchase an aggregate of 256,117 shares of common stock granted under the Alexion Pharmaceuticals, Inc. 2000 Stock Option Plan.
- (4) Represents the number of shares of common stock under this registration statement that may be issued upon the exercise of options to be granted under the Alexion Pharmaceuticals, Inc. 2000 Stock Option Plan, as amended (and not previously registered).
- (5) The price is estimated in accordance with Rule 457(h)(1) under the Securities Act of 1933, as amended, solely for the purpose of calculating the registration fee. Such computation is based on the average of the high and low prices of the common stock of Alexion Pharmaceuticals, Inc. as reported on the Nasdaq National Market on July 1, 2003 with respect to 643,883 shares available for issuance upon the exercise of options to be granted under the Alexion Pharmaceuticals, Inc. 2002 Stock Option Plan, as amended.
- (6) Represents the number of shares of common stock under this registration statement that may be issued upon the exercise of options to be granted under the Alexion Pharmaceuticals, Inc. 1992 Stock Option Plan for Outside Directors, as amended (and not previously registered).

EXPLANATORY NOTE

This Registration Statement is filed pursuant to General Instruction E to Form S-8 in order to register: (i) 900,000 additional shares of common stock \$.0001 par value per share (the "Common Stock"), of Alexion Pharmaceuticals, Inc. (the "Registrant"), for issuance pursuant to the Registrant's 2000 Stock Option Plan (the "2000 Plan") which are in addition to 1,500,000 shares previously registered in a registration statement on Form S-8 (Registration No. 333-69478) filed with the Securities and Exchange Commission pursuant to the 2000 Plan and (ii) 350,000 additional shares of Common Stock for issuance pursuant to the Registrant's 1992 Stock Option Plan for Outside Directors (the "Director Plan") which are in addition to 3,300,000 shares previously registered on registration statements on Form S-8 (Registration Nos. 333-24863, 333-71879 and 333-71985) filed with the Securities and Exchange Commission pursuant to the Director Plan. The contents of these previously filed registration statements are hereby incorporated by reference in this Registration Statement.

This Form S-8 includes a Reoffer Prospectus prepared in accordance with Part I of Form S-3 under the Securities Act. The Reoffer Prospectus may be utilized in the future for reofferings and resales of shares of Common Stock which may be acquired pursuant to the 2000 Plan by selling stockholders who may be deemed an "affiliate" (as such term is defined in Rule 405 under the Securities Act) of the Registrant.

PROSPECTUS FOR RESALES

The material which follows constitutes a Reoffer Prospectus, prepared pursuant to General Instruction C to Form S-8 in accordance with the requirements of Part I of Form S-3, to be used in connection with resales of "control securities" and "restricted securities" which may be acquired upon the exercise of share options granted under the 2000 Plan.

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PROSPECTUS

shares

ALEXION PHARMACEUTICALS, INC.

COMMON STOCK

(par value \$.0001 per share)

UNDER THE ALEXION PHARMACEUTICALS, INC.

2000 STOCK OPTION PLAN

This Prospectus relates to the reoffer and resale of up to shares of common stock of Alexion Pharmaceuticals, Inc. ("Alexion") by certain selling
stockholders who may be deemed to be affiliates of Alexion (the "Selling Stockholders"). These Selling Stockholders [have acquired or] may acquire these shares
(the "Shares") upon the exercise of stock options. The stock options will be granted pursuant to the Alexion Pharmaceuticals, Inc. 2000 Stock Option Plan (the
"2000 Plan"). This prospectus also relates to certain underlying options that have not been granted as of this date. If and when such options are granted to persons
required to use this Prospectus to reoffer and resell the shares underlying such options, we will distribute a prospectus supplement. The Shares are being reoffered
and resold for the account of the Selling Stockholders and we will not receive any of the proceeds from the resale of the Shares. The Selling Stockholders have
advised us that the resale of their Shares may be effected from time to time in one or more transactions on the Nasdaq National Market, in negotiated transactions
or otherwise, at market prices prevailing at the time of the sale or at prices otherwise negotiated. See "Plan of Distribution." We will bear all expenses in
connection with the preparation of this Prospectus.

Our common stock is traded on the Nasdaq National Market under the symbol "ALXN." On______, 200___, the closing price for our common stock, as reported by the Nasdaq National Market, was \$______.

Our principal executive offices are located at 352 Knotter Drive, Cheshire, Connecticut 06410, and our telephone number there is (203) 272-2596.

THE COMMON STOCK OFFERED HEREBY INVOLVES A HIGH DEGREE OF RISK. SEE "RISK FACTORS" BEGINNING ON PAGE 5.

From time to time, the Selling Stockholders may sell the Shares in transactions on The Nasdaq National Market, in negotiated transactions, through the writing of options on the Shares, or a combination of such methods of sale at fixed prices which may be changed, at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices. The Selling Stockholders may effect such transactions by selling the Shares to or through broker-dealers, and such broker-dealers may receive compensation in the form of discounts, concessions or commissions from the holders or the purchasers of the Shares for whom such broker-dealers may act as agent or to whom they sell as principal, or both (which compensation to a particular broker-dealer might be in excess of customary commissions). See "Plan of Distribution."

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

Brokers and dealers will be reimbursed by Alexion for their out-of-pocket expenses incurred in connection with the forwarding of this Prospectus. All expenses of the registration of securities covered by this Prospectus are to be borne by Alexion, except that the Selling Stockholders will pay underwriting discounts, selling commissions, and fees and the expenses, if any, of counsel or other advisers to the Selling Stockholders.

The date of this Prospectus is______, 200___

AVAILABLE INFORMATION

Alexion is subject to the informational requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and, in accordance therewith, files periodic reports, proxy statements and other information with the Securities and Exchange Commission (the "Commission"). Such reports, proxy statements and other information filed with the Commission may be inspected and copied at the Public Reference Section of the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549. Copies of such material can be obtained from the Public Reference Section of the Commission at prescribed rates by writing to the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549. The Commission maintains a World Wide Web site on the Internet at http://www.sec.gov that contains reports, proxy and information statements and other information regarding registrants that file electronically with the Commission. Alexion maintains a World Wide Web site on the Internet at http://www.alxn.com that contains an archive of its press releases.

This Prospectus constitutes a part of a Registration Statement on Form S-8 (herein, together with all amendments and exhibits, referred to as the "Registration Statement") filed by Alexion with the Commission under the Securities Act. This Prospectus does not contain all of the information set forth in the Registration Statement, certain parts of which are omitted in accordance with the rules and regulations of the Commission. For further information with respect to Alexion and our common stock, reference is hereby made to the Registration Statement. Statements contained herein concerning the provisions of any document are not necessarily complete, and in each instance reference is made to the copy of such document filed as an exhibit to the Registration Statement or otherwise filed with the Commission. Each such statement is qualified in its entirety by such reference. Copies of the Registration Statement together with exhibits may be inspected at the offices of the Commission as indicated above without charge and copies thereof may be obtained therefrom upon payment of a prescribed fee.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The Commission allows us to "incorporate by reference" the documents that we file with the Commission. This means that we can disclose important information to you by referring you to those documents. Any information incorporated in this manner is considered part of this Registration Statement. Any information we file with the Commission after the date of this Registration Statement will automatically update and supersede the information contained in this Registration Statement.

We incorporate by reference the following documents that have been filed with the Commission and any filings that we will make with the Commission in the future under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 until we file a post-effective amendment to this Registration Statement indicating this offering has been completed:

- (i) our annual report on Form 10-K, for the fiscal year ended July 31, 2002;
- (ii) our quarterly reports on Form 10-Q for the quarters ended October 31, 2002, January 31, 2003 and April 30, 2003 filed on December 11, 2002, March 17, 2003 and June 13, 2003, respectively;
- (iii) our current report on Form 8-K filed on June 10, 2003; and
- (iv) our registration statement on Form 8-A filed on February 21, 1997, as amended by Amendment No. 1 to Form 8-A filed on October 6, 2000, and Amendment No. 2 to Form 8-A filed on February 12, 2002.

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.

Alexion 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., 352 Knotter Drive, Cheshire, Connecticut 06410, (203) 272-2596, Attention: Thomas I.H. Dubin, Vice President and General Counsel. We will 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. The Selling Stockholders will not make an offer of these shares in any state where the offer is not permitted. You should not assume that information in this Prospectus or any supplement is accurate as of any date other than the date on the front of these documents.

PROSPECTUS SUMMARY

This summary provides an overview of selected information and does not contain all the information you should consider. You should read the entire prospectus, including the section entitled "Risk Factors," carefully before making an investment decision.

THE COMPANY

We are engaged in the discovery and development of therapeutic products aimed at treating patients with a wide array of severe disease states, including cardiovascular, autoimmune, and hematologic disorders, inflammation and cancer. Since our inception in January 1992, we have devoted substantially all of our resources to drug discovery, research, and product and clinical development. Additionally, through our wholly owned subsidiary, Alexion Antibody Technologies, Inc., or AAT, we are engaged in the discovery and development of a portfolio of additional antibody therapeutics targeting severe unmet medical needs.

Our two lead product candidates from our C5 Inhibitor program are antibodies that address specific diseases that arise when the human immune system attacks the human body itself and produces undesired inflammation. Antibodies are proteins that bind specifically to selected targets, or antigens, in the body. After the antibody binds to its target, it may activate the body's immune system against the target, block activities of the target or stimulate activities of the target.

One of our antibody product candidates, pexelizumab, is an antibody fragment under development in collaboration with Procter & Gamble Pharmaceuticals, or P&G, in acute cardiovascular disorders. Pexelizumab is currently in evaluation in a pivotal Phase III trial, PRIMO-CABG, in patients undergoing coronary artery bypass graft surgery, or CABG, with cardiopulmonary bypass, or CPB. This study recently completed the target patient enrollment of approximately 3,000 patients in February 2003. This study remains ongoing as evaluation awaits completion of all follow-up patient visits, data collection, and subsequent data analysis. Also in collaboration with P&G, we conducted two Phase II clinical trials in acute myocardial infarction or heart attack patients: one study in patients receiving angioplasty, a procedure for opening up narrowed or blocked arteries that supply blood to the heart, the

COMMA study, and the other in patients receiving thrombolytic therapy, a procedure for dissolving clots that block heart vessels, the COMPLY study. Results from both studies were reported at the November 2002 annual meeting of the American Heart Association. In both studies, the primary endpoint of a reduction of myocardial infarction, or death of heart muscle, was not reached; however in the COMMA study, pexelizumab treatment was associated with a significant, dose dependent reduction in mortality. Pending discussions with the U.S. Food and Drug Administration, or FDA, our partner, P&G, and other development considerations, we expect to proceed with the Phase III clinical development of pexelizumab in acute myocardial infarction.

Our other lead antibody product candidate, eculizumab, is in clinical development for the treatment of a variety of chronic autoimmune diseases. We completed enrollment in January 2003 for the ongoing Phase IIb study with eculizumab in approximately 350 rheumatoid arthritis patients. Evaluation of this rheumatoid arthritis study awaits completion of all patient dosing, follow-up patient visits, data collection, and subsequent data analysis. In November 2002, preliminary results were reported at the American Society of Nephrology annual meeting from two clinical trials evaluating eculizumab in patients with membranous nephritis patients, a kidney disease. Results from the first, randomized, placebo controlled double blind, membranous nephritis study showed that eculizumab was well tolerated, but did not reach its primary clinical efficacy endpoint of reduction in proteinuria, an abnormal loss of substantial amounts of protein in a patient's urine, after four months of therapy. In the second membranous nephritis study, both placebo and eculizumab treated patients from the four month study were treated for an additional 12 months with eculizumab therapy. In this second study, eculizumab was well tolerated and was associated with an increased remission rate at 12 months and with significant improvements in proteinuria and other important components of nephrotic syndrome.

Eculizumab is also under evaluation in a Phase I extension study in paroxysmal nocturnal hemoglobinuria, or PNH, patients in the United Kingdom. PNH is a rare blood disease characterized by severe anemia and risk of blood clotting or thrombosis. Preliminary results from the open label 3 month PNH pilot study were presented at the American Society of Hematology meeting in December 2002. In this PNH study, eculizumab was well-tolerated and associated with a 68% reduction in the need for blood transfusions, up to 81% reduction in biochemical parameters of hemolysis or destruction of red cells, and 90% reduction in clinical paroxysms. A 12 month extension trial remains ongoing in which all eleven PNH patients elected to enroll.

Through AAT, our wholly owned subsidiary with extensive combinatorial human and humanized antibody library technologies and expertise, we have developed important capabilities to discover and develop additional antibody product candidates for the treatment of inflammatory diseases and cancer.

We have also developed therapies employing the transplantation of cells from other species into humans, known as xenotransplantation. During the quarter ended April 30, 2003, we concluded that we would be unable to secure a collaboration with a third party to share in the future funding of the development and clinical trials for the xenotransplantation or UniGraft program. We are discontinuing the UniGraft program in order to focus our resources on our other discovery targets and development programs. As a consequence, we recorded an impairment charge to the xenotransplantation manufacturing assets. We recorded an impairment of fixed assets charge of approximately \$2.6 million for the fiscal quarter ended April 30, 2003 in order to record the carrying value of the xenotransplantation manufacturing assets at their estimated fair value.

To date, we have not received any revenues from the sale of our products. We have incurred operating losses since our inception. As of April 30, 2003, we had an accumulated deficit of \$243.7 million. We expect to incur substantial and increasing operating losses for the next several years due to

expenses associated with product research and development, pre-clinical studies and clinical testing, regulatory activities, manufacturing development, scale-up and commercial manufacturing, pre-commercialization activities and developing a sales and marketing force and we will need to obtain additional financing to cover these costs. Relative to scale-up and commercial manufacturing, we have executed a large-scale product supply agreement with Lonza Biologics, plc for the long-term manufacture of eculizumab.

We plan to develop and commercialize on our own those product candidates for which the clinical trials and commercialization requirements can be funded and accomplished by our own resources. For those products which require greater resources, our strategy is to form corporate partnerships with major pharmaceutical companies for product development and commercialization, where we will still play a major role.

RISK FACTORS

You should carefully consider the following risk factors before you decide to invest in our Company and our business because these risk factors may have a significant impact on our business, operating results, financial condition, and cash flows. If any of these risks actually occurs, our business, financial condition, operating results and/or cash flows could be harmed.

If we continue to incur operating losses, we may be unable to continue our operations.

We have incurred losses since we started our company in January 1992. As of April 30, 2003, we had an accumulated deficit of approximately \$243.7 million. If we continue to incur operating losses and fail to become a profitable company, we may be unable to continue our operations. Since we began our business, we have focused on research and development of product candidates. We have no products that are available for sale and do not know when we will have products available for sale, if ever. We expect to continue to operate at a net loss for at least the next several years as we continue 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. The extent and the timing of our future losses and our profitability, if we are ever profitable, are highly uncertain.

If we do not obtain regulatory approval for our drug products, we will not be able to sell our drug products.

We cannot sell or market our drugs without regulatory approval. If we do not obtain regulatory approval for our products, the value of our company and our results of operations will be harmed. In the United States, we must obtain approval from the U.S. Food and Drug Administration, or FDA, for each drug that we intend to sell. Obtaining FDA approval is typically a lengthy and expensive process, and approval is highly uncertain. Foreign governments also regulate drugs distributed outside the United States, whose approval can also be lengthy, expensive and highly uncertain. None of our product candidates has received regulatory approval to be marketed and sold in the United States or any other country. We may not receive regulatory approval of any of our product candidates, if ever, for at least the next several years.

If our drug trials are delayed or achieve unfavorable results, we will have to delay or may be unable to obtain regulatory approval for our products.

We must conduct extensive testing of our product candidates before we can obtain regulatory approval for our products. We need to conduct both preclinical animal testing and clinical trials. These tests and trials may not achieve favorable results. We would need to reevaluate any drug that did not test favorably and either alter the study, the drug or the dose and perform additional or repeat tests, or abandon the drug development project. In those circumstances, we would not be able to obtain regulatory approval on a timely basis, if ever. Even if approval is granted, the approval may require limitations on the indicated uses for which the drug may be marketed.

We have announced the completion of a Phase IIb trial of pexelizumab, one of our two lead antibody product candidates, for the treatment of complications in patients after cardiopulmonary bypass surgery, including the reduction of the frequency and severity of myocardial infarctions, or heart attacks and frequency of death. The primary therapeutic exploratory pre-set goal of the trial, referred to as the primary endpoint, was not achieved. However, in the pre-specified population that included approximately 90% of the patient population, the 800 patients who had coronary artery bypass graft surgery without valve surgery, those that received pexelizumab at the highest dose level experienced a significant reduction in larger post-surgical heart attacks. Based on these results, in January 2002, we commenced enrollment of a pivotal Phase III clinical trial of pexelizumab in approximately 3,000 patients undergoing coronary artery bypass graft surgery with cardiopulmonary bypass operations. The Phase III trial will assess the safety and efficacy of pexelizumab in reducing the combined incidence of death or myocardial infarction in this patient population. We cannot assure you that this trial will be successful or that any of the endpoints of the trial will be achieved.

We have also announced, in 2001, the completion of a Phase IIa trial of eculizumab, our other lead antibody product candidate, for the treatment of rheumatoid arthritis. The primary endpoint, or therapeutic pre-set goal, for this trial was met by the group of patients who received the mid-level dosing regimen of eculizumab. Patients who received higher or lower doses of eculizumab in the clinical trial did not achieve the primary endpoint.

Completion of these and other trials does not guarantee that we will initiate additional trials for our product candidates, that if the trials are initiated what the scope and phase of the trial will be or that they will be completed, or that if the trials are completed, the results will provide a sufficient basis to proceed with further trials or to apply for or receive regulatory approvals or to commercialize products. Results of trials could be inconclusive, requiring additional or repeat trials.

There are many reasons why drug testing could be delayed or terminated. For human trials, patients must be recruited and each product candidate must be tested at various doses and formulations for each clinical indication. Also, to ensure safety and effectiveness, the effect of drugs often must be studied over a long period of time, especially for the chronic diseases that we are studying. Unfavorable results or insufficient patient enrollment in our clinical trials could delay or cause us to abandon a product development program.

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

- slow patient enrollment;
- long treatment time required to demonstrate effectiveness;
- 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.

We may expand our business through new acquisitions that could disrupt our business and harm our financial condition.

Our business strategy includes expanding our products and capabilities, and we may seek acquisitions to do so. Acquisitions involve numerous risks, including:

- · substantial cash expenditures;
- potentially dilutive issuance of equity securities;
- · incurrence of debt and contingent liabilities, some of which may be difficult or impossible to identify at the time of acquisition;
- difficulties in assimilating the operations of the acquired companies;
- · diverting our management's attention away from other business concerns;
- risks of entering markets in which we have limited or no direct experience; and
- · the potential loss of our key employees or key employees of the acquired companies.

We cannot assure you that any acquisition will result in long-term benefits to us. We may incorrectly judge the value or worth of an acquired company or business. In addition, our future success would depend in part on our ability to manage the rapid growth associated with some of these acquisitions. We cannot assure you that we will be able to make the combination of our business with that of acquired businesses or companies work or be successful. Furthermore, the development or expansion of our business or any acquired business or companies may require a substantial capital investment by us. We may not have these necessary funds nor may they be readily available to us on acceptable terms or at all. We may also seek to raise funds by selling shares of our stock, which could dilute your ownership interest in our company.

On September 22, 2000, we purchased all of the capital stock and other outstanding securities of Prolifaron, Inc., a privately held biopharmaceutical company that is developing therapeutic antibodies addressing multiple diseases, including cancer, for approximately 400,000 shares of our outstanding capital stock. The business of Prolifaron, now our wholly-owned subsidiary, Alexion Antibody Technologies, Inc., or AAT, is subject to many of the same risks that our business is subject to. We cannot assure you that AAT will successfully develop any products or that we will realize any benefits from the acquisition of Prolifaron

If we fail to obtain the capital necessary to fund our operations, we will be unable to continue or complete our product development.

We believe we have sufficient capital to fund our operations and product development for at least twenty-four months. We may need to raise additional capital after that time to complete the development and commercialization of our product candidates. We are currently conducting several clinical trials, including the PRIMO-CABG trial. Funding needs may shift between programs and potentially accelerate

and increase if we initiate new pivotal trials for our product candidates, including any pivotal clinical trial of pexelizumab for acute myocardial infarction, or heart attack, patients undergoing angioplasty, a procedure for opening up narrowed or blocked arteries that supply blood to the heart.

Additional financing could take the form of public or private debt or equity offerings, equity line facilities, bank loans collaborative research and development arrangements with corporate partners and/or the sale or licensing of some of our property. The amount of capital we may need depends on many factors, including:

- · the existence, terms and status of collaborative arrangements and strategic partnerships, such as our collaboration with Procter & Gamble;
- · 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 develop sales, marketing and distribution capabilities;
- · the cost necessary to sell, market and distribute our products, if any are approved;
- · changes in applicable governmental regulatory policies; and
- · any new collaborative, licensing and other commercial relationships that we may establish.

We may not get funding when we need it or funding may only be available on unfavorable terms. If we cannot raise adequate funds to satisfy our capital requirements, we may have to delay, scale-back or eliminate our research and development activities or future operations. We might have to license our technology to others. This could result in sharing revenues that we might otherwise retain for ourselves. Any of these actions may harm our business.

If our collaboration with Procter & Gamble is terminated or Procter & Gamble reduces its commitment to our collaboration, our ability to commercialize pexelizumab in the time expected, or at all, and our business would be harmed.

We rely heavily on Procter & Gamble to perform development, obtain commercial manufacturing, and provide sales and marketing for pexelizumab. While we cannot assure you that pexelizumab will ever be successfully developed and commercialized if Procter & Gamble does not perform its obligations in a timely manner, or at all, our ability to commercialize pexelizumab will be significantly adversely affected. We rely on Procter & Gamble, or P&G, to provide funding and additional resources for the development and commercialization of pexelizumab. These include funds and resources for:

clinical development and clinical and commercial manufacturing;

- · obtaining regulatory approvals; and
- · sales, marketing and distribution efforts worldwide.

Prior to December 2001, Procter & Gamble was generally funding all clinical development and manufacturing costs for pexelizumab. In December 2001, we and P&G entered into a binding memorandum of understanding, or MOU, pursuant to which we and P&G revised our collaboration. Per the MOU, our revised collaboration provides for us and P&G to each incur approximately 50% of all Phase III clinical trial, product development and manufacturing, and commercialization costs necessary for the potential approval and marketing of pexelizumab in the U.S. Procter & Gamble agreed to retain responsibility and costs for future development and commercialization outside the U.S. Additionally, as part of the MOU, we will receive milestone payments for achieving specified development steps, regulatory filings and approvals, but will not receive previously agreed sales milestones and will generally forego further research and development support payments from P&G.

P&G has the right to terminate the collaboration at any time. Termination of our agreement with Procter & Gamble would cause significant delays in the development of pexelizumab and result in additional development costs. If we were to continue development of pexelizumab, we would need to fund the development and commercialization of pexelizumab on our own or identify a new development partner. We cannot guarantee that Procter & Gamble will devote the resources necessary to successfully develop and commercialize pexelizumab in a timely manner, if at all. Furthermore, Procter & Gamble may devote the necessary resources, but we may still not successfully develop and commercialize pexelizumab. We might also have to repeat testing already completed with Procter & Gamble.

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 to assist us in the development of our product candidates. If any of our existing collaborators breaches or terminates its agreement with us or does not perform its development work under an agreement in a timely manner or at all, we would experience significant delays in the development or commercialization of our product candidates. We would also experience significant delays if we could not engage additional collaborators when required. In either event, we would be required to devote additional funds or other resources to these activities or to terminate them. This would divert funds or other resources from other parts of our business.

We cannot assure you that:

- · current collaboration arrangements will be continued in their current form;
- · we will be able to negotiate acceptable collaborative agreements to develop or commercialize our product candidates;
- · any arrangements with third parties will be successful; or
- current or potential collaborators will not pursue treatments for other diseases or seek other ways of developing treatments for our disease targets.

If the trading price of our common stock continues to fluctuate in a wide range, our stockholders will suffer considerable uncertainty with respect to an investment in our stock

The trading price of our common stock has been volatile and may continue to be volatile in the future. Factors such as announcements of fluctuations in our or our competitors' operating results, fluctuations in the trading prices or business prospects of our competitors and collaborators, including, but not limited to Procter & Gamble, changes in our prospects, and market conditions for biotechnology stocks in general could have a significant impact on the future trading prices of our common stock and our outstanding notes. In particular, the trading price of the common stock of many biotechnology companies, including ours, has experienced extreme price and volume fluctuations, which have at times been unrelated to the operating performance of the companies whose stocks were affected. This is due to several factors, including general market conditions, the announcement of the results of our clinical trials or product development and the results of our attempts to obtain FDA approval for our products. In particular, since August 1, 2001, the sales price of our common stock has ranged from a low of \$9.58 per share to a high of \$26.69 per share and since August 1, 1999, the sales price of our common stock has ranged from a low of \$10.00 per share to a high of \$119.88 per share. While we cannot predict our future performance, if our stock continues to fluctuate in a wide range, an investment in our stock or our outstanding notes may result in considerable uncertainty for an investor.

If we cannot protect the confidentiality and proprietary nature of our trade secrets, our business and competitive position will be harmed.

Our business requires using sensitive technology, techniques and proprietary compounds that we protect as trade secrets. However, since we are a small company, we also rely heavily on collaboration with suppliers, outside scientists and other drug companies. Collaboration presents a strong risk of exposing our trade secrets. If our trade secrets were exposed, it would help our competitors and adversely affect our business prospects.

In order to protect our drugs and technology more effectively, we need to obtain patents covering the drugs and technologies we develop. We may obtain patents through ownership or license. Our drugs are expensive and time-consuming to test and develop. Without patent protection, competitors may copy our methods, or the chemical structure or other aspects of our drugs. Even if we obtain patents, the patents may not be broad enough to protect our drugs from copycat products.

If we are found to be infringing on patents owned by others, we may be forced to obtain a license to continue the sale or development of our drugs and/or pay damages. If we cannot obtain a license, we may be prevented from the sale or development of our drugs.

Parts of our technology, techniques and proprietary compounds and potential drug candidates may conflict with patents owned by or granted to others. If we cannot resolve these conflicts, we may be liable for damages, be required to obtain costly licenses or be stopped from manufacturing, using or selling our products or conducting other activities. For example, we are aware of broad patents owned by others relating to the manufacture, use and sale of recombinant humanized antibodies, recombinant human antibodies, recombinant human single chain antibodies, and genetically engineered animals. Many of our product candidates are genetically engineered antibodies, including recombinant humanized antibodies, recombinant human antibodies, and recombinant human single chain antibodies, and other products are tissues from genetically engineered animals.

We have received notices from the owners of some of these patents claiming that their patents may be relevant to the development, manufacture or sale of some of our drug candidates. In response to some of these notices, we have obtained licenses, or expect to obtain licenses. However, with regard to 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; or
- we have identified and are testing various modifications that we believe should not infringe the patents and which should permit commercialization of our product candidates.

Any patent holders could sue us for damages and seek to prevent us from manufacturing, selling or developing our drugs. Legal disputes can be costly and time consuming to defend. If any of these actions are successful, we could be required to pay damages or to obtain a license to sell or develop our drugs. A required license may not be available on acceptable terms, if at all.

If the testing or use of our products harms people, we could be subject to costly and damaging product liability claims.

The testing, manufacturing, marketing and sale of drugs for use in humans exposes us to product liability risks. Side effects and other problems from using our products could give rise to product liability claims against us. We might have to recall our products, if any, from the marketplace. Some of these risks are unknown at this time. Use of C5 Inhibitors, such as pexelizumab and eculizumab, is associated with an increased risk for infection with Neisseria bacteria. One patient in our eculizumab membranous nephritis trials became infected with Neisseria bacteria. Serious cases of Neisseria infection can result in brain damage, loss of limbs or parts of limbs, kidney failure, or death.

In addition, we may be sued by people who participate in our trials. A number of patients who participate in such trials are already very ill when they enter the trial. Any informed consents or waivers obtained from people who sign up for our trials may not protect us from liability or litigation. Our product liability insurance may not cover all potential liabilities or may not completely cover any covered liabilities. Moreover, we may not be able to maintain our insurance on acceptable terms. In addition, negative publicity relating to a product liability claim may make it more difficult, or impossible, for us to recruit patients for our clinical trials or to market and sell our products. 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 or results of operations.

If we cannot manufacture our drug candidates in sufficient amounts at acceptable costs and on a timely basis, we may be unable to have the necessary materials for product testing, and later for potential sale in the market. Either event would harm our business.

For our drug trials, we need to produce sufficient amounts of product for testing. Our small manufacturing plant cannot manufacture enough of our product candidates for later stage clinical development. In addition, we do not have the capacity to produce more than one product candidate at a time. We depend on a few outside suppliers for manufacturing. If we experience interruptions in the manufacture of our products for testing, our drug development and commercialization efforts will be delayed. If any of our outside manufacturers stops manufacturing our products or reduces the amount manufactured, we will need to find other alternatives. If we are unable to find an acceptable outside manufacturer on reasonable terms, we will have to divert our own resources to manufacturing which may not be sufficient to produce the necessary quantity or quality of product. As a result, our ability to conduct testing and drug trials and our plans for

commercialization would be materially adversely affected. Submission of products and new development programs for regulatory approval, as well as our plans for commercialization, would be delayed. Our competitive position and our prospects for achieving profitability could be materially and adversely affected.

Manufacture of drug products is highly regulated by the FDA and other domestic and foreign authorities, including the need to develop and utilize manufacturing processes that consistently produce our drug products to their required quality specifications. We cannot assure you that we or our third-party collaborators will successfully comply with all of those regulations, which would have a materially adverse effect on our business.

Manufacture of our drug products is highly technical and only a few third-parties have the ability and capacity to manufacture our drug products for our development and commercialization needs. We can not assure you that these potential third-party collaborators will agree to manufacture our products on our behalf on commercially reasonable terms. If we do achieve agreement from one or more third parties to manufacture our drug products, we can not assure you that they will be able or willing to honor the terms of the agreements, including any obligations to manufacture the drug products in accordance with regulatory requirements and to our specific quality specifications and volume requirements. Due to the highly technical requirements of manufacturing our drug products, our third-party collaborators and we may be unable to manufacture our drug products despite their and our efforts. Inability to contract with third-party manufacturers on commercially reasonable terms, or failure or delay by our third-party manufacturers, if any, in manufacturing our drug products in the volumes and quality required, would have a material adverse effect on our business.

We have no experience or capacity for manufacturing drug products in volumes that would be necessary to support commercial sales. 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 would be adversely affected.

Currently, we are relying on Procter & Gamble to retain appropriate commercial manufacturing for pexelizumab through one or more third-party manufacturers. P&G has contracted with one third-party manufacturer for the large-scale commercial manufacture of pexelizumab. The failure of Procter & Gamble to obtain appropriate commercial manufacturing for pexelizumab on a timely basis, or at all, may prevent or impede the commercialization of pexelizumab. We have executed a large-scale product supply agreement with Lonza Biologics, plc for the long-term manufacture of eculizumab. The failure of Lonza Biologics, plc to manufacture appropriate supplies of eculizumab on a timely basis, or at all, may prevent or impede the commercialization of eculizumab. Due to the nature of the current market for third-party commercial manufacturing arrangements, many arrangements require substantial penalty payments by the customer for failure to use the manufacturing capacity contracted for. We could owe substantial penalty payments to Lonza Biologics, plc if we were not to use the manufacturing capacity contracted for with them; and we could be required to share on an equal basis with P&G substantial penalty payments owed by P&G for its failure to utilize the manufacturing capacity contracted for by it with third-party manufacturers for supply of pexelizumab. The payment of a substantial penalty would harm our financial condition.

If we are unable to establish sales, marketing and distribution capabilities, or to enter into agreements with third parties to do so, we will be unable to successfully market and sell future drug products.

We have no sales or distribution personnel or capabilities, and have only recently begun to develop marketing personnel and capabilities. If we are unable to establish those capabilities, either by developing our own capabilities or entering into agreements with others, we will not be able to successfully sell our products. In that event, we will not be able to generate significant revenues. We cannot guarantee that we will be able to hire the qualified sales and marketing personnel we need. We may not be able to enter into any marketing or distribution agreements with third-party providers on

acceptable terms, if at all. Currently, we are relying on Procter & Gamble for sales, marketing and distribution of pexelizumab. Procter & Gamble, or any future third-party collaborators, may not succeed at selling, marketing or distributing any of our future drug products.

If we are unable to obtain reimbursement from government health administration authorities, private health insurers and other organizations for our future products, our products may be too costly for regular use and our ability to generate revenues would be harmed.

Our products, once commercialized, like similar products in the market place, may be significantly more expensive than traditional drug treatments. Our future revenues and profitability will be adversely affected if we cannot depend on governmental and private third-party payors to defray the cost of our products to the consumer. If these entities refuse to provide reimbursement with respect to our products or determine to provide a low level of reimbursement, our products may be too costly for general use. Our profitability may be adversely impacted if we choose to offer our products at a reduced price. Any limitation on the use of our products or any decrease on the price of our products without a corresponding decrease in expenses will have a material adverse effect on our ability to achieve profitability.

If our competitors get to the marketplace before we do with better or cheaper drugs, our drugs may not be profitable to sell or to continue to develop.

Each of Avant Immunotherapeutics, Inc, Millennium Pharmaceuticals, Inc., Tanox, Inc., Abbott Laboratories, Baxter International Inc., Gliatech Inc., Neurogen Corporation, and Biocryst Pharmaceuticals have publicly announced their intentions to develop drugs which target the inflammatory effects of complement in the immune system. We are also aware that Pfizer, Inc., GlaxoSmithKline plc and Merck & Co., Inc. are also attempting to develop complement inhibitor therapies. Each of Cambridge Antibody Technology Group plc, MorphoSys AG and Dyax Corporation has publicly announced intentions to develop therapeutic human antibodies from libraries of human antibody genes. Additionally, each of Abgenix Inc. and Medarex, Inc. has publicly announced intentions to develop therapeutic human antibodies from mice that have been bred to include some human antibody genes. These and other pharmaceutical companies, many of which have significantly greater resources than we, may develop, manufacture and market better or cheaper drugs than our product candidates. They may establish themselves in the marketplace before we are able to even finish our clinical trials. Other pharmaceutical companies also compete with us to attract academic research institutions as drug development partners, including for licensing these institutions' proprietary technology. If our competitors successfully enter

into such arrangements with academic institutions, we will be precluded from pursuing those specific unique opportunities and may not be able to find equivalent opportunities elsewhere.

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, particularly, Leonard Bell, M.D., our Chief Executive Officer and Director, David W. Keiser, our President, Chief Operating Officer and Director, and Stephen P. Squinto, Ph.D., our Executive Vice President and Head of Research. There is intense competition in the biotechnology industry 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. We have a key man insurance policy for Dr. Bell and we have an employment agreement with Dr. Bell. We are currently negotiating new employment agreements with Mr. Keiser and Dr. Squinto. We cannot assure you that we will be able to negotiate employment agreements with Mr. Keiser and Dr. Squinto or what the terms of those agreements would be. To our knowledge, none of our key personnel is planning to retire or is nearing retirement age. Further, to our knowledge, there is no tension between any of our key personnel and the Board. If we lose the services of our management and scientific personnel or fail to recruit other 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 Chief Executive Officer. The loss of his services could materially and adversely affect our ability to achieve our development objectives.

The conviction of our former independent public accountants, Arthur Andersen LLP, on federal obstruction of justice charges may adversely affect Arthur Andersen LLP's ability to satisfy any claims arising from the provision of auditing services to us and may impede our access to the capital markets.

On March 14, 2002, our previous independent public accounting firm, Arthur Andersen LLP, was indicted on federal obstruction of justice charges arising from the federal government's investigation of Enron Corp. On June 15, 2002, a jury returned with a guilty verdict against Arthur Andersen LLP following a trial. As a public company, we are required to file with the U.S. Securities and Exchange Commission, or SEC, periodic financial statements audited or reviewed by an independent public accountant. On May 31, 2002, we dismissed Arthur Andersen LLP as our independent public accountants, and engaged a new independent public accounting firm to audit our financial statements for fiscal 2002. It may be impossible for you to obtain recoveries from Arthur Andersen LLP with respect to its audits of our financial statements as a result of its conviction in the Enron matter. In addition, Arthur Andersen LLP has not performed any procedures in connection with our Annual Report on Form 10-K for the fiscal year ended July 31, 2002 and has not consented to the incorporation by reference of its reports in our Annual Report on Form 10-K for the fiscal year ended July 31, 2002, and therefore, you will not be able to recover against Arthur Andersen LLP for any untrue statements of material fact contained in the financial statements audited by Arthur Andersen LLP or any omissions to state a material fact required to be stated therein.

Should we seek access to the public capital markets, the SEC rules will require us to include or incorporate by reference in any prospectus three years of audited financial statements. The SEC's current rules would require us to present audited financial statements for one or more fiscal years audited by Arthur Andersen LLP and obtain their consent and representations until our audited financial statements

for the fiscal year ending July 31, 2004 become available in the first quarter ended October 31, 2004. We expect that we would not be able to obtain the necessary consent and representations from Arthur Andersen LLP who have ceased operations. As a result, we may not be able to satisfy the SEC requirements for a registration statement or for our periodic reports. Even if the SEC decides to accept financial statements previously audited by Arthur Andersen LLP, but without their current consent and representations, those financial statements would not provide us and any underwriters with the same level of protection under current securities laws as would otherwise be the case. In either of these situations, our access to the capital markets would be impaired unless PricewaterhouseCoopers LLP, our current independent public accounting firm, or another independent public accounting firm, is able to audit the financial statements originally audited by Arthur Andersen LLP. Any delay or inability to access the public capital markets caused by these circumstances could have a material adverse effect on our business, profitability and growth prospects.

USE OF PROCEEDS

We will not receive any proceeds from the sale of shares of common stock by the Selling Stockholders, although we will receive the exercise prices of the stock options.

SELLING STOCKHOLDERS

We will supplement this Prospectus from time to time to include certain information concerning the security ownership of the Selling Stockholders and the position, office or other material relationship which a Selling Stockholder has had within the past three years with us or any of our predecessors or affiliates.

PLAN OF DISTRIBUTION

We are registering the Shares covered by this Prospectus on behalf of the Selling Stockholders. All costs, expenses and fees in connection with the registration of the Shares will be paid by us. Brokerage commissions, if any, attributable to the sale of the Shares will be paid by the Selling Stockholders or their donees or pledgees.

Sales of the Shares may be effected from time to time in transactions (which may include block transactions) on the Nasdaq National Market, in negotiated transactions, or a combination of such methods of sale, at fixed prices which may be changed, at market prices prevailing at the time of sale, or at negotiated or other prices. The Selling Stockholders may also sell these shares pursuant to Rule 144 promulgated under the Securities Act of 1933, as amended, or may pledge shares as collateral for margin accounts and such shares could be resold pursuant to the terms of such accounts. Pursuant to this Prospectus, the Selling Stockholders may also donate a certain de minimus number (as allowed by the Securities and Exchange Commission) of their shares of common stock, and such shares could be resold pursuant to rules set forth by the Commission. The Selling Stockholders have advised us that they have not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of their securities. The Selling Stockholders may effect such transactions by selling common stock directly to purchasers or to or through broker-dealers which may act as agents or principals. These broker-dealers may receive compensation in the form of discounts, concessions or commissions from each Selling Stockholder and/or the purchasers of the shares for whom the broker-dealers may act as agents or to whom they sell as principal, or both (which compensation as to a particular broker-dealer might be in excess of customary commissions). The Selling Stockholders and any broker-dealers that act in connection with the sale of the shares might be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act and any commission received by them and any profit on

the resale of the Shares as principal might be deemed to be underwriting discounts and commissions under the Securities Act. The Selling Stockholders may agree to indemnify any agent, dealer or broker-dealer that participates in transactions involving sales of the Shares against certain liabilities, including liabilities arising under the Securities Act. Liabilities under the federal securities laws cannot be waived.

Because the Selling Stockholders may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act, the Selling Stockholders will be subject to prospectus delivery requirements under the Securities Act. Furthermore, in the event of a "distribution" of the shares, the Selling Stockholder, any selling broker or dealer and any "affiliated purchasers" may be subject to Regulation M under the Exchange Act. Such regulation would prohibit, with certain exceptions, any such person from bidding for or purchasing any security which is the subject of the distribution until his, her or its participation in that distribution is completed. In addition, Regulation M prohibits any "stabilizing bid" or "stabilizing purchase" for the purpose of pegging, fixing or stabilizing the price of common stock in connection with this offering.

LEGAL MATTERS

Legal matters relating to our common stock have been passed upon for us by Fulbright & Jaworski L.L.P., New York, New York.

NO PERSON (INCLUDING ANY SALESMAN OR BROKER) IS AUTHORIZED TO PROVIDE ORAL OR WRITTEN INFORMATION ABOUT THIS OFFERING NOT CONTAINED IN THIS PROSPECTUS. YOU SHOULD NOT ASSUME THAT THE INFORMATION CONTAINED IN THIS PROSPECTUS IS ACCURATE AS OF ANY DATE OTHER THAN THE DATE INDICATED BELOW.

[] Shares
ALEXION PHARMACEUTICALS, INC.
COMMON STOCK
PROSPECTUS

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

The contents of the Registration Statements on Form S-8 (File Nos. 333-24863, 333-71879, 333-71985 and 333-69478), as filed with the Securities and Exchange Commission on April 4, 1997, February 5, 1999, February 8, 1999 and September 14, 2001, respectively, are incorporated herein by reference. This Registration Statement is filed pursuant to General Instruction E to Form S-8 in order to register 900,000 additional shares of common stock \$.0001 par value per share, of Alexion Pharmaceuticals, Inc. (the "Common Stock"), for issuance pursuant to the Alexion Pharmaceuticals, Inc. 2000 Stock Option Plan and 350,000 shares of Common Stock for issuance pursuant to the Alexion Pharmaceuticals, Inc. 1992 Stock Option Plan for Outside Directors.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of Cheshire, State of Connecticut on July 7, 2003.

ALEXION PHARMACEUTICALS, INC.

By: /s/ David W. Keiser

David W. Keiser President and Chief Operating Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

/s/ Leonard Bell	Chief Executive Officer, Secretary, Treasurer and	July 7, 2003
Leonard Bell	Director (principal executive officer)	
/s/ DAVID W. KEISER	President, Chief Operating Officer and Director	July 7, 2003
David W. Keiser	(principal financial officer)	
/S/ BARRY P. LUKE	Vice President of Finance and Administration	July 7, 2003
Barry P. Luke	(principal accounting officer)	
/s/ Jerry T. Jackson	Director	July 7, 2003

Jerry T. Jackson

Alvin S. Parven

/S/ MAX LINK	Director	July 7, 2003
Max Link		
/s/ Joseph A. Madri	Director	July 7, 2003
Joseph A. Madri		
/s/ R. Douglas Norby	Director	July 7, 2003
R. Douglas Norby		
/S/ ALVIN S. PARVEN	Director	July 7, 2003

EXHIBIT INDEX

Exhibit No.	Description
	
4.1	Alexion Pharmaceuticals, Inc. 2000 Stock Option Plan, as amended*
4.2	Alexion Pharmaceuticals, Inc. 1992 Stock Option Plan for Outside Director, as amended*
5.1	Opinion of Fulbright & Jaworski L.L.P.
23.1	Consent of PricewaterhouseCoopers LLP
23.2	Consent of Fulbright & Jaworski L.L.P. (Included in Exhibit 5.1)
99.1	Consent of Arthur Andersen LLP (previously issued)

^{*} Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended January 31, 2003.

FULBRIGHT & JAWORSKI L.L.P.

A Registered Limited Liability Partnership 666 Fifth Avenue, 31st Floor New York, New York 10103-3198 www.fulbright.com

telephone: (212) 318-3000 facsimile: (212) 318-3400

Exhibit 5.1

July 3, 2003

Alexion Pharmaceuticals, Inc. 352 Knotter Drive Cheshire, Connecticut 06410

Re: Registration Statement on Form S-8

Ladies and Gentleman:

We refer to the Registration Statement on Form S-8 (the "Registration Statement") to be filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Act"), on behalf of Alexion Pharmaceuticals, Inc., a Delaware corporation (the "Company"), relating to: (i) 900,000 shares of the Company's Common Stock, \$.0001 par value (the "Common Stock"), issuable upon the exercise of options previously granted and to be granted pursuant to the Alexion Pharmaceuticals, Inc. 2000 Stock Option Plan (the "2000 Options") and (ii) 350,000 shares of Common Stock issuable upon the exercise of options to be granted pursuant to the Alexion Pharmaceuticals, Inc. 1992 Stock Option Plan for Outside Directors (the such options, collectively with the 2000 Options, the "Options").

As counsel to the Company, we have examined such corporate records, other documents and such questions of law as we have deemed necessary or appropriate for the purposes of this opinion and, upon the basis of such examinations, advise you that in our opinion the 1,250,000 shares of Common Stock issuable upon the exercise of the Options have been duly and validly authorized and, subsequent to the exercise of the Options and payment of the exercise price of the Options, will be validly issued, fully paid and non-assessable.

We consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement. This consent is not to be construed as an admission that we are a person whose consent is required to be filed with the Registration Statement under the provisions of the Act.

Very truly yours,

/s/ Fulbright & Jaworski L.L.P.

Houston Ÿ New York Ÿ Washington DC Ÿ Austin Ÿ Dallas Ÿ Los Angeles Ÿ Minneapolis Ÿ San Antonio Ÿ Hong Kong Ÿ London Ÿ Munich

[LETTERHEAD OF PRICEWATERHOUSECOOPERS LLP]

CONSENT OF INDEPENDENT AUDITORS

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated October 18, 2002 relating to the consolidated financial statements of Alexion Pharmaceuticals, Inc. 's Annual Report on Form 10-K for the year ended July 31, 2002

/s/ PricewaterhouseCoopers LLP Hartford, Connecticut July 3, 2003 THE FOLLOWING REPORT IS A COPY OF A REPORT PREVIOUSLY ISSUED BY ARTHUR ANDERSEN LLP AND HAS NOT BEEN REISSUED BY ARTHUR ANDERSEN LLP. THE COMPANY IS UNABLE TO OBTAIN A REISSUED REPORT OR CONSENT TO INCORPORATION BY REFERENCE OF ARTHUR ANDERSEN LLP'S REPORT FROM ARTHUR ANDERSEN LLP BECAUSE ARTHUR ANDERSEN LLP HAS CEASED OPERATIONS.

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 subsidiaries (collectively, the Company) as of July 31, 2001 and 2000, and the related consolidated statements of operations, stockholders' equity and comprehensive loss, and cash flows for each of the three years in the period ended July 31, 2001. 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 auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Alexion Pharmaceuticals, Inc. and subsidiaries as of July 31, 2001 and 2000, and the consolidated results of their operations and their cash flows for each of the three years in the period ended July 31, 2001, in conformity with accounting principles generally accepted in the United States.

As further discussed in Note 2 to the consolidated financial statements, during the year ended July 31, 2001, the Company changed its method of revenue recognition relating to non-refundable upfront licensing fees in accordance with Staff Accounting Bulletin No. 101.

/s/ Arthur Andersen LLP

Hartford, Connecticut August 31, 2001