

ALEXION PHARMACEUTICALS INC  
Form S-3/A  
May 14, 2004  
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As filed with the Securities and Exchange Commission on May 14, 2004

Registration No. 333-114449

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**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

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**Amendment No. 2**

**to**

**FORM S-3**

**REGISTRATION STATEMENT**

**UNDER**

**THE SECURITIES ACT OF 1933**

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**ALEXION PHARMACEUTICALS, INC.**

(Exact Name of Registrant as Specified in Its Charter)

**Delaware**  
(State or Other Jurisdiction of  
Incorporation or Organization)

**13-364831**  
(I.R.S. Employer  
Identification Number)

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352 Knotter Drive

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Cheshire, Connecticut 06410

(203) 272-2596

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

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Thomas I.H. Dubin, Esq.

352 Knotter Drive

Cheshire, Connecticut 06410

(203) 272-2596

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

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*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

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**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 other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

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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. " \_\_\_\_\_

\_\_\_\_\_ (Calculation table and footnotes on following page)

**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.**

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**Table of Contents***(Continued from cover page)***CALCULATION OF REGISTRATION FEE**

Title Of Each Class of Securities To Be Registered	Amount To Be Registered (1)	Proposed Maximum Offering Price Per Unit (1)	Proposed Maximum Aggregate Offering Price (1)(3)	Amount Of Registration Fee
Common Stock, \$.0001 par value per share (2)(5)				
Preferred Stock, \$.0001 par value per share (2)(4)				
Debt Securities (2)(4)				
Warrants (2)(4)				
Rights to purchase Junior Participating Cumulative Preferred Stock (5)				
Total (2)			\$150,000,000	(1)

- (1) These securities were previously registered on the registrant's Form S-3 Registration Statement, File No. 333-110828, declared effective on December 23, 2003 (including \$44,475,000 of securities carried forward from the registrant's prior Form S-3 Registration Statement, File No. 333-47594, declared effective on October 16, 2000) (such registration statements are collectively referred to as the Prior Registrations Statements), and are included herein pursuant to Rule 429 under the Securities Act of 1933, as amended. The filing fee relating to these securities is being carried forward and was paid with the Prior Registration Statements.
- (2) An indeterminate number of, or aggregate principal amount of, the securities is being registered as may at various times be issued at indeterminate prices, with an aggregate public offering price not to exceed \$150,000,000 or the equivalent thereof or, if any debt securities are issued at any original issuance discount, such greater amount as shall result in net proceeds of \$150,000,000 to the registrant.
- (3) Estimated solely for purposes of calculating the registration fee pursuant to Rule 457(o) under the Securities Act.
- (4) In addition to any Preferred Stock, Debt Securities or Warrants that may be issued directly under this Registration Statement, there are being registered hereunder an indeterminate number of shares of Common Stock as may be issued upon conversion or exchange of the Preferred Stock or Debt Securities or conversion of the Warrants, as the case may be. No separate consideration will be received for any shares of Common Stock so issued upon conversion or exchange.
- (5) The rights to purchase Junior Participating Cumulative Preferred Stock are attached to and trade with all common stock of the registrant, including each share of common stock previously registered on the Prior Registration Statements. Value attributable to such rights, if any, is reflected in the market price of the common stock.

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**The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.**

**PROSPECTUS (Subject to Completion)**

**Issued May 14, 2004**

**Common Stock**

**Preferred Stock**

**Debt Securities**

**Warrants**

Alexion Pharmaceuticals, Inc. is offering securities of up to an aggregate of \$150,000,000.

From time to time, we may sell any of the securities listed above.

We will provide the specific terms of these securities in one or more supplements to this prospectus. You should read this prospectus, the information incorporated by reference in this prospectus and any prospectus supplement carefully before you invest.

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Our common stock is listed on the Nasdaq National Market under the symbol ALXN. On May 13, 2004, the last sale price of our common stock was \$20.88 per share.

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**Investing in these securities involves a high degree of risk. See Risk Factors beginning on page 9.**

**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.**

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The date of this Prospectus is \_\_\_\_\_, 2004.

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You should rely only on the information contained or incorporated by reference into this prospectus or any applicable prospectus supplement. We have not authorized anyone to provide you with different information. We are not making an offer of the securities to be sold under this prospectus in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained in this prospectus or any applicable prospectus supplement is accurate as of any date other than the date on the front cover of this prospectus or the prospectus supplement, or that the information contained in any document incorporated by reference is accurate as of any date other than the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security.

**ABOUT THIS PROSPECTUS**

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, using a shelf registration process. Under this shelf registration process, we may sell common stock, preferred stock, debt securities and warrants, in one or more offerings up to a total dollar amount of \$150 million. This prospectus provides you with a general description of the securities we may offer. Each time we sell any securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of those securities. We may also add, update or change in a prospectus supplement any of the information contained in this prospectus or in documents we have incorporated by reference into this prospectus. This prospectus, together with the applicable prospectus supplements and the documents incorporated by reference into this prospectus, includes all material information relating to this offering. You should carefully read both this prospectus and the applicable prospectus supplement together with the additional information described under Where You Can Find More Information before buying securities in this offering.

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**SUMMARY**

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 incorporation 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 are therapeutic antibodies that address specific diseases that arise when the human immune system produces inflammation in the human body. 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. We are currently examining our two lead antibody product candidates in a variety of clinical development programs.

One of our antibody product candidates, pexelizumab, is an antibody fragment under development in acute cardiovascular disorders. We completed a Phase III clinical trial of pexelizumab, known as the PRIMO-CABG trial, in approximately 3,000 patients undergoing coronary artery bypass graft surgery, or CABG, with cardiopulmonary bypass, or CPB. The PRIMO-CABG trial was conducted in collaboration with Procter & Gamble Pharmaceuticals, or P&G. Although there was reduction in the primary endpoint, it was not achieved with statistical significance. The primary endpoint in this trial was a composite of the incidence of death or myocardial infarction, measured at 30 days post-procedure, in the subpopulation of patients undergoing CABG without concomitant valve surgery. However, key pre-specified secondary endpoints consisting of the same composite in the overall study population, which included all patients undergoing CABG with or without concomitant valve surgery, were achieved. We have discussed with the FDA the next steps required for the Phase III development of pexelizumab in patients undergoing CABG with CPB. We, along with P&G, are currently planning and expect to initiate this year a confirmatory pivotal Phase III trial in CABG patients, known as PRIMO-CABG2, to expand upon and confirm observations from the earlier PRIMO-CABG trial. In September 2000 the FDA granted Fast Track status for the development of pexelizumab in CPB. Fast Track designation provides for expedited development and application review for approval of a drug through the FDA.

In addition to our Phase III trial of pexelizumab in PRIMO-CABG, P&G and we have together concluded two Phase II studies with pexelizumab in acute myocardial infarction, or AMI: one study in patients receiving angioplasty, a procedure for opening up narrowed or blocked arteries that supply blood to the heart, and the other in patients receiving thrombolytic therapy, a procedure for dissolving clots that block heart vessels. 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 angioplasty study, called COMMA, pexelizumab treatment was associated with a statistically significant, dose dependent reduction in death. We have discussed with the FDA the next steps required for the Phase III development of pexelizumab in AMI patients undergoing angioplasty. We, along with P&G, are currently planning and expect to initiate this year a pivotal Phase III trial, known as APEX-AMI, in AMI patients undergoing angioplasty.

Our other lead antibody product candidate, eculizumab, is in clinical development for the treatment of a variety of chronic inflammatory diseases. In particular, eculizumab is under evaluation in a Phase I extension study in paroxysmal nocturnal hemoglobinuria, or PNH, patients. PNH is a rare chronic blood disease characterized by severe anemia and risk of blood clotting or thrombosis. Preliminary results from the open-label three month PNH pilot study performed in the United Kingdom were presented at the American Society of Hematology, or ASH, meeting in December 2002. In this PNH study, eculizumab was well-tolerated and associated with a 71% reduction in the need for blood transfusions, up to 81% reduction in biochemical



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parameters of hemolysis or destruction of red cells, and 96% reduction in clinical paroxysms. An open-label extension trial that will help us evaluate long-term safety is ongoing in which all eleven PNH patients are participating.

We are currently in discussion with the Food and Drug Administration, or FDA, to determine the next steps required for the Phase III development of eculizumab in PNH. We are planning and expect to initiate this year a Phase III program, including a pivotal efficacy trial known as TRIUMPH, with eculizumab in PNH patients who require blood transfusions. We retain all rights to eculizumab in all indications worldwide. In 2003, the FDA and the European Medicines Evaluation Agency, or EMEA, granted Orphan Drug Status for the development of eculizumab in PNH.

Eculizumab is also under evaluation for the treatment of rheumatoid arthritis and membranous nephritis, a kidney disease. We recently announced preliminary results of our approximately 350 patient Phase IIb study of eculizumab in rheumatoid arthritis patients. The primary efficacy endpoint of the trial, improvement in ACR20 score after a six month treatment period, was achieved with statistical significance in the monthly dosing arm but not in the bimonthly dosing arm. After completing analysis of this Phase IIb rheumatoid arthritis trial, we anticipate presenting the results at an upcoming scientific conference and determining our plans for eculizumab in rheumatoid arthritis. 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. 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 in an open-label extension trial 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.

In January 2002, we completed a Phase I pilot safety trial in dermatomyositis, an inflammatory skin and muscle disorder, which indicated that eculizumab appeared to be safe and well tolerated in this patient population. We reviewed the clinical data with the FDA and after considering whether to initiate a Phase II clinical study for eculizumab in this disease, have elected not to pursue this program further at this time to more efficiently focus resources on other on-going eculizumab development programs.

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

To date, we have not received any revenues from the sale of our products. We have incurred operating losses since our inception. As of January 31, 2004, we had an accumulated deficit of approximately \$304 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. We will need to obtain additional financing to cover these costs. We have executed a large-scale product supply agreement with Lonza Biologics, plc, or Lonza, for the long-term commercial manufacture of eculizumab and P&G has executed a product supply agreement with a third party for the commercial manufacture of pexelizumab.

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.



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

## **Recent Developments**

On March 16, 2004, we appointed Larry L. Mathis as a member of our Board of Directors. Since 1998, Mr. Mathis, who is 60 years old, has served as an executive consultant with D. Petersen & Associates providing counsel to select clients on leadership strategies, integrated systems and governance. Prior to joining D. Petersen & Associates, Mr. Mathis served for 27 years in various capacities within The Methodist Health Care System, in Houston, Texas, an organization comprising 16 corporations and 37 hospital affiliates in the U.S. and abroad. Mr. Mathis served as a consultant to the Chairman of the Board of The Methodist Health Care System from 1997 to 1998 and as President and Chief Executive Officer, as well as a member of the Board of Directors, from 1983 to 1997. Mr. Mathis holds a number of leadership positions in a number of organizations involved in influencing the future of U.S. healthcare delivery, including Chairman of the American Hospital Association, Chairman of the National Task Force of Health Care Technology Assessment and Chairman of the American College of Healthcare Executives. He holds a master's degree in health administration from the University of Washington.

On March 9, 2004, we announced that, at the Scientific Sessions of the American College of Cardiology in New Orleans, Louisiana, Dr. Pierre Th  roux, Professor of Medicine, University of Montr  al, and Department of Cardiology, Montr  al Heart Institute, presented results showing that pexelizumab treatment significantly reduced key measures of inflammation in acute myocardial infarction patients undergoing primary angioplasty. Further, baseline levels of inflammation were shown to be highly predictive of subsequent mortality in this patient population.

On March 8, 2004, we announced, at the Scientific Sessions of the American College of Cardiology in New Orleans, Louisiana, that Professor Frans Van de Werf, Chairman, Department of Cardiology at the Gasthuisberg Hospital, University of Leuven, Leuven, Belgium, presented results of a meta-analysis showing that the investigational drug pexelizumab significantly reduced 30-day mortality across multiple acute cardiovascular disease trials. The trials were conducted by us with our partner P&G.

On February 11, 2004, we announced the appointment of Carsten Boess as our Vice President and Chief Financial Officer. Mr. Boess, who is 37 years old, began his career at Novo Nordisk in 1991 as Corporate Controller and subsequently took on various assignments including Manager Investor Relations and Finance for Novo Nordisk North America, based in New York, as well as Senior Director Finance and Information Technology of Novozymes' North American operations. Mr. Boess holds Bachelor's and Master's degrees in economics and finance from the University of Odense, Denmark.

## **The Securities We May Offer**

We may offer shares of our common stock and preferred stock, various series of debt securities and warrants to purchase any of such securities, with a total value of up to \$150 million from time to time under this prospectus at prices and on terms to be determined by market conditions at the time of offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

designation or classification;

aggregate principal amount or aggregate offering price;

maturity;

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original issue discount, if any;

rates and times of payment of interest, dividends or other payments, if any;

redemption, conversion, exchange, settlement or sinking fund terms, if any;

conversion, exchange or settlement prices or rates, if any, and, if applicable, any provisions for changes to or adjustments in the conversion, exchange or settlement prices or rates and in the securities or other property receivable upon conversion, exchange or settlement;

ranking;

restrictive covenants, if any;

voting or other rights, if any; and

important federal income tax considerations.

The prospectus supplement also may add, update or change information contained in this prospectus or in documents we have incorporated by reference into this prospectus.

**This prospectus may not be used to offer or sell any securities unless accompanied by a prospectus supplement.**

We may sell the securities directly to or through underwriters, dealers or agents. We, and our underwriters or agents, reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities through underwriters or agents, we will include in the applicable prospectus supplement:

the names of those underwriters or agents;

applicable fees, discounts and commissions to be paid to them;

details regarding over-allotment options, if any; and

the net proceeds to us.

*Common Stock.* We may issue shares of our common stock from time to time. Holders of our common stock are entitled to one vote per share for the election of directors and on all other matters that require stockholder approval. Subject to any preferential rights of any outstanding preferred stock, in the event of our liquidation, dissolution or winding up, holders of our common stock are entitled to share ratably in the assets remaining

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after payment of liabilities and the liquidation preferences of any outstanding preferred stock. Our common stock does not carry any preemptive rights enabling a holder to subscribe for, or receive shares of, any class of our common stock or any other securities convertible into shares of any class of our common stock, or any redemption rights. All shares of common stock issued by us since March 6, 1997 have been issued with rights to purchase Junior Participating Cumulative Preferred Stock described in greater detail in this prospectus under Description of Capital Stock Preferred Stock Shareholder Rights Plan.

*Preferred Stock.* We may issue shares of our preferred stock from time to time, in one or more series. Under our certificate of incorporation, our board of directors has the authority, without further action by stockholders, to designate up to 5,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges, qualifications and restrictions granted to or imposed upon the preferred stock, including dividend rights, conversion rights, voting rights, rights and terms of redemption, liquidation preference and sinking fund terms, any or all of which may be greater than the rights of the common stock. To date, our board of directors has designated 120,000 of the 5,000,000 authorized shares of preferred stock as Junior Participating Cumulative Preferred Stock, which series is described in greater detail in this prospectus under Description of Capital Stock Preferred Stock Stockholder Rights Plan.

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We will fix the rights, preferences, privileges, qualifications and restrictions of the preferred stock of each series that we sell under this prospectus and applicable prospectus supplements in the certificate of designation relating to that series. We will incorporate by reference into the registration statement of which this prospectus is a part the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of the related series of preferred stock. We urge you to read the prospectus supplements related to the series of preferred stock being offered, as well as the complete certificate of designation that contains the terms of the applicable series of preferred stock.

*Debt Securities.* We may issue debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. Any series of debt securities will be unsecured. The senior debt securities will rank equally with any other unsubordinated debt that we may have. The subordinated debt securities will be subordinate and junior in right of payment to all of our other indebtedness, except any of our indebtedness the terms of which expressly provide that repayment of that indebtedness is subordinate and junior in right of payment to the subordinated debt securities. Any convertible debt securities that we issue will be convertible into or exchangeable for our common stock or other securities of ours. Conversion may be mandatory or at your option and would be at prescribed conversion rates.

The debt securities will be issued under one or more documents called indentures, which are contracts between us and a trustee for the holders of the debt securities. In this prospectus, we have summarized certain general features of the debt securities. We urge you, however, to read the prospectus supplements related to the series of debt securities being offered, as well as the complete indentures that contain the terms of the debt securities. Indentures for our senior debt securities and subordinated debt securities have been filed as exhibits to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of debt securities being offered will be incorporated by reference into the registration statement of which this prospectus is a part from reports we file with the SEC.

*Warrants.* We may issue warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series, from time to time. We may issue warrants independently or together with common stock, preferred stock and/or debt securities, and the warrants may be attached to or separate from those securities.

The warrants will be evidenced by warrant certificates issued under one or more warrant agreements, which are contracts between us and an agent for the holders of the warrants. In this prospectus, we have summarized certain general features of the warrants. We urge you, however, to read the prospectus supplements related to the series of warrants being offered, as well as the complete warrant agreements and warrant certificates that contain the terms of the warrants. Complete warrant agreements and warrant certificates containing the terms of the warrants being offered will be incorporated by reference into the registration statement of which this prospectus is a part from reports we file with the SEC.

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**RISK FACTORS**

*An investment in our securities is risky. Prior to making a decision about investing in our securities, you should carefully consider the specific risks discussed under Risk Factors in both the prospectus and the applicable prospectus supplement, together with all of the other information contained in this prospectus and the prospectus supplement or incorporated by reference in this prospectus. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently see as immaterial, may also harm our business. If any of the risks or uncertainties described below or any such additional risks and uncertainties actually occur, our business, results of operations and financial condition could be materially and adversely affected. In that case, the trading price of the securities being offered by this prospectus and the applicable prospectus supplements could decline, and you might lose all or part of your investment.*

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 January 31, 2004, we had an accumulated deficit of approximately \$304 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.

*We are subject to extensive government regulation; if we do not obtain regulatory approval for our drug products, we will not be able to sell our drug products.*

We and our partners cannot sell or market our drugs without regulatory approval. If we or our partners do not obtain and maintain regulatory approval for our products, the value of our company and our results of operations will be harmed. In the United States, we or our partners must obtain and maintain 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 for any of our product candidates for at least the next several years, if ever.

We and our partners, contract manufacturers and suppliers are subject to rigorous and extensive regulation by the FDA, other federal and state agencies, and governmental authorities in other countries. These regulations apply both before and after approval of our product candidates, if our product candidates are ever approved, and cover, among other things, testing, manufacturing, quality control, labeling, advertising, promotion, and export of biologics. Failure to comply with the laws, including statutes and regulations, administered by the FDA or other agencies could result in administrative and judicial sanctions, including, warning letters; fines and other civil penalties; delay in approving or



refusal to approve a product candidate; product recall or seizure; interruption of production; operating restrictions; injunctions; and criminal prosecution.

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The FDA has granted fast track status for pexelizumab for use during cardiopulmonary bypass and for treatment of acute myocardial infarction, and for eculizumab in treatment of membranous nephritis. Although fast track status may expedite development and FDA review of an application, there can be no assurance that pexelizumab or eculizumab will be reviewed more expeditiously for their fast-track indications than would otherwise have been the case or will be approved promptly, or at all. Further, the FDA could revoke fast track status for pexelizumab or eculizumab.

The FDA has granted orphan drug designation for eculizumab in the treatment of paroxysmal nocturnal hemoglobinuria and membranous nephritis. Orphan drug designation does not convey any advantage in, or shorten the duration of, the FDA review and approval process. If a product which has an orphan drug designation subsequently receives the first FDA approval for the indication for which it has such designation, the product is entitled to orphan exclusivity, i.e., the FDA may not approve any other applications to market the same drug for the same indication for a period of seven years, except in limited circumstances.

***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 human 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.

***Clinical trials completed to date have not achieved their primary endpoints.***

In December 1999 we completed 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 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, (i.e. the 800 patients who had coronary artery bypass graft surgery without valve surgery), those that received pexelizumab at the highest dose level experienced a statistically significant reduction in larger post-surgical heart attacks. Based on these results, in January 2002, we commenced enrollment of a Phase III clinical trial of pexelizumab in patients undergoing coronary artery bypass graft surgery, or CABG, with cardiopulmonary bypass operations. This study completed the target patient enrollment of approximately 3,000 patients in February 2003. In August 2003, we disclosed preliminary results that indicated that the primary endpoint was not achieved with statistical significance. The primary endpoint in this Phase III trial was a composite of the incidence of death or myocardial infarction, measured at 30 days post-procedure, in patients undergoing CABG without concomitant valve surgery.

We are not currently able to predict the determination of the United States Food and Drug Administration and other regulatory agencies regarding the results of this Phase III trial of pexelizumab in CABG patients. Such determinations may include, but not be limited to, the view that the results may be sufficient for filing and approval of a Biologics License Application, or BLA, supportive of the filing and approval of a BLA together with additional studies, or not supportive of the filing or approval of a BLA.

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, or RA. The primary endpoint, or therapeutic pre-set goal, for this trial was met by the group of patients who received the

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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. The primary endpoint in this Phase IIa trial was ACR 20 at 3.25 months.

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In January 2002, we initiated a Phase IIb multi-center study in RA patients. The trial is designed to assess safety and efficacy of eculizumab and to confirm the most efficacious dose regimen of the drug in RA patients. The trial consists of approximately 350 patients who are being treated concomitantly with disease-modifying anti-rheumatic drugs. We completed enrollment in January 2003 for this ongoing Phase IIb study. We expect to release the full results later in 2003 or during the first half of 2004. We are also conducting an on-going 12 month open-label extension study in RA which will continue to help us assess long-term safety.

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. If the results achieved in our clinical trials are insufficient to proceed to further trials or to regulatory approval of our product candidates our company could be materially adversely affected. Failure of a trial to achieve its prespecified primary endpoint generally increases the likelihood that additional studies will be required if the sponsoring company determines to continue development of the product candidate, and reduces the likelihood of timely development of and regulatory approval to market the product candidate.

*There are many additional 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.*

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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.

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We cannot assure you that any acquisition will result in short-term or 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 or they might not be 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 current shareholder's 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 before or after that time to complete the development and commercialization of our product candidates. We are currently conducting or completing several clinical trials, including the Phase III trial of pexelizumab in CABG patients. 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. We rely heavily on Procter & Gamble to fund development of pexelizumab. If Procter & Gamble were to terminate the pexelizumab collaboration, we could have to raise additional capital or find new collaboration partners in order to continue the development of pexelizumab.

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

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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 would harm our business.

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

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.

P&G has rights to terminate the collaboration or sublicense its collaboration rights at any time. Termination of our agreement with Procter & Gamble would cause significant delays in the development of pexelizumab and result in significant additional development costs to us. If we were to continue development of pexelizumab following termination by P&G, we would need to fund the development and commercialization of pexelizumab on our own or identify a new development partner. We would need to develop or acquire replacement expertise in many areas necessary for the development and potential commercialization of pexelizumab, or enter into agreements with other companies with respect to those matters. We do not have the resources to replace some of the functions provided or funded by P&G. Accordingly, we might have to stop the development of pexelizumab or shift resources from other product development programs until alternative resources are obtained. Sublicense of its rights by P&G also could cause significant delays in the development of pexelizumab and result in substantial additional development costs to us. In addition, sublicense would introduce a new collaboration partner which could create new and additional risks to the development of pexelizumab that can not be identified at this time.

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.

We are not currently able to predict the determination of P&G to regarding the results of the Phase III PRIMO-CABG trial of pexelizumab, including how those results may affect P&G's future plans for pexelizumab.

*If we are unable to engage and retain third-party collaborators, our research and development efforts may be delayed.*



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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.

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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 or clinical or scientific 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 \$9.05 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 \$9.05 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 manufacture, 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 humanized single chain antibodies, recombinant human antibodies, and recombinant human single chain antibodies. Many of our product candidates are genetically engineered antibodies, including recombinant humanized antibodies, recombinant humanized single chain antibodies, recombinant human antibodies, and recombinant human single chain antibodies.

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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 costly damages or to obtain a license to sell or develop our drugs. A required license may be costly or 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.

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.

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.

*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, or is otherwise unable to manufacture our required amounts at our required quality, 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 would be materially and adversely affected.

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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 at all. 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. Also, 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 a third-party manufacturer for supply of pexelizumab; or we could be solely liable for such potential penalty payments if P&G were to terminate our collaboration and if we were to assume such third-party manufacturing agreement. 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 established core pre-commercial marketing capabilities. If we are unable to continue developing or contracting 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.



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*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, if commercialized, like similar products in the marketplace, 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 an insufficient 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.*