

SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM S-3
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)

13-364831
(IRS Employer
Identification No.)

352 Knotter Drive
Cheshire, Connecticut 06410
(203) 272-2596
(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Thomas I.H. Dubin, Esq.
352 Knotter Drive
Cheshire, Connecticut 06410
(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

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

Patrick O'Brien
Ropes & Gray LLP
One International Place
Boston, Massachusetts 02110
(617)-951-7000

Approximate date of commencement of proposed sale to public: As soon as practicable after this Registration Statement becomes effective.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are being offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. 333-114449

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 registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier 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 OF REGISTRATION FEE

Title of each class of securities to be registered(4)	Proposed Maximum Aggregate Offering Price (1)(2)(3)	Amount of Registration Fee
Common Stock, \$0.0001 par value per share	\$2,125,000	\$250.11

- (1) An aggregate of \$150,000,000 of securities were previously registered on a Registration Statement on Form S-3 (File No. 333-114449), all of which 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 Registration Statements"). A filing fee was paid with the Prior Registration Statements. The Registrant has sufficient funds in its Securities and Exchange Commission account to cover the registration fee for this filing.

- (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 \$2,125,000 or the equivalent thereof.
 - (3) Estimated solely for purposes of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933.
 - (4) 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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EXPLANATORY NOTE AND INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

Alexion Pharmaceuticals, Inc., a Delaware corporation (the "Company") is filing this Registration Statement with respect to the registration of an additional \$2,125,000 of securities, pursuant to General Instruction IV of Form S-3 and Rule 462(b) promulgated under the Securities Act of 1933, as amended. This Registration Statement relates to the public offering of our securities contemplated by the Registration Statement on Form S-3 (File No. 333-114449), as amended (the "Original Registration Statement"), which was originally filed by the Company with the Securities and Exchange Commission on April 14, 2004 and declared effective by the Commission on May 14, 2004.

The contents of the Original Registration Statement and all exhibits to the Original Registration Statement are hereby incorporated by reference into this Registration Statement.

The required opinions and consents are listed on the Exhibit Index attached hereto and filed herewith.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 16. Exhibits and Financial Statement Schedules.

All exhibits filed with or incorporated by reference in the Original Registration Statement are incorporated by reference into, and shall be deemed a part of, this Registration Statement, and the following additional exhibits are filed herewith:

<u>Exhibit Number</u>	<u>Description of Exhibit</u>
5.1	Opinion of Ropes & Gray LLP regarding legality of the shares of common stock being registered.
23.1	Consent of PricewaterhouseCoopers LLP.
23.2	Consent of Ropes & Gray LLP (included in Exhibit 5.1).
24.1	Power of Attorney*

* Previously filed in connection with the Registration Statement on Form S-3 (File No. 333-114449) and incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cheshire, State of Connecticut, State of Connecticut, on this 11th day of August, 2005.

ALEXION PHARMACEUTICALS, INC.

By: /s/ Leonard Bell

Leonard Bell
Chief Executive Officer, Secretary and Treasurer

By: _____ *

David W. Keiser
President and Chief Operating Officer

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ Leonard Bell _____ Leonard Bell	Chief Executive Officer and Director (Principal Executive Officer)	August 11, 2005
* _____ David W. Keiser	President, Chief Operating Officer, Chief Financial Officer, and Director	August 11, 2005
* _____ Barry P. Luke	Vice President, Finance and Administration (Principal Accounting Officer)	August 11, 2005
* _____ Max Link	Chairman of the Board of Directors	August 11, 2005
* _____ Joseph A. Madri	Director	August 11, 2005
* _____ R. Douglas Norby	Director	August 11, 2005
* _____ Larry L. Mathis	Director	August 11, 2005

*By: /s/ Leonard Bell

Leonard Bell
Attorney-in-fact

EXHIBIT INDEX

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* Previously filed in connection with the Registration Statement on Form S-3 (File No. 333-114449) and incorporated herein by reference.

[ROPES & GRAY LLP LETTERHEAD]

August 11, 2005

Alexion Pharmaceuticals, Inc.
352 Knotter Dr.
Cheshire, CT 06410

Re: Alexion Pharmaceuticals, Inc.

Ladies and Gentlemen:

This opinion is furnished to you in connection with a registration statement (the "Registration Statement") on Form S-3 (Registration No. 333-_____), filed with the Securities and Exchange Commission (the "Commission") pursuant to Rule 462(b) of Regulation C promulgated under the Securities Act of 1933, as amended, for the registration of shares of Common Stock, \$.0001 par value, of Alexion Pharmaceuticals, Inc., a Delaware corporation (the "Company") having a maximum aggregate public offering price of \$2,125,000 (the "Shares"). The Shares are to be sold pursuant to an underwriting agreement (the "Underwriting Agreement") dated August 11, 2005, by and among the Company and Morgan Stanley & Co. Incorporated. The Registration Statement relates to the public offering of the Company's securities contemplated by the registration statement on Form S-3 (File No. 333-114449), as amended, which was originally filed by the Company with the Commission on April 14, 2004 and declared effective on May 14, 2004.

We have acted as counsel for the Company in connection with its proposed issuance and sale of the Shares. For purposes of this opinion, we have examined and relied upon such documents, records, certificates and other instruments as we have deemed necessary.

The opinions expressed below are limited to the Delaware General Corporation Law, including the applicable provisions of the Delaware Constitution and the reported cases interpreting those laws.

Based on the foregoing, we are of the opinion that the shares have been duly authorized and, when the Shares have been issued and sold and the Company has received the consideration in accordance with the terms of the Underwriting Agreement, the Shares will be validly issued, fully paid and non-assessable.

We hereby consent to your filing this opinion as an exhibit to the Registration Statement and to the use of our name therein and in the related prospectus under the caption "Legal Matters".

This opinion may be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

Very truly yours,

/s/ ROPES & GRAY LLP

Ropes & Gray LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated September 15, 2004 relating to the financial statements, which appears in Alexion Pharmaceuticals, Inc.'s Annual Report on Form 10-K for the year ended July 31, 2004. We also consent to the reference to us under the heading "Experts" in this Registration Statement.

/s/ PricewaterhouseCoopers LLP
Hartford, Connecticut
August 12, 2005