

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 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)

13-3648318
(I.R.S. Employer
Identification Number)

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)

Leonard Bell, M.D.
Chief Executive Officer
Alexion Pharmaceuticals, Inc.
352 Knotter Drive
Cheshire, Connecticut 06410
(203) 272-2596
(Name and address, including zip code, and telephone number, including area code, of agent for service of process for registrant)

With copies to:

Thomas I.H. Dubin, Esq.
Senior Vice President and Chief Legal Officer
Alexion Pharmaceuticals, Inc.
352 Knotter Drive
Cheshire, Connecticut 06410
(203) 272-2596

Patrick O'Brien, Esq.
Ropes & Gray LLP
800 Boylston Street
Boston, Massachusetts 02199
(617) 951-7000

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 plans, 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 the dividend or interest reinvestment plans, check the following box.

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

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

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer
Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

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)	Amount of registration fee(2)
Common stock, \$0.0001 par value per share, and associated rights to purchase Junior Participating Cumulative Preferred Stock, \$0.0001 par value per share (3)				

- Omitted pursuant to General Instruction II. E. of Form S-3. This registration statement covers an indeterminate amount of common stock as may from time to time be offered hereunder at indeterminate prices.
- In accordance on Rules 456(b) and 457(r) under the Securities Act, the registrant is deferring payment of the registration fee and will pay the registration fee on a pay-as-you-go basis.
- The rights to purchase Junior Participating Cumulative Preferred Stock, par value \$0.0001 per share, are attached to and trade with all common stock of the registrant. Value attributable to such rights, if any, is reflected in the market price of the common stock.



ALEXION PHARMACEUTICALS, INC.

Common Stock

We may offer and sell, or facilitate the resale of, shares of our common stock from time to time. We will provide specific offering terms in supplements to this prospectus. The prospectus supplements may also add, update or change information contained or incorporated by reference in this document. This prospectus may be used to offer and sell securities only if accompanied by a prospectus supplement. You should read this prospectus and any prospectus supplements, along with the additional information described under the headings “Where You Can Find More Information” and “Incorporation by Reference,” before making an investment decision.

The shares of our common stock may be sold directly to our stockholders or to purchasers or through agents on our behalf or through underwriters or dealers as designated from time to time. If any agents or underwriters are involved in the sale of any of these securities, the applicable prospectus supplement will provide the names of the agents or underwriters and any applicable fees, commissions, or discounts.

Our common stock is listed on The Nasdaq Global Select Market under the symbol “ALXN.”

Investing in these securities involves substantial risk. Please see “[Risk Factors](#)” on page 1.

The address of our principal executive offices is 352 Knotter Drive, Cheshire, Connecticut 06410, and the telephone number at our principal executive offices is (203) 272-2596.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is May 23, 2012

[Table of Contents](#)

TABLE OF CONTENTS

About this Prospectus	1
Risk Factors	1
Where You Can Find More Information	1
Incorporation by Reference	1
Alexion Pharmaceuticals, Inc.	3
Use of Proceeds	4
Description of Capital Stock	4
Plan of Distribution	9
Legal Matters	10
Experts	10

ABOUT THIS PROSPECTUS

Each time we offer securities using this prospectus, we will provide the number of shares and offering price in a supplement to this prospectus. The prospectus supplements also may add, update or change the information contained or incorporated by reference in this prospectus and also will describe the specific manner in which we will be offering shares. You should read carefully both this prospectus and any prospectus supplement together with the additional information described under the headings “Where You Can Find More Information” and “Incorporation by Reference.”

We have not authorized anyone to provide any information other than that contained or incorporated by reference in this prospectus, in any accompanying prospectus supplement or in any free writing prospectus prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus or incorporated by reference herein is accurate only as of the date on the front of this prospectus or the respective dates of filing of the incorporated documents. Our business, financial condition, results of operations and prospects may have changed since that date.

Unless otherwise indicated or unless the context requires otherwise, all references in this prospectus to “Alexion,” “we,” “us” and “our” refer to Alexion Pharmaceuticals, Inc.

RISK FACTORS

For a discussion of the factors you should carefully consider before deciding to purchase any shares, please review “Part II, Item 1A—Risk Factors” in our most recent Quarterly Report on Form 10-Q, which is incorporated by reference in this prospectus, as that disclosure has been updated by subsequent periodic reports, as well as the “Risk Factors” section in the applicable prospectus supplement.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission, or the SEC. You may read and copy any materials that we file with the SEC at its Public Reference Room, 100 F Street, N.E., Washington, D.C. 20549. You may call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room. Our SEC filings are also available to the public from the SEC’s website at <http://www.sec.gov>.

INCORPORATION BY REFERENCE

The SEC’s rules allow us to “incorporate by reference” the information we have filed with the SEC, which means that we can disclose important information by referring you to those documents. The information incorporated by reference is a part of this prospectus, and information that we file later with the SEC will automatically update and supersede the information included and/or incorporated by reference in this prospectus. We incorporate by reference into this prospectus the documents listed below and any future filings made by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1933, as amended (other than, in each case, any document or portion of a document that is deemed not to be filed) after the initial filing of the registration statement that contains this prospectus and prior to the termination of the offerings to which this prospectus relates:

- our annual report on Form 10-K for the year ended December 31, 2011, filed on February 17, 2012;
- our quarterly report on Form 10-Q for the quarterly period ended March 31, 2012, filed on May 2, 2012;

Table of Contents

- our current reports on Form 8-K filed on January 4, 2012, February 7, 2012, April 16, 2012, May 7, 2012, and May 11, 2012; and
- our registration statement on Form 8-A filed on February 12, 1996, 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, Amendment No. 2 to Form 8-A filed on February 12, 2002 and Amendment No. 3 to Form 8-A filed on November 17, 2004.

You may obtain documents incorporated by reference into this prospectus at no cost by requesting them in writing or telephoning us at the following:

Investor Relations
Alexion Pharmaceuticals, Inc.
352 Knotter Drive
Cheshire, CT 06410
(203) 272-2596

These filings are also made available, free of charge, on our website at <http://www.alxn.com>. The information contained in, and that can be accessed through, our website is not incorporated into and does not form a part of this prospectus.

This prospectus constitutes a part of a registration statement on Form S-3, referred to herein, including all amendments and exhibits, as the Registration Statement, that we have filed with the SEC under the Securities Act of 1933, as amended, or the Securities Act. This prospectus does not contain all of the information contained in the Registration Statement. We refer you to the Registration Statement and related exhibits for further information regarding us and our securities. The Registration Statement may be inspected at the public reference facilities maintained by the SEC at the address set forth above or from the SEC's website at <http://www.sec.gov>. Statements contained in this prospectus or in a document incorporated or deemed to be incorporated by reference herein concerning the provisions of any document filed as an exhibit to the Registration Statement 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 SEC. Each such statement is qualified in its entirety by such reference.

ALEXION PHARMACEUTICALS, INC.

We are a biopharmaceutical company focused on serving patients with severe and ultra-rare disorders through the innovation, development and commercialization of life-transforming therapeutic products. Our marketed product Soliris® (eculizumab) is the first and only therapeutic approved for patients with two ultra-rare and severe disorders resulting from chronic uncontrolled activation of the complement component of the immune system: paroxysmal nocturnal hemoglobinuria (PNH), an ultra-rare and life-threatening blood disorder, and atypical hemolytic uremic syndrome (aHUS), an ultra-rare and life-threatening genetic disease. We are also evaluating other potential indications for Soliris in other diseases in which chronic uncontrolled complement activation is the underlying mechanism, and we are progressing with other biotechnology product candidates in ultra-rare and severe disorders which are now in various stages of development. We were incorporated in 1992 and began commercial sale of Soliris in 2007.

USE OF PROCEEDS

The use of proceeds from the disposition of the securities covered by this prospectus will be as set forth in the applicable prospectus supplement.

DESCRIPTION OF CAPITAL STOCK

As of the date of this prospectus, our certificate of incorporation authorizes us to issue 290,000,000 shares of common stock, par value \$0.0001 per share, and 5,000,000 shares of preferred stock, par value \$0.0001 per share. 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 below under “—Preferred Stock—Stockholder Rights Plan.”

The following summary describes the material terms of our capital stock and stockholder rights plan. The description of capital stock and stockholder rights plan is qualified by reference to our certificate of incorporation, as amended, and the certificate of designation for our junior participating cumulative preferred stock, both of which are filed as an exhibit to this Registration Statement, as well as our bylaws, as amended, and our stockholder rights agreement, as amended, both of which are incorporated into this prospectus by reference to the SEC filings to which they are exhibits.

Common Stock

Voting. Common stockholders are entitled to one vote per share for the election of directors and on all other matters that require stockholder approval. There is no cumulative voting.

Dividends and Other Distributions. Subject to any preferences that may apply to any shares of preferred stock outstanding at the time, holders of our common stock are entitled to share in an equal amount per share any dividends declared by our board of directors on the common stock and paid out of legally available assets.

Distribution on Dissolution. 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 after payment of liabilities and the liquidation preferences of any outstanding preferred stock.

Other Rights. 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.

Preferred Stock

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, and liquidation preference, 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 below under “—Stockholder Rights Plan.”

The issuance of preferred stock could adversely affect the voting power of holders of common stock and reduce the likelihood that common stockholders will receive dividend payments and payments upon liquidation.

[Table of Contents](#)

The issuance could have the effect of decreasing the market price of our common stock. The issuance of preferred stock also could have the effect of delaying, deterring or preventing a change in control of us.

When we issue shares of preferred stock, the shares will be fully paid and non-assessable and will not have, or be subject to, any preemptive or similar rights.

Delaware law provides that the holders of preferred stock will have the right to vote separately as a class on any proposal involving changes that would adversely affect the powers, preferences, or special rights of holders of that preferred stock. This right is in addition to any voting rights that may be provided for in the applicable certificate of designation.

Stockholder Rights Plan.

On February 14, 1997, our board of directors declared a dividend of one preferred stock purchase right for each outstanding share of our common stock for the stockholders of record on March 6, 1997. The right will expire on March 6, 2017, subject to earlier redemption or expiration of the right as provided in the rights agreement, as amended, or the rights agreement, between us and Continental Stock Transfer & Trust Company, as rights agent. Under certain circumstances, each right entitles the registered holder to purchase from us one one-hundredth of a share of our junior participating cumulative preferred stock or, in certain circumstances, either our common stock or common stock of an acquiring company, at one-half the market price of our common stock or the acquiring company's common stock, as the case may be. The rights are designed to make it more likely that all of our stockholders receive fair and equal treatment in the event of any proposed takeover of us and to guard against the use of partial tender offers or other coercive tactics to gain control of us. The description and terms of the rights are set forth in the rights agreement.

Exercise Price. When exercisable, except as set forth below, each right entitles the registered holder to purchase from us one one-hundredth of a share of junior participating cumulative preferred stock, at a price of \$300.00 per one one-hundredth of a share, subject to adjustment in certain circumstances.

Transfer and Detachment. Until the distribution date, which is the earlier to occur of (i) the stock acquisition date, which is ten business days following the time of a public announcement or notice to us that certain persons or groups of affiliated or associated persons have acquired, or obtained the right to acquire, beneficial ownership of 20% or more of our outstanding shares of common stock (also referred to as acquiring persons), or (ii) ten business days, or such later date as may be determined by our board of directors, after the date of the commencement or announcement by a person of an intention to make a tender offer or exchange offer for an amount of common stock which, together with the shares of such stock already owned by such person, constitutes 20% or more of the outstanding shares of our common stock, the rights will be evidenced, with respect to any of our common stock certificates outstanding as of March 6, 1997, by such common stock certificate with a copy of the summary of rights attached thereto. The rights agreement provides that, until the distribution date, the rights will be transferred with and only with our common stock.

Until the distribution date (or earlier redemption or expiration of the rights, as provided in the rights agreement), new common stock certificates issued after March 6, 1997, upon the transfer or issuance of new shares of common stock, will contain a notation incorporating the rights agreement by reference. Until the distribution date (or earlier redemption or expiration of the rights, as provided in the rights agreement), the surrender for the transfer of any of our common stock certificates outstanding as of March 6, 1997, even without a copy of the summary of rights attached thereto, will also constitute the transfer of the rights associated with the shares of common stock represented by such certificate.

As soon as practicable following the distribution date, separate rights certificates evidencing the rights will be mailed to holders of record of the common stock as of the close of business on the distribution date, and such separate right certificates alone will evidence the rights.

[Table of Contents](#)

Exercisability. The rights are not exercisable until the distribution date. The rights will expire on March 6, 2017 unless earlier redeemed by us.

Right to Acquire Stock at Half Price. In the event that after the stock acquisition date, we are acquired in a merger or other business combination transaction or 50% or more of our assets, cash flow or earning power are sold or otherwise transferred, the rights agreement provides that proper provision shall be made so that each holder of a right, upon the exercise thereof at the then current exercise price of the right, shall be entitled to receive that number of shares of common stock of the acquiring company having a market value of two times the exercise price of the right. In the event that we are the surviving corporation of a merger and our common stock is changed or exchanged, proper provision shall be made so that each holder of a right will thereafter have the right to receive upon exercise that number of shares of common stock of the other party to the transaction having a market value of two times the exercise price of the right.

In the event that a person or group becomes an acquiring person (otherwise than pursuant to a tender offer or exchange offer for all outstanding shares of our common stock at a price and on terms which are determined to be fair and in the best interests of us and our stockholders by a majority of the members of our board of directors), proper provision shall be made so that each holder of a right, other than the acquiring person, whose rights will thereafter be void, will thereafter have the right to receive upon exercise that number of shares of our common stock having a market value (as defined in the rights agreement) of two times the exercise price of the right. A person or group will not be deemed to be an acquiring person if our board of directors determines that such person or group became an acquiring person inadvertently and such person or group promptly divests itself of a sufficient number of shares of common stock so that such person or group is no longer an acquiring person.

Adjustments. The purchase price payable and the number of shares of junior participating cumulative preferred stock or other securities or property issuable upon the exercise of the rights are subject to adjustment from time to time to prevent dilution (i) in the event of a stock dividend on or a subdivision, combination or reclassification of the shares of junior participating cumulative preferred stock, (ii) upon the fixing of a record date for the issuance to holders of junior participating cumulative preferred stock of certain rights, options or warrants to subscribe for shares of junior participating cumulative preferred stock or convertible securities at less than the current market price of shares of junior participating cumulative preferred stock or (iii) upon the fixing of a record date for the making of a distribution to holders of shares of junior participating cumulative preferred stock of evidences of indebtedness or assets (excluding regular periodic cash dividends not exceeding 125% of the last regular periodic cash dividend or dividends payable in shares of junior participating cumulative preferred stock) or of subscription rights or warrants (other than those referred to above). The number of rights and the number of shares of junior participating cumulative preferred stock issuable upon exercise of each right are also subject to adjustment in the case of a stock split, combination or stock dividend on the shares of our common stock prior to the distribution date.

With certain exceptions, no adjustment in the purchase price will be required until cumulative adjustments require an adjustment of at least 1% in the purchase price. No fractional shares of common stock will be issued and, in lieu thereof, an adjustment in cash will be made based on the market value of shares of common stock on the last trading date prior to the date of exercise.

Redemption or Exchange. At any time prior to the earlier of (i) ten business days after the stock acquisition date or (ii) March 6, 2017, we, by resolution of our board of directors, may redeem the rights in whole, but not in part, at a redemption price of \$0.01 per right. Our board of directors may extend the time within which the rights may be redeemed at any time prior to the stock acquisition date. Immediately upon the action of our board of directors electing to redeem the rights, the right to exercise the rights will terminate and the only right of the holders of rights will be to receive the redemption price.

At any time after a person becomes an acquiring person and prior to the acquisition by such person of 50% or more of our outstanding common stock, our board of directors may exchange the rights (other than rights

[Table of Contents](#)

beneficially owned by such person which have become void), in whole or in part, for our common stock at an exchange ratio of one share of common stock per right (subject to adjustment).

Preferred Stock. The shares of junior participating cumulative preferred stock purchasable upon exercise of the rights will be nonredeemable and junior to any other series of preferred stock we may issue (unless otherwise provided in the terms of such preferred stock or in our certificate of incorporation). Each share of junior participating cumulative preferred stock will be entitled to receive, in the aggregate, a dividend in an amount equal to 100 times the dividend per share of common stock, or, if greater, \$10.00 per year. In the event of liquidation, the holders of shares of junior participating cumulative preferred stock will be entitled to receive a minimum liquidation payment equal to the greater of \$100.00 per share or an amount equal to 100 times the amount to be paid in liquidation per share of common stock. Each share of junior participating cumulative preferred stock will have 100 votes, voting together with the shares of common stock. In addition, if dividends on the junior participating cumulative preferred stock are in arrears for four consecutive quarterly payment periods, the holders of the shares of junior participating cumulative preferred stock will have the right, voting as a class, to elect two members to our board of directors. In the event of any merger, consolidation or other transaction in which shares of common stock are exchanged, each share of junior participating cumulative preferred stock will be entitled to receive 100 times the amount and type of consideration received per share of common stock. The rights of the shares of junior participating cumulative preferred stock as to dividends and liquidation, and in the event of mergers and consolidations, are protected by anti-dilution provisions.

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

Amendment. The rights and the rights agreement can be amended by our board of directors in any respect (including, without limitation, any extension of the period in which the rights may be redeemed) at any time prior to the stock acquisition date. From and after such time, without the approval of our stockholders or the holders of the rights, the board of directors may only supplement or amend the rights agreement in order (i) to cure any ambiguity, (ii) to correct or supplement any provision contained in the rights agreement which may be defective or inconsistent with any other provision in the rights agreement, (iii) to shorten or lengthen any time period under the rights agreement, provided such lengthening is for the purpose of protecting, enhancing or clarifying the rights of or the benefits to the rights holders or (iv) to make any changes or supplements which we and the rights agent may deem necessary or desirable which shall not adversely affect the interests of the holders of right certificates (other than an acquiring person or an affiliate or associate thereof). We may, at any time prior to the stock acquisition date, amend the rights agreement to lower the threshold of common stock beneficial ownership at which a person will become an acquiring person to not less than the greater of (i) a percentage larger than the largest percentage of common stock then known by the us to be beneficially owned by a person and (ii) ten percent (10%).

Anti-Takeover Provisions

Delaware Law. We are subject to Section 203 of the Delaware General Corporation Law. This statute regulating corporate takeovers prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for three years following the date that the stockholder became an interested stockholder, unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (a) shares owned by persons who are directors and also officers, and (b) shares owned by

Table of Contents

employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

- on or subsequent to the date of the transaction, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is any person who, together with such person's affiliates and associates (i) owns 15% or more of a corporation's voting securities or (ii) is an affiliate or associate of a corporation and was the owner of 15% or more of the corporation's voting securities at any time within the three year period immediately preceding a business combination of the corporation governed by Section 203. We expect the existence of this provision to have an anti-takeover effect with respect to transactions that our board of directors does not approve in advance. We also anticipate that Section 203 may discourage takeover attempts that might result in a premium over the market price for the shares of common stock held by our stockholders.

Bylaw and Certificate of Incorporation Provisions. Our bylaws provide that special meetings of our stockholders may be called only by the Chairman of the board of directors, the President, the Secretary, or a majority of the board of directors, or upon the written request of stockholders who together own of record 50% of the outstanding stock of all classes entitled to vote at such meeting. Our bylaws also specify that the authorized number of directors may be changed only by resolution of the board of directors. Our certificate does not include a provision for cumulative voting for directors. Under cumulative voting, a minority stockholder holding a sufficient percentage of a class of shares may be able to ensure the election of one or more directors. These and other provisions contained in our certificate of incorporation and bylaws could delay or discourage transactions involving an actual or potential change in control of us or our management, including transactions in which stockholders might otherwise receive a premium for their shares over then current prices. These provisions could also limit the ability of stockholders to remove current management or approve transactions that stockholders may deem to be in their best interests and could adversely affect the price of our common stock.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A.

Listing

Our common stock is listed on The Nasdaq Global Select Market under the symbol "ALXN."

PLAN OF DISTRIBUTION

General

The shares may be sold:

- to or through underwriting syndicates represented by one or more managing underwriters;
- to or through one or more underwriters without a syndicate;
- through dealers or agents; or
- to investors directly in negotiated sales or in competitively bid transactions.

The prospectus supplement for each offering will describe, to the extent required, information with respect to that offering, including:

- the name or names of any underwriters and the respective amounts underwritten;
- the sale price and the proceeds from the sale;
- any underwriting discounts and other items constituting underwriters' compensation;
- any initial public offering price and any discounts or concessions allowed or reallocated or paid to dealers; and
- any material relationships with the underwriters.

Underwriters

If underwriters are used in the sale, we will execute an underwriting agreement with those underwriters relating to the sale of the shares. Unless otherwise set forth in the applicable prospectus supplement, the obligations of the underwriters to purchase these shares will be subject to conditions, and the underwriters will be obligated to purchase all of these shares if any are purchased.

The shares subject to an underwriting agreement will be acquired by the underwriters for their own account and may be resold by them from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Underwriters may be deemed to have received compensation in the form of underwriting discounts or commissions and may also receive commissions from the purchasers of these shares for whom they may act as agent. Underwriters may sell these shares to or through dealers. These dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they may act as agent. Any initial public offering price and any discounts or concessions allowed or reallocated or paid to dealers may be changed from time to time.

Agents

We may sell shares through agents designated by us from time to time. We will name any agent involved in the offer or sale of these shares and will list commissions payable by us to these agents in the applicable prospectus supplement. These agents will be acting on a best efforts basis to solicit purchases for the period of its appointment, unless we state otherwise in the applicable prospectus supplement.

Direct Sales

We may sell shares directly to purchasers. In this case, we will not engage underwriters or agents in the offer and sale of the applicable shares.

[Table of Contents](#)

Indemnification

We may indemnify underwriters, dealers or agents who participate in the distribution of shares against certain liabilities, including liabilities under the Securities Act, and agree to contribute to payments which these underwriters, dealers or agents may be required to make.

Secondary Sales

Shares of our common stock may be sold from time to time by selling stockholders, through public or private transactions at prevailing market prices or at privately negotiated prices, as described in the applicable prospectus supplement.

LEGAL MATTERS

Unless the applicable prospectus supplement indicates otherwise, our counsel Ropes & Gray LLP, Boston, Massachusetts, will pass upon the validity of the shares of common stock offered by this prospectus.

EXPERTS

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this Prospectus by reference to the Alexion Pharmaceuticals, Inc. Annual Report on Form 10-K for the year ended December 31, 2011 have been so incorporated in reliance on the report(s) of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

The audited historical consolidated financial statements of Enobia Pharma Corp. which appear in Exhibit 99.2 of the Current Report on Form 8-K/A of Alexion Pharmaceuticals, Inc. dated April 16, 2012 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, independent auditors, given on the authority of said firm as experts in auditing and accounting.

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth all fees and expenses payable by the registrant in connection with the issuance and distribution of the securities being registered hereby (other than any underwriting discounts and commissions). All amounts are estimated.

SEC registration fee	(1)
Printing and engraving fees	\$ 50,000
Legal fees and expenses	\$150,000
Accounting fees and expenses	\$ 65,000
Stock exchange listing fees	\$ 50,000
Miscellaneous	\$ 25,000
Total	<u>\$340,000</u>

(1) Deferred in reliance upon Rule 456(b) and 457(r) under the Securities Act.

Item 15. Indemnification of Directors and Officers.

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

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

In accordance with Section 145 of the DGCL, Section EIGHTH of our Certificate of Incorporation, as amended, provides that we shall indemnify each person who is or was a director, officer, employee or agent of us (including the heirs, executors, administrators or estate of such person) or is or was serving at our request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, to the fullest extent permitted. The indemnification provided by our amended Certificate of Incorporation shall not be deemed exclusive of any other rights to which any of those seeking indemnification or advancement of expenses may be entitled under any by-law, agreement, vote of shareholders or disinterested directors or otherwise, both as to action in his official capacity and as to action in another capacity while holding such office, and shall continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the

[Table of Contents](#)

benefit of the heirs, executors and administrators of such a person. Expenses (including attorneys' fees) incurred in defending a civil, criminal, administrative or investigative action, suit or proceeding shall be paid by us in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of the indemnified person to repay such amount if it shall ultimately be determined that he is not entitled to be indemnified by us. Section NINTH of our amended Certificate of Incorporation provides that our directors shall not be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to us or our stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit.

Insofar as the indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers or controlling persons pursuant to the foregoing provisions, we have been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

Table of Contents

Item 16. Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
1.1†	Form of Underwriting Agreement.
4.1	Certificate of Incorporation, as amended (incorporated by reference to our Registration Statement on Form S-3 (Reg. No. 333-128085), filed on September 2, 2005).
4.2	Certificate of Amendment of the Certificate of Incorporation (incorporated by reference to our Annual Report on Form 10-K for the year ended December 31, 2011, filed on February 17, 2012).
4.3	Bylaws, as amended (incorporated by reference to our Current Report on Form 8-K, filed on December 2, 2011).
4.4	Rights Agreement, dated as of February 14, 1997, between Alexion and Continental Stock Transfer & Trust Company (incorporated by reference to our Registration Statement on Form 8-A (Reg. No. 000-27756), filed on February 21, 1997).
4.5	Amendment No. 1 to Rights Agreement, dated as of September 18, 2000, between Alexion and Continental Stock Transfer and Trust Company (incorporated by reference to our Amendment No. 1 to our Registration Statement on Form 8-A (Reg. No. 000-27756), filed on October 6, 2000).
4.6	Amendment No. 2 to Rights Agreement, dated as of December 12, 2001, between Alexion and Continental Stock Transfer and Trust Company (incorporated by reference to our Registration Statement on Form 8-A (Reg. No. 000-27756), filed on February 12, 2002).
4.7	Amendment No. 3 to Rights Agreement, dated as of November 16, 2004, between Alexion and Continental Stock Transfer and Trust Company (incorporated by reference to our Registration Statement on Form 8-A (Reg. No. 000-27756), filed on November 17, 2004).
4.8	Amendment No. 4 to Rights Agreement, dated as of February 23, 2007, between Alexion and Continental Stock Transfer and Trust Company (incorporated by reference to our Annual Report on Form 10-K for the year ended December 31, 2006, filed on February 23, 2007).
5.1*	Opinion of Ropes & Gray LLP.
23.1*	Consent of PricewaterhouseCoopers LLP, Consent of Independent Registered Public Accounting Firm.
23.2*	Consent of PricewaterhouseCoopers LLP, Consent of Independent Auditors.
23.3*	Consent of Ropes & Gray LLP (included in Exhibit 5.1).
24.1*	Powers of Attorney (included on the signature page to this Registration Statement).

* Filed herewith.

† To be filed, if necessary, subsequent to the effectiveness of this registration statement by an amendment to this registration statement or incorporated by reference pursuant to a Current Report on Form 8-K in connection with an offering of securities.

Item 17. Undertakings

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the

aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that:

- (A) Paragraphs (1)(i) and (1)(ii) of this section do not apply if the registration statement is on Form S-8, and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement; and
 - (B) Paragraphs (1)(i), (1)(ii) and (1)(iii) of this section do not apply if the registration statement is on Form S-3 or Form F-3 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.
 - (C) *Provided further, however,* that paragraphs (1)(i) and (1)(ii) do not apply if the registration statement is for an offering of asset-backed securities on Form S-1 or Form S-3, and the information required to be included in a post-effective amendment is provided pursuant to Item 1100(c) of Regulation AB.
- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
 - (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
 - (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
 - (i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
 - (ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering

Table of Contents

thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

- (5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934, as amended) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in such Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, Alexion Pharmaceuticals, Inc. 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, on May 23, 2012.

ALEXION PHARMACEUTICALS, INC.

By: /s/ Leonard Bell

Name: Leonard Bell, M.D.

Title: Chief Executive Officer and Treasurer

SIGNATURES AND POWERS OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned officers and directors of Alexion Pharmaceuticals, Inc., a Delaware corporation, hereby severally constitute Leonard Bell, M.D., and Vikas Sinha M.B.A., C.A., and each of them singly, our true and lawful attorney with full power to them, and each of them singly, to sign for us and in our names in the capacities indicated below, the registration statement filed herewith and any and all amendments to said registration statement, and generally to do all such things in our names and in our capacities as officers and directors to enable Alexion Pharmaceuticals, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said registration statement and any and all amendments thereto.

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Leonard Bell</u> Leonard Bell, M.D.	Chief Executive Officer, Treasurer and Director <i>(Principal Executive Officer)</i>	May 22, 2012
<u>/s/ Vikas Sinha</u> Vikas Sinha, M.B.A., C.A.	Senior Vice President and Chief Financial Officer <i>(Principal Financial Officer)</i>	May 22, 2012
<u>/s/ Scott Phillips</u> Scott Phillips, C.P.A.	Corporate Controller and Chief Accounting Officer <i>(Principal Accounting Officer)</i>	May 22, 2012
<u>/s/ Max Link</u> Max Link, Ph.D.	Chairman of the Board of Directors	May 22, 2012
<u>/s/ William R. Keller</u> William R. Keller	Director	May 22, 2012
<u>/s/ Joseph A. Madri</u> Joseph A. Madri, Ph.D., M.D.	Director	May 22, 2012
<u>/s/ Larry L. Mathis</u> Larry L. Mathis	Director	May 22, 2012
<u>/s/ R. Douglas Norby</u> R. Douglas Norby	Director	May 22, 2012
<u>/s/ Alvin S. Parven</u> Alvin S. Parven	Director	May 22, 2012
<u>/s/ Andreas Rummelt</u> Andreas Rummelt, Ph.D.	Director	May 22, 2012
<u>/s/ Ann M. Veneman</u> Ann M. Veneman	Director	May 22, 2012

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Description</u>
1.1†	Form of Underwriting Agreement.
4.1	Certificate of Incorporation, as amended (incorporated by reference to our Registration Statement on Form S-3 (Reg. No. 333-128085), filed on September 2, 2005).
4.2	Certificate of Amendment of the Certificate of Incorporation (incorporated by reference to our Annual Report on Form 10-K for the year ended December 31, 2011, filed on February 17, 2012).
4.3	Bylaws, as amended (incorporated by reference to our Current Report on Form 8-K, filed on December 2, 2011).
4.4	Rights Agreement, dated as of February 14, 1997, between Alexion and Continental Stock Transfer & Trust Company (incorporated by reference to our Registration Statement on Form 8-A (Reg. No. 000-27756), filed on February 21, 1997).
4.5	Amendment No. 1 to Rights Agreement, dated as of September 18, 2000, between Alexion and Continental Stock Transfer and Trust Company (incorporated by reference to our Amendment No. 1 to our Registration Statement on Form 8-A (Reg. No. 000-27756), filed on October 6, 2000).
4.6	Amendment No. 2 to Rights Agreement, dated as of December 12, 2001, between Alexion and Continental Stock Transfer and Trust Company (incorporated by reference to our Registration Statement on Form 8-A (Reg. No. 000-27756), filed on February 12, 2002).
4.7	Amendment No. 3 to Rights Agreement, dated as of November 16, 2004, between Alexion and Continental Stock Transfer and Trust Company (incorporated by reference to our Registration Statement on Form 8-A (Reg. No. 000-27756), filed on November 17, 2004).
4.8	Amendment No. 4 to Rights Agreement, dated as of February 23, 2007, between Alexion and Continental Stock Transfer and Trust Company (incorporated by reference to our Annual Report on Form 10-K for the year ended December 31, 2006, filed on February 23, 2007).
5.1*	Opinion of Ropes & Gray LLP.
23.1*	Consent of PricewaterhouseCoopers LLP, Consent of Independent Registered Public Accounting Firm.
23.2*	Consent of PricewaterhouseCoopers LLP, Consent of Independent Auditors.
23.3*	Consent of Ropes & Gray LLP (included in Exhibit 5.1).
24.1*	Powers of Attorney (included on the signature page to this Registration Statement).

* Filed herewith.

† To be filed, if necessary, subsequent to the effectiveness of this registration statement by an amendment to this registration statement or incorporated by reference pursuant to a Current Report on Form 8-K in connection with an offering of securities.



May 23, 2012

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

Re: Registration of Securities by Alexion Pharmaceuticals, Inc.

Ladies and Gentlemen:

This opinion letter is furnished to you in connection with the registration statement on Form S-3 (the "Registration Statement") filed by Alexion Pharmaceuticals, Inc., a Delaware corporation (the "Company"), on the date hereof, with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), relating to the registration under the Securities Act and the proposed issuance and sale from time to time pursuant to Rule 415 under the Securities Act of shares of the Company's common stock, \$0.0001 par value per share (the "Common Stock").

We have examined such certificates, documents and records and have made such investigation of fact and such examination of law as we have deemed appropriate in order to enable us to render the opinions set forth herein. In conducting such investigation, we have relied, without independent verification, upon certificates of officers of the Company, public officials and other appropriate persons.

The opinions expressed below are limited to the General Corporation Law of the State of Delaware.

Based upon and subject to the foregoing and the assumptions, qualifications and limitations set forth below, we are of the opinion that when (i) the issuance and sale of any shares of Common Stock have been duly authorized by all necessary corporate action of the Company and (ii) such shares have been issued and delivered against payment of the purchase price therefor (in an amount in excess of the par value thereof) in accordance with the applicable purchase, underwriting or other agreement, and as contemplated by the Registration Statement, such shares of Common Stock will be validly issued, fully paid and nonassessable.

In rendering the opinions set forth above, we have assumed that (i) the Registration Statement will have become effective under the Securities Act, a prospectus supplement will have been prepared and filed with the Commission describing the Common Stock offered thereby and such shares of Common Stock will have been issued and sold in accordance with the terms of such prospectus supplement; (ii) a definitive purchase, underwriting, or similar agreement, pursuant to which such Common Stock may be issued, will have been duly authorized, executed and delivered by the Company and the other parties thereto (iv) at the time of the issuance of any shares of Common Stock, the Company will be a validly existing corporation under the law of its jurisdiction of incorporation; (v) the number of shares of Common Stock issued pursuant to the Registration Statement, together with the number of shares outstanding or reserved at the time of issuance, will not exceed the respective number of shares authorized by the Company's certificate of incorporation in effect at the time of such issuance; and (vi) all the foregoing actions to be taken by the Company are taken so as not to violate any applicable law and so as to comply with any requirement or restriction imposed by any court or governmental or regulatory body having jurisdiction over the Company or any of its property.

We hereby consent to the filing of this opinion letter 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." In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Sections 7 of the Securities Act or the rules and regulations of the Commission thereunder.

This opinion is for your benefit in connection with the Registration Statement and may be relied upon by you and by persons entitled to rely upon it pursuant to the applicable provisions of the Act.

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 February 17, 2012 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in Alexion Pharmaceuticals, Inc's Annual Report on Form 10-K for the year ended December 31, 2011. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP
Hartford, CT
May 23, 2012

CONSENT OF INDEPENDENT AUDITORS

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of Alexion Pharmaceuticals, Inc. of our report dated April 12, 2012 relating to the consolidated financial statements of Enobia Pharma Corp, which appears in the Current Report on Form 8-K/A of Alexion Pharmaceuticals, Inc. dated April 16, 2012. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP
Montréal, Quebec
May 23, 2012