

As filed with the Securities and Exchange Commission on November 23, 1999

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

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

ALEXION PHARMACEUTICALS, INC.
(Exact name of Registrant as specified in its charter)

DELAWARE
(State or other jurisdiction of
incorporation or organization)

13-3648318
(I.R.S. Employer
Identification No.)

25 SCIENCE PARK
NEW HAVEN, CT 06511
(203) 498-4210
(Address, including zip code, and telephone number, including area code, of
Registrant's principal executive offices)

LEONARD BELL, M.D.
ALEXION PHARMACEUTICALS, INC.
25 SCIENCE PARK
NEW HAVEN, CT 06511
(203) 776-1790
(Name, address, including zip code, and telephone number, including area code,
of agent for service)

with copies to:

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

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

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: As soon as
practicable after the effective date of this Registration Statement.

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, 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. [X] 333-89343

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 number of the earlier effective registration statement for the same offering. []

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. [X]

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

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a) Exhibits.

5.1 Opinion of Fulbright & Jaworski L.L.P.

23.1 Consent of Arthur Andersen LLP.*

23.2 Consent of Fulbright & Jaworski L.L.P. (contained in Exhibit 5.1).

24.1 Power of Attorney.*

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* Previously filed.

SIGNATURES

PURSUANT TO THE REQUIREMENTS OF THE SECURITIES ACT OF 1933, AS AMENDED, THE REGISTRANT HAS DULY CAUSED THIS POST-EFFECTIVE AMENDMENT NO. 1 TO THIS REGISTRATION STATEMENT TO BE SIGNED ON ITS BEHALF BY THE UNDERSIGNED, THEREUNTO DULY AUTHORIZED, IN THE CITY OF NEW HAVEN AND STATE OF CONNECTICUT ON THE 23RD DAY OF NOVEMBER, 1999.

ALEXION PHARMACEUTICALS, INC.

By: /s/ LEONARD BELL

Leonard Bell, M.D.
PRESIDENT, CHIEF EXECUTIVE OFFICER,
SECRETARY AND TREASURER

Pursuant to the requirements of the Securities Act of 1933, as amended, this Post-Effective Amendment No. 1 to this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

/s/ LEONARD BELL ----- Leonard Bell, M.D.	President, Chief Executive Officer, Secretary, Treasurer and Director (principal executive officer)	November 23, 1999
/s/ DAVID W. KEISER ----- David W. Keiser	Executive Vice President and Chief Operating Officer (principal financial officer)	November 23, 1999
* ----- Barry P. Luke	Vice President of Finance and Administration (principal accounting officer)	November 23, 1999
* ----- John H. Fried, Ph.D.	Chairman of the Board of Directors	November 23, 1999
----- Jerry T. Jackson	Director	
* ----- Joseph A. Madri, Ph.D., M.D.	Director	November 23, 1999
* ----- Leonard Marks, Jr., Ph.D.	Director	November 23, 1999

*

Max Link, Ph.D.

Director

November 23, 1999

*

Eileen M. More

Director

November 23, 1999

R. Douglas Norby

Director

Alvin S. Parven

Director

*By:

/s/ LEONARD BELL
Leonard Bell, M.D.
AS ATTORNEY-IN-FACT

TELEPHONE: 212/318-3000
FACSIMILE: 212/752-5958

FULBRIGHT & JAWORSKI L.L.P.
A REGISTERED LIMITED LIABILITY
PARTNERSHIP
666 FIFTH AVENUE
NEW YORK, NEW YORK 10103

HOUSTON
WASHINGTON, D.C.
AUSTIN
SAN ANTONIO
DALLAS
NEW YORK
LOS ANGELES
LONDON
HONG KONG

November 23, 1999

Alexion Pharmaceuticals, Inc.
25 Science Park
New Haven, Connecticut 06511

Ladies and Gentlemen:

We have acted as counsel to Alexion Pharmaceuticals, Inc., a Delaware corporation (the "Company"), in connection with its filing with the Securities and Exchange Commission of a Registration Statement on Form S-3 (as amended, the "Abbreviated Registration Statement"), under the Securities Act of 1933, as amended (the "Act") for the registration of 500,000 shares of common stock, par value \$.0001 per share, of the Company (the "Common Stock") and up to an additional 40,000 shares of Common Stock subject to an option (the "Over-Allotment Option") from the Company to the underwriters, exercisable within thirty (30) days after the effective date of the Registration Statement, to cover over-allotments. The Abbreviated Registration Statement relates to the same class of securities registered pursuant to the Company's Registration Statement on Form S-3 (No. 333-89343) declared effective on November 19, 1999 (the "Initial Registration Statement").

The Abbreviated Registration Statement, together with the Initial Registration Statement (collectively, the "Registration Statement"), relate to the proposed sale by the Company in a public offering of an aggregate of 3,000,000 shares of the Company's Common Stock. The Registration Statement also relates to the proposed sale by the Company of an aggregate of up to an additional 415,000 shares of Common Stock subject to the Over-Allotment Option. All such shares of Common Stock are hereinafter referred to as the "Shares."

In connection with this opinion, we, as counsel for the Company, have examined such corporate records, other documents and questions of law as we have considered necessary or appropriate for the purposes of this opinion. Our opinion set forth below is limited to the General Corporation Law of the State of Delaware.

We assume that appropriate action will be taken, prior to the offer and sale of the Shares, to register and qualify the Shares for sale under all applicable state securities or "blue sky" laws.

In our examination of the foregoing documents, we have assumed the genuineness of all signatures and the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified or photostatic copies, and the authenticity of the originals of such latter documents.

Based on and subject to the foregoing, we advise you that in our opinion, the Shares to be sold by the Company have been duly and validly authorized and, when issued and sold in the manner contemplated by the

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Purchase Agreement, a form of which has been filed as an exhibit to the Registration Statement (the "Purchase Agreement"), and upon receipt by the Company of payment therefor as provided in the Purchase Agreement, will be duly and validly authorized, legally issued, fully paid and non-assessable.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and the reference to this firm under the caption "Legal Matters" in the prospectus contained therein. This consent is not to be construed as an admission that we are a party whose consent is required to be filed with the Registration Statement under the provisions of the Act or the rules and regulations of the Securities and Exchange Commission promulgated thereunder. The opinion expressed herein is solely for your benefit, and may be relied upon only by you.

Very truly yours,

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