

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D
(Amendment No. 2)

Under the Securities Exchange Act of 1934

ALEXION PHARMACEUTICALS, INC.

(Name of Issuer)

COMMON STOCK \$.0001 PAR VALUE

(Title of Class of Securities)

015351-10-9

(CUSIP Number)

Dr. Anders Hove
Grafenauweg 4, 6301 Zug CH/Switzerland
011-41-41-724-5959

(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

Copy to:

Daniel L. Goelzer, Esq.
Baker & McKenzie
815 Connecticut Avenue, N.W.
Washington, D.C. 20006

December 8, 1997

(Date of Event which Requires
Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(b) (3) or (4), check the following box [].

Check the following box if a fee is being paid with the statement []. (A fee is not required only if the reporting person: (1) has a previous statement on file reporting beneficial ownership of more than five percent of the class of securities described in Item 1; and (2) has filed no amendment subsequent thereto reporting beneficial ownership of five percent or less of such class.) (See Rule 13d-7.)

NOTE: Six copies of this statement, including all exhibits, should be filed with the Commission. See Rule 13d-1(a) for other parties to whom copies are to be sent.

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No. 015351-10-9

(1) Name of Reporting Person

Biotech Target S.A.

S.S. or I.R.S. Identification No. of Above Person:

Not Applicable - Foreign Corporation
-----(2) Check the Appropriate Box if a Member of a Group* (a) []
(b) [X]-----
(3) SEC Use Only-----
(4) Source of Funds

AF

(5) Check Box If Disclosure of Legal Proceedings Is Required Pursuant To Items
2(d) or 2(e) []-----
(6) Citizenship or Place of Organization

Panama

Number of Shares (7) Sole Voting Power
Beneficially Owned 0 by Biotech Target S.A.
by Each Reporting
Person With-----
(8) Shared Voting Power
1,038,282 by Biotech Target S.A.
(See Item 5)-----
(9) Sole Dispositive Power
0 by Biotech Target S.A.-----
(10) Shared Dispositive Power
1,038,282 by Biotech Target S.A.
(See Item 5)-----
(11) Aggregate Amount Beneficially Owned by Each Reporting Person

1,038,282 shares of common stock, \$.0001 par value per share
(See Item 5)

(12) Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares* []

(13) Percent of Class Represented by Amount in Row (11)

11.4%

(12) Type of Reporting Person*

CO

CUSIP No. 015351-10-9

(1) Name of Reporting Person

BB Biotech AG

S.S. or I.R.S. Identification No. of Above Person:

Not Applicable: Foreign Corporation

(2) Check the Appropriate Box if a Member of a Group* (a) [] (b) [X]

(3) SEC Use Only

(4) Source of Funds

WC

(5) Check Box If Disclosure of Legal Proceedings Is Required Pursuant To Items 2(d) or 2(e) []

(6) Citizenship or Place of Organization

Switzerland

Number of Shares Beneficially Owned by Each Reporting Person With (7) Sole Voting Power 0 by BB Biotech AG

(8) Shared Voting Power 1,038,282 by BB Biotech AG (See Item 5)

(9) Sole Dispositive Power 0 by BB Biotech AG

(10) Shared Dispositive Power 1,038,282 by BB Biotech AG (See Item 5)

(11) Aggregate Amount Beneficially Owned by Each Reporting Person

1,038,282 shares of common stock, \$.0001 par value per share
(See Item 5)

(12) Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares* []

(13) Percent of Class Represented by Amount in Row (11)

11.4%

(12) Type of Reporting Person*

HC, CO

Schedule 13D Amendment Number 2

This Amendment Number 2 reports the acquisition by BB Biotech AG ("BB Biotech") and Biotech Target S.A. ("Biotech Target") of additional securities of Alexion Pharmaceuticals, Inc. ("Alexion"). Biotech Target purchased an additional 102,500 shares of common stock, \$.0001 par value per share, of Alexion (the "Common Stock") in a series of open market transactions as described in Item 5 of this Amendment Number 2.

This Amendment Number 2 also serves to modify the reporting of the beneficial ownership by Biotech Target and BB Biotech of securities issued by Alexion. Pursuant to that certain Series B Preferred Stock Purchase Agreement, dated September 8, 1997, Biotech Target purchased 400,000 shares of the Series B Convertible Preferred Stock, par value \$.0001 per share the ("Preferred Stock"), which represented 100% of the outstanding shares of the Preferred Stock. The Preferred Stock is an unregistered class of securities. As of December 18, 1997, the shares of Preferred Stock owned by Biotech Target and BB Biotech were immediately convertible into 935,782 shares of the Common Stock, which represents approximately 9.5% of the outstanding shares of the Common Stock. Therefore, as of December 16, 1997, Biotech Target and BB Biotech beneficially own, as defined in Rule 13-d(3)(a) and Rule 13d-(3)(d), a total of 1,038,282 shares of the Common Stock which represent approximately 11.4% of the outstanding shares of the Common Stock.

ITEM 5. INTEREST IN SECURITIES OF THE ISSUER

(c) Biotech Target engaged in the following transactions with respect to the securities of Alexion during the past sixty days. Each of these transactions was completed on the open market.

DATE	TRANSACTION	AMOUNT	PRICE PER SHARE
December 8, 1997	Bought	85,000 shares of Common Stock	\$10.63
December 10, 1997	Bought	7,500 shares of Common Stock	\$10.63
December 11, 1997	Bought	10,000 shares of Common Stock	\$10.63

ITEM 7. MATERIAL TO BE FILED AS EXHIBITS

Exhibit 1: Agreement by and between BB Biotech and Biotech Target with respect to the joint filing of this disclosure statement.

SIGNATURES

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

BB BIOTECH AG

Date: December 18, 1997

By: /s/ Hans-Joerg Graf

Name: Hans-Joerg Graf

Date: December 18, 1997

By: /s/ Dr. Victor Bischoff

Name: Dr. Victor Bischoff

BIOTECH TARGET S.A.

Date: December 18, 1997

By: /s/ Dr. Andreas Bremer

Name: Dr. Andreas Bremer

Date: December 18, 1997

By: /s/ Dr. Anders Hove

Name: Dr. Anders Hove

JOINT FILING AGREEMENT

We, the undersigned, hereby express our agreement that the attached Schedule 13D (including all amendments thereto) is filed on behalf of each of the undersigned.

BB BIOTECH AG

Date: December 18, 1997

By: /s/ Hans-Joerg Graf

Name: Hans-Joerg Graf

Date: December 18, 1997

By: /s/ Dr. Victor Bischoff

Name: Dr. Victor Bischoff

BIOTECH TARGET S.A.

Date: December 18, 1997

By: /s/ Dr. Andreas Bremer

Name: Dr. Andreas Bremer

Date: December 18, 1997

By: /s/ Dr. Anders Hove

Name: Dr. Anders Hove
