

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

SCHEDULE 13G/A

UNDER THE SECURITIES EXCHANGE ACT OF 1934

(AMENDMENT NO. 1)*

ALEXION PHARMACEUTICALS, INC.

(Name of Issuer)

COMMON STOCK, PAR VALUE \$.0001 PER SHARE

(Title of Class of Securities)

015351109

(CUSIP Number)

(Date of Event Which Requires Filing This Statement)

Check the appropriate box to designate the rule pursuant to which this
Schedule is filed:

Rule 13d-1(b)

Rule 13d-1(c)

Rule 13d-1(d)

*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 the disclosures provided in a prior cover page.

The information required in 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. 015351109

1. Names of Reporting Persons.

I.R.S. Identification Nos. of above persons (entities only).

BB BIOTECH AG

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization

SWITZERLAND

Number of Shares Beneficially Owned by Each Reporting Person With:

5. Sole Voting Power
-0-

6. Shared Voting Power
874,113

7. Sole Dispositive Power
-0-

8. Shared Dispositive Power
874,113

9. Aggregate Amount Beneficially Owned by Each Reporting Person

874,113

10. Check if the Aggregate Amount in Row (11) Excludes Certain shares

11. Percent of Class Represented by amount in Row (11)
4.9%

12. Type of Reporting Person (See Instructions)

HC, CO

CUSIP No. 015351109

1. Names of Reporting Persons.

I.R.S. Identification Nos. of above persons (entities only).

BIOTECH TARGET S.A.

2. Check the Appropriate Box if a Member of a Group

(a)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization

PANAMA

Number of
Shares Beneficially
Owned by Each
Reporting
Person With:

5. Sole Voting Power
-0-

6. Shared Voting Power
874,113

7. Sole Dispositive Power
-0-

8. Shared Dispositive Power
874,113

9. Aggregate Amount Beneficially Owned by Each Reporting Person

874,113

10. Check if the Aggregate Amount in Row (11) Excludes Certain shares

11. Percent of Class Represented by amount in Row (11)

4.9%

12. Type of Reporting Person

CO

CUSIP No. 015351109

ITEM 2.

- (a) Name of Person Filing
BB Biotech AG ("BB Biotech")
Biotech Target S.A. ("Biotech Target")
- (b) Address of Principal Business Office or, if none, Residence
- | | |
|-------------------|--------------------|
| BB Biotech | Biotech Target |
| Vordergasse 3 | Swiss Bank Tower |
| 8200 Schaffhausen | Panama 1 |
| CH/Switzerland | Republic of Panama |
- (c) Citizenship
See Item No. 4 of cover pages.
- (d) Title of Class of Securities
Common Stock, Par Value \$.0001 Per Share
- (e) CUSIP Number
015351109

ITEM 4. OWNERSHIP

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

- (a) Amount beneficially owned:
874,113
- (b) Percent of class:
4.9%
- (c) Number of shares as to which the person has:
- (i) Sole power to vote or to direct the vote
-0-
 - (ii) Shared power to vote or to direct the vote
874,113
 - (iii) Sole power to dispose or to direct the disposition of
-0-
 - (iv) Shared power to dispose or to direct the disposition of
874,113

ITEM 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following: [X]

ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY

This statement is filed jointly by BB Biotech and Biotech Target. Biotech Target is a wholly-owned subsidiary of BB Biotech.

SIGNATURES

After reasonable inquiry and 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: February 14, 2001

By: /s/ Dubravka Racjnak

Name: Dubravka Racjnak

Title: Signatory Authority

Date: February 14, 2001

By: /s/ Anders Hove

Name: Anders Hove

Title: Signatory Authority

BIOTECH TARGET S.A.

Date: February 14, 2001

By: /s/ Dubravka Racjnak

Name: Dubravka Racjnak

Title: Signatory Authority

Date: February 14, 2001

By: /s/ Anders Hove

Name: Anders Hove

Title: Signatory Authority

CUSIP No. 015351109

EXHIBIT INDEX

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

* Previously filed.