

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

SCHEDULE 13D

(Amendment No. 1)

Under the Securities Exchange Act of 1934

ALEXION PHARMACEUTICALS, INC.

-----  
(Name of Issuer)

SERIES B CONVERTIBLE PREFERRED STOCK

-----  
(Title of Class of Securities)

NONE

-----  
(CUSIP Number)

DR. ANDREAS BREMER  
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

SEPTEMBER 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. None  
-----

(1) Name of Reporting Persons  
S.S. or I.R.S. Identification No. of Above Persons

BB Biotech AG  
Biotech Target, S.A.

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

(3) SEC Use Only

(4) Source of Funds  
AF, 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

BB Biotech AG -- Switzerland  
Biotech Target, S.A. -- Panama

Number of Shares Beneficially Owned	(7) Sole Voting Power 0 by Biotech AG -----
by Each Reporting Person With	(8) Shared Voting Power 400,000 by Biotech Target S.A. ----- (See Item 5)
	(9) Sole Dispositive Power 0 by Biotech AG -----
	(10) Shared Dispositive Power 400,000 by Biotech Target S.A. ----- (See Item 5)

(11) Aggregate Amount Beneficially Owned by Each Reporting Person

400,000 shares of Series B Preferred Convertible Stock  
(See Item 5)

(12) Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares\* [ ]

(13) Percent of Class Represented by Amount in Row (9)

100%

(12) Type of Reporting Person\*

BB Biotech AG -- HC, CO  
Biotech Target, S.A. -- CO

## SCHEDULE 13D

This Amendment No. 1 reflects the addition of the Series B Preferred Stock Purchase Agreement as an exhibit to the Schedule 13D which was filed on September 18, 1997 (the "Schedule 13D"). No other material changes have occurred with respect to information which was contained in the Schedule 13D.

## ITEM 7. MATERIAL TO BE FILED AS EXHIBITS

- Exhibit 1: Translation of minutes of the October 18, 1995, Board of Directors Meeting of Biotech Target (evidencing a power of attorney in favor of Dr. Andreas Bremer).
- Exhibit 2: Translation of minutes of the January 3, 1997 meeting of the Board of Directors Meeting of Biotech Target (evidencing a power of attorney in favor of Dr. Anders Hove).
- Exhibit 3: Translation of evidence of a power of attorney in favor of Victor Bischoff and Hans-Joerg Graf on behalf of BB Biotech.\*
- Exhibit 4: Agreement by and between BB Biotech and Biotech Target with respect to the filing of this disclosure statement.
- Exhibit 5: Series B Preferred Stock Purchase Agreement dated September 4, 1997.

- - - - -  
\* See power of attorney, attached as an exhibit 99.E to the Schedule 13D relating to Biogen, Inc. filed with the Securities and Exchange Commission on June 2, 1994, which exhibit is incorporated by reference herein.

## 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: September 19, 1997  
---

By: /s/ HANS-JOERG GRAF  
-----  
Name: Hans-Joerg Graf

Date: September 19, 1997  
---

By: /s/ DR. VICTOR BISCHOFF  
-----  
Name: Dr. Victor Bischoff

BIOTECH TARGET, S.A.

Date: September 19, 1997  
---

By: /s/ DR. ANDREAS BREMER  
-----  
Name: Dr. Andreas Bremer

Date: September 19, 1997  
---

By: /s/ DR. ANDERS HOVE  
-----  
Name: Dr. Anders Hove

## APPENDIX A TO ITEM 2

NAME AND POSITION WITH COMPANY -----	RESIDENCE OR BUSINESS ADDRESS -----	PRESENT PRINCIPAL OCCUPATION -----
<b>BB BIOTECH</b>		
Dr. Ernst Thomke (Swiss citizen)	Vordergasse 3, 8200 Schaffhausen, CH/Switzerland	Vice- Chairman and Director
Dr. Victor Bischoff (Swiss citizen)	Vordergasse 3, 8200 Schaffhausen, CH/Switzerland	Vice- Chairman and Director
Dr. David Baltimore (U.S. citizen)	Rockefeller University 1239 York Avenue New York, NY 19921	Professor and Director
<b>BIOTECH TARGET</b>		
Dr. Andreas Bremer (German citizen)	Grafenauweg 4, 6301 Zug CH/Switzerland	signatory authority
Dr. Anders Hove (Danish citizen)	Grafenauweg 4, 6301 Zug CH/Switzerland	signatory authority
Hans-Joerg Graf (Swiss citizen)	Grafenauweg 4, 6301 Zug CH/Switzerland	signatory authority
Pablo Javier Espino (Panamanian citizen)	Swiss Bank Tower, Panama 1, Republic of Panama	President and Director
Adelina M. de Estribi (Panamanian citizen)	Swiss Bank Tower, Panama 1, Republic of Panama	Director

CERTIFICADO:---- Yo, Adelina M. de Estribi, Secretaria de la sociedad BIOTECH TARGET S.A., certifico que lo anterior es copia autentica de su original.

- ----- (Fdo.) Adelina M. de Estribi Secretaria.---

- ----- -MINUTES OF A MEETING OF THE BOARD OF DIRECTORS OF THE CORPORATION BIOTECH TARGET S.A.----In the City of Panama, Republic of Panama, on October 18, 1995, a Meeting of the Board of Directors of BIOTECH TARGET S.A., was held in the principal offices of said corporation at 53rd Street, Urbanizacion Obarrio, Torre Swiss Bank, 16th floor, Panama, Republic of Panama, wherein a quorum was at all time present and active.--- All of the Directors of the corporation, PABLO JAVIER ESPINO, AIDA MAY BIGGS and ADELINA M. DE ESTRIBI, were present at the Meeting, therefore the notice of the meeting was waived.-- The President of the Corporation PABLO JAVIER ESPINO presided the Meeting, and the Secretary of the Corporation ADELINA M. DE ESTRIBI served as Secretary.-- The President then called the Meeting to order and explained its objects: to grant power of attorney to persons chosen by the Board of Directors to act on behalf of the corporation with such authority as the Board may approve, there upon, after an exchange of views on motion duly made and seconded the following resolutions were unanimously approved:-- RESOLVED: That be and hereby is granted a Power of Attorney as full as it may be legally necessary in favor of DANIEL BUGMANN, born the 10.10.1966, at Wiesenstrasse 10, 8008 Zurich, Switzerland; ANDREAS BREMER, born the 1.7.1961, at Schaedruetirain 8, 6006 Lucerna, Switzerland; NICOLAS MERIAN, born the 18.1.1961, at Rennweg 10, 8001 Zurich, Switzerland, to act on behalf of the Corporation, jointly by two, with full powers, which for purposes of enunciation and not in order to limit this Power of Attorney, are detailed as follows: - to purchase, alienate, transfer, sell, lease, pledge, mortgage, encumber, or dispose of in any way or manner, the movable or immovable, corporeal or incorporeal, property of the corporation; to accept, endorse, collect, deposit and transfer checks, tes and any other negotiable instruments in its name; to open and to close any kind of banking account, to draw from accounts and the banking deposits of the corporation, be they checking accounts, time

deposits or against overdraft or any other kind of deposits, be it in the Republic of Panama or abroad. To issue notes, sign, bills of exchange as a drawer, acceptor, endorser or guarantor; accept obligations, be they of a commercial or civil nature; to represent the corporation in matters of disposition and administration as well as in all affairs of management and situations in which the corporation has an interest, also in general partnerships or joint ventures; to buy stock or shares of any kind in other companies; to take part in Assemblies or meetings in order to make any kind of agreements, including agreements of constitution, transformation, increase of capital and dissolution of companies, to become the legal representative of the company, as plaintiff, defendant, third party or in any other form, in front of any office of the Republic of Panama or abroad, be they judicial, administrative, concerning labor, or of any other nature, to substitute this power in whole or partially and to revoke the substitutions, to subscribe documents wherein the corporation may be involved; as debtor or creditor; to make agreements using arbitrators or any other type of arrangement whatsoever and to complete any act or to enter into any contract that may be considered beneficial to the interests of the company BIOTECH TARGET S.A., because it is the intention of this Power of Attorney that it be exercised without any limitations whatsoever. It is hereby expressed that this Power of Attorney can be exercised inside the territory of the Republic of Panama or in any other country.--- It was also resolved to give authority to the law firm MORGAN Y MORGAN to protocolize a copy of the minutes of this meeting of the Board of Directors.-----Having nothing else to discuss, the meeting was adjourned.------(sgd.) Pablo J. Espino- President----- Adelina M. de Estribi- Secretary.----CERTIFICATE:- I, ADELINA M. DE ESTRIBI, Secretary of the corporation BIOTECH TARGET S.A., certify that the foregoing is a genuine copy of its original.------(sgd.) Adelina M. de Estribi- Secretary.-----Concuenda con su original esta copia que expido, firmo y sello en la Ciudad de Panama, a los dieciocho (18) dias del mes de octubre de mil novecientos noventa y cinco (1995)

TARGET S.A. certifico que lo anterior es copia autentica de su original.  
 - -----(Fdo.) Adeline M. de Estribi-Secretaria.----- MINUTES OF A  
 MEETING OF THE BOARD OF DIRECTORS OF THE CORPORATION BIOTECH TARGET S.A. -----  
 In the City of Panama, Republic of Panama, on January 3, 1997, a Meeting of the  
 Board of Directors of BIOTECH TARGET S.A. was held in the principal offices of  
 said corporation at 53rd Street Urbanizaicion Obarrio, Torre Swiss Bank, 16th  
 floor, Panama, Republic of Panama, wherein a quorum was at all time present and  
 active.----- All of the Directors of the corporation, PABLO JAVIER ESPINO, AIDA  
 MAY BIGGS and ADELINA M. DE ESTRIBI, were present at the Meeting, therefore  
 notice of the meeting was waived.-- The President of the Corporation PABLO  
 JAVIER ESPINO presided the Meeting, and the Secretary of the Corporation ADELINA  
 M. DE ESTRIBI served as Secretary.--- The President then called the Meeting to  
 order and explained its objects: to grant a Power of Attorney to a person chosen  
 by the Board of Directors to act on behalf of the corporation with such  
 authority as the Board may approve. There upon, after an exchange of views on  
 motion duly made and seconded the following resolutions were unanimously  
 approved: -- RESOLVED: That be and hereby is granted a Power of Attorney as full  
 as it may be legally necessary in favor of Dr. ANDERS HOVE, Danish, born on  
 October 31, 1965, to act on behalf of the Corporation, jointly by two, with  
 Messrs. HANS JOERG GRAF, DANIEL BUGMANN, ANDREAS BREMER and NICOLAS MERIAM, with  
 full powers, which for purposes of enunciation and not in order to limit this  
 Power of Attorney, are detailed as follows: to purchase, alienate, transfer,  
 sell, lease, pledge, mortgage, encumber, or dispose of in any way or manner, the  
 movable or immovable, corporeal or incorporeal property of the corporation; to  
 accept, endorse, collect, deposit and transfer checks, notes and any other  
 negotiable instruments in its name; to open and to close any kind of bank  
 account, to draw from accounts and the bank deposits of the corporation, be they  
 checking accounts, time deposits overdraft, or any other kind of deposits, be  
 they in the Republic of Panama or abroad. To issue notes, sign bill of exchange  
 as a drawer, acceptor, endorser or guarantor; accept obligations, be they of a  
 commercial or civil nature; to represent the corporation in matters of  
 disposition and administration as well as in all affairs of management and  
 situations in which the corporation has an interest, also in general  
 partnerships or joint ventures; to buy stock or shares of any kind in other  
 companies; to take part in Assemblies or meetings in order to make any kind of  
 agreements, including agreements of constitution, transformation, increase of  
 capital and dissolution of companies, to become the legal representative of the  
 company, as plaintiff, defendant, third party or in any other form, before any  
 office of the Republic of Panama or abroad, be they judicial, administrative,  
 concerning labor, or of any other nature, to substitute this power in whole or  
 in part and to revoke the substitutions; to subscribe documents wherein the  
 corporation may be involved as debtor or creditor; to make agreements using  
 arbitrators or any other type of arrangement whatsoever and to complete any act  
 or to enter into any contract that may be considered beneficial to the interests  
 of the company BIOTECH TARGET S.A. because it is the intention of this Power of  
 Attorney that it be exercised without any limitations whatsoever. - It is hereby  
 expressed that this Power of Attorney can be exercised in the territory of the  
 Republic of Panama or in any other country.---- It was also resolved to give  
 authority to the Law firm MORGAN Y MORGAN to protocolize a copy of the minutes  
 of this meeting of the Board of Directors.----- Having nothing else  
 to discuss, the meeting was adjourned.----- (sgd.) Pablo J. Espino-  
 President - Adelina H. de Estribi- Secretary.----- CERTIFICATE:- I,  
 ADELINA M. DE ESTRIBI, Secretary of the corporation BIOTECH TARGET S.A. certify  
 that the foregoing is a genuine copy of its original.----- (sgd.) Adelina M.  
 de Estribi- Secretary.----- Concuerta con su original esta copia que  
 expido, firmo y sello en la Ciudad de Panama. Republica de Panama, a los  
 veinticuatro (24) dias del mes de abril de mil novecientos noventa y siete  
 (1997).



## 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.

Date: September 19, 1997  
---

BB BIOTECH AG

By: /s/ HANS-JOERG GRAF  
-----

Name: Hans-Joerg Graf

By: /s/ DR. VICTOR BISCHOFF  
-----

Name: Dr. Victor Bischoff

BIOTECH TARGET, S.A.

By: /s/ DR. ANDREAS BREMER  
-----

Name: Dr. Andreas Bremer

By: /s/ DR. ANDERS HOVE  
-----

Name: Dr. Anders Hove

SERIES B PREFERRED STOCK PURCHASE AGREEMENT

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

Ladies & Gentlemen:

The undersigned, Biotech Target S.A. (the "Investor"), hereby confirms its agreement with you as follows:

1. This Series B Preferred Stock Purchase Agreement (the "Agreement") is made as of September 4, 1997 between Alexion Pharmaceuticals, Inc., a Delaware corporation (the "Company"), and the Investor.
2. The Company has authorized the sale and issuance of up to 400,000 shares of Series B Convertible Preferred Stock, par value \$.0001 per share (the "Series B Preferred Stock").
3. The Company and the Investor agree that the Investor will purchase and the Company will sell, for a purchase price of \$25.00 per share of Series B Preferred Stock, or an aggregate purchase price of \$10,000,000.00, the Series B Preferred Stock, and upon such purchase and sale, the Company will issue the Series B Preferred Stock, pursuant to the Terms and Conditions for Purchase of Series B Preferred Stock attached hereto as Annex I and incorporated herein by reference as if fully set forth herein (any reference to the "Agreement" in Annex I shall mean this signature page and Annex I hereto, collectively). Unless otherwise requested by the Investor, certificates representing the Series B Preferred Stock will be registered in the Investor's name and address as set forth below.
4. The Investor represents that, except as set forth below, (a) it has had no position, office or other material relationship within the past three years with the Company or its affiliates, (b) neither it, nor any group of which it is a member or to which it is related, beneficially owns (including the right to acquire or vote) any securities of the Company and (c) it has no direct or indirect affiliation or association with any NASD member. Exceptions:

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(If no exceptions, write "none." If left blank, response will be deemed to be "none.")

Please confirm that the foregoing correctly sets forth the agreement between us by signing in the space below for that purpose.

INVESTOR

Biotech Target SA

-----  
Name: /s/ HANS-JOERG GRAF  
/s/ ANDREAS BREMER  
-----

By: Hans-Joerg Graf/Andreas Bremer

Title: -----

Address: Vordergasse 3, 8200 Schaffhausen,  
-----  
CH/Switzerland  
-----

Tax ID No.: -----

Contact name: Andreas Bremer  
-----

Telephone: 011 41 41 724-5930  
-----

Name in which the Series B Preferred Stock  
should be registered (if different):  
-----

AGREED AND ACCEPTED:

-----  
ALEXION PHARMACEUTICALS, INC.

/s/ LEONARD BELL, M.D.

-----  
By: Leonard Bell, M.D.  
Title: President and Chief Executive Officer

## ANNEX I

## TERMS AND CONDITIONS FOR PURCHASE OF SERIES B PREFERRED STOCK

1. Authorization and Sale of the Series B Preferred Stock. Subject to the terms and conditions of this Agreement, the Company has authorized the sale of up to 400,000 shares of its Series B Preferred Stock, \$.0001 par value (the "Series B Preferred Stock"), having the designations, powers, preferences and rights described in the Certificate of the Designations, Powers, Preferences and Rights of the Series B Preferred Stock (the "Certificate of Designations") attached hereto as Exhibit A. The shares of Series B Preferred Stock, shares of Common Stock, \$.0001 par value (the "Common Stock") issuable upon the conversion of the Series B Preferred Stock (the "Conversion Shares") and the Common Stock issuable as a dividend upon the Series B Preferred Stock, if any, (the "Dividend Shares") are sometimes collectively referred to herein as the "Securities."

2. Agreement to Sell and Purchase the Series B Preferred Stock. At the Closing (as defined in Section 3), the Company will sell to the Investor, and the Investor will purchase from the Company, upon the terms and conditions hereinafter set forth, 400,000 shares of Series B Preferred Stock at the purchase price set forth on the signature page hereto.

3. Delivery of the Series B Preferred Stock at Closing. The completion of the purchase and sale of the Series B Preferred Stock (the "Closing") shall occur on September 5, 1997 (the "Closing Date"). At the Closing, the Company shall deliver to the Investor one or more stock certificates representing the shares of Series B Preferred Stock to be purchased by the Investor hereunder, each such certificate to be registered in the name of the Investor or, if so indicated on the signature page hereto, in the name of a nominee designated by the Investor.

The Company's obligation to close the transaction shall be subject to the following conditions, any one or more of which may be waived by the Company: (a) receipt by the Company of a certified or official bank check or wire transfer of funds in the full amount of the purchase price for the shares of Series B Preferred Stock being purchased hereunder; and (b) the accuracy of the representations and warranties made by the Investor and the fulfillment of those undertakings of the Investor to be fulfilled prior to the Closing.

The Investor's obligation to close the transaction shall be subject to: (a) the receipt of the shares of Series B Preferred Stock; and (b) the accuracy of the representations and warranties made by the Company and the fulfillment of those undertakings of the Company to be fulfilled prior to the Closing.

4. Representations, Warranties and Covenants of the Company. The Company hereby represents and warrants to, and covenants with, the Investor as follows:

4.1. Organization. The Company is duly organized and validly existing in good standing under the laws of the State of Delaware. The Company has full power and authority to own, operate and occupy its properties and conduct its business as presently conducted and as described in its Annual Report on Form 10-K for the year ended July 31, 1996 (the "10-K") and the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended October 31, 1996, the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended January 31, 1997, as amended by Form 10-Q/A, filed March 17, 1997, and Form 10-Q/A2, filed June 19, 1997, the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended April 30, 1997, the Company's Current Report on Form 8-K, dated February 28, 1997, the Company's Current Report on Form 8-K, dated June 17, 1997, the Company's Current Report on Form 8-K dated July 9, 1997 and Registration Statement on Form 8-A dated February 21, 1997, the foregoing filings constitute all documents filed by the Company since the date of the 10-K with the Securities and Exchange Commission (the "SEC") under the Securities Exchange Act of 1934, as amended (all such documents are hereinafter referred to as the "1934 Act Filings"), and is registered or qualified to do business and in good standing in each jurisdiction in which it owns or leases property or transacts business and where the failure to be so qualified would have a material adverse effect upon the business, financial condition, properties or operations of the Company. The Company has no subsidiaries.

4.2. Due Authorization. The Company has all requisite power and authority to execute, deliver and perform its obligations under this Agreement, and this Agreement has been duly authorized and validly executed and delivered by the Company and constitutes the legal, valid and binding agreement of the Company enforceable against the Company in accordance with its terms, except as rights to indemnity and contribution may be limited by state or federal securities laws or the public policy underlying such laws, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' and contracting parties' rights generally and except as enforceability may be subject to general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

4.3. Non-Contravention. The execution and delivery of the Agreement, the issuance and sale of the shares of Series B Preferred Stock to be sold by the Company hereunder, the fulfillment of the terms of the Agreement and the terms of the Certificate of Designations the shares of Series B Preferred Stock and the consummation of the transactions contemplated hereby and thereby will not conflict with or constitute a violation of, or default (with the passage of time or otherwise) under, any material agreement or instrument to which the Company is a party or by which it is bound or the charter, by-laws or other organizational documents of the Company nor result in the creation or imposition of any lien, encumbrance, claim, security interest or restriction whatsoever upon any of the material properties or assets of the Company or an acceleration of indebtedness pursuant to any obligation, agreement or condition contained in any material bond, debenture, note or any other evidence of indebtedness or any material indenture, mortgage, deed of trust or any other agreement or instrument to which the Company is a party or by which it is bound

or to which any of the property or assets of the Company is subject, nor conflict with, or result in a violation of, any law, administrative regulation, ordinance, order, judgment or decree of any court or governmental agency, arbitration panel or authority applicable to the Company. No consent, approval, authorization or other order of, or registration, qualification or filing with, any regulatory body, administrative agency, or other governmental body in the United States is required for the valid issuance and sale of the Securities, other than such as have been made or obtained before the date of this Agreement and which, in the case of the Conversion Shares and the Dividend Shares, are not required to be made until after the issuance of such shares, and other than a Form D which will be filed under the Securities Act of 1933, as amended, after the Closing Date, and other than Nasdaq listing which has been applied for and will be obtained.

4.4. Capitalization. The capitalization of the Company as of July 31, 1996 is as set forth in the 10-K. The Company has not issued any capital stock since that date other than as contemplated by or described in the 1934 Act Filings, including the issuance in June 1997 of 1,450,000 shares of Common Stock in a private placement transaction. At September 4, 1997 the Company had outstanding 8,865,468 shares of Common Stock, holds in treasury 11,875 shares of Common Stock and has outstanding options and warrants to purchase 1,471,484 and 926,669 shares of Common Stock, respectively. The shares of Series B Preferred Stock to be sold pursuant to the Agreement have been, subject to the filing of the Certificate of Designations with the Secretary of State of Delaware, duly authorized, and upon Closing, will be validly issued, fully paid and nonassessable. The Conversion Shares and, upon resolution by the Board of Directors of the Company to pay the dividend on the shares of Series B Preferred Stock in the form of Common Stock, the Dividend Shares, if any, issuable in accordance with the Series B Preferred Stock have been, or will be, as the case may be, duly authorized, and when issued in accordance with the terms of the Series B Preferred Stock, will be validly issued, fully paid and nonassessable. All outstanding shares of capital stock of the Company have been duly and validly issued and are fully paid and nonassessable. Except as set forth above there are no outstanding rights (including, without limitation, preemptive rights), warrants or options to acquire, or instruments convertible into or exchangeable for, any shares of capital stock or other equity interest in the Company, or any contract, commitment, agreement, understanding or arrangement of any kind relating to the issuance of any capital stock of the Company, any such convertible or exchangeable securities or any such rights, warrants or options, except for the rights granted to the holders of Common Stock pursuant to the Rights Agreement, dated February 14, 1997, by and between the Company and Continental Stock Transfer & Trust Company.

4.5. Legal Proceedings. There is no material legal or governmental proceeding pending or, to the knowledge of the Company, threatened or contemplated to which the Company is or may be a party or of which the business or property of the Company is or may be subject that is not disclosed in the 1934 Act Filings, and to the Company's knowledge no basis exists for any (i) legal proceeding by or against the Company or (ii) governmental proceeding or investigation of the Company.

4.6. No Violations. The Company is not in violation of its charter, bylaws, or other organizational document, in violation of any law, administrative regulation, ordinance, order, judgment or decree of any court or governmental agency, arbitration panel or authority applicable to the Company, except for any violations which, individually or in the aggregate, would have a material adverse effect on the business or financial condition of the Company. The Company is not in default in any material respect in the performance of any obligation, agreement or condition contained in any bond, debenture, note or any other evidence of indebtedness in any indenture, mortgage, deed of trust or any other agreement or instrument to which the Company is a party or by which the Company is bound or by which the properties of the Company are bound or affected, and there exists no condition which, with the passage of time or otherwise, would constitute a material default under any such document or instrument or result in the imposition of any material penalty or the acceleration of any material indebtedness.

4.7. Governmental Permits, Etc. The Company has all necessary franchises, licenses, permits, certificates and other authorizations from any foreign, federal, state or local government or governmental agency, department, or body that are currently necessary for the operation of the business of the Company as currently conducted and as described in the 1934 Act Filings, the absence of which would have a material adverse effect on the Company.

4.8. Intellectual Property. Except as described in the 1934 Act Filings, the Company owns or possesses sufficient rights to use all material patents, patent rights, trademarks, copyrights, licenses, inventions, trade secrets and know-how described or referred to in the 1934 Act Filings as owned or used by it or that are necessary for the conduct of its business as now conducted or as described in the 1934 Act Filings. Except as described in the 1934 Act Filings, the Company has not received any notice of, and has no knowledge of or reason to believe that, any infringement of or conflict with any right of others with respect to any patent, patent right, trademark, copyright, invention, trade secret or know-how that, individually or in the aggregate would have a material adverse effect on the condition (financial or otherwise), earnings, operations, business or business prospects of the Company. Except as described in 1934 Act Filings, the Company has not entered into or become party to any development, work for hire, license or other agreement pursuant to which they have secured the right or obligation to use, or granted others the right or obligation to use, any trademarks, servicemarks, trade names, copyrights, patents or any other intellectual property right. All proprietary technical information developed by or belonging to the Company which has not been patented has been kept confidential.

4.9. Financial Statements. The financial statements of the Company and the related notes contained in the 1934 Act Filings present fairly, subject to customary year end adjustments in the case of the quarterly statements, the financial position of the Company as of the dates indicated, and the results of its operations and cash flows for the periods therein specified and the assets and liabilities of the Company have not changed significantly since the date of the most recent 1934 Act Filing except for changes in the ordinary course of business or resulting from the Company's private

placement of Common Stock during June 1997. Such financial statements (including the related notes) have been prepared in accordance with generally accepted accounting principles applied on a consistent basis throughout the periods therein specified, except as disclosed in the 1934 Act Filings. The other financial information contained in the 1934 Act Filings has been prepared on a basis consistent with the financial statements of the Company.

4.10. No Material Adverse Change. Subsequent to the respective dates as of which information is given in the 1934 Act Filings, and except as contemplated or described in the 1934 Act Filings, the Company has not incurred any material liabilities or obligations, direct or contingent, other than in the ordinary course of business, and there has not been any material adverse change in its condition (financial or other), results of operations, business, prospects, key personnel or capitalization.

4.11. Additional Information. The Company has filed in a timely manner all documents that the Company was required to file under the Securities Exchange Act of 1934, as amended (the "Exchange Act") since the Company's initial public offering. The 1934 Act Filings complied in all material respects with the SEC's requirements as of their respective filing dates, and the information contained therein as of the respective dates thereof did not contain any untrue statement of material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading.

4.12. Listing. The Company shall comply with all requirements of the National Association of Securities Dealers, Inc. with respect to the issuance of the Securities and the listing of the Conversion Shares and Dividend Shares, if any, on the Nasdaq National Market.

4.13. Maintenance of Capital Surplus. The Company shall maintain sufficient capital surplus (as such term is described in Section 154 of the Delaware General Corporation Law) in order to satisfy its dividend obligations with respect to the Series B Preferred Stock in accordance with Section 170 of the Delaware General Corporation Law. In addition, the Corporation will take whatever actions are necessary in order to satisfy its obligation to pay the dividends referenced in the Certificate of Designations.

4.14. Operation of the Business. Except as described in the 1934 Act Filings, the Company owns and retains all such assets, tangible or intangible, contractual, license and leasehold rights necessary for it (i) to operate its business as described in the 1934 Act Filings, and (ii) to utilize the assets and contractual, license and leasehold rights in the same manner as they were utilized at the Closing Date, except where the failure to own, retain or utilize such assets or rights will not have a material adverse effect upon the business or financial condition of the Company.

4.15. Environmental Matters. The Company is in compliance in all respects with all applicable local, state and federal safety and environmental laws, rules, orders and regulations ("Environmental Laws") under the jurisdiction of the USDA, BATF, USNRC and CTDEP and any other federal or state agency with applicable programs



relating to biosafety, chemical hygiene, radiation safety, blood borne pathogens, hazard communication, hazardous waste management and chemical, medical and radiation waste disposal, except where the failure to comply with the Environmental Laws will not have a material adverse effect upon the business or financial condition of the Company.

4.16. Reliance. The Company acknowledges that the Investor has reviewed and relied upon the 1934 Act Filings in making its decision to purchase the shares of Series B Preferred Stock.

5. Representations, Warranties and Covenants of the Investor.

(a) The Investor represents and warrants to, and covenants with, the Company that: (i) the Investor is an "accredited investor" as defined in Regulation D under the Securities Act of 1933, as amended (the "Securities Act") and the Investor is also knowledgeable, sophisticated and experienced in making, and is qualified to make decisions with respect to investments in securities presenting an investment decision like that involved in the purchase of the Securities, including investments in securities issued by the Company and investments in comparable companies, and has requested, received, reviewed and considered all information it deemed relevant in making an informed decision to purchase the Securities; (ii) the Investor is acquiring the shares of Series B Preferred Stock set forth on the signature page hereto in the ordinary course of its business and for its own account for investment only and with no present intention of distributing any of the Securities or any arrangement or understanding with any other persons regarding the distribution of such Securities; (iii) the Investor will not, directly or indirectly, offer, sell, pledge, transfer or otherwise dispose of (or solicit any offers to buy, purchase or otherwise acquire or take a pledge of) any of the Securities except in compliance with the Securities Act, applicable state securities laws and the respective rules and regulations promulgated thereunder; (iv) the Investor has answered all questions on the signature page hereto for use in preparation for the Registration Statement (referred to below) and the answers thereto are true and correct to the best of the Investor's knowledge as of the Closing Date; and (v) the Investor will notify the Company immediately of any change in any of such information until such time as the Investor has sold all of its Securities or until the Company is no longer required to keep the Registration Statement effective.

(b) The Investor acknowledges that no action has been or will be taken in any jurisdiction outside the United States by the Company that would permit an offering of the Securities, or possession or distribution of offering materials in connection with the issue of the Securities, in any jurisdiction outside the United States where action for that purpose is required. The Investor will comply with all applicable laws and regulations in each foreign jurisdiction in which it purchases, offers, sells or delivers Securities or has in its possession or distributes any offering material, in all cases at its own expense.

(c) The Investor hereby covenants with the Company not to make any sale of the Securities without complying with the provisions of this Agreement, including

Section 7.2 hereof, and without effectively causing the prospectus delivery requirement under the Securities Act to be satisfied. The Investor acknowledges that there may occasionally be times when the Company, based on the reasonable advice of its counsel, determines that it must suspend the use of the prospectus forming a part of the Registration Statement until such time as an amendment to the Registration Statement has been filed by the Company and declared effective by the SEC or until the Company has amended or supplemented such prospectus.

(d) The Investor further represents and warrants to the Company that (i) the Investor has full right, power, authority and capacity to enter into this Agreement and to consummate the transactions contemplated hereby and has taken all necessary action to authorize the execution, delivery and performance of this Agreement, and (ii) upon the execution and delivery of this Agreement, this Agreement shall constitute a valid and binding obligation of the Investor enforceable in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' and contracting parties' rights generally and except as enforceability may be subject to general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law) and except as the indemnification agreements of the Investors herein may be legally unenforceable.

(e) The Investor will not (unless pursuant to an applicable exemption under the Securities Act) sell, offer to sell, solicit offers to buy, dispose of, loan, pledge or grant any right with respect to the shares of Series B Preferred Stock and, will not, prior to the effectiveness of the Registration Statement, sell, offer to sell, solicit offers to buy, dispose of, loan, pledge or grant any right with respect to (collectively, a "Disposition"), the Conversion Shares or the Dividend Shares, if any, nor will the Investor engage in any hedging or other transaction which is designed to or could reasonably be expected to lead to or result in a Disposition of Common Stock of the Company by the Investor or any other person or entity. Such prohibited hedging or other transactions would include without limitation effecting any short sale or having in effect any short position (whether or not such sale or position is against the box and regardless of when such position was entered into) or any purchase, sale or grant of any right (including without limitation any put or call option) with respect to the Common stock of the Company or with respect to any security (other than a broad-based market basket or index) that includes, relates to or derives any significant part of its value from the Common Stock of the Company, but such security shall not include the capital stock or debt of the Investor, its parent companies or their respective subsidiaries.

(f) The Investor understands that nothing in this Agreement or any other materials presented to the Investor in connection with the purchase and sale of the Securities constitutes legal, tax or investment advice. The Investor has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection of Securities.

6. Survival of Representations, Warranties and Agreements.  
Notwithstanding any investigation made by any party to this Agreement, all covenants,

agreements, representations and warranties made by the Company and the Investor herein shall survive the execution of this Agreement, the delivery to the Investor of the shares of Series B Preferred Stock being purchased and the payment therefor, including, without limitation, those contained in Section 7.3 hereof.

7. Registration of the Conversion Shares and the Dividend Shares; Compliance with the Securities Act.

7.1. Registration Procedures and Expenses. The Company shall:

(a) subject to receipt of necessary information from the Investor to prepare and file with the Commission, within seventy-five (75) days of the Closing Date, a Registration Statement on Form S-3 (the "Registration Statement") to enable the sale of the Conversion Shares and the Dividend Shares, if any, by the Investor from time to time through the automated quotation system of the Nasdaq National Market or in privately-negotiated transactions;

(b) use its best efforts, subject to receipt of necessary information from the Investor, to cause the Registration Statement to become effective within 90 days after the Registration Statement is filed by the Company;

(c) prepare and file with the Commission such amendments and supplements to the Registration Statement and the prospectus used in connection therewith as may be necessary to keep the Registration Statement effective until the earlier of (i) the second anniversary of the Closing Date or (ii) such time as all Conversion Shares and Dividend Shares have been sold pursuant to a registration statement.

(d) furnish to the Investor with respect to the Conversion Shares and Dividend Shares registered under the Registration Statement (and to each underwriter, if any, of such shares of Common Stock) such number of copies of prospectuses and preliminary prospectuses in conformity with the requirements of the Securities Act and such other documents as the Investor may reasonably request, in order to facilitate the sale or other disposition of all or any of the Conversion Shares and Dividend Shares by the Investor, provided, however, that the obligation of the Company to deliver copies of prospectuses or preliminary prospectuses to the Investor shall be subject to the receipt by the Company of reasonable assurances from the Investor that the Investor will comply with the applicable provisions of the Securities Act and of such other securities or blue sky laws as may be applicable in connection with any use of such prospectuses or preliminary prospectuses;

(e) file documents required of the Company for blue sky clearance in states specified in writing by the Investor; provided, however, that the Company shall not be required to qualify to do business or consent to service of process in any jurisdiction in which it is not now so qualified or has not so consented; and

(f) bear all expenses in connection with the procedures in paragraph (a) through (e) of this Section 7.1 and the registration of the Conversion Shares and

Dividend Shares pursuant to the Registration Statement, other than fees and expenses, if any, of counsel or other advisers to the Investor.

The Company understands that the Investor disclaims being an underwriter, but the Investor being deemed an underwriter shall not relieve the Company of any obligations it has hereunder.

7.2. Transfer of Conversion Shares and Dividend Shares After Registration.

(a) The Investor agrees that it will not effect any disposition of the Conversion Shares or the Dividend Shares that would constitute a sale within the meaning of the Securities Act except as contemplated in the Registration Statement referred to in Section 7.1 or Section 5(e) and described below, and that it will promptly notify the Company of any changes in the information set forth in the Registration Statement regarding the Investor or in the "Plan of Distribution" section of the Registration Statement.

(b) The Investor agrees that to sell the Conversion Shares or Dividend Shares pursuant to the Registration Statement or pursuant to an applicable exemption under the Securities Act:

(i) The Investor must notify the Company three (3) business days prior to sale through the Company's counsel, Fulbright & Jaworski L.L.P., at the address provided in Section 10(b) hereto, of its intent to sell, so as to confirm that no event has occurred or is expected to occur which would make the Registration Statement false or misleading, and to ensure that the Registration Statement in its possession is current and has not been suspended. The Company may refuse to permit the Investor to resell pursuant to the Registration Statement, provided that it must notify the Investor within three (3) business days that such a sale would violate federal securities laws unless the Registration Statement is updated. In such an event, the Company shall use its best efforts to amend the Registration Statement if necessary and take all other actions necessary to allow such sale under the federal securities laws within 10 business days of Investor's initial notification, and shall notify the Investor promptly after it has determined that such sale has become permissible under the federal securities laws. Notwithstanding the foregoing, within any twelve (12) month period the Company shall not, except upon advice of counsel as to the necessity pursuant to federal securities laws, exercise its right to refuse to permit resale of any Conversion Shares or Dividend Shares pursuant to the Registration Statement (i) more than three (3) times or (ii) for an aggregate period in excess of forty-five (45) days. The Investor hereby covenants and agrees that it will not sell any Conversion Shares or Dividend Shares pursuant to the Registration Statement during the periods the Registration Statement is withdrawn as set forth in this Section.

(ii) If the Company or its counsel does not, within such three business days, notify the Investor that it is exercising its right to delay such sale, the Investor may proceed with such sale provided that it arranges for delivery of a current prospectus to the transferee.

(iii) The Investor must also deliver to the Company's counsel a Notice of Sale substantially in the form attached hereto as Exhibit B, so that the Conversion Shares and Dividend Shares may be properly transferred.

7.3. Indemnification. For the purpose 7.3:

(i) the term "Selling Stockholder" shall include the Investor and any affiliate of such Investor;

(ii) the term "Registration Statement" shall include any final prospectus, exhibit, supplement or amendment included in or relating to the Registration Statement referred to in Section 7.1;

(iii) the term "untrue statement" shall include any untrue statement or alleged untrue statement, or any omission or alleged omission to state in the Registration Statement a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(a) The Company agrees to indemnify and hold harmless each Selling Stockholder from and against any losses, claims, damages or liabilities to which such Selling Stockholder may become subject (under the Securities Act or otherwise) insofar as such Losses (as used herein the term "Losses" means any and all claims, demands, costs, losses, damages and liabilities, net of insurance proceeds, and includes reasonable attorney's fees and costs incurred in the investigation and defense of a claim, demand, cost, loss or liability), claims, damages or liabilities (or actions or proceedings in respect thereof) arise out of, or are based upon a breach by the Company of its representations, warranties, covenants or obligations in this Agreement or any untrue statement of a material fact contained in the Registration Statement on the effective date thereof, or arise out of any failure by the Company to fulfill any undertaking included in the Registration Statement and the Company will reimburse such Selling Stockholder for any reasonable legal or other expenses reasonably incurred in investigating, defending or preparing to defend any such action, proceeding or claim, or preparing to defend any such action, proceeding or claim, provided, however, that the Company shall not be liable in any such case to the extent that such loss, claim, damage or liability arises out of, or is based upon, an untrue statement made in such Registration Statement in reliance upon and in conformity with written information furnished to the Company by or on behalf of such Selling Stockholder specifically for use in preparation of the Registration Statement or the failure of such Selling Stockholder to comply with the covenants and agreements contained in Sections 5(c) or 7.2 hereof respecting sale of the Stock or any statement or omission in any Prospectus that is corrected in any subsequent Prospectus that was delivered to the Investor within a reasonable time prior to the pertinent sale or sales by the Selling Stockholder to inform the buyer of such change.

(b) Each Selling Stockholder agrees to indemnify and hold harmless the Company (and each person, if any, who controls the Company within the meaning of

Section 15 of the Securities Act, each officer of the Company who signs the Registration Statement and each director of the Company) from and against any Losses, claims, damages or liabilities to which the Company (or any such officer, director or controlling person) may become subject (under the Securities Act or otherwise), insofar as such Losses, claims, damages or liabilities (or actions or proceedings in respect thereof) arise out of, or are based upon, any failure to comply with the covenants and agreements contained in Section 5(c) or 7.2 hereof respecting sale of the Conversion Shares or Dividend Shares, or any untrue statement of a material fact contained in the Registration Statement on the effective date thereof if such untrue statement was made in reliance upon and in conformity with written information furnished by or on behalf of the Selling Stockholder specifically for use in preparation of the Registration Statement, and the Selling Stockholder will reimburse the Company (or such officer, director or controlling person), as the case may be, for any legal or other expenses reasonably incurred in investigating, defending or preparing to defend any such action, proceeding or claim; provided, however, that (i) the obligations of the Selling Stockholder hereunder shall be limited to an amount equal to the aggregate public offering price of the registered stock of such Selling Stockholder sold as contemplated herein, unless such liability arises out of or is based upon willful misconduct by the Selling Stockholder and (ii) the indemnity for untrue statements or omissions described above, and the reimbursement obligation relating thereto, shall not apply if the Selling Stockholder provides the Company with additional written information a reasonable time prior to the effectiveness of the Registration Statement as is required to make the previously supplied written information true and complete, together with a description in reasonable detail of the information previously supplied which was untrue or complete.

(c) Promptly after receipt by any indemnified person of a notice of a claim or the beginning of any action in respect of which indemnity is to be sought against an indemnifying person pursuant to this Section 7.3, such indemnified person shall notify the indemnifying person in writing of such claim or of the commencement of such action, and, subject to the provisions hereinafter stated, in case any such action shall be brought against an indemnified person and such indemnifying person shall be entitled to participate therein, and, to the extent it shall wish, to assume the defense thereof, with counsel reasonably satisfactory to such indemnified person. After notice from the indemnifying person to such indemnified person of its election to assume the defense thereof, such indemnifying person shall not be liable to such indemnified person for any legal expenses subsequently incurred by such indemnified person in connection with the defense thereof, provided, however, that if there exists or shall exist a conflict of interest that would make it inappropriate, in the opinion of counsel to the indemnified person, for the same counsel to represent both the indemnified person and such indemnifying person or any affiliate or associate thereof, the indemnified person shall be entitled to retain its own counsel at the expense of such indemnifying person; provided, however, that no indemnifying person shall be responsible for the fees and expenses of more than one separate counsel for all indemnified parties.

(d) If the indemnification provided for in this Section 7.3 is unavailable to or insufficient to hold harmless an indemnified party under subsection (a) or (b) above in

respect of any losses, claims, damages or liabilities (or actions or proceedings in respect thereof) referred to therein, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as result of such losses, claims, damages or liabilities (or actions in respect thereof) in such proportion as is appropriate to reflect the relative fault of the Company on the one hand and the Investor on the other in connection with the statements or omissions which resulted in such losses, claims, damages or liabilities (or actions in respect thereof), as well as any other relevant equitable considerations. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company on the one hand or the Investor on the other and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Investor agree that it would not be just and equitable if contribution pursuant to this subsection (d) were determined by pro rata allocation or by any other method of allocation which does not take into account the equitable considerations referred to above in this subsection (d). The amount paid or payable by an indemnified party as a result of the losses, claims, damages or liabilities (or actions in respect thereof) referred to above in this subsection (d) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this subsection (d), the Investor shall not be required to contribute any amount in excess of the amount by which the net amount received by the Investor from the sale of the Stock to which such loss the amount of any damages which the Investor has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

7.4. Termination of Conditions and Obligations. The conditions precedent imposed by Section 5 or this Section 7 upon the transferability of the Conversion Shares and Dividend Shares shall cease and terminate as to any particular number of the shares of Common Stock when such shares of Common Stock shall have been effectively registered under the Securities Act and sold or otherwise disposed of in accordance with the intended method of disposition set forth in the Registration Statement covering such Conversion Shares and Dividend Shares or at such time as an opinion of counsel reasonably satisfactory to the Company shall have been rendered to the effect that such conditions are not necessary in order to comply with the Securities Act at such time for such sale or at such time for all future sales at the Investor's option.

7.5. Information Available. So long as the Registration Statement is effective covering the resale of Conversion Shares and Dividend Shares owned by the Investor, the Company will furnish to the Investor:

(a) as soon as practicable after available one copy of (i) its Annual Report to Stockholders (which Annual Report shall contain financial statements audited in

accordance with generally accepted accounting principles by a national firm of certified public accountants), (ii) if not included in substance in the Annual Report to Stockholders, its Annual Report on Form 10-K, (iii) if not included in substance in its Quarterly Reports to Stockholders, its Quarterly Reports on Form 10-Q, and (iv) a full copy of the particular Registration Statement covering the Conversion Shares and Dividend Shares (the foregoing, in each case, excluding exhibits);

(b) upon the reasonable request of the Investor, all exhibits excluded by the parenthetical to subparagraph (a)(iv) of this Section 7.5 and all other information that is made available to stockholders; and

(c) upon the reasonable request of the Investor, an adequate number of copies of the prospectuses to supply to any other party requiring such prospectuses; and the Company, upon the reasonable request of the Investor, will meet with the Investor or a representative thereof at the Company's headquarters to discuss all information relevant for disclosure in the Registration Statement covering the Conversion Shares and Dividend Shares and will otherwise cooperate with any Investor conducting an investigation for the purpose of reducing or eliminating such Investor's exposure to liability under the Securities Act, including the reasonable production of information at the Company's headquarters; provided, that, the Company shall not be required to disclose any confidential information to or meet at its headquarters with any Investor until and unless the Investor shall have entered into a confidentiality agreement in the form and substance reasonably satisfactory to the Company with the Company with respect thereto.

8. Right of First Refusal. The Company hereby grants to the Investor the right of first refusal to purchase a pro rata portion of Common Stock, preferred stock, debt or notes convertible into Common Stock, or notes sold together with warrants to purchase Common Stock (collectively, "New Securities"), which the Company may, from time to time, propose to sell and issue in private placements for cash. This right of first refusal shall be subject to the following provisions:

(a) The right of first refusal granted herein shall not apply to New Securities, (A) issued upon the exercise of the Company's outstanding options or warrants, (B) issued pursuant to the acquisition of another corporation by the Company by merger, purchase of substantially all the assets or other reorganization, (C) issued by the Company in connection with the acquisition of any patent or other rights to technology, including licenses, (D) issued to employees, consultants, officers or directors of the Company pursuant to any stock option plan or stock purchase or stock bonus arrangement approved by the Board of Directors of the Company, (E) issued in connection with a corporate collaboration, joint venture, partnership, or marketing, manufacturing, research or other similar arrangement, or (F) issued pursuant to a public offering by the Company.

(b) In the event the Company proposes to undertake an issuance of New Securities in a private placement, it shall give each Investor written notice of its intention describing the price and other material terms at which the Company proposes



to issue the same. Each Investor shall have three (3) days from the date of receipt of any such notice to agree to purchase its pro rata portion of such securities for the price specified in the notice by giving written notice to the Company and stating therein the quantity of securities to be purchased. Any Investor exercising its right of first refusal hereunder shall, unless the Company otherwise consents, be required to purchase its entire pro rata portion if any securities are to be purchased.

(c) In the event, and to the extent, that the Investors fail to exercise the right of first refusal within said three (3) day period, the Company shall have ninety (90) days thereafter to sell or enter into an agreement (pursuant to which the sale of securities covered thereby shall be closed, if at all, within ninety (90) days from the date of said agreement) to sell the securities respecting which the right of first refusal was not exercised, at a price and upon material terms no more favorable to the purchasers thereof than specified in the Company's notice. In the event the Company has not sold within said ninety (90) day period or entered into an agreement to sell the securities within said ninety (90) day period (or sold and issued securities in accordance with the foregoing within ninety (90) days from the date of said agreement), the Company shall not thereafter issue or sell any New Securities in a private placement for cash without first offering such securities to the Investors in the manner provided above.

(d) For purposes of this Agreement, an Investor's "pro rata" portion shall be the ratio of (A) the number of shares of Series B Preferred Stock held by such Investor to (B) the total number of shares of Series B Preferred Stock then outstanding.

(e) The rights to purchase securities of the Company pursuant to this Agreement may not be assigned by the Investors and shall terminate upon the conversion of the Series B Preferred Stock into Common Stock.

9. Fee. The Investor acknowledges that the Company intends to pay to the a placement agent a fee in respect of the sale of the Securities to the Investor.

10. Notices. All notices, requests, consents and other communications hereunder shall be in writing, shall be mailed by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, and shall be deemed given when so mailed and shall be delivered as addressed as follows:

(a) if to the Company, to:

Alexion Pharmaceuticals, Inc.  
25 Science Park, Suite 360  
New Haven, Connecticut  
Attn: David W. Keiser or Barry Luke  
Phone: 203-776-1790  
Telecopy: 203-776-2089

(b) with a copy mailed to:

Fulbright & Jaworski L.L.P.  
666 Fifth Avenue  
New York, NY 10103  
Attn: Lawrence A. Spector or Merrill M. Kraines  
Phone: 212-318-3000  
Telecopy: 212-752-5958

(c) if to the Investor, at its address on the signature page hereto, or at such other address or addresses as may have been furnished to the Company in writing.

(d) with a copy mailed to:

Baker & McKenzie  
815 Connecticut Avenue, N.W.  
Washington, D.C. 20006  
Attn: Daniel Goelzer, Esq.  
Phone: (202) 452-7000  
Facsimile: (202) 452-7074

11. Changes. This Agreement may not be modified or amended except pursuant to an instrument in writing signed by the Company and the Investor.

12. Headings. The headings of the various section of this Agreement have been inserted for convenience of reference only and shall not be deemed to be part of this Agreement.

13. Severability. In case any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.

14. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware and the federal law of the United States of America.

15. Choice of Forum; Venue; Service of Process. Any claim, suit, action, or proceeding among any or all of the parties hereto relating to this Agreement, to any document, instrument, or agreement delivered pursuant hereto, referred to herein, or contemplated hereby, or in any other manner arising out of or relating to the transactions contemplated by or referenced in this Agreement, shall be commenced and maintained exclusively in the United States District Court for the District of Delaware, or, if such Court lacks jurisdiction over the subject matter, in a state court of competent subject-matter jurisdiction sitting in the State of Delaware. The parties hereby submit themselves unconditionally and irrevocably to the personal jurisdiction of such courts. The parties further agree that venue shall be exclusively in Delaware. The parties irrevocably waive any objection to such personal jurisdiction or venue including,

Delaware but not limited to, the objection that any suit, action, or proceeding brought in the State of Delaware has been brought in an inconvenient forum. The parties irrevocably agree that process issuing from such courts may be served on them, either personally or by certified mail, return receipt requested, at the addresses given Section 10 hereof; and further irrevocably waive any objection to service of process made in such manner and at such addresses, including without limitation any objection that service in such manner and at such addresses is not authorized by the local or procedural laws of the State of Delaware.

16. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall constitute an original, but all of which, when taken together, shall constitute but one instrument, and shall become effective when one or more counterparts have been signed by each party hereto and delivered to the other parties.

Date: \_\_\_\_\_

Lawrence Spector, Esq. or Merrill Kraines, Esq.  
Fulbright & Jaworski L.L.P.  
666 Fifth Avenue  
New York, NY 10103

Re: Alexion Pharmaceuticals, Inc.

INVESTOR'S CERTIFICATE OF SUBSEQUENT SALE

The undersigned, an officer of, or other person duly authorized by [official name of shareholder] \_\_\_\_\_ ("Shareholder") hereby certifies that Shareholder has sold [number] \_\_\_\_\_ shares of Alexion Pharmaceuticals, Inc. Common Stock on [date] \_\_\_\_\_ in accordance with registration statement number [fill in number or otherwise identify registration statement] \_\_\_\_\_ and the requirements of delivering a current prospectus has been complied with in connection with such sale.

Print or Type:

Name of Purchaser  
(Individual or Institution): \_\_\_\_\_

Name of Individual representing  
Purchaser (if an Institution): \_\_\_\_\_

Title of Individual representing  
Purchaser (if an Institution): \_\_\_\_\_

Signature by:

Individual Purchaser or  
Individual representing Purchaser: \_\_\_\_\_