

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): APRIL 15, 1998

SHEFFIELD PHARMACEUTICALS INC.

(Exact name of Registrant as specified in its charter)

Delaware	1-12584	13-3808303
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(State or other jurisdiction of incorporation)	(Commission File Number)	(I.R.S. Employer Identification Number)

425 WOODSMILL ROAD, ST. LOUIS, MISSOURI	63017
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(Address of Principal executive offices)	(Zip Code)

(314) 579-9899

Registrant's telephone number, including area code

(Former Name or Former Address; if Changed Since Last Report)

ITEM 5. OTHER EVENTS.

On April 15, 1998, Sheffield Pharmaceuticals, Inc. (the "Company") announced that it had entered into an option agreement to form a strategic arrangement with Zambon Group SpA of Milan, Italy for the worldwide development and commercialization of drugs to treat respiratory disease in the Company's proprietary Metered Solution Inhaler (MSI) system. A copy of the press release disclosing information relating to the option agreement and certain other matters is attached as an exhibit to this report.

On April 16, 1998, the Company announced its financial results for the fourth quarter and year ended December 31, 1998. In addition, the Company announced that it had completed the offering and sale of its Series B Cumulative Convertible Redeemable Preferred Stock ("Series B Preferred Stock") for gross proceeds of \$1.25 million. Copies of (i) the related press release and (ii) the Certificate of Designations, Preferences and Rights of the Series B Preferred Stock are attached as exhibits to this report.

ITEM 7. FINANCIAL STATEMENTS, PRO FORMA FINANCIAL INFORMATION AND EXHIBITS.

(c) EXHIBITS

1. Press Release of the Company dated April 15, 1998.

2. Press Release of the Company dated April 16, 1998.
3. Certificate of Designations, Preferences and Rights of Series B Cumulative Convertible Redeemable Preferred Stock of the Company dated April 15, 1998.

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

SHEFFIELD PHARMACEUTICALS INC.

Date: April 17, 1998

By: /s/ Judy Roeske Bullock

Judy Roeske Bullock
Vice President and Chief Financial
Officer

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meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are intended to be covered by the safe harbors created hereby. Investors are cautioned that all forward-looking statements involve risks and uncertainty, including without limitation, the ability of the company to successfully develop and commercialize its technologies. Although the Company believes that the assumptions underlying the forward-looking statements contained herein are reasonable, any assumptions could be inaccurate, and therefore, there can be no assurance that the forward-looking statements included in this press release will prove to be accurate. In light of the significant uncertainties inherent in the forward-looking statements included herein, the inclusion of such information should not be regarded as a representation by the company or any other person that the objectives and plans of the Company will be achieved.

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	1997	1996	1997	1996
<S>	<C>	<C>	<C>	<C>
Sub-license revenue	\$ 500,000	\$ 10,000	\$ 500,000	\$ 510,000
Interest income	7,551	39,150	56,914	163,664
Total revenue	507,551	49,150	556,914	673,664
Acquisition of R & D in-process technology	--	--	1,650,000	--
Research and development	445,561	983,713	3,729,193	3,841,818
General and administrative	1,540,464	1,181,468	4,627,567	3,831,204
Interest	32,341	2,952	39,292	9,531
Net loss	\$1,510,815	\$ 2,118,983	\$ 9,489,138	\$ 7,008,889
Net loss per share of common stock	\$ 0.13	\$ 0.19	\$ 0.80	\$ 0.65
Weighted average common shares outstanding	12,600,548	11,388,274	11,976,090	10,806,799

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CERTIFICATE OF DESIGNATIONS,
PREFERENCES AND RIGHTS

OF

SERIES B CUMULATIVE CONVERTIBLE REDEEMABLE PREFERRED STOCK

OF

SHEFFIELD PHARMACEUTICALS, INC.

Pursuant to Section 151 of
the General Corporation Law of the State of Delaware

Sheffield Pharmaceuticals, Inc., a corporation organized and existing under the General Corporation Law of the State of Delaware (the "Corporation"), hereby certifies that the following resolutions were adopted by the Board of Directors of the Corporation on April 13, 1998 pursuant to authority of the Board of Directors as required by Section 151 of the General Corporation Law of the State of Delaware:

RESOLVED, that pursuant to the authority expressly granted to and vested in the Board of Directors of the Corporation (the "Board" or the "Board of Directors") by the provisions of the Certificate of Incorporation of the Corporation (the "Certificate of Incorporation"), there hereby is created, out of the 3,000,000 shares of preferred stock of the Corporation authorized in Article FOURTH of the Certificate of Incorporation (the "Preferred Stock"), a series of Preferred Stock consisting of 1,250 shares, which series shall have the following powers, designations, preferences and relative, participating, optional or other rights, and the following qualifications, limitations and restrictions (in addition to the powers, designations, rights, and the qualifications, limitations and restrictions, set forth in the Certificate of Incorporation which are applicable to the Preferred Stock).

ARTICLE 1
DESIGNATION AND AMOUNT

The shares of such series shall be designated as "Series B Cumulative Convertible Redeemable Preferred Stock" (the "Series B Preferred Stock") and the authorized number of shares constituting such series shall be 1,250 shares. The par value of the Series B Preferred Stock shall be \$.01 per share. The stated value of the Series B Preferred Stock shall be One Thousand Dollars (\$1,000) per share (the "Stated Value").

ARTICLE 2
DEFINITIONS

SECTION 2.1 DEFINITIONS. The terms defined in this Article whenever used in this Certificate of Designations have the following respective meanings:

(a) "ADDITIONAL CAPITAL SHARES" has the meaning set forth in Section 6.1(c).

(b) "AFFILIATE" has the meaning ascribed to such term in Rule 12b-2 under the Securities Exchange Act of 1934, as amended.

(c) "BUSINESS DAY" means a day other than Saturday, Sunday or any day on which banks located in the State of New York are authorized or obligated to close.

(d) "CAPITAL SHARES" means the Common Shares and any other shares of any other class or series of common stock, whether now or hereafter authorized and however designated, which have the right to participate in the distribution of earnings and assets (upon dissolution, liquidation or winding-up) of the Corporation.

(e) "CLOSING DATE" means the date of issuance of the first share of Series B Preferred Stock.

(f) "COMMON SHARES" or "COMMON STOCK" means shares of common stock, \$.01 par value, of the Corporation.

(g) "COMMON STOCK ISSUED AT CONVERSION" when used with reference to the securities issuable upon conversion of the Series B Preferred Stock, means all Common Shares now or hereafter Outstanding and securities of any other class or

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series into which the Series B Preferred Stock hereafter shall have been changed or substituted, whether now or hereafter created and however designated.

(h) "CONVERSION DATE" means any day on which all or any portion of shares of the Series B Preferred Stock is converted in accordance with the provisions hereof.

(i) "CONVERSION NOTICE" has the meaning set forth in Section 6.2.

(j) "CONVERSION PRICE" means on any date of determination the applicable price for the conversion of shares of Series B Preferred Stock into Common Shares on such day as set forth in Section 6.1.

(k) "CONVERSION RATIO" means on any date of determination the applicable percentage of the Market Price for conversion of shares of Series B Preferred Stock into Common Shares on such day as set forth in Section 6.1.

(l) "CORPORATION" means Sheffield Pharmaceuticals, Inc. a Delaware corporation, and any successor or resulting corporation by way of merger, consolidation, sale or exchange of all or substantially all of the Corporation's assets, or otherwise.

(m) "CURRENT MARKET PRICE" on any date of determination means the closing price of a Common Share on such day as reported on the AMEX, or, if such security is not listed or admitted to trading on the AMEX, on the principal national security exchange or quotation system on which such security is quoted or listed or admitted to trading, or, if not quoted or listed or admitted to trading on any national securities exchange or quotation system, the closing price of such security on the over-the-counter market on the day in question as reported by the National Quotation Bureau Incorporated, or a similar generally accepted reporting service, or if not so available, in such manner as furnished by any Nasdaq member firm of the National Association of Securities Dealers, Inc. selected from time to time by the Board of Directors of the Corporation for that purpose, or a price determined in good faith by the Board of Directors of the Corporation as being equal to the fair market value thereof, as the case may be.

(n) "DEFAULT DIVIDEND RATE" shall be equal to the Preferred Stock Dividend Rate plus an additional 4% per annum.

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(o) "HOLDER" means The Shaar Fund Ltd., any successor thereto, or any Person to whom the Series B Preferred Stock is subsequently transferred in accordance with the provisions hereof.

(p) "ISSUE DATE" means the date of original issuance of the applicable share of Series B Preferred Stock.

(q) "MARKET DISRUPTION EVENT" means any event that results in a material suspension or limitation of trading of Common Shares on the AMEX.

(r) "MARKET PRICE" per Common Share means the average of the closing prices of the Common Shares as reported on the AMEX for the five Trading Days in any Valuation Period.

(s) "OUTSTANDING" when used with reference to Common Shares or Capital Shares (collectively, "Shares"), means, on any date of determination, all issued and outstanding Shares, and includes all such Shares issuable in

respect of outstanding scrip or any certificates representing fractional interests in such Shares; PROVIDED, HOWEVER, that any such Shares directly or indirectly owned or held by or for the account of the Corporation or any Subsidiary of the Corporation shall not be deemed "Outstanding" for purposes hereof.

(t) "PERSON" means an individual, a corporation, a partnership, an association, a limited liability company, a unincorporated business organization, a trust or other entity or organization, and any government or political subdivision or any agency or instrumentality thereof.

(u) "SEC" means the United States Securities and Exchange Commission.

(v) "SECURITIES ACT" means the Securities Act of 1933, as amended, and the rules and regulations of the SEC thereunder, all as in effect at the time.

(w) "SERIES B PREFERRED STOCK" means the Series B Cumulative Convertible Redeemable Preferred Stock of the Corporation created by this Certificate of Designations or such other convertible Preferred Stock exchanged therefor as provided in Section 6.4.

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(aa) "STATED VALUE" has the meaning set forth in Article 1.

(bb) "SUBSIDIARY" means any entity of which securities or other ownership interests having ordinary voting power to elect a majority of the board of directors or other persons performing similar functions are owned directly or indirectly by the Corporation.

(cc) "TRADING DAY" means any day on which purchases and sales of securities authorized for quotation on the AMEX are reported thereon and on which no Market Disruption Event has occurred or, if the Common Stock is not listed or admitted to trading on the AMEX, a day on which the principal national securities exchange on which the Common Stock is listed or admitted to trading is open for the transaction of business, or, if the Common Stock is not so listed or admitted to trading on any national securities exchange, a day on which the Nasdaq National Market (or any successor thereto) or such other system then in use is open for the transaction of business, or, if the Common Stock is not quoted by any such organization, any day other than a Saturday, Sunday or a day on which banking institutions in the State of New York are authorized or obligated by law or executive order to close.

(dd) "VALUATION EVENT" has the meaning set forth in Section 6.1.

(ee) "VALUATION PERIOD" means the five Trading Day period immediately preceding the applicable Conversion Date.

All references to "cash" or "\$" herein means currency of the United States of America.

ARTICLE 3 RANK

The Series B Preferred Stock shall rank (i) prior to the Common Stock; (ii) prior to any class or series of capital stock of the Corporation hereafter created other than "Pari Passu Securities" (collectively, with the Common Stock, "Junior Securities"); (iii) pari passu with the Corporation's Series A Cumulative Convertible Redeemable Preferred Stock (the "Series A Preferred Stock"); and (iv) pari passu with any class or series of capital stock of the Corporation hereafter created specifically ranking on parity

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with the Series B Preferred Stock (collectively, with the Series A Preferred Stock, "Pari Passu Securities").

ARTICLE 4

DIVIDENDS

SECTION 4.1

(a) (i) Subject to Article 6, the Holder shall be entitled to receive, when, as and if declared by the Board of Directors, out of funds legally available for the payment of dividends, dividends (subject to Sections 4(a)(ii) hereof) at the rate of 6% per annum (computed on the basis of a 360-day year) (the "Dividend Rate") on the Liquidation Value (as defined below) of each share of Series B Preferred Stock on and as of the most recent Dividend Payment Due Date (as defined below) with respect to each Dividend Period (as defined below). Dividends on the Series B Preferred Stock shall be cumulative from the date of issue, whether or not declared for any reason, including if such declaration is prohibited under any outstanding indebtedness or borrowings of the Corporation or any of its Subsidiaries, or any other contractual provision binding on the Corporation or any of its Subsidiaries, and whether or not there shall be funds legally available for the payment thereof.

(ii) Each dividend shall be payable in equal quarterly amounts on each March 31, June 30, September 30 and December 31 of each year (each, a "Dividend Payment Due Date"), commencing September 30, 1998, to the holders of record of shares of the Series B Preferred Stock, as they appear on the stock records of the Corporation at the close of business on any record date, not more than 60 days or less than 10 days preceding the payment dates thereof, as shall be fixed by the Board of Directors. For the purposes hereof, "Dividend Period," in respect of any share of Series B Preferred Stock, shall mean (i) the period commencing on and including the Issue Date of such share and including September 30, 1998 and, thereafter, the quarterly period commencing on and including the day after the immediately preceding Dividend Payment Date and ending on and including the immediately subsequent Dividend Payment Date. Accrued and unpaid dividends for any past Dividend Period may be declared and paid at any time, without reference to any Dividend Payment Due Date, to holders of record on such date, not more than 15 days preceding the payment date thereof, as may be fixed by the Board of Directors.

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(iii) At the option of the Corporation, the dividend shall be paid in cash or through the issuance of duly and validly authorized and issued, fully paid and non-assessable shares of the Common Stock valued at the Market Price. Notwithstanding the foregoing, until the shares of Common Stock issuable as dividends on the Series B Preferred Stock have been registered for resale under a registration statement that has been declared effective under the Securities Act by the SEC, payment of dividends on the Series B Preferred Stock shall be in cash.

(b) The Holder shall not be entitled to any dividends in excess of the cumulative dividends, as herein provided, on the Series B Preferred Stock. Except as provided in this Article 4, no interest, or sum of money in lieu of interest, shall be payable in respect of any dividend payment or payments on the Series B Preferred Stock that may be in arrears.

(c) So long as any shares of the Series B Preferred Stock are outstanding, no dividends, except as described in the next succeeding sentence, shall be declared or paid or set apart for payment on Pari Passu Securities for any period unless full cumulative dividends required to be paid in cash have been or contemporaneously are declared and paid or declared and a sum sufficient for the payment thereof set apart for such payment on the Series B Preferred Stock for all Dividend Periods terminating on or prior to the date of payment of the dividend on such class or series of Pari Passu Securities. When dividends are not paid in full or a sum sufficient for such payment is not set apart, as aforesaid, all dividends declared upon shares of the Series B Preferred Stock and all dividends declared upon any other class or series of Pari Passu Securities shall be declared ratably in proportion to the respective amounts of dividends accumulated and unpaid on the Series B Preferred Stock and accumulated and unpaid on such Pari Passu Securities.

(d) So long as any shares of the Series B Preferred Stock are outstanding, no dividends shall be declared or paid or set apart for payment or other distribution declared or made upon Junior Securities, nor shall any Junior Securities be redeemed, purchased or otherwise acquired (other than a redemption, purchase or other acquisition of shares of Common Stock made for

purposes of an employee incentive or benefit plan (including a stock option plan) of the Corporation or any Subsidiary,

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(all such dividends, distributions, redemptions or purchases being hereinafter referred to as a "Junior Securities Distribution") for any consideration (or any moneys be paid to or made available for a sinking fund for the redemption of any shares of any such stock) by the Corporation, directly or indirectly, unless in each case (i) the full cumulative dividends required to be paid in cash on all outstanding shares of the Series B Preferred Stock and any other Pari Passu Securities shall have been paid or set apart for payment for all past Dividend Periods with respect to the Series B Preferred Stock and all past dividend periods with respect to such Pari Passu Securities, and (ii) sufficient funds shall have been paid or set apart for the payment of the dividend for the current Dividend Period with respect to the Series B Preferred Stock and the current dividend period with respect to such Pari Passu Securities.

ARTICLE 5 LIQUIDATION PREFERENCE

SECTION 5.1

(a) If the Corporation shall commence a voluntary case under the Federal bankruptcy laws or any other applicable Federal or State bankruptcy, insolvency or similar law, or consent to the entry of an order for relief in an involuntary case under any law or to the appointment of a receiver, liquidator, assignee, custodian, trustee, sequestrator (or other similar official) of the Corporation or of any substantial part of its property, or make an assignment for the benefit of its creditors, or admit in writing its inability to pay its debts generally as they become due, or if a decree or order for relief in respect of the Corporation shall be entered by a court having jurisdiction in the premises in an involuntary case under the Federal bankruptcy laws or any other applicable Federal or state bankruptcy, insolvency or similar law resulting in the appointment of a receiver, liquidator, assignee, custodian, trustee, sequestrator (or other similar official) of the Corporation or of any substantial part of its property, or ordering the winding up or liquidation of its affairs, and any such decree or order shall be unstayed and in effect for a period of sixty (60) consecutive days and, on account of any such event, the Corporation shall liquidate, dissolve or wind up, or if the Corporation shall otherwise liquidate, dissolve or wind up (each such event being considered a "Liquidation Event"), no distribution shall be made to the holders of any Junior Securities of the Corporation upon liquidation, dissolution or winding up unless prior thereto, the holders of shares of Series B Preferred Stock, subject to Article 5, shall have received the Liquidation Preference (as defined in Article 5(b)) with respect to each share. If upon the occurrence of a Liquidation Event, the assets and funds available for distribution among the holders of the Series B Preferred Stock and holders of Pari Passu Securities shall be insufficient to permit the payment to such holders of the preferential amounts payable thereon, then the entire assets and funds of the Corporation legally available for distribution to the Series B Preferred Stock and the Pari Passu Securities shall be distributed ratably among such shares in proportion to the ratio that the Liquidation Preference payable on each such share bears to the aggregate liquidation Preference payable on all such shares.

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(b) For purposes hereof, the "Liquidation Preference" with respect to a share of the Series B Preferred Stock shall mean an amount equal to the sum of (i) the Stated Value thereof, plus (ii) the aggregate of all accrued and unpaid dividends on such share of Series B Preferred Stock until the most recent Dividend Payment Date; PROVIDED that, in the event of an actual liquidation, dissolution or winding up of the Corporation, the amount referred to in clause (iii) above shall be calculated by including accrued and unpaid dividends to the actual date of such liquidation, dissolution or winding up, rather than the Dividend Payment Due Date referred to above.

ARTICLE 6 CONVERSION AND REDEMPTION OF PREFERRED STOCK

SECTION 6.1 CONVERSION; CONVERSION PRICE. At the option of the Holder, the shares of Preferred Stock may be converted, either in whole or in part, into

Common Shares (calculated as to each such conversion to the nearest 1/100th of a share), at any time, and from time to time after the 90th day following the Issue Date at a Conversion Price equal to 75% of the Market Price; provided, however, that the Holder shall not have the right to convert any portion of the Series B Preferred Stock to the extent that the issuance to the Holder of Common Shares upon such conversion would result in the Holder being deemed the "beneficial owner" of 5% or more of the then outstanding Common Shares within the meaning of Rule 13d-3 of the Securities Exchange Act of 1934, as amended, provided, however, that the Corporation shall have no obligation to determine whether or not a Holder is a "beneficial owner" of 5% or more of the outstanding Common Stock in connection with any conversion of Series B Preferred Stock. At the Corporation's option, the amount of accrued and unpaid dividends as of the Conversion Date shall not be subject to conversion but instead may be paid in cash as of the Conversion Date; if the Corporation elects to convert the amount of accrued and unpaid dividends at the Conversion Date into Common Stock, the Common Stock issued to the Holder shall be valued at the Conversion Price as of the applicable Conversion Date. Notwithstanding the previous sentence, in no event shall the Holder have the right to convert that portion of the Series B Preferred Stock to the extent that the issuance of Common Shares upon the conversion of such Series B Preferred Stock, when combined with shares of Common Stock received upon other conversions of Series B Preferred Stock and exercise of the Warrants by such Holder and any other holders of Series B Preferred Stock and the Warrants, would exceed 19.99% of the Common Stock outstanding on the Closing Date. Within ten (10) Business Days after the receipt of the Conversion Notice which upon conversion would, when combined with shares of Common Stock received upon other conversions of Series B Preferred Stock and exercise of the Warrants by such Holder and any other holders of Series B Preferred Stock and Warrants, exceed 19.99% of the Common Stock outstanding on the Closing Date, the Corporation shall redeem all remaining outstanding shares of Series B Preferred Stock at one hundred and fifteen percent (115%) of the Stated Value thereof, together with all accrued and unpaid dividends thereon, in cash, to the date of such redemption.

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The number of shares of Common Stock due upon conversion of Series B Preferred Stock in respect of any Conversion Date shall be (i) the number of shares of Series B Preferred Stock to be converted, multiplied by (ii) the Stated Value and divided by (iii) the applicable Conversion Price for such Conversion Date.

Within two (2) Business Days of the occurrence of a Valuation Event, the Corporation shall send notice (the "Valuation Event Notice") of such occurrence to the Holder. Notwithstanding anything to the contrary contained herein, if a Valuation Event occurs during any Valuation Period, a new Valuation Period shall begin on the Trading Day immediately following the occurrence of such Valuation Event and end on the Conversion Date; PROVIDED that, if a Valuation Event occurs on the fifth day of any Valuation Period, then the Conversion Price shall be the Current Market Price of the Common Shares on such day; and PROVIDED, FURTHER, that the Holder may, in its discretion, postpone such Conversion Date to a Trading Day which is no more than five (5) Trading Days after the occurrence of the latest Valuation Event by delivering a notification to the Corporation within two (2) Business Days of the receipt of the Valuation Event Notice. In the event that the Holder deems the Valuation Period to be other than the five (5) Trading Days immediately prior to the Conversion Date, the Holder shall give written notice of such fact to the Corporation in the related Conversion Notice at the time of conversion.

For purposes of this Section 6.1, a "VALUATION EVENT" shall mean an event in which the Corporation at any time during a Valuation Period takes any of the following actions:

- (a) subdivides or combines its Capital Shares;
- (b) makes any distribution of its Capital Shares;

(c) issues any additional Capital Shares (the "Additional Capital Shares"), otherwise than as provided in the foregoing Sections 6.1(a) and 6.1(b) above, at a price per share less, or for other consideration lower, than the Current Market Price in effect immediately prior to such issuances, or without consideration, except for the issuance of (i) Common Stock and other securities of the Corporation issuable upon the exercise or conversion of options, warrants or other rights to purchase securities of the Corporation

outstanding as of the date hereof and (ii)

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securities to officers, directors or employees of the Corporation or any of its Subsidiaries;

(d) issues any warrants, options or other rights to subscribe for or purchase any Additional Capital Shares and the price per share for which Additional Capital Shares may at any time thereafter be issuable pursuant to such warrants, options or other rights shall be less than the Current Market Price in effect immediately prior to such issuance; except for the issuance of (i) Common Stock and other securities of the Corporation issuable upon the exercise or conversion of options, warrants or other rights to purchase securities of the Corporation outstanding as of the date hereof and (ii) securities to officers, directors or employees of the Corporation or any of its Subsidiaries;

(e) issues any securities convertible into or exchangeable or exercisable for Capital Shares and the consideration per share for which Additional Capital Shares may at any time thereafter be issuable pursuant to the terms of such convertible, exchangeable or exercisable securities shall be less than the Current Market Price in effect immediately prior to such issuance except for the issuance of (i) Common Stock and other securities of the Corporation issuable upon the exercise or conversion of options, warrants or other rights to purchase securities of the Corporation outstanding as of the date hereof and (ii) securities to officers, directors or employees of the Corporation or any of its subsidiaries;

(f) makes a distribution of its assets or evidences of indebtedness to the holders of its Capital Shares as a dividend in liquidation or by way of return of capital or other than as a dividend payable out of earnings or surplus legally available for the payment of dividends under applicable law or any distribution to such holders made in respect of the sale of all or substantially all of the Corporation's assets (other than under the circumstances provided for in the foregoing Sections 6.1(a) through 6.1(e)); or

(g) takes any action affecting the number of Outstanding Capital Shares, other than an action described in any of the foregoing Sections 6.1(a) through 6.1(f) hereof, inclusive, which in the opinion of the Corporation's Board of Directors, determined in good faith, would have a material adverse effect upon the rights of the Holder at the time of a conversion of the Series B Preferred Stock.

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SECTION 6.2 EXERCISE OF CONVERSION PRIVILEGE. (a) Conversion of the Series B Preferred Stock may be exercised, in whole or in part, by the Holder by telecopying an executed and completed notice of conversion in the form annexed hereto as Annex I (the "Conversion Notice") to the Corporation and delivering a copy of the Conversion Notice to the Corporation by nationally recognized overnight courier not later than five (5) Business Days next following the date on which the telecopied Conversion Notice has been transmitted to the Corporation. Each date on which a Conversion Notice is telecopied to and received by the Corporation in accordance with the provisions of this Section 6.2 shall be deemed a Conversion Date. The Corporation shall convert the Preferred Stock and issue the Common Stock Issued at Conversion effective as of the Conversion Date. The Conversion Notice also shall state the name or names (with addresses) of the persons who are to become the holders of the Common Stock Issued at Conversion in connection with such conversion. The applicable Holder shall deliver the stock certificate representing the shares of Series B Preferred Stock so converted to the Corporation by nationally recognized overnight courier service within 15 days following the date on which the telecopied Conversion Notice has been transmitted to the Corporation. Upon surrender for conversion, the Preferred Stock shall be accompanied by a proper assignment hereof to the Corporation or be endorsed in blank. As promptly as practicable after the delivery to the Corporation of the applicable Conversion Notice as aforesaid, but in any event not more than five (5) Business Days after the Corporation's delivery to the Corporation of the applicable Conversion Notice, the Corporation shall (i) issue the Common Stock issued at Conversion in accordance with the provisions of this Article 6, and (ii) cause to be mailed for delivery by overnight courier to the Holder (X) a certificate or certificate(s) representing the number of Common Shares to which the Holder is

entitled by virtue of such conversion, (Y) cash, as provided in Section 6.3, in respect of any fraction of a Share issuable upon such conversion and (Z) cash or Common Stock, as applicable representing the amount of accrued and unpaid dividends as of the Conversion Date. Such conversion shall be deemed to have been effected at the time at which the Conversion Notice indicates so long as the Corporation shall have been delivered the applicable Conversion Notice in accordance with this Section 6.2, and at such time the rights of the Holder of the Preferred Stock, as such, shall cease and the Person and Persons in whose name or names the Common Stock Issued at Conversion shall be issuable shall be deemed to have become the holder or holders of record of the

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Common Shares represented thereby. The Conversion Notice shall constitute a contract between the Holder and the Corporation, whereby the Holder shall be deemed to subscribe for the number of Common Shares which it will be entitled to receive upon such conversion and, in consideration of such conversion, to surrender the Preferred Stock and to release the Corporation from all liability thereon.

(b) From and after the delivery of the Conversion Notice in respect of any conversion of shares of Series B Preferred Stock, all such shares of Series B Preferred Stock shall be deemed to have been converted into shares of Common Stock as of the applicable Conversion Date at the applicable conversion rate, all stock dividends on such shares of the Series B Preferred Stock shall cease to accrue, and all rights of the holders thereof as holders of Series B Preferred Stock, except the right to receive all accrued and unpaid stock dividends to such Conversion Date at the applicable rate for such shares of Series B Preferred Stock and the right to receive certificates representing shares of Common Stock issuable upon the conversion of such shares (including, without limitation, with respect to such stock dividends, as applicable), shall cease and terminate, such shares of Series B Preferred Stock shall not thereafter be transferred (except with the consent of the Corporation) and such shares shall not be deemed to be outstanding for any purpose whatsoever.

(c) If, at any time (i) the Corporation challenges, disputes or denies the right of the Holder hereof to effect the conversion of the Preferred Stock into Common Shares or otherwise dishonors or rejects any Conversion Notice delivered in accordance with this Section 6.2 or (ii) any third party who is not and has never been an Affiliate of the Holder commences any lawsuit or proceeding or otherwise asserts any claim before any court or public or governmental authority which seeks to challenge, deny, enjoin, limit, modify, delay or dispute the right of the Holder hereof to effect the conversion of the Preferred Stock into Common Shares, then the Holder shall have the right, by written notice to the Corporation, to require the Corporation to promptly redeem the Preferred Stock for cash at a redemption price equal to 125% of the Stated Value thereof together with all accrued and unpaid dividends thereon. Under any of the circumstances set forth above, the Corporation shall be responsible for the payment of all costs and expenses of the Holder, including reasonable legal fees and expenses, as and when incurred in disputing any such action or pursuing its rights hereunder (in addition to any other rights of the Holder).

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(d) Notwithstanding the preceding paragraph (c), in the event a dispute arises over whether a Conversion Notice was delivered to the Corporation by the Holder pursuant to Section 6.2, the Holder purporting to have telecopied such notice shall have the burden of proving that such notice was telecopied to the Corporation.

SECTION 6.3 FRACTIONAL SHARES. No fractional Common Shares or scrip representing fractional Common Shares shall be issued upon conversion of the Series B Preferred Stock. Instead of any fractional Common Shares which otherwise would be issuable upon conversion of the Series B Preferred Stock, the Corporation shall pay a cash adjustment in respect of such fraction in an amount equal to the same fraction. No cash payment of less than \$1.50 shall be required to be given unless specifically requested by the Holder.

SECTION 6.4 ADJUSTMENTS. The Conversion Price and the number of shares issuable upon conversion of the Series B Preferred Stock are subject to adjustment from time to time as follows.

(a) MERGER, SALE OF ASSETS, ETC. If at any time while the Series B Preferred Stock, or any portion thereof, is outstanding there shall be (i) a reorganization (other than a combination, reclassification, exchange or subdivision of shares otherwise provided for herein), (ii) a merger or consolidation of the Corporation with or into another corporation in which the Corporation is the surviving entity but the shares of the Corporation's capital stock outstanding immediately prior to the merger are converted by virtue of the merger into other property, whether in the form of securities, cash or otherwise, or (iii) a sale or transfer of the Corporation's properties and assets as, or substantially as, an entirety to any other person, then as a part of such reorganization, merger, consolidation, sale or transfer lawful provision shall be made so that the Holder shall thereafter be entitled to receive upon conversion of the Series B Preferred Stock, during the period specified herein, the number of shares of stock or other securities or property of the successor corporation resulting from such reorganization, merger, consolidation, sale or transfer that the Holder would have been entitled to receive in such reorganization, consolidation, merger, sale or transfer if the Series B Preferred Stock had been converted immediately before such

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reorganization, merger, consolidation, sale or transfer, all subject to further adjustment as provided in this Section 6.4. The foregoing provisions of this Section 6.4 shall similarly apply to successive reclassification, changes, consolidations, mergers, mandatory share exchanges and sales and transfers. If the per share consideration payable to the holder hereof for shares in connection with any such transaction is in a form other than cash or marketable securities, then the value of such consideration shall be determined in good faith by the Board of Directors. In all events, appropriate adjustment (as determined in good faith by the Board of Directors) shall be made in the application of the provisions of this Certificate of Designations with respect to the rights and interests of the Holder after the transaction, to the end that the provisions of this Certificate of Designations shall be applicable after that event, as near as reasonably may be, in relation to any shares or other property deliverable after that event upon conversion of the Series B Preferred Stock.

(b) RECLASSIFICATION, ETC. If the Corporation, at any time while the Series B Preferred Stock, or any portion thereof, remains outstanding, shall change any of the securities as to which conversion rights under this Certificate of Designations exist into the same or a different number of securities of any other class or classes, the Series B Preferred Stock shall thereafter represent the right to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities that were subject to the conversion rights under this Certificate of Designations immediately prior to such reclassification or other change and the Conversion Price therefor shall be appropriately adjusted, all subject to further adjustment as provided in this Certificate of Designations.

(c) SPLIT, SUBDIVISION OR COMBINATION OF SHARES. If the Corporation at any time while the Series B Preferred Stock, or any portion thereof, remains outstanding shall split, subdivide or combine the securities as to which conversion rights under this Certificate of Designations exist, into a different number of securities of the same class, the Conversion Price shall be proportionately decreased in the case of a split or subdivision or proportionately increased in the case of a combination.

(d) ADJUSTMENTS FOR DIVIDENDS IN STOCK AND OTHER SECURITIES OR PROPERTY. If while the Series B Preferred Stock, or any portion hereof, remains outstanding, the

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holders of the securities as to which conversion rights under this Certificate of Designations exist at the time shall have received, or, on or after the record date fixed for the determination of eligible stockholders of the Corporation, shall have become entitled to receive, without payment therefor, other or additional stock or other securities or property (other than cash) of the Corporation by way of dividend, then and in each case, the Series B Preferred Stock shall represent the right to acquire, upon conversion, in addition to the number of shares of the security receivable upon conversion of the Series B Preferred Stock, and without payment of any additional consideration therefor, the amount of such other or additional stock or other

securities or property (other than cash) of the Corporation that the Holder would hold on the date of such conversion had it been the holder of record of the security receivable upon conversion of the Series B Preferred Stock on the date hereof and had thereafter, during the period from the date hereof to and including the date of such conversion, retained such shares and/or additional stock available by it as aforesaid during such period, giving effect to all adjustments called for during such period by the provisions of this Section 6.4.

(e) CERTIFICATE AS TO ADJUSTMENTS. Upon the occurrence of each adjustment or readjustment pursuant to this Section 6.4, the Corporation at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to the Holder a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based.

SECTION 6.5 MANDATORY REDEMPTION UNDER CERTAIN CIRCUMSTANCES. (a) If at anytime from the Closing Date until the 90th day after the Closing Date (the "Mandatory Redemption Termination Date"), the Corporation shall be a party to a transaction or a series of transactions involving the issuance of equity securities, the incurrence of debt of the Corporation, the sale of licensing rights, the entering into of joint ventures or any other similar infusion of cash (collectively, a "Cash Infusion") as a result of which the Corporation shall receive funds in an aggregate amount in excess of \$300,000, the Corporation shall immediately upon receipt of such Cash Infusion redeem the Series B Preferred Stock at the applicable Mandatory Redemption Price (as defined below), together with all accrued and unpaid dividends thereon to the date of the Corporation's receipt of such funds (the "Mandatory Redemption Date") by the

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amount of such excess funds; PROVIDED, HOWEVER, that any funds received by the Corporation from Zambon Group, SpA (or any affiliate thereof) shall not be required to be aggregated to satisfy the \$300,000 amount provided for in the preceding clause but shall be used immediately for redemption under this Section 6.5; PROVIDED FURTHER, HOWEVER, should the amounts received by the Corporation from any of the foregoing transactions be lower than the amount needed to redeem the Series B Preferred Stock in full, then any amounts so received shall be used to redeem shares on a pro rata basis. The proceeds available for redemption under this Section 6.5 shall be applied first to accrued and unpaid dividends thereon to the date of redemption and second to the redemption of Series B Preferred Stock.

(b) For purposes hereof, the "Mandatory Redemption Price" shall mean as follows: (i) with respect to each share of Series B Preferred Stock redeemed during the period beginning on the Issue Date of each such share and ending on the 45th day after such Issue Date, an amount equal to 106% of the Stated Value thereof; and (ii) with respect to each share of Series B Preferred Stock redeemed during the period beginning on the 46th day after the Issue Date of each such share and ending on or before the Mandatory Redemption Termination Date, an amount equal to the sum of (A) 106% of the Stated Value thereof for the period from the Issue Date until the 45th day after the Issue Date and (B) 0.1334% of the Stated Value of each such share for each day, if any, from the 46th day after the Issue Date through and including the Mandatory Redemption Date.

(c) After the Mandatory Redemption Termination Date, the Corporation shall cease to have any obligation to redeem shares of Series B Preferred Stock under this Section 6.5.

SECTION 6.6 OPTIONAL REDEMPTION UNDER CERTAIN CIRCUMSTANCES. At any time after the date of issuance of the Series B Preferred Stock until the Mandatory Conversion Date (as defined below), the Corporation, upon notice delivered to the Holder as provided in Section 6.7, may redeem the Series B Preferred Stock (but only with respect to such shares as to which the Holder has not theretofore furnished a Conversion Notice in compliance with Section 6.2), at 125% of the Stated Value thereof (the "Optional Redemption Price"), together with all accrued and unpaid dividends thereon to the date of redemption (the "Redemption Date"); PROVIDED, HOWEVER, that the Corporation may only

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redeem the Series B Preferred Stock under this Section 6.6 if the Current Market

Price on the date the notice of redemption pursuant to this Section 6.6 is less than the Current Market Price on the Closing Date. Except as set forth in Sections 6.5 and 6.6, the Corporation shall not have the right to prepay or redeem the Series B Preferred Stock.

SECTION 6.7 NOTICE OF REDEMPTION. (a) Notice of redemption pursuant to Sections 6.5 and 6.6 shall be provided by the Corporation to the Holder in writing (by registered mail or overnight courier at the Holder's last address appearing in the Corporation's security registry) not less than ten (10) nor more than fifteen (15) days prior to the proposed Mandatory Redemption Date or the Redemption Date, as the case may be, which notice shall specify the proposed Mandatory Redemption Date or the Redemption Date, as the case may be, and refer to Section 6.5 or 6.6 (including, with respect to Section 6.6, a statement of the Market Price) and this Section 6.7.

(b) Any notice of redemption delivered by the Corporation in connection with a redemption under Section 6.5 may state that such redemption is conditioned on the consummation of the transactions giving rise to such redemption and may be revoked by the Corporation by notice to the Holder in the event that such transaction is not consummated, whereupon the Corporation's obligation to redeem shares of Series B Preferred Stock in respect thereof shall terminate.

SECTION 6.8 SURRENDER OF PREFERRED STOCK. Upon any redemption of the Series B Preferred Stock pursuant to Sections 6.5 or 6.6, the Holder, within 15 days of the date of any such redemption, shall either deliver the Series B Preferred Stock by hand to the Corporation at its principal executive offices or surrender the same to the Corporation at such address by express courier. Payment of the Mandatory Redemption Price or the Optional Redemption Price specified in Section 6.5 or 6.6, as the case may be, shall be made by the Corporation to the Holder by wire transfer of immediately available funds to such account(s) as the Holder shall specify to the Corporation. If payment of such redemption price is not made in full by the Mandatory Redemption Date or the Redemption Date, as the case may be, the Holder shall again have the right to convert the Series B Preferred Stock as provided in Article 6 hereof.

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SECTION 6.9 MANDATORY CONVERSION. On the third anniversary of the date of this Agreement (the "Mandatory Conversion Date"), the Corporation shall convert all Series B Preferred Stock outstanding at the Conversion Price. Notwithstanding the previous sentence, in no event shall the Corporation convert that portion of the Series B Preferred Stock to the extent that the issuance of Common Shares upon the conversion of such Series B Preferred Stock, when combined with shares of Common Stock received upon other conversions of Series B Preferred Stock and exercise of the Warrants by such Holder and any other holders of Series B Preferred Stock and Warrants, would exceed 19.99% of the Common Stock outstanding on the Closing Date. Within ten (10) Business Days after the Mandatory Conversion Date, the Corporation shall redeem all remaining outstanding Series B Preferred Stock at one hundred and twenty-five percent (125%) of the Stated Value thereof, together with all accrued and unpaid dividends thereon, in cash, to the date of redemption.

ARTICLE 7 VOTING RIGHTS

The holders of the Series B Preferred Stock have no voting power, except as otherwise provided by the General Corporation Law of the State of Delaware ("DGCL"), in this Article 7, and in Article 8 below.

The Corporation shall provide each holder of Series B Preferred Stock with prior notification of any meeting of the shareholders (and copies of proxy materials and other information sent to shareholders). In the event of any taking by the Corporation of a record of its shareholders for the purpose of determining shareholders who are entitled to receive payment of any dividend or other distribution, any right to subscribe for, purchase or otherwise acquire (including by way of merger, consolidation or recapitalization) any share of any class or any other securities or property, or to receive any other right, or for the purpose of determining shareholders who are entitled to vote in connection with any proposed liquidation, dissolution or winding up of the Corporation, the Corporation shall mail a notice to each

holder, at least thirty (30) days prior to the consummation of the transaction or event, whichever is earlier), of the date on which any such action is to be taken for the purpose of such dividend, distribution, right or other event, and a brief statement regarding the amount and character of such dividend, distribution, right or other event to the extent known at such time.

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To the extent that under the DGCL the vote of the holders of the Series B Preferred Stock, voting separately as a class or series as applicable, is required to authorize a given action of the Corporation, the affirmative vote or consent of the holders of at least a majority of the shares of the Series B Preferred Stock represented at a duly held meeting at which a quorum is present or by written consent of a majority of the shares of Series B Preferred Stock (except as otherwise may be required under the DGCL) shall constitute the approval of such action by the class. To the extent that under the DGCL holders of the Series B Preferred Stock are entitled to vote on a matter with holders of Common Stock, voting together as one class, each share of Series B Preferred Stock shall be entitled to a number of votes equal to the number of shares of Common Stock into which convertible the record date for the taking of such vote of shareholders as the date as of which the Conversion Price is calculated. Holders of the Series B Preferred Stock shall be entitled to notice of all shareholder meetings or written consents (and copies of proxy materials and other information sent to shareholders) with respect to which they would be entitled as of right under the DGCL which notice would be provided pursuant to the Corporation's bylaws and the DGCL.

ARTICLE 8 PROTECTIVE PROVISIONS

So long as shares of Series B Preferred Stock are outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent, as provided by the DGCL) of the holders of at least a majority of the then outstanding shares of Series B Preferred Stock:

(a) alter or change the rights, preferences or privileges of the Series B Preferred Stock;

(b) create any new class or series of capital stock having a preference over the Series B Preferred Stock as to distribution of assets upon liquidation, dissolution or winding up of the Corporation ("Senior Securities") or alter or change the rights, preferences or privileges of any Senior Securities so as to affect adversely the Series B Preferred Stock;

(c) increase the authorized number of shares of Series B Preferred Stock; or

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(d) do any act or thing not authorized or contemplated by this Certificate of Designation which would result in taxation of the holders of shares of the Series B Preferred Stock under Section 305 of the Internal Revenue Code of 1986, as amended (or any comparable provision of the Internal Revenue Code as hereafter from time to time amended).

In the event holders of at least a majority of the then outstanding shares of Series B Preferred Stock agree to allow the Corporation to alter or change the rights, preferences or privileges of the shares of Series B Preferred Stock, pursuant to subsection (a) above, so as to affect the Series B Preferred Stock, then the Corporation will deliver notice of such approved change to the holders of the Series B Preferred Stock that did not agree to such alteration or change (the "Dissenting Holders") and Dissenting Holders shall have the right for a period of thirty (30) days to convert pursuant to the terms of this Certificate of Designations as they exist prior to such alteration or change or continue to hold their shares of Series B Preferred Stock.

ARTICLE 9 MISCELLANEOUS

SECTION 9.1 LOSS, THEFT, DESTRUCTION OF PREFERRED STOCK. Upon receipt of evidence satisfactory to the Corporation of the loss, theft, destruction or

mutilation of shares of Series B Preferred Stock and, in the case of any such loss, theft or destruction, upon receipt of indemnity or security reasonably satisfactory to the Corporation, or, in the case of any such mutilation, upon surrender and cancellation of the Series B Preferred Stock, the Corporation shall make, issue and deliver, in lieu of such lost, stolen, destroyed or mutilated shares of Series B Preferred Stock, new shares of Series B Preferred Stock of like date and tenor.

SECTION 9.2 WHO DEEMED ABSOLUTE OWNER. The Corporation may deem the Person in whose name the Series B Preferred Stock shall be registered upon the registry books of the Corporation to be, and may treat it as, the absolute owner of the Series B Preferred Stock for the purpose of receiving payment of dividends on the Series B Preferred Stock, for the conversion of the Series B Preferred Stock

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and for all other purposes, and the Corporation shall not be affected by any notice to the contrary. All such payments and such conversion shall be valid and effectual to satisfy and discharge the liability upon the Series B Preferred Stock to the extent of the sum or sums so paid or the conversion so made.

SECTION 9.3 REGISTER. The Corporation shall keep at its principal office a register in which the Corporation shall provide for the registration of the Series B Preferred Stock. Upon any transfer of the Series B Preferred Stock in accordance with the provisions hereof, the Corporation shall register such transfer on the Series B Preferred Stock register.

SECTION 9.4 WITHHOLDING. To the extent required by applicable law, the Corporation may withhold amounts for or on account of any taxes imposed or levied by or on behalf of any taxing authority in the United States having jurisdiction over the Corporation from any payments made pursuant to the Series B Preferred Stock.

SECTION 9.5 HEADINGS. The headings of the Articles and Sections of this Certificate of Designations are inserted for convenience only and do not constitute a part of this Certificate of Designations.

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IN WITNESS WHEREOF, the Corporation has caused this Certificate of Designations, Preferences and Rights to be signed by Loren G. Peterson, its President and Chief Executive Officer, and attested by Judy Roeske Bullock, its Secretary, on this 15th day of April, 1998.

SHEFFIELD PHARMACEUTICALS, INC.

By:/s/ Loren G. Peterson

Loren G. Peterson
President and Chief Executive Officer

Attested:

By:/s/ Judy Roeske Bullock

Judy Roeske Bullock
Secretary

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FORM OF CONVERSION NOTICE

TO: Sheffield Pharmaceuticals, Inc.
Attention: Chief Financial Officer

The undersigned owner of shares of Series B Cumulative Convertible Redeemable Preferred Stock (the "Series B Preferred Stock") issued by Sheffield Pharmaceuticals, Inc. (the "Corporation") hereby irrevocably exercises its option to convert _____ shares of the Series B Preferred Stock into shares of the common stock, \$.01 par value, of the Corporation ("Common Stock"), in accordance with the terms of the Certificate of Designations of the Series B Preferred Stock. The undersigned hereby instructs the Corporation to convert the number of shares of the Series B Preferred Stock specified above into shares of Common Stock in accordance with the provisions of Article 6 of such Certificate of Designations. The undersigned directs that the Common Stock issuable and certificates therefor deliverable upon conversion, the Series B Preferred Stock recertificated, if any, not being surrendered for conversion hereby, together with any check in payment for fractional Common Stock, be issued in the name of and delivered to the undersigned unless a different name has been indicated below. All capitalized terms used and not defined herein have the respective meanings assigned to them in such Certificate of Designations.

Dated: _____

Signature

Fill in for registration of Series B Preferred Stock:

Please print name and address
(including zip code number) :

