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

FORM 10-Q

(Mark One)
 QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2006

OR

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

For the transition period from _____ to _____

Commission File Number 000-28782

SPECTRUM PHARMACEUTICALS, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

157 Technology Drive
Irvine, California
(Address of Principal Executive Offices)

93-0979187
(I.R.S. Employer
Identification No.)

92618
(Zip Code)

Registrant's Telephone Number, Including Area Code: (949) 788-6700

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12B-2 of the Exchange Act). Yes No

Indicate the number of shares outstanding of each of the issuer's classes of Common Stock as of the latest practicable date:

Class	Outstanding at August 4, 2006
Common Stock, \$.001 par value	24,485,369

SPECTRUM PHARMACEUTICALS, INC.

TABLE OF CONTENTS

	<u>Page No.</u>
PART I. FINANCIAL INFORMATION	
ITEM 1. Financial Statements	3
Statement Regarding Financial Information	3
Condensed Consolidated Balance Sheets as of June 30, 2006 and December 31, 2005 (unaudited)	4
Condensed Consolidated Statements of Operations for the three-month and six-month periods ended June 30, 2006 and 2005 (unaudited)	5
Condensed Consolidated Statements of Cash Flows for the six-month periods ended June 30, 2006 and 2005 (unaudited)	6
Notes to Condensed Consolidated Financial Statements (unaudited)	7
ITEM 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations	17
ITEM 3. Quantitative and Qualitative Disclosures About Market Risk	26
ITEM 4. Controls and Procedures	26
PART II. OTHER INFORMATION	
ITEM 1. Legal Proceedings	27
ITEM 1A. Risk Factors	27
ITEM 2. Unregistered Sales of Equity Securities and Use of Proceeds	30
ITEM 3. Defaults Upon Senior Securities	31
ITEM 4. Submission of Matters to a Vote of Security Holders	31
ITEM 5. Other Information	31
ITEM 6. Exhibits	33
SIGNATURES	34

FORM 10-Q

For the three-month and six-month periods ended June 30, 2006

PART I — FINANCIAL INFORMATION

ITEM 1. Financial Statements

Statement Regarding Financial Information

The condensed consolidated financial statements of Spectrum Pharmaceuticals, Inc. included herein have been prepared by management, without audit, pursuant to the rules and regulations of the Securities and Exchange Commission. Certain information normally included in the consolidated financial statements prepared in accordance with accounting principles generally accepted in the United States has been condensed or omitted pursuant to such rules and regulations. However, we believe that the disclosures are adequate to make the information presented not misleading.

We recommend that you read the condensed consolidated financial statements included herein in conjunction with the audited consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2005, filed with the Securities and Exchange Commission on March 15, 2006.

Condensed Consolidated Balance Sheets
(Unaudited)

	June 30, 2006	December 31, 2005
	(In Thousands, Except Share and Per Share Data)	
Assets		
Current Assets:		
Cash and cash equivalents	\$ 4,226	\$ 28,750
Marketable securities	50,683	34,917
Accounts Receivable	237	287
Inventory	109	58
Prepaid expenses and other current assets	582	373
Total current assets	55,837	64,385
Property and equipment, net	608	562
Other Assets	168	128
Total assets	<u>\$ 56,613</u>	<u>\$ 65,075</u>
Liabilities and Stockholders' Equity		
Current Liabilities:		
Accounts payable	\$ 1,280	\$ 1,220
Accrued compensation	549	683
Accrued clinical study costs	2,524	1,925
Total current liabilities	4,353	3,828
Deferred rent and deposit	217	241
Total liabilities	4,570	4,069
Commitments and Contingencies (Note 4)		
Minority Interest	21	23
Stockholders' Equity:		
Preferred Stock, par value \$0.001 per share, 5,000,000 shares authorized:		
Series B Junior Participating Preferred Stock, 200,000 shares authorized, no shares issued and outstanding (Note 6)		
Series D 8% Cumulative Convertible Voting Preferred Stock, 600 shares authorized, stated value \$10,000 per share, liquidation value \$1,884, issued and outstanding 127 shares at June 30, 2006 and 157 shares at December 31, 2005	604	747
Series E Convertible Voting Preferred Stock, 2,000 shares authorized, stated value \$10,000 per share, liquidation value \$3,492, issued and outstanding, 291 shares at June 30, 2006 and December 31, 2005	1,795	1,795
Common stock, par value \$0.001 per share, 50,000,000 shares authorized (Note 6):		
Issued and outstanding, 24,485,370 and 23,503,157 shares at June 30, 2006 and December 31, 2005, respectively	24	24
Additional paid-in capital	248,662	243,656
Deferred stock-based compensation	—	(783)
Accumulated other comprehensive income	258	(26)
Accumulated deficit	(199,321)	(184,430)
Total stockholders' equity	52,022	60,983
Total liabilities and stockholders' equity	<u>\$ 56,613</u>	<u>\$ 65,075</u>

The accompanying notes are an integral part of these
condensed consolidated balance sheets.

Condensed Consolidated Statements of Operations
(Unaudited)

	Three-Months Ended June 30, 2006 <small>(In Thousands, Except Share and Per Share Data)</small>	Three-Months Ended June 30, 2005 <small>(In Thousands, Except Share and Per Share Data)</small>	Six-Months Ended June 30, 2006 <small>(In Thousands, Except Share and Per Share Data)</small>	Six-Months Ended June 30, 2005 <small>(In Thousands, Except Share and Per Share Data)</small>
Revenues	\$ —	\$ 240	\$ —	\$ 240
Operating expenses:				
Cost of product sold	—	221	—	221
Research and development	4,028	3,373	7,751	7,082
General and administrative	1,468	1,437	2,863	2,555
Stock-based charges	4,180	36	5,568	694
Total operating expenses	9,676	5,067	16,182	10,552
Loss from operations	(9,676)	(4,827)	(16,182)	(10,312)
Other income, net	658	275	1,289	489
Net loss before minority interest in consolidated subsidiary	(9,018)	(4,552)	(14,893)	(9,823)
Minority interest in net loss of consolidated subsidiary	—	2	2	4
Net loss	\$ (9,018)	\$ (4,550)	\$ (14,891)	\$ (9,819)
Basic and diluted net loss per share	\$ (0.37)	\$ (0.30)	\$ (0.62)	\$ (0.65)
Basic and diluted weighted average common shares outstanding	24,231,045	15,353,938	23,930,671	15,243,965
Supplemental Information				
Stock-based charges - Components:				
Research and development	\$ 3,885	\$ 16	\$ 4,786	\$ 654
General and administrative	296	20	782	40
Total stock based charges	\$ 4,181	\$ 36	\$ 5,568	\$ 694

The accompanying notes are an integral part of these condensed consolidated balance sheets.

Condensed Consolidated Statements of Cash Flows
(Unaudited)

	Six-Months Ended June 30, 2006	Six-Months Ended June 30, 2005
	(In Thousands, Except Share and Per Share Data)	
Cash Flows From Operating Activities:		
Net loss	\$ (14,891)	\$ (9,819)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	96	120
Amortization of deferred stock-based compensation	2,252	100
Fair value of common stock issued in connection with drug license	3,316	594
Minority interest in subsidiary	(2)	(4)
Changes in operating assets and liabilities:		
(Increase) decrease in Accounts Receivable	50	(41)
(Increase) decrease in Inventory	(51)	16
(Increase) decrease in other assets	(209)	161
Increase (decrease) in accounts payable and accrued expenses	720	1,839
Increase (decrease) in accrued compensation and related taxes	(134)	(432)
Increase (decrease) in other non-current liabilities	(24)	69
Net cash used in operating activities	<u>(8,877)</u>	<u>(7,397)</u>
Cash Flows From Investing Activities:		
Sales of marketable securities		35,965
Purchases of marketable securities	(15,522)	(104)
Purchases of property and equipment	(142)	(50)
Net cash provided by (used in) investing activities	<u>(15,664)</u>	<u>35,811</u>
Cash Flows From Financing Activities:		
Proceeds from issuance of common stock and warrants		750
Proceeds from exercise of warrants	17	1,052
Proceeds from exercise of stock options		5
Net cash provided by financing activities	<u>17</u>	<u>1,807</u>
Net increase (decrease) in cash and cash equivalents	(24,524)	30,221
Cash and cash equivalents, beginning of period	28,750	3,241
Cash and cash equivalents, end of period	<u>\$ 4,226</u>	<u>\$ 33,462</u>
Supplemental Cash Flow Information:		
Interest paid	<u>\$ 3</u>	<u>\$ —</u>
Income taxes paid	<u>\$ 1</u>	<u>\$ 1</u>
Schedule of Non-Cash Investing and Financing Activities:		
Preferred stock dividends paid with common stock	<u>\$ 55</u>	<u>\$ 63</u>
Fair value of common stock issued in connection with drugs licensed	<u>\$ 3,316</u>	<u>\$ 594</u>
Fair value of options and warrants issued to consultants for services	<u>\$ 407</u>	<u>\$ 110</u>
Fair value of restricted stock granted employees and directors	<u>\$ 338</u>	
Fair value of stock issued to match employee 401(k) contributions	<u>\$ 75</u>	

The accompanying notes are an integral part of these
condensed consolidated balance sheets.

Notes to Condensed Financial Statements

June 30, 2006
(Unaudited)

1. Business and Basis of Presentation

Business

Spectrum Pharmaceuticals, Inc., or the Company, is a specialty pharmaceutical company engaged in the business of acquiring, developing and commercializing prescription drugs for various indications. While we directly own certain patent rights, the drugs we are currently developing, which are focused on the treatment of cancer and other unmet medical needs, are in-licensed from third parties whereby we acquired rights to develop and commercialize those compounds in territories specified in the respective agreements.

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements are prepared on a consistent basis in accordance with accounting principles generally accepted in the United States (GAAP) for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. In the opinion of management, all adjustments (consisting of normal recurring accruals and consolidation and elimination entries) considered necessary for a fair presentation have been included. Operating results for the three-month and six-month periods ended June 30, 2006 are not necessarily indicative of the results that may be expected for the year ending December 31, 2006. The balance sheet at December 31, 2005 has been derived from the audited financial statements at that date but does not include all of the information and footnotes required by GAAP for complete financial statements. For further information, refer to the consolidated financial statements and footnotes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2005.

Certain quarterly amounts have been reclassified to conform to the current period presentation.

2. Summary of Significant Accounting Policies and Estimates

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and of our wholly owned and majority owned subsidiaries. As of June 30, 2006, we had three subsidiaries: NeoJB LLC (NeoJB), 80% owned, organized in Delaware in April 2002; Spectrum Pharmaceuticals GmbH, wholly owned, incorporated in Switzerland in April 1997; and NeoGene Technologies, Inc. (NeoGene), an inactive subsidiary, 88.4% owned, incorporated in California in October 1999. We have eliminated all significant intercompany accounts and transactions.

Investments by outside parties in our consolidated subsidiary are recorded as Minority Interest in Consolidated Subsidiary in our accounts, and stated net after allocation of income and losses in the subsidiary.

We operate in one business segment, that of acquiring, developing and commercializing prescription drug products. The business has not matured to the point that disaggregated segment information would be meaningful. Accordingly, the accompanying financial statements are reported in the aggregate including all our activities in one segment.

Certain prior year amounts have been reclassified to conform to the current year presentation.

[Table of Contents](#)

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses and disclosure of contingent obligations in the financial statements and accompanying notes. Our most significant assumptions are employed in estimates used in determining values of financial instruments and accrued obligations, as well as in estimates used in applying the revenue recognition policy and estimating stock-based charges. The estimation process requires assumptions to be made about future events and conditions, and as such, is inherently subjective and uncertain. Actual results could differ materially from our estimates.

In estimating the fair value of stock-based compensation, we use the quoted market price of our common stock for stock awards, and the Black-Scholes Option Pricing Model for stock options and warrants. We estimate future volatility based on past volatility of our common stock; and we estimate the expected length of the option on several criteria, including the vesting period of the grant, and the expected volatility. In estimating the fair value of restricted common stock we issue in connection with licensing transactions, we apply a discount for marketability restrictions of more than one year, calculated after considering past volatility of our common stock as well as the term of restriction and the cost of risk free capital for a period that is comparable with the term of the restriction on the shares.

Fair Value of Financial Instruments

The carrying amounts of cash and cash equivalents, marketable securities, accounts receivable, accounts payable and accrued liabilities, as reported in the balance sheets, are considered to approximate fair value given the short term maturity and/or liquidity of these financial instruments.

Cash, Cash Equivalents and Marketable Securities

Cash, cash equivalents and marketable securities primarily consist of bank checking deposits, short-term treasury securities, and institutional money market funds, corporate debt and equity, municipal obligations, including market auction debt securities, government agency notes, and certificates of deposit. We classify highly liquid short-term investments, with insignificant interest rate risk and maturities of 90 days or less at the time of acquisition, as cash and cash equivalents. Other investments, which do not meet the above definition of cash equivalents, are classified as either "held-to-maturity" or "available-for-sale" marketable securities, in accordance with the provisions of Financial Accounting Standards Board (FASB) Statement No. 115, "Accounting for Certain Investments in Debt and Equity Securities." Investments that we intend to hold for more than one year are classified as long-term investments.

Concentrations of Credit Risk, Supplier and Customer

All of our cash, cash equivalents and marketable securities are invested at three major financial institutions. To a limited degree these investments are insured by the Federal Deposit Insurance Corporation (FDIC) and by third party insurance. However, these investments are not insured against the possibility of a complete loss of earnings or principal and are inherently subject to the credit risk related to the credit worthiness of the underlying issuer. We believe that such risks are mitigated because we invest only in investment grade securities. We have not incurred any significant credit risk losses related to such investments.

Inventory

Inventory is stated at the lower of cost (first-in, first-out method) or market. As of June 30, 2006, inventory consisted of primarily finished dosage form of our drug product carboplatin injection. The lower of cost or market is determined based on net realizable value after appropriate consideration is given to obsolescence, excessive levels, deterioration, and other factors.

[Table of Contents](#)

Patents and Licenses

We own or license all the intellectual property that forms the basis of our business model. We expense all licensing and patent application costs as they are incurred.

Revenue Recognition

License fees representing non-refundable payments received upon the execution of license agreements are recognized as revenue upon execution of the license agreements where we have no significant future performance obligations and collectibility of the fees is assured. Milestone payments, which are generally based on developmental or regulatory events, are recognized as revenue when the milestones are achieved, collectibility is assured, and we have no significant future performance obligations in connection with the milestones. In those instances where we have collected fees or milestone payments but have ongoing future obligations related to the development of the drug product, revenue recognition is deferred and amortized ratably over the period of our future obligations.

Revenue from sales of product is recognized upon shipment of product when title and risk of loss have transferred to the customer, and provisions for estimates, including promotional adjustments, price adjustments, returns, and other potential adjustments are reasonably determinable. Such revenue is recorded, net of such estimated provisions, at the minimum amount of the customer's obligation to us. We state the related accounts receivable at net realizable value, with any allowance for doubtful accounts charged to general operating expenses.

Research and Development

Research and development expenses are comprised of the following types of costs incurred in performing research and development activities: personnel expenses, facility costs, contract services, licensing fees and milestone payments, costs of clinical trials, laboratory supplies and drug products, and allocations of corporate costs. We expense all research and development activity costs in the period incurred.

Basic and Diluted Net Loss Per Share

In accordance with FASB Statement No. 128, "Earnings Per Share," we calculate basic and diluted net loss per share using the weighted average number of common shares outstanding during the periods presented, and adjust the amount of net loss, used in this calculation, for preferred stock dividends declared during the period.

We incurred a net loss in each period presented, and as such, did not include the effect of potentially dilutive common stock equivalents in the diluted net loss per share calculation, as their effect would be anti-dilutive for all periods. Potentially dilutive common stock equivalents would include the common stock issuable upon the conversion of preferred stock and the exercise of warrants and stock options that have conversion or exercise prices below the market value of our common stock at the measurement date. As of June 30, 2006 and 2005, all potentially dilutive common stock equivalents amounted to approximately 15 million and 11 million shares, respectively.

The following data show the amounts used in computing basic loss per share for the three-month and six-month periods ended June 30, 2006 and 2005.

	<u>Three-Months Ended June 30, 2006</u>	<u>Three-Months Ended June 30, 2005</u>	<u>Six-Months Ended June 30, 2006</u>	<u>Six-Months Ended June 30, 2005</u>
Net loss	\$ (9,018)	\$ (4,550)	\$ (14,891)	\$ (9,819)
Less:				
Preferred dividends paid in cash or stock	(26)	(32)	(55)	(63)
Income available to common stockholders used in computing basic earnings per share	\$ (9,044)	\$ (4,582)	\$ (14,946)	\$ (9,882)
Weighted average shares outstanding	<u>24,231,045</u>	<u>15,353,938</u>	<u>23,930,671</u>	<u>15,243,965</u>
Basic and diluted net loss per share	<u>\$ (0.37)</u>	<u>\$ (0.30)</u>	<u>\$ (0.62)</u>	<u>\$ (0.65)</u>

Accounting for Stock-Based Employee Compensation

In December 2004, the Financial Accounting Standards Board (FASB) issued SFAS No. 123(R), "Share-Based Payment." This pronouncement amends SFAS No. 123, "Accounting for Stock-Based Compensation," and supersedes Accounting Principles Board (APB) Opinion No. 25, "Accounting for Stock Issued to Employees." SFAS No. 123(R) requires that companies account for awards of equity instruments issued to employees under the fair value method of accounting and recognize such amounts in their statements of operations. We adopted SFAS No. 123(R) on January 1, 2006, using the modified prospective method and, accordingly, have not restated the consolidated statements of operations for periods prior to January 1, 2006. Under SFAS No. 123(R), we are required to measure compensation cost for all stock-based awards at fair value on the date of grant and recognize compensation expense in our consolidated statements of operations over the service period that the awards are expected to vest. As permitted under SFAS No. 123(R), we have elected to recognize compensation cost for all options with graded vesting on a straight-line basis over the vesting period of the entire option.

Prior to January 1, 2006, we accounted for stock-based compensation, as permitted by FASB Statement No. 123, "Accounting for Stock-Based Compensation," under the intrinsic value method described in Accounting Principles Board (APB) Opinion No. 25, "Accounting for Stock Issued to Employees," and related Interpretations. Under the intrinsic value method, no stock-based employee compensation cost is recorded when the exercise price is equal to, or higher than, the market value of the underlying common stock on the date of grant. We recognized stock-based compensation expense for all grants to consultants and for those grants to employees where the exercise prices were below the market price of the underlying stock at the measurement date of the grant.

The following table illustrates the effect on net loss and loss per share if we had applied the fair value recognition provisions of FASB Statement No. 123, "Accounting for Stock-Based Compensation," to stock-based employee compensation, using the straight-line method, for periods prior to January 1, 2006.

	Three-Months Ended June 30, 2005	Six-Months Ended June 30, 2005
	(In Thousands, Except Share and Per Share Data)	
Net loss, as reported	\$ (4,550)	\$ (9,819)
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects	(797)	(2,779)
Pro forma net loss	<u>\$ (5,347)</u>	<u>\$ (12,598)</u>
Loss per share:		
Basic and diluted – as reported	<u>\$ (0.30)</u>	<u>\$ (0.65)</u>
Basic and diluted – pro forma	<u>\$ (0.35)</u>	<u>\$ (0.83)</u>

Comprehensive Loss

The net loss reflected on our Consolidated Statements of Operations substantially represents the total comprehensive loss for the periods presented.

3. Products and Strategic Alliances

As of June 30, 2006, we had nine proprietary drugs under development: satraplatin, levofolinic acid (LFA), EOquin™, elsamitrucin, ozarelix (formerly SPI-153), lucanthon, RenaZorb™, SPI-1620 and SPI-205 and through the date of this report we have filed multiple Abbreviated New Drug Applications, or ANDAs, with the U.S. Food and Drug Administration, or FDA, including those for ciprofloxacin and fluconazole tablets, and carboplatin injection, which

[Table of Contents](#)

have been approved by the FDA. We are developing our proprietary drugs for the treatment of a variety of cancers and other unmet medical needs.

In general, we direct and pay for all aspects of the drug development process, and consequently incur the risks and rewards of drug development, which is an inherently uncertain process. To mitigate such risks we enter into alliances where we believe that our partners can provide strategic advantage in the development, manufacturing or distribution of our drugs. In such situations, the alliance partners may share in the risks and rewards of the drug development and commercialization.

Business Alliances

Our business alliances are described in detail in our Annual Report on Form 10-K for the year ended December 31, 2005. The following represents an update for significant developments during 2006.

Par Pharmaceutical Companies Inc.: In February 2006, we entered into a strategic alliance with Par Pharmaceutical Companies, Inc., or Par, one of the largest generics companies in the United States, to distribute generic drugs for which we have filed ANDAs, including sumatriptan succinate injection. We expect that we will receive FDA approval for several ANDAs during the next eighteen months. Pursuant to the terms of the agreement, we will receive payments upon regulatory approval of certain ANDAs filed by us. The agreement also provides for a share of the profits from the sale by Par of our generic products. In addition, Par agreed to provide financial and legal support, including the payment of all legal expenses going forward, for the ongoing patent challenge for sumatriptan succinate injection. Within twenty-four months of the effective date of the agreement, we have the right to request Par to make an equity investment in the Company, which is subject to due diligence and the negotiation of definitive documents at that time. Not counting our share of any profits from sales of the generic drugs, we could receive an aggregate of over \$10 million under the agreement if the equity investment is made and all the regulatory milestones are achieved.

Products under development

The following is a brief update of the most advanced products under development as of June 30, 2006:

Satraplatin: Satraplatin is an orally administered chemotherapeutic agent that is being studied for treating hormone refractory prostate cancer. A phase 3 clinical trial being conducted by our development partner, GPC Biotech AG, or GPC Biotech, was proceeding in accordance with plans, and a rolling submission of a New Drug Application, or NDA, with the FDA has commenced. We expect final data from the phase 3 trial in the Fall, and completion of the NDA filing in the fourth quarter of 2006.

Levofolinic acid (LFA): In April 2006, we completed the acquisition of all of the oncology drug assets of Targent, Inc. The principal asset in the transaction was a license agreement between Targent and Merck Eprova AG, a Swiss corporation, whereby we acquired an exclusive license to use regulatory filings related to levofolinic acid, or LFA, and a non-exclusive license under certain patents and know-how related to LFA to develop, make, have made, use, sell and have sold LFA in the field of oncology in North America. LFA is the pure active isomer of calcium leucovorin, a component of "standard of care" 5-fluorouracil, or 5-FU, containing regimens for the treatment of colorectal cancer and other malignancies, for which a new drug application is on file with the FDA. We expect to respond in the first quarter 2007 to certain chemistry and manufacturing questions raised by the FDA during the review of the application.

EOquin™: EOquin™, a synthetic drug which is activated by certain enzymes present in higher amounts in cancer cells than in normal tissues, is currently being developed for superficial bladder cancer. Enrollment in a phase 2 clinical trial has been completed and patients are in follow-up. In early 2006, we held a pre-IND and end of phase 2 meeting with the FDA and recently filed an IND with the FDA, with the view to initiating phase 3 trials in the United States in late 2006 to evaluate EOquin™ in superficial bladder cancer after completion of a 20-patient pilot study which has recently begun.

[Table of Contents](#)

Ozarelix: Ozarelix, a fourth generation LHRH (Luteinizing Hormone Releasing Hormone, also known as GnRH or Gonadotropin Releasing Hormone) antagonist is under evaluation for its intended initial indications, hormone-dependent prostate cancer and benign prostatic hypertrophy. Phase 2 clinical trials in each of those indications are proceeding in Europe in accordance with plans.

4. Commitments and Contingencies

Facility and Equipment Leases

As of June 30, 2006, we were obligated under a facility lease and several operating equipment leases. We have sub-leased a portion of our facility through September 2007, with a renewal option through the remaining term of our underlying lease.

Minimum lease commitments, and minimum contractual sublease income for each of the next five years and thereafter, under the property and equipment operating leases, are as follows:

<u>Year ending December 31:</u>	<u>Lease Commitments</u>	<u>Sub-Lease Commitments</u>
	<u>Amounts In Thousands</u>	
2006 (Remainder of Year)	\$ 232	\$ 114
2007	\$ 474	\$ 171
2008	\$ 494	\$ —
2009	\$ 253	\$ —
Thereafter	\$ 5	\$ —
	<u>\$ 1,458</u>	<u>\$ 285</u>

Licensing Agreements

Each of our proprietary drug product candidates is being developed pursuant to license agreements, which provide us with rights to certain territories to, among other things, develop, sublicense, and sell the drugs. With regard to one of our proprietary drug product candidates, satraplatin, we have out-licensed our rights to GPC Biotech. We are required to use commercially reasonable efforts to develop the drugs, are generally responsible for all development, patent filing and maintenance costs, sales, marketing and liability insurance costs, and are contingently obligated to make milestone payments to the licensors if we successfully reach development and regulatory milestones specified in the agreements. In addition, we are obligated to pay royalties and milestone payments based on net sales, if any, after marketing approval is obtained from regulatory authorities. We have no similar milestone or other payment obligations in connection with our generic drug products.

The potential contingent development and regulatory milestone obligations under all our licensing agreements, are generally tied to progress through the FDA approval process, which approval significantly depends on positive clinical trial results. The following list is typical of milestone events: commencement of phase 3 clinical trials, filing of new drug applications in the United States, Europe and Japan, and approvals from those regulatory agencies.

Given the uncertainty of the drug development process, we are unable to predict with any certainty when any of the milestones will occur and, accordingly, the milestone payments represent contingent obligations that will be recorded as expense when the milestone is achieved. In connection with the development of in-licensed drug products, we anticipate certain milestones will be achieved over the next eighteen months. If the anticipated milestones are achieved, we will likely become obligated to issue approximately 500,000 restricted shares of our common stock and pay up to approximately \$5 million in cash during the eighteen-month period. If all of our contingent milestones were achieved, our potential contingent cash development and regulatory milestone obligations, aggregating approximately \$52 million as of June 30, 2006, would be due approximately as follows: \$5 million in less than 1 year; \$6 million between 1 and 3 years; \$2 million between 3 and 5 years; and \$39 million after 5 years.

[Table of Contents](#)

If we reach a milestone, it will likely occur prior to revenues being generated from the related compound. However, in connection with the milestone obligations related to satraplatin, each of our contingent future payment obligations is generally matched by a corresponding, greater payment milestone obligation of GPC Biotech to us.

Service Agreements

In connection with the research and development of our drugs, we have entered into contracts with numerous third party service providers, such as clinical trial centers, clinical research organizations, data monitoring centers, and with drug formulation, development and testing laboratories. The financial terms of these agreements vary and generally obligate us to pay in stages, depending on achievement of certain events specified in the agreements, such as contract execution, reservation of service or production capacity, actual performance of service, or the successful accrual and dosing of patients. As of each period end, we accrue for all non-cancelable installment amounts that we are likely to become obligated to pay.

Employment Agreements

We have entered into employment agreements with two of our Executive Officers, Dr. Shrotriya, Chief Executive Officer, and Dr. Lenaz, Chief Scientific Officer, expiring December 31, 2006 and July 1, 2007, respectively. The employment agreements automatically renew for a one-year term unless either party gives written notice at least 90 days prior to the commencement of the next year of such party's intent not to renew the agreement. The agreements require each executive to devote his full working time and effort to the business and affairs of the Company during the term of the agreement. The agreements provide for an annual base salary with annual increases, periodic bonuses and option grants as determined by the Compensation Committee of our Board of Directors.

Each officer's employment may be terminated by us with or without cause, as defined in the agreement. The agreements provide for certain guaranteed severance payments and benefits if the officer's employment is terminated without cause, if the officer's employment is terminated due to a change in control or is adversely affected due to a change in control and the officer resigns or if the officer decides to terminate his employment due to a disposition of a significant amount of assets or business units. The guaranteed severance payment includes a payment equal to the officer's annual base salary and other cash compensation, and approved bonus. The officer is also entitled to two years medical, dental and other benefits following termination. In addition, all options held by the officer shall immediately vest and will be exercisable for one year from the date of termination; provided, however, if the board determines that the officer's employment is being terminated for the reason that the shared expectations of the officer and the board are not being met, then the options currently held by the officer will vest in accordance with their terms for up to one year after the date of termination, with the right to exercise those options, when they vest, for approximately thirteen months after the date of termination. The agreements also provide that, upon his retirement, all options held by the officer will become fully vested.

Litigation

We are party to various legal proceedings arising from the ordinary course of business. Although the ultimate resolution of these various proceedings cannot be determined at this time, we do not believe that such proceedings, individually or in the aggregate, will have a material adverse effect on our future consolidated results of operations, cash flows or financial condition.

At June 30, 2006, we were in litigation with GlaxoSmithKline as a result of filing an ANDA for sumatriptan succinate injection, which is marketed by GlaxoSmithKline under the brand name Imitrex[®]. Pursuant to our February 2006 agreement with Par, Par agreed to provide financial and legal support, including the payment of all legal expenses going forward, for this patent challenge.

5. Stockholders' Equity

Common Stock

In connection with the acquisition, in April 2006, of all the oncology assets of Targent, Inc., we issued to Targent and its stockholders an aggregate amount of 600,000 shares of Spectrum common stock, with a fair value of \$2.7 million as of the transaction closing date, all of which amount representing purchased research and

[Table of Contents](#)

development, has been charged to expense at the closing of the transaction. Targent is eligible to receive additional payments of shares of Spectrum common stock and/or cash upon achievement of certain regulatory and sales milestones, if any. At our option, cash payments specified in the agreement may be paid in shares of Spectrum common stock having a value determined as provided in the asset purchase agreement, equal to the cash payment amount.

In June 2006, we issued to Altair Nanotechnologies, Inc. 140,000 restricted shares of Spectrum common stock, representing partly payment of a milestone pursuant to the license agreement for RenaZorb™, and partly additional amounts for transfer of technology related to formulation improvements to RenaZorb™ developed by Altair. The fair value of the stock, \$574,000, was recorded as a stock-based charge for the six-month period ended June 30, 2006.

Common Stock Reserved for Future Issuance

As of June 30, 2006, approximately 15 million shares of common stock were issuable upon conversion or exercise of rights granted under prior financing arrangements and stock options and warrants, as follows:

Conversion of Series D preferred shares	537,479
Conversion of Series E preferred shares	582,000
Exercise of stock options	4,039,042
Exercise of warrants	9,944,363
Total shares of common stock reserved for future issuances	15,102,884

Stock-Based Compensation

At June 30, 2006, we had three stock incentive plans: the 1991 Stock Incentive Plan (1991 Plan), the 1997 Stock Incentive Plan (1997 Plan) and the 2003 Amended and Restated Incentive Award Plan (2003 Plan), (collectively, the Plans). We are not granting any more options pursuant the 1991 and 1997 Plans. The 2003 Plan authorizes the grant, in conjunction with all of our other plans, of various forms of stock-based awards including incentive and non-statutory stock options, stock purchase rights, stock appreciation rights, and restricted and unrestricted stock awards, for the purchase of up to a total of 30% of our issued and outstanding stock at the time of grant. As of June 30, 2006, approximately 3.0 million incentive awards were available for grant under the 2003 Plan. Stock-based awards vest over periods of up to four years and have a ten-year life.

Below is a summary of activity, for all of our stock incentive plans, during the six-month period ended June 30, 2006:

Stock Options:

During the six-month period ended June 30, 2006, the Compensation Committee granted stock options at exercise prices equal to or greater than the quoted price of our common stock on the grant dates. The weighted average grant date fair value of stock options granted during the six-month period ended June 30, 2006, was estimated at approximately \$3.01, using the Black-Scholes option pricing model with the following assumptions: dividend yield of 0%; expected volatility of 83.70%; risk free interest rate of 4.63%; and an expected life of five years.

	<u>Common Stock Options</u>	<u>Weighted Average Exercise Price</u>	<u>Weighted Average Remaining Term (In Years)</u>	<u>Aggregate Intrinsic Value (In Thousands)</u>
Outstanding at beginning of period	3,661,682	\$ 6.98		
Granted	445,500	\$ 4.36		
Exercised	—	\$ —		
Forfeited	(44,650)	\$ 4.92		
Expired	(23,490)	\$ 7.00		
Outstanding, at the end of period	<u>4,039,042</u>	<u>\$ 6.72</u>	<u>7.20</u>	<u>\$ 1,405</u>
Vested and expected to vest, at end of period	<u>3,968,208</u>	<u>\$ 6.73</u>	<u>7.18</u>	<u>\$ 1,405</u>
Exercisable, at the end of period	<u>2,622,363</u>	<u>\$ 7.19</u>	<u>6.64</u>	<u>\$ 1,404</u>

Table of Contents

The aggregate intrinsic value in the table above represents the total difference between the Company's closing common stock price on June 30, 2006 and the exercise price, multiplied by the number of all in-the-money options, that would have been received by the option holders had all option holders exercised their options on June 30, 2006. This amount changes based on the fair market value of the Company's common stock.

During the six-month period ended June 30, 2006, the stock-based charge in connection with the expensing of stock options was \$2.1 million. As of June 30, 2006, there was \$4.8 million of unrecognized stock-based compensation cost related to stock options which is expected to be recognized over a weighted average period of 1.30 years.

Restricted Stock:

	<u>Restricted Stock Awards</u>	<u>Weighted Average Grant date Fair Value</u>
Nonvested at beginning of period	115,000	\$ 4.26
Granted	80,000	\$ 4.23
Vested	(48,750)	\$ 4.25
Forfeited	—	\$ —
Nonvested, at the end of period	<u>146,250</u>	<u>\$ 4.25</u>

The fair value of restricted stock awards is the quoted market price of our stock on the grant date, and is charged to expense over the period of vesting. These awards are subject to forfeiture to the extent that the recipient's service is terminated prior to the shares becoming vested.

During the six-month period ended June 30, 2006, the stock-based charge in connection with the expensing of restricted stock awards was \$194,000. As of June 30, 2006, there was \$512,000 of unrecognized stock-based compensation cost related to nonvested restricted stock awards, which is expected to be recognized over a weighted average period of 2.51 years.

401(k) Plan Matching Contribution:

In June 2006, we issued 17,709 shares of common stock as the Company's match of \$75,000 on the 401(k) contributions of its employees accrued in 2005.

Warrants Activity

We typically issue warrants to purchase shares of our common stock to investors as part of a financing transaction, or in connection with services rendered by placement agents and consultants. Our outstanding warrants expire on varying dates through September 2013. Below is a summary of warrant activity during the six-month period ended June 30, 2006. The weighted average grant date fair value of stock options granted during the six-month period ended June 30, 2006, was estimated at approximately \$3.55, using the Black-Scholes option pricing model with the following assumptions: dividend yield of 0%; expected volatility of 80.04%; risk free interest rate of 5.21%; and an expected life of five years.

[Table of Contents](#)

	Common Stock Warrants	Weighted Average Exercise Price
Outstanding at beginning of period	9,920,703	\$ 7.20
Granted	50,000	\$ 5.25
Exercised	(5,750)	\$ 3.00
Forfeited	—	\$ —
Expired	(20,590)	\$ (163.98)
Outstanding, at the end of period	<u>9,944,363</u>	<u>\$ 6.87</u>
Exercisable, at the end of period	<u>9,824,363</u>	<u>\$ 6.89</u>

6. Subsequent Events

On July 6, 2006, our stockholders approved an amendment to our Certificate of Incorporation to increase the authorized number of shares of our common stock from 50 million shares to 100 million shares. The amendment was filed with the Delaware Secretary of State on July 7, 2006. Further, on July 7, 2006, we amended the Certificate of Designation of Rights, Preferences and Privileges of Series B Junior Participating Preferred Stock filed with the Delaware Secretary of State on December 18, 2000 to increase the authorized number of Series B Junior Participating Preferred Stock from 200,000 shares to 1,000,000.

On August 4, 2006, we agreed to terminate the supply agreement dated April 16, 2002, by and between J.B. Chemicals & Pharmaceuticals Ltd., or JBCPL, and NeoJB LLC, or NeoJB, an 80% owned subsidiary, whereby in addition to certain named products we also had the right of first refusal on products sold by JBCPL in the U.S. In place of the supply agreement, we have agreed to enter into a new supply agreement between the Company and JBCPL for four specified products, including ciprofloxacin and fluconazole tablets, to be supplied by JBCPL. In addition, pursuant to a share subscription agreement, JBCPL agreed to purchase 120,000 restricted shares of our common stock for \$1 million subject to approval by the appropriate regulatory authorities in India. We have agreed to file a registration statement with the Securities and Exchange Commission to register the shares after they have been issued.

ITEM 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations

Note Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, in reliance upon the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include statements regarding our future product development activities and costs, the revenue potential (licensing, royalty and sales) of our product candidates, the safety and efficacy of our drug products, the timing and likelihood of achieving development milestones and product revenues, the sufficiency of our capital resources, and other statements containing forward-looking words, such as, “believes,” “may,” “could,” “will,” “expects,” “intends,” “estimates,” “anticipates,” “plans,” “seeks,” or “continues.” Such forward-looking statements are based on the beliefs of the Company’s management as well as assumptions made by and information currently available to the Company’s management. Readers should not put undue reliance on these forward-looking statements. Forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified; therefore, our actual results may differ materially from those described in any forward-looking statements. Factors that might cause such a difference include, but are not limited to, those discussed below, including under “Risk Factors”. These factors include, but are not limited to:

- our ability to successfully develop, obtain regulatory approvals for and market our products;
- our ability to generate and maintain sufficient cash resources to fund in our business;
- our ability to enter into strategic alliances with partners for manufacturing, development and commercialization;
- our ability to identify new product candidates;
- the timing or results of pending or future clinical trials;
- competition in the marketplace for our generic drugs;
- actions by the FDA and other regulatory agencies;
- demand and market acceptance for our approved products; and
- the effect of changing economic conditions.

We do not plan to update any such forward-looking statements and expressly disclaim any duty to update the information contained in this report except as required by law.

You should read the following discussion of the financial condition and results of our operations in conjunction with the condensed financial statements and the notes to those financial statements included in Item 1 of Part 1 of this report.

Overview

Spectrum Pharmaceuticals, Inc. is a specialty pharmaceutical company engaged in the business of acquiring, developing and commercializing prescription drugs for various indications. While we directly own certain patent rights, the drugs we are currently developing, which are focused on the treatment of cancer and other unmet medical needs, are in-licensed from third parties whereby we acquired rights to develop and commercialize those compounds in territories specified in the agreements. We are also actively seeking FDA approval for marketing generic versions of branded drugs whose patent protection has either already expired, or is scheduled to expire in the foreseeable future. We currently have three generic products approved by the FDA for marketing in the United States, ciprofloxacin tablets, fluconazole tablets, and carboplatin injection. In addition, we have a few neurology compounds that we may out-license to third parties for further development.

[Table of Contents](#)

New drug development is an inherently uncertain, lengthy and expensive process. We focus our research and development efforts principally on clinical stage drug candidates, for which the primary expenses relate to the conduct of clinical trials necessary to demonstrate to the satisfaction of the FDA, and other regulatory authorities in the United States and other countries, that the products are both safe and effective in their respective indications and that they can be produced by a validated consistent manufacturing process. The number, size, scope and timing of the clinical trials necessary to bring a product candidate to development completion and commercialization cannot readily be determined at an early stage, nor, given the timelines of the trials extending over periods of years, can future costs be estimated with precision. While generic drug development is also subject to approval by regulatory authorities, the costs and timelines of development completion and commercialization can be significantly shorter, and compared to new drug development, relatively less uncertain and less expensive.

Business Outlook

Our primary business focus for 2006, and beyond, will be to continue to acquire, develop and commercialize a portfolio of marketable prescription drug products with a mix of near-term and long-term revenue potential. As of the date of filing this report, we had nine proprietary drug product candidates under development: satraplatin, levofolinic acid, or LFA, EOquin™, elsamitrucin, ozarelix, lucanthone, RenaZorb™, SPI-1620 and SPI-205. Key developments anticipated in 2006 and early 2007 are:

- **Satraplatin:** Funding for worldwide satraplatin clinical trials is being borne entirely by our co-development partner GPC Biotech and its new sublicensee, Pharmion Corporation. Patient accrual in a phase 3 clinical trial (SPARC (Satraplatin and Prednisone Against Refractory Cancer) trial) was completed in December 2005. The independent Data Monitoring Board, or DMB, performed an interim analysis of the phase 3 data in the second quarter of 2006. The DMB analyzed the efficacy data as assessed by the blinded, independent end point review panel on the first 354 progression-free survival events, available overall survival data, and the safety data from the first 593 patients who have been randomized in the trial and have completed at least one cycle of treatment. After reviewing the data, the DMB reported that the design and conduct of the trial remain sound. In addition, the DMB determined that the trial had also passed the pre-defined futility analysis. As anticipated, the DMB recommended that the trial should continue as planned, and therefore, the trial continues as planned. GPC Biotech and Spectrum Pharmaceuticals remain blinded to the study data. Final study results are expected in the Fall. In December 2005, a rolling NDA filing with the FDA was commenced. Completion of the full NDA filing is expected by the end of 2006.
- **Levofolinic acid (LFA):** In April 2006, we completed the acquisition of all of the oncology drug assets of Targent, Inc. The key drug acquired is LFA, the pure active isomer of calcium leuovorin, a component of “standard of care” 5-fluorouracil, or 5-FU, containing regimens for the treatment of colorectal cancer and other malignancies, for which a new drug application is on file with the FDA. We expect to respond to certain chemistry and manufacturing questions raised by the FDA during the review of the application in the first quarter 2007.
- **EOquin™:** In early 2006, we held a pre-IND and end of phase 2 meeting with the FDA and recently filed an IND with the FDA, with the view to initiating phase 3 trials in the United States before the end of 2006 to evaluate EOquin™ in superficial bladder cancer, after completion of a 20-patient pilot study which recently commenced.
- **Ozarelix:** We expect final results from the hormone-dependent prostate cancer (HDPC) and benign prostatic hypertrophy (BPH) phase 2 trials in the fourth quarter of 2006. Based on those results we will determine the next regulatory and clinical steps. Also, we plan to initiate a study in healthy female volunteers for endometriosis in Europe in the second half of 2006. A license and collaboration agreement has been signed with Nippon Kayaku for the Japanese oncology market, for which Spectrum is entitled to receive fifty percent of the upfront, milestone and royalty payments.
- We plan to continue to fund the development of lucanthone, elsamitrucin, RenaZorb™, SPI-1620 and SPI-205.
- We expect to continue to evaluate additional promising drug product candidates for acquisition or license.

We have recorded only modest revenues to date from generic product sales, due primarily to our late entry into the market for each of our approved generic drugs. We are unable at this time to reliably estimate recurring revenues or profits from these generic products in the foreseeable future. We have observed significant price declines in the

[Table of Contents](#)

marketplace for each of our marketed products, due to the FDA's approval of several competing ANDAs, and the resultant glut of product introduced on and after the generic product launch dates. We continue to explore sales opportunities for our products. If we are successful in our patent challenge for sumatriptan succinate injection, and obtain 180-day marketing exclusivity as the only FDA approved generic version of this product, the resulting revenues could be significant. We recently entered into a strategic alliance with Par Pharmaceutical Companies, Inc., or Par, for the marketing of our current as well as certain future generic drugs. In addition, Par shall provide financial and legal support, including payment of legal expenses going forward, for the litigation regarding sumatriptan succinate injection. With three generic drugs already approved and additional approvals expected this year, we hope to see success from the sale of these drugs in the next twelve months.

Financial Condition

Liquidity and Capital Resources

Our current business operations do not generate sufficient operating cash to finance the clinical development of our drug product candidates. Our cumulative losses, since inception in 1987, through June 30, 2006, have exceeded \$190 million. We expect to continue to incur significant additional losses as we implement our growth strategy of developing marketable drug products for at least the next several years unless they are offset, if at all, by licensing revenues under our out-license agreement with GPC Biotech or from the out-license of any of our other proprietary products and any profits from the sale of generic products.

We believe that the approximately \$55 million in cash, cash equivalents and marketable securities that we had on hand as of June 30, 2006, will allow us to fund our current planned operations for at least the next twelve months. Our long-term strategy is to generate profits from the sale and licensing of our propriety drug products. In the next several years, we anticipate supplementing our cash position with licensing and royalties revenues under our out-license agreement with GPC Biotech, licensing revenues from out-licensing our other proprietary products and milestone payments and profits from the sale of our generic products by Par. Under the agreement with Par, not counting our share of the profits from sales of the generic drugs, the Company could receive an aggregate of over \$10 million under the agreement if a specified equity investment is made and the necessary regulatory approvals are obtained. If GPC Biotech successfully completes the filing of the NDA as planned, we will realize licensing revenues in late 2006 from licensing milestones specified in the agreement.

However, if we are unable to generate the necessary revenues to finance our operations long-term, we may have to seek additional capital through the sale of our equity. Our operations have historically been financed by the issuance of capital stock. To this effect, we have a shelf registration statement with approximately \$32 million available for the sale of our securities. In addition, we could receive a significant amount of cash from the exercise of outstanding warrants and options, if the price of our common stock appreciates. It is generally difficult to fund pharmaceutical research and development via borrowings due to the significant expenses involved, lack of revenues sufficient to service debt and the significant inherent uncertainty as to results of research and the timing of those results.

As described elsewhere in this report, including in Item 1A under "Risk Factors", our drug development efforts are subject to the considerable uncertainty inherent in any new drug development. Due to the uncertainties involved in progressing through clinical trials, and the time and cost involved in obtaining regulatory approval and in establishing collaborative arrangements, among other factors, we cannot reasonably estimate the timing and ultimate aggregate cost of developing each of our drug product candidates, and are similarly unable to reasonably estimate when, if ever, we will realize material net cash inflows from our proprietary drug product candidates. Accordingly, the following discussion of our current assessment of the need for cash to fund our operations may prove too optimistic and our assessment of expenditures may prove inadequate.

[Table of Contents](#)

Our expenditures for research and development and general and administrative expenses consist of direct product specific costs and non-product specific, or indirect, costs. The following describes our current assessment of direct, or product specific development costs, such as upfront license fees, milestone payments, active pharmaceutical ingredient, clinical trials, patent related legal costs, and product liability insurance, among others, for each significant proprietary product, and generics as a group, currently under development. These costs are subject to uncertainties inherent in new drug development. Additionally, we may shift our cash resources between products. Therefore, what we actually spend to develop a particular product may not fall within the estimated range and the estimated ranges may change from quarter to quarter based upon changes in priorities or strategy and/or the results of the development. While we do not receive any funding from third parties for research and development we conduct, our estimated costs could be mitigated should we enter into co-development agreements for any of our drug product candidates.

- *Satraplatin*: The costs of conducting clinical trials worldwide are being borne entirely by our co-development partner GPC Biotech and its sublicensee, Pharmion Corporation. While we have licensed the development of satraplatin to GPC Biotech, we are not obligated to reimburse GPC Biotech for development costs they incur or to refund any license or milestone payments we receive.
- *Levofolinic acid (LFA)*: In April 2006, we acquired the rights to the NDA filing pending at the FDA. During the six-month period ended June 30, 2006, excluding indirect costs, we spent approximately \$0.6 million on the development of LFA. In order to complete the NDA filing to the satisfaction of the FDA, we anticipate that over the next twelve months we may incur development costs up to approximately \$2 million.
- *EOquin™*: During the six-month period ended June 30, 2006, excluding indirect costs, we spent approximately \$0.8 million on the development of EOquin™. Estimated expenditures for the next twelve months are subject to considerable uncertainty, and are largely dependent on the outcome of continuing discussions with the FDA regarding our planned phase 3 clinical trial. We anticipate that over the next twelve months we could incur development costs up to approximately \$6 million.
- *Ozarelix*: During the six-month period ended June 30, 2006, excluding indirect costs, we spent approximately \$0.6 million on the development of ozarelix. Estimated expenditures for the next twelve months are subject to considerable uncertainty, and are largely dependent on the results from the analysis of the complete phase 2 study data, expected in the fourth quarter of 2006, and the initiation of a study in healthy female volunteers for endometriosis in Europe in the second half of this year. We anticipate that over the next twelve months we could incur development costs up to approximately \$6 million.
- *Elsamitrucin*: During the six-month period ended June 30, 2006, excluding indirect costs, we incurred approximately \$0.3 million on the development of elsamitrucin. Estimated expenditures for the next twelve months are subject to considerable uncertainty, and are largely dependent on positive results from the analysis of the phase 2 study data as well as other pilot combination studies.
- *Lucanthone*: During the six-month period ended June 30, 2006, excluding indirect costs, we incurred approximately \$0.3 million on the development of lucanthone. Estimated expenditures for the next twelve months are subject to considerable uncertainty, and are largely dependent on the timing of the continuation of the phase 2 clinical trial.
- *RenaZorb™*: During the six-month period ended June 30, 2006, excluding indirect costs, we incurred less than \$250,000 on the development of RenaZorb™. Estimated expenditures for the next twelve months are subject to considerable uncertainty, and are largely dependent on the results of our preclinical work and the initiation of any clinical trials.
- *SPI-1620*: During the six-month period ended June 30, 2006, excluding indirect costs, we incurred approximately \$0.7 million on the development of SPI-1620. Estimated expenditures for the next twelve months are subject to considerable uncertainty, and are largely dependent on the results of our preclinical work and the initiation of any clinical trials.

[Table of Contents](#)

- **SPI-205:** During the six-month period ended June 30, 2006, excluding indirect costs described earlier, we incurred less than \$250,000 on the development of SPI-205. Estimated expenditures for the next twelve months are subject to considerable uncertainty, and are largely dependent on the results of our preclinical work and the initiation of any clinical trials.
- **Generic Drugs:** During the six-month period ended June 30, 2006, excluding indirect costs, we incurred approximately \$0.6 million for the advancement of our generic drugs, including costs for products for which we anticipate filing ANDAs in the future.

In addition to the foregoing drug product candidates, we continually evaluate proprietary products for acquisition. If we are successful in acquiring rights to additional products, we may pay up-front licensing fees in cash and our research and development expenditures would likely increase.

Under our various existing licensing agreements, we are contingently obligated to make milestone payments. In connection with the development of certain in-licensed drug products, we anticipate the occurrence of certain of these milestones over the next eighteen months. Upon successful achievement of these milestones, we will likely become obligated to pay up to approximately \$5 million in cash and issue approximately 500,000 shares of our common stock during the eighteen-month period.

Net Cash used in Operating Activities

During the six-month period ended June 30, 2006, the net cash used in operations was approximately \$8.9 million, net of interest income of approximately \$1.3 million.

Based on our current plans and the scope of our activities, our anticipated use of cash for operations over the next twelve months, excluding the cost of in-licensing any additional drug products, is expected to average between approximately \$5 million and \$7.5 million per quarter. Our cash expenses may increase or decrease beyond this range depending on the results of the ongoing clinical trials and research and development activity.

Net Cash provided by and used for Investing Activities

While cash preservation is our primary investment goal, in order to maximize the interest yield on our investments, we invest our cash in a variety of investments pending its use in our business. During the six-month period ended June 30, 2006, we reinvested our funds with Lehman Brothers acting as primary cash manager. This reinvestment resulted in the net conversion of approximately \$15 million of cash and cash equivalents into marketable securities.

Net Cash provided by and used for Financing Activities

During the six-month period ended June 30, 2006, we received approximately \$17,000 from the exercise of an outstanding warrant for 5,750 shares of our common stock.

Results of Operations

Results of Operations for the three-month period ended June 30, 2006 Compared to the three-month period ended June 30, 2005

For the three-month period ended June 30, 2006, we incurred a net loss of approximately \$9.0 million compared to a net loss of approximately \$4.6 million in the three-month period ended June 30, 2005. The increase of approximately \$4.4 million in the net loss was primarily due to increases in stock-based charges resulting from the adoption, effective January 1, 2006, of SFAS 123(R), and the issuance of common stock to Targent, Inc. in connection with the acquisition of its oncology assets; and the issuance of common stock to Altair Nanotechnologies, Inc. in connection with the payment of a milestone under our license agreement for RenaZorb™ and for transfer of technology related to formulation improvements to RenaZorb™ developed by Altair.

[Table of Contents](#)

We had no revenues during the three-month period ended June 30, 2006. During the three-month period ended June 30, 2005, we had \$240,000 of revenues from product sales, with related cost of sales of \$221,000.

Research and development expenses increased by approximately \$0.6 million, from approximately \$3.4 million in the three-month period ended June 30, 2005 to approximately \$4.0 million in the three-month period ended June 30, 2006, due to the expanded scope of our research and development activities, including an increase in the number of personnel in preparation for the commencement of a phase 3 trial in late 2006.

General and administrative expenses increased slightly by approximately \$0.1 million, from approximately \$1.4 million in the three-month period ended June 30, 2005 to approximately \$1.5 million in the three-month period ended June 30, 2006, primarily due to increased payroll expense.

Stock-based charges increased by approximately \$4.1 million; from \$36,000 in the three-month period ended June 30, 2005 to approximately \$4.2 million in the three-month period ended June 30, 2006. \$0.7 million of the stock-based charge for the three-month period ended June 30, 2006 was the result of our adoption of SFAS 123(R), effective January 1, 2006. Also in the three-month period ended June 30, 2006, we recorded a stock-based charge of approximately \$2.7 million in connection with the acquisition of its oncology assets of Targent, Inc. and approximately \$0.6 million in connection with a payment to Altair Nanotechnologies, Inc., the licensor of RenaZorb™, of a milestone pursuant to our license agreement and additional amounts for transfer of technology related to formulation improvements to RenaZorb™.

Other income consisted of net interest income of approximately \$0.7 million for the three-month period ended June 30, 2006 and approximately \$0.3 million for the three-month period ended June 30, 2005. The increase of approximately \$0.4 million is attributable to significantly higher average interest rates and balances of investable funds in 2006.

Results of Operations for the six-month period ended June 30, 2006 Compared to the six-month period ended June 30, 2005

For the six-month period ended June 30, 2006, we incurred a net loss of approximately \$14.9 million compared to a net loss of approximately \$9.8 million in the six-month period ended June 30, 2005. The increase of approximately \$5.1 million in the net loss was primarily due to increases in stock-based charges resulting from the adoption, effective January 1, 2006, of SFAS 123(R), and the issuance of common stock to Targent Inc. in connection with the acquisition of its oncology assets; and the issuance of common stock to Altair Nanotechnologies, Inc. in connection with a payment to Altair Nanotechnologies, Inc., the licensor of RenaZorb™, of a milestone pursuant to our license agreement and additional amounts for transfer of technology related to formulation improvements to RenaZorb™.

We had no revenues during the six-month period ended June 30, 2006. During the six-month period ended June 30, 2005, we had \$240,000 of revenues from product sales, with related cost of sales of \$221,000.

Research and development expenses increased by approximately \$0.7 million, from approximately \$7.1 million in the six-month period ended June 30, 2005 to approximately \$7.8 million in the six-month period ended June 30, 2006, due to the expanded scope of our research and development activities, including an increase in the number of personnel in preparation for the commencement of a phase 3.

General and administrative expenses increased by approximately \$0.3 million, from approximately \$2.6 million in the six-month period ended June 30, 2005 to approximately \$2.9 million in the six-month period ended June 30, 2006, primarily due to increased payroll expense.

Stock-based charges increased by approximately \$4.9 million; from \$0.7 million in the six-month period ended June 30, 2005 to approximately \$5.6 million in the six-month period ended June 30, 2006. \$1.9 million of the stock-based charge for the six-month period ended June 30, 2006 was the result of our adoption of SFAS 123(R), effective January 1, 2006. Also in the six-month period ended June 30, 2006, we recorded a stock-based charge of approximately \$2.7 million in connection with the acquisition of its oncology assets of Targent, Inc. and approximately \$0.6 million in connection with a payment to Altair Nanotechnologies, Inc., the licensor of RenaZorb™, of a milestone pursuant to our license agreement and additional amounts for transfer of technology related to formulation improvements to RenaZorb™.

[Table of Contents](#)

Other income consisted of net interest income of approximately \$1.3 million for the six-month period ended June 30, 2006 and approximately \$0.5 million for the six-month period ended June 30, 2005. The increase of approximately \$0.8 million is attributable to significantly higher average interest rates and balances of investable funds in 2006.

Off-Balance Sheet Arrangements

None.

Contractual and Commercial Obligations

The following table summarizes our contractual and other commitments, including obligations under facility and equipment leases, as of June 30, 2006:

	Total	Less than 1 Year	1-3 Years	3-5 Years	After 5 Years
Contractual Obligations (1)					
Capital Lease Obligations (2)	\$ —	\$ —	\$ —	\$ —	\$ —
Operating Lease Obligations (3)	\$ 1,457	\$ 463	\$ 981	\$ 13	\$ —
Purchase Obligations (4)	\$ 2,308	\$ 1,952	\$ 356	\$ —	\$ —
Contingent Milestone Obligations (5)	\$51,756	\$ 4,754	\$ 6,027	\$ 1,875	\$39,100
Total	<u>\$55,521</u>	<u>\$ 7,169</u>	<u>\$ 7,364</u>	<u>\$ 1,888</u>	<u>\$39,100</u>

- (1) The table of contractual and commercial obligations excludes contingent payments that we may become obligated to pay upon the occurrence of future events whose outcome is not readily predictable. Such significant contingent obligations are described below under "Employment Agreements".
- (2) As of June 30, 2006, we had no capital lease obligations.
- (3) The operating lease obligations are primarily the facility lease for our corporate office, which extends through June 2009.
- (4) Purchase obligations represent the amount of open purchase orders and contractual commitments to vendors, for products and services that have not been delivered, or rendered, as of June 30, 2006.
- (5) Contingent milestone obligations are payable contingent upon successfully reaching certain development and regulatory milestones as further described below under "Licensing Agreements". While the amounts included in the table above represent all of our potential cash development and regulatory milestone obligations as of June 30, 2006, given the unpredictability of the drug development process, and the impossibility of predicting the success of current and future clinical trials, the timelines estimated above do not represent a forecast of when payment milestones will actually be reached, if at all. Rather, they assume that all development and regulatory milestones under all of our license agreements are successfully met, and represent our best estimates of the timelines. In the event that the milestones are met, we believe it is likely that the increase in the potential value of the related drug product will significantly exceed the amount of the milestone obligation.

Licensing Agreements

Each of our proprietary drug product candidates is being developed pursuant to license agreements, which provide us with rights to certain territories to, among other things, develop, sublicense, and sell the drug product candidates. With regard to one of our drug product candidates, satraplatin, we have out licensed our rights to GPC Biotech. We are required to use commercially reasonable efforts to develop the drug product candidates, are generally responsible for all development, patent filing and maintenance costs, sales, marketing and liability insurance costs, and are contingently obligated to make milestone payments to the licensors if we successfully reach the development and regulatory milestones specified in the agreements. In addition, we are obligated to pay royalties and milestone payments based on net sales, if any, after marketing approval is obtained from regulatory authorities. We have no similar milestone or other payment obligations in connection with our generic drug products.

[Table of Contents](#)

The potential contingent development and regulatory milestone obligations, under all our licensing agreements, are generally tied to progress through the FDA approval process, which approval significantly depends on positive clinical trial results. The following list is typical of milestone events: commencement of phase 3 clinical trials, filing of new drug applications in the United States, Europe and Japan, and approvals from those regulatory agencies.

Given the uncertainty of the drug development process, we are unable to predict with any certainty when any of the milestones will occur and, accordingly, the milestone payments represent contingent obligations that will be recorded as expense when the milestone is achieved. In connection with the development of in-licensed drug products, we anticipate certain milestones will be achieved over the next eighteen months. If the anticipated milestones are achieved, we will likely become obligated to issue approximately 500,000 restricted shares of our common stock and pay up to approximately \$5 million in cash during the eighteen-month period. If all of our contingent milestones were achieved, our potential contingent cash development and regulatory milestone obligations, aggregating approximately \$52 million as of June 30, 2006, would be due approximately as follows: \$5 million in less than 1 year; \$6 million between 1 and 3 years; \$2 million between 3 and 5 years; and \$39 million after 5 years.

If we reach a milestone, it will likely occur prior to revenues being generated from the related compound. However, in connection with the milestone obligations related to satraplatin, each of our contingent future payment obligations is generally matched by a corresponding, greater milestone payment obligation of GPC Biotech to us.

Service Agreements

In connection with the research and development of our drug products, we have entered into contracts with numerous third party service providers, such as clinical trial centers, clinical research organizations, data monitoring centers, and with drug formulation, development and testing laboratories. The financial terms of these agreements vary and generally obligate us to pay in stages, depending on achievement of certain events specified in the agreements, such as contract execution, reservation of service or production capacity, actual performance of service, or the successful accrual and dosing of patients. As of each period end, we accrue for all non-cancelable installment amounts that we are likely to become obligated to pay.

Employment Agreements

We have entered into employment agreements with two of our executive officers, Dr. Shrotriya, Chief Executive Officer, and Dr. Lenaz, Chief Scientific Officer, expiring December 31, 2006 and July 1, 2007, respectively. The employment agreements automatically renew for a one-year term unless either party gives written notice at least 90 days prior to the commencement of the next year of such party's intent not to renew the agreement. The agreements require each executive to devote his full working time and effort to the business and affairs of the Company during the term of the agreement. The agreements provide for an annual base salary with annual increases, periodic bonuses and option grants as determined by the Compensation Committee of our Board of Directors.

Each officer's employment may be terminated by us with or without cause, as defined in the agreement. The agreements provide for certain guaranteed severance payments and benefits if the officer's employment is terminated without cause, if the officer's employment is terminated due to a change in control or is adversely affected due to a change in control and the officer resigns or if the officer decides to terminate his employment due to a disposition of a significant amount of assets or business units. The guaranteed severance payment includes a payment equal to the officer's annual base salary and other cash compensation, and any approved bonus. The officer is also entitled to medical, dental and other benefits for two years following termination. In addition, all options held by the officer shall immediately vest and will be exercisable for one year from the date of such termination. However, if the board determines that the officer's employment is being terminated for the reason that the shared expectations of the officer and the board are not being met, then the options currently held by the officer will vest in accordance with their terms for up to one year after the date of termination, with the right to exercise those options, when they vest, for approximately thirteen months after the date of termination. The agreements also provide that, upon his retirement, all options held by the officer will become fully vested.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. The estimation process requires assumptions to be made about future events and conditions, and as such, is inherently subjective and uncertain. Actual results could differ materially from our estimates. On an on-going basis, we evaluate our estimates, including cash requirements, by assessing: planned research and development activities and general and administrative requirements, required clinical trial activity, market need for our drug candidates and other major business assumptions.

The SEC defines critical accounting policies as those that are, in management's view, most important to the portrayal of our financial condition and results of operations and most demanding of our judgment. We consider the following policies to be critical to an understanding of our consolidated financial statements and the uncertainties associated with the complex judgments made by us that could impact our results of operations, financial position and cash flows.

Stock-Based Charges

In estimating the fair value of stock-based compensation, we use the quoted market price of our common stock for stock awards, and the Black Scholes Option Pricing Model for stock options and warrants. We estimate future volatility based on past volatility of our common stock; and we estimate the expected length of the option on several criteria, including the vesting period of the grant, and the expected volatility. In estimating the fair value of restricted common stock we issue in connection with licensing transactions, we apply a discount for the marketability restrictions calculated after considering past volatility of our common stock as well as the term of restriction and the cost of risk free capital for a period that is comparable with the term of the restriction on the shares.

Cash, Cash Equivalents and Marketable Securities

Cash, cash equivalents and marketable securities primarily consist of bank checking deposits, short-term treasury securities, and institutional money market funds, corporate debt and equity, municipal obligations, including market auction debt securities, government agency notes, and certificates of deposit. We classify highly liquid short-term investments, with insignificant interest rate risk and maturities of 90 days or less at the time of acquisition, as cash and cash equivalents. Other investments, which do not meet the above definition of cash equivalents, are classified as either "held-to-maturity" or "available-for-sale" marketable securities, in accordance with the provisions of Financial Accounting Standards Board (FASB) Statement No. 115, "Accounting for Certain Investments in Debt and Equity Securities." Investments that we intend to hold for more than one year are classified as long-term investments.

Patents and Licenses

We own or license all the intellectual property that forms the basis of our business model. We expense all licensing and patent application costs as they are incurred.

Revenue Recognition

License fees representing non-refundable payments received upon the execution of license agreements are recognized as revenue upon execution of the license agreements where we have no significant future performance obligations and collectibility of the fees is assured. Milestone payments, which are generally based on developmental or regulatory events, are recognized as revenue when the milestones are achieved, collectibility is assured, and we have no significant future performance obligations in connection with the milestones. In those instances where we have collected fees or milestone payments but have ongoing future obligations related to the development of the drug product, revenue recognition is deferred and amortized ratably over the period of our future obligations.

Revenue from sales of product is recognized upon shipment of product when title and risk of loss have transferred to the customer, and provisions for estimates, including promotional adjustments, price adjustments, returns, and other potential adjustments are reasonably determinable. Such revenue is recorded, net of such estimated provisions, at the minimum amount of the customer's obligation to us. We state the related accounts receivable at net realizable value, with any allowance for doubtful accounts charged to general operating expenses.

Research and Development

Research and development expenses are comprised of the following types of costs incurred in performing research and development activities: personnel expenses, facility costs, contract services, license fees and milestone payments, costs of clinical trials, laboratory supplies and drug products, and allocations of corporate costs. We expense all research and development activity costs in the period incurred.

ITEM 3. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to certain market risks associated with interest rate fluctuations and credit risk on our cash equivalents and marketable securities, which investments are entered into for purposes other than trading. The primary objective of our investment activities is to preserve principal, while at the same time maximizing yields without significantly increasing risk. We do not utilize hedging contracts or similar instruments.

Our primary exposures relate to (1) interest rate risk on our investment portfolio, and (2) credit risk of the companies' bonds in which we invest. We manage interest rate risk on our investment portfolio by matching scheduled investment maturities with our cash requirements.

Our investments as of June 30, 2006 are primarily in floating rate securities, short-term government securities and money market accounts. Because of our ability to redeem these investments at par with short notice, changes in interest rates would have an immaterial effect on the fair value of these investments. If a 10% change in interest rates were to have occurred on June 30, 2006, any decline in the fair value of our investments would not be material. In addition, we are exposed to certain market risks associated with credit ratings of corporations whose corporate bonds we may purchase from time to time. If these companies were to experience a significant detrimental change in their credit ratings, the fair market value of such corporate bonds may significantly decrease. If these companies were to default on these corporate bonds, we may lose part or all of our principal. We believe that we effectively manage this market risk by diversifying our investments, and selecting securities that generally have third party insurance coverage in the event of default by the issuer.

In addition, we are exposed to foreign currency exchange rate fluctuations relating to payments we make to vendors and suppliers using foreign currencies. In particular, we have foreign expenses associated with our ongoing clinical studies in Europe, where some of our obligations are incurred in Euros. We mitigate such risk by maintaining a limited portion of our cash in Euros. Although fluctuations in exchange rates have an effect on our payment obligations, such fluctuations have not had a material impact on our financial condition or results of operations as of or for the six-month period ended June 30, 2006.

ITEM 4. Controls and Procedures

We have established disclosure controls and procedures (as such terms are defined in Rules 13(a)-15(e) and 15(d)-15(e)) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, that are designed to ensure that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer (our principal executive officer) and Vice President Finance (our principal financial officer), as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, our management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Our disclosure controls and procedures are designed to provide a reasonable level of assurance of reaching our desired disclosure control objectives.

As required by SEC Rule 13a-15(b), we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and our Vice President Finance, of the effectiveness of the design and operation of our disclosure controls and procedures as of June 30, 2006, the end of the period covered by this report, or the Evaluation Date. Based on the foregoing, our Chief Executive Officer and Vice President Finance concluded that our disclosure controls and procedures were effective and were operating at the reasonable assurance level.

[Table of Contents](#)

There has been no change in our internal controls over financial reporting during our most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting.

PART II — OTHER INFORMATION

ITEM 1. Legal Proceedings

Sumatriptan succinate injection Paragraph IV Litigation

In October 2004, we filed with the FDA an abbreviated new drug application for sumatriptan succinate injection 6mg/0.5mL seeking approval to engage in the commercial manufacture, sale, and use of the sumatriptan succinate injection product in the United States. Sumatriptan succinate injection is marketed by GlaxoSmithKline under the brand name Imitrex[®] injection and is used for the acute treatment of migraine attacks with or without aura and the acute treatment of cluster headache episodes in adults. Subsequently, GlaxoSmithKline filed a lawsuit against us in the United States District Court for the District of Delaware, alleging infringement of the patent on Imitrex[®] injection.

While it is not possible to determine with any degree of certainty the ultimate outcome of the foregoing legal proceedings, we believe that we have substantial meritorious basis for our challenge of the patent. Fact and expert discovery is complete and we are waiting to hear if the summary judgment motions will be heard. Trial is set on November 14, 2006. Pursuant to our agreement with Par, Par shall provide financial and legal support, including payment of legal expenses going forward, for the sumatriptan litigation. In addition, we have made other regulatory filings with the FDA related to sumatriptan succinate injection which may result in additional legal proceedings related to this litigation that may impact this litigation.

Additional information regarding this litigation can be found in our annual report on Form 10-K filed with the SEC on March 15, 2006.

Other

We are sometimes involved in matters of litigation that we consider ordinary routine litigation incidental to our business. We are not aware of any pending litigation matters that will materially affect our financial statements.

ITEM IA. Risk Factors

RISK FACTORS

An investment in our common stock involves a high degree of risk. Our business, financial condition, operating results and prospects can be impacted by a number of factors, any one of which could cause our actual results to

[Table of Contents](#)

differ materially from recent results or from our anticipated future results. As a result, the trading price of our common stock could decline, and you could lose a part or all of your investment. You should carefully consider the risks described below with all of the other information included in this Quarterly Report. For discussion of some of our potential risks or uncertainties, refer to Part I, Item 1A., Risk Factors, included in our Form 10-K for the fiscal year ended December 31, 2005 as filed with the SEC. The following risk factors are the only material changes to the risk factors described in the Form 10-K.

Risks Related to Our Business

Clinical trials may fail to demonstrate the safety and efficacy of our proprietary drug candidates, which could prevent or significantly delay obtaining regulatory approval.

Prior to receiving approval to commercialize any of our proprietary drug candidates, we must demonstrate with substantial evidence from well-controlled clinical trials, and to the satisfaction of the FDA and other regulatory authorities in the United States and other countries, that each of the products is both safe and effective. For each product candidate, we will need to demonstrate its efficacy and monitor its safety throughout the process. If such development is unsuccessful, our business and reputation would be harmed and our stock price would be adversely affected.

All of our product candidates are prone to the risks of failure inherent in drug development. The results of pre-clinical studies and early-stage clinical trials of our product candidates do not necessarily predict the results of later-stage clinical trials. Later-stage clinical trials may fail to demonstrate that a product candidate is safe and effective despite having progressed through initial clinical testing. Even if we believe the data collected from clinical trials of our drug candidates are promising, such data may not be sufficient to support approval by the FDA or any other United States or foreign regulatory approval. Pre-clinical and clinical data can be interpreted in different ways.

Accordingly, FDA officials could interpret such data in different ways than we or our partners do, which could delay, limit or prevent regulatory approval. The FDA, other regulatory authorities, our institutional review boards, our contract research organizations, or we may suspend or terminate our clinical trials for our drug candidates. Any failure or significant delay in completing clinical trials for our product candidates, or in receiving regulatory approval for the sale of any drugs resulting from our drug candidates, may severely harm our business and reputation. Even if we receive FDA and other regulatory approvals, our product candidates may later exhibit adverse effects that may limit or prevent their widespread use, may cause the FDA to revoke, suspend or limit their approval, or may force us to withdraw products derived from those candidates from the market.

Our proprietary drug candidates, their target indications, and status of development are summarized in the following table:

<u>Drug Candidate</u>	<u>Target Indication</u>	<u>Development Status</u>
Satraplatin	Hormone Refractory Prostate Cancer	Late phase 3; rolling NDA submission has begun
	Metastatic breast cancer	Phase 2
	With Taxol® in advanced Non-small Cell Lung Cancer	Phase 2
	With Tarceva® in inoperable advanced Non-small Cell Lung Cancer	Phase 2
	With radiation therapy in Non-small Cell Lung Cancer	Phase 1/2
	With Taxotere® in advanced solid tumors With Xeloda® in advanced solid tumors	Phase 1 Phase 1
Levofolinic acid (LFA),	Osteogenic Sarcoma	NDA on file with FDA; CMC responses pending
	Colorectal Cancer	

[Table of Contents](#)

<u>Drug Candidate</u>	<u>Target Indication</u>	<u>Development Status</u>
EOquin™	Superficial Bladder Cancer	Phase 2 completed; end of phase 2 meeting held with the FDA; IND filed; Pilot Safety Study initiated
Elsamitucin	Refractory non-Hodgkin's Lymphoma	Phase 2
Ozarelix (formerly SPI-153)	Hormone Dependent Prostate Cancer	Phase 2
	Benign Prostatic Hypertrophy	Phase 2
Lucanthone	Radiation Sensitizer for Brain Tumors and Brain Metastases	Phase 2
RenaZorb™	Hyperphosphatemia in End-stage Renal Disease	Pre-clinical
SPI-1620	Adjunct to Chemotherapy	Pre-clinical
SPI-205	Chemotherapy Induced Neuropathy	Pre-clinical

The development of our drug candidate, satraplatin, depends on the efforts of a third party and, therefore, its eventual success or commercial viability is largely beyond our control.

In 2002, we entered into a co-development and license agreement with GPC Biotech AG for the worldwide development and commercialization of our lead drug candidate, satraplatin. GPC Biotech has agreed to fully fund development and commercialization expenses for satraplatin. We do not have control over the drug development process and therefore the success of our lead drug candidate depends upon the efforts of GPC Biotech and its new sublicensee, Pharmion Corporation. GPC Biotech and Pharmion Corporation may not be successful in the clinical development of the drug, the achievement of any additional milestones such as the acceptance of a New Drug Application, or NDA, filing by the FDA, or the eventual commercialization of satraplatin.

The eventual FDA approval and subsequent marketing and sale of our drug candidate levofolinic acid, or LFA, may be adversely affected by the marketing and sale efforts of third parties who sell LFA outside North America.

We have only licensed the rights to develop, market and sell LFA in North America. Other companies, such as Wyeth and Sanofi-Aventis Inc., market and sell LFA in other parts of the world. If, as a result of their actions, negative publicity is associated with LFA, our own efforts to successfully receive FDA approval for, and subsequently, market and sell LFA, may be adversely impacted.

Our proprietary drug candidate LFA may not be more effective, safer or more cost efficient than competing drugs and otherwise may not have any competitive advantage, which could hinder our ability to successfully commercialize it.

LFA is the pure active isomer of calcium leucovorin, a component of "standard of care" 5-FU containing regimens for the treatment of colorectal cancer and other malignancies. Leucovorin has been sold as a generic product on the market for a number of years. There are a number of generic companies currently selling the product. Even if LFA ultimately receives FDA approval, it may not have better efficacy in treating the target indication or a more favorable side-effect profile than generic leucovorin. If we are not able to demonstrate a competitive advantage over generic leucovorin, we may not be able to obtain a price premium over generic leucovorin. If we are not able to obtain a price premium, we may not be able to manufacture LFA in a cost efficient manner or at a cost below the generic leucovorin cost price. Also, LFA will be offered as part of a treatment regimen, and that regimen may change to exclude LFA. Accordingly, even if FDA approval is obtained for LFA, it may not gain acceptance by the medical field or become commercially successful.

GlaxoSmithKline filed suit in United States federal court asserting that we have infringed one of their patents for Imitrex® injection by filing our ANDA for sumatriptan injection, the generic form of Imitrex® injection. This challenge may prevent us from commercializing sumatriptan until after the patent has expired and may require us to incur the significant effort of technical and management personnel.

On February 18, 2005, GlaxoSmithKline, or GSK, filed suit in United States federal court to prevent us from proceeding with the commercialization of our generic form of sumatriptan injection. Since patent litigation has been initiated, the FDA will not approve our ANDA until the earlier of 30 months from GSK's receipt of our notice of ANDA acceptance (the 30-month stay) or the issuance of a final non-appealed, or non-appealable court decision finding the Imitrex® patent we are currently challenging invalid, unenforceable or not infringed. If the patent is found to be infringed by the filing of our ANDA, GSK could seek an injunction to block the launch of our generic product until the patent expires. This might prohibit us from obtaining the 180-day marketing exclusivity afforded by the FDA to companies who are the first to file an ANDA with a paragraph IV certification for a generic equivalent to a brand name product. We believe we are the first to file an ANDA with a paragraph IV certification for sumatriptan injection.

During 2006, we made additional regulatory filings with the FDA, related to sumatriptan succinate injection, which may result in additional legal proceedings related to this litigation that may delay the litigation and/or delay our ability to launch our generic product.

Our continued defense against the charge of infringement by GSK could require us to divert significant effort of our technical and management personnel away from their regular activities in our business, which could substantially hinder our ability to conduct, advance and grow our business. However, through our strategic alliance with Par, Par has agreed to provide us with financial and legal support and therefore, the success of our defense is dependent on their efforts as well.

Risks Related to Our Stock

The market price and volume of our common stock fluctuate significantly and could result in substantial losses for individual investors.

The stock market from time to time experiences significant price and volume fluctuations that are unrelated to the operating performance of particular companies. These broad market fluctuations may cause the market price and volume of our common stock to decrease. In addition, the market price and volume of our common stock is highly volatile. Factors that may cause the market price and volume of our common stock to decrease include fluctuations in our results of operations, timing and announcements of our bio-technological innovations or new products or those of our competitors, FDA and foreign regulatory actions, developments with respect to patents and proprietary rights, public concern as to the safety of products developed by us or others, changes in health care policy in the United States and in foreign countries, changes in stock market analyst recommendations regarding our common stock, the pharmaceutical industry generally and general market conditions. In addition, the market price and volume of our common stock may decrease if our results of operations fail to meet the expectations of stock market analysts and investors. Also, certain dilutive securities such as warrants can be used as hedging tools which may increase volatility in our stock and cause a price decline. While a decrease in market price could result in direct economic loss for an individual investor, low trading volume could limit an individual investor's ability to sell our common stock, which could result in substantial economic loss as well. During 2005, the price of our common stock ranged between \$3.51 and \$7.50, and the daily trading volume was as high as 1,368,400 shares and as low as 16,700 shares. During 2006 through August 4, 2006, the price of our common stock has ranged between \$3.36 and \$5.69, and the daily trading volume has been as high as 1,343,800 shares and as low as 24,300 shares.

ITEM 2. Unregistered Sales of Equity Securities and Use of Proceeds

On June 6, 2006, we entered into a settlement agreement with Altair Nanomaterials, Inc. and its parent Altair Nanotechnologies, Inc. to settle arbitration proceedings. Under the terms of the settlement agreement, we issued to Altair 140,000 restricted shares of our common stock representing payment of a milestone pursuant to the license agreement for Renazorb™, and additional amounts for transfer of technology related to formulation improvements to RenaZorb™ developed by Altair.

The common stock issued to Altair was issued without registration under the Securities Act of 1933, as amended, or the Act, in reliance upon the exemptions from registration provided under Section 4(2) of the Act and Regulation D promulgated thereunder. The issuance did not involve any public offerings; we made no solicitation in connection with this transaction, other than communication with Altair; we obtained representations from Altair regarding its investment intent, experience and sophistication; Altair had received or had access to adequate information about us in order to make an informed investment decision; Altair had represented that it is an "accredited investor" within the meaning of Rule 501 of Regulation D under the Act; we reasonably believed that Altair was sophisticated within the meaning of Section 4(2) of the Act; and the common stock was issued with a restricted securities legend. No underwriting discounts or commissions were paid in conjunction with the issuance.

On June 23, 2006, we issued a five-year warrant to purchase up to 50,000 shares of our common stock, at an exercise price of \$5.25, to a consultant for services. The warrant shall vest in three installments of 15,000, 15,000 and 20,000 shares of common stock on the effective date of the warrant, and on the first and second year anniversaries of the effective date of the warrant, respectively, subject to a consulting agreement with the consultant being in effect at the time of vesting.

The warrant issued to the consultant described above was issued without registration under the Act in reliance upon the exemptions from registration provided under Section 4(2) of the Act. The foregoing transaction did not involve any public offering; we made no solicitation in connection with the transaction, other than communications with the consultant; we obtained representations from the consultant regarding his investment intent, experience and sophistication; the consultant either received or had access to adequate information about us in order to make an informed investment decision; the consultant represented that he is an "accredited investor" within the meaning of Rule 501 of Regulation D under the Act; we reasonably believed that the consultant was "sophisticated" within the meaning of Section 4(2) of the Act; and the warrant was issued with a restricted securities legend. No underwriting discounts or commissions were paid in conjunction with the issuance.

[Table of Contents](#)

On August 4, 2006, we entered into a share subscription agreement with J.B. Chemicals & Pharmaceuticals, Inc., or JBCPL, whereby JBCPL agreed to purchase 120,000 restricted shares of our common stock for \$1 million subject to approval by the appropriate regulatory authorities in India. We have agreed to file a registration statement with the Securities and Exchange Commission to register the shares after they have been issued. In addition, we agreed to terminate an existing supply agreement with JBCPL and enter into a new one as discussed below under Item 5.

The shares to be issued to JBCPL will be issued without registration under the Securities Act of 1933 in reliance upon the exemptions from registration provided under Section 4(2) of the Act and Regulation D promulgated thereunder. The foregoing transactions did not involve any public offering; we made no solicitation in connection with the transaction, other than communications with JBCPL; we obtained representations from JBCPL regarding its investment intent, experience and sophistication; JBCPL either received or had access to adequate information about us in order to make an informed investment decision; JBCPL represented that it is an “accredited investor” within the meaning of Rule 501 of Regulation D under the Act and we reasonably believed that JBCPL was “sophisticated” within the meaning of Section 4(2) of the Act. No underwriting discounts or commissions will be paid in conjunction with the issuance.

ITEM 3. Defaults Upon Senior Securities

None

ITEM 4. Submission of Matters to a Vote of Security Holders

We held our Annual Meeting of Stockholders on July 6, 2006 to vote on two proposals. At our Annual Meeting, there were present in person or by proxy 23,175,851 votes represent 93% of the total outstanding eligible votes. The following matters were voted upon at our Annual Meeting of Stockholders held on July 6, 2006:

1. The following persons were elected as directors to serve a one-year term expiring at the Annual Meeting of Stockholder to be held in 2007, or until their successors are elected or qualified:

	VOTES CAST	
	For	Authority Withheld
Richard D. Fulmer, MBA	22,154,849	1,021,002
Stuart M. Krassner, Sc.D., Psy.D.	22,029,909	1,145,942
Anthony E. Maida III, MA, MBA	21,991,085	1,184,766
Dilip J. Mehta, Ph.D.	22,026,904	1,148,947
Rajesh C. Shrotriya, MD	22,090,901	1,084,950
Julius A. Vida, Ph.D.	22,030,211	1,145,640

2. Proposal to approve the increase in the number of authorized shares of common stock from 50 million shares to 100 million shares:

Number of Shares	Votes Cast			Broker Non-Votes
	For	Against	Abstain	
	21,670,598	1,455,778	49,475	1,763,142

ITEM 5. Other Information (not previously reported in a Form 8-K)

On August 4, 2006, we agreed to terminate the supply agreement dated April 16, 2002, by and between J.B. Chemicals & Pharmaceuticals Ltd., or JBCPL, and NeoJB LLC, or NeoJB, an 80% owned subsidiary of ours. The other 20% is owned by J.B. Life Science Overseas Limited, a subsidiary of JBCPL and past investor in shares of our common stock. In addition, JBCPL owns a warrant to purchase up to 4,000 shares of our common stock at an exercise price of \$11.25 per share that expires in 2007. Pursuant to the supply agreement, JBCPL granted NeoJB an exclusive license to obtain regulatory approval for market and distribute certain products, including ciprofloxacin and fluconazole tablets as well as two undisclosed products for which we have filed abbreviated new drug applications with the FDA, within the United States. The agreement provides that we, or NeoJB, will bear all costs of regulatory approvals for the products and that JBCPL will manufacture and supply to NeoJB the products in such quantities as NeoJB may require at prices reasonably acceptable to both parties. In place of the supply agreement, we have agreed to enter into a new supply agreement between Spectrum and JBCPL for the four products discussed

[Table of Contents](#)

above. In addition, pursuant to a share subscription agreement, JBCPL agreed to purchase 120,000 restricted shares of our common stock for \$1 million subject to approval by the appropriate regulatory authorities in India. We have agreed to file a registration statement with the Securities and Exchange Commission to register the shares after they have been issued.

See “Item 2 - Unregistered Sales of Equity Securities and Use of Proceeds” above.

[Table of Contents](#)

ITEM 6. Exhibits

<u>Exhibit No.</u>	<u>Description</u>
3.1+	Amended Certificate of Incorporation of the Registrant, as filed.
3.1.1	First Amendment to the Certificate of Designation of Series B Junior Participating Preferred Stock of Spectrum Pharmaceuticals, Inc. dated July 6, 2006. (Filed as Exhibit 3.1.1 to Form 8-K, as filed with the Securities and Exchange Commission on July 12, 2005, and incorporated herein by reference.)
4.1	4 th Amendment to Rights Agreement dated July 7, 2006. (Filed as Exhibit 4.1 to Form 8-K, as filed with the Securities and Exchange Commission on July 12, 2005, and incorporated herein by reference.)
10.1 + #	License Agreement between Registrant and Merck Eprova AG dated May 23, 2006.
10.2 + #	Manufacturing and Supply Agreement between Registrant and Merck Eprova AG dated May 23, 2006.
31.1+	Certification of Chief Executive Officer, pursuant to Rule 13a-14 promulgated under the Exchange Act, as created by Section 302 of the Sarbanes-Oxley Act of 2002.
31.2+	Certification of Vice President Finance, pursuant to Rule 13a-14 promulgated under the Exchange Act, as created by Section 302 of the Sarbanes-Oxley Act of 2002.
32.1+	Certification of Chief Executive Officer, pursuant to 18 U.S.C. Section 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002.
32.2+	Certification of Vice President Finance, pursuant to 18 U.S.C. Section 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002.

+ Filed herewith.

Confidential portions omitted and filed separately with the U.S. Securities and Exchange Commission pursuant to Rule 24b-2 promulgated under the Securities Exchange Act of 1934, as amended.

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Description</u>
3.1+	Amended Certificate of Incorporation of the Registrant, as filed.
3.1.1	First Amendment to the Certificate of Designation of Series B Junior Participating Preferred Stock of Spectrum Pharmaceuticals, Inc. dated July 6, 2006. (Filed as Exhibit 3.1.1 to Form 8-K, as filed with the Securities and Exchange Commission on July 12, 2005, and incorporated herein by reference.)
4.1	4 th Amendment to Rights Agreement dated July 7, 2006. (Filed as Exhibit 4.1 to Form 8-K, as filed with the Securities and Exchange Commission on July 12, 2005, and incorporated herein by reference.)
10.1+ #	License Agreement between Registrant and Merck Eprova AG dated May 23, 2006.
10.2+ #	Manufacturing and Supply Agreement between Registrant and Merck Eprova AG dated May 23, 2006.
31.1+	Certification of Chief Executive Officer, pursuant to Rule 13a-14 promulgated under the Exchange Act, as created by Section 302 of the Sarbanes-Oxley Act of 2002.
31.2+	Certification of Vice President Finance, pursuant to Rule 13a-14 promulgated under the Exchange Act, as created by Section 302 of the Sarbanes-Oxley Act of 2002.
32.1+	Certification of Chief Executive Officer, pursuant to 18 U.S.C. Section 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002.
32.2+	Certification of Vice President Finance, pursuant to 18 U.S.C. Section 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002.

+ Filed herewith.

Confidential portions omitted and filed separately with the U.S. Securities and Exchange Commission pursuant to Rule 24b-2 promulgated under the Securities Exchange Act of 1934, as amended.

STATE OF DELAWARE
SECRETARY OF STATE
DIVISION OF CORPORATIONS
FILED 09:00 AM 05/07/1997
971149762 – 2742853

CERTIFICATE OF INCORPORATION
OF
NEOTHERAPEUTICS, INC.

ARTICLE 1

The name of this Corporation is NeoTherapeutics, Inc.

ARTICLE 2

The registered office of the Corporation in the State of Delaware is located at 1013 Centre Road, Wilmington, Delaware 19805, County of New Castle, and Corporation Service Company is the registered agent of the Corporation.

ARTICLE 3

The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the Delaware General Corporation Law, as amended from time to time.

ARTICLE 4

The aggregate number of shares of all classes of stock which the Corporation shall have authority to issue is 30,000,000 shares, consisting of (a) 25,000,000 shares of Common Stock, \$.001 par value per share (the "Common Stock"), and (b) 5,000,000 shares of Preferred Stock, \$.001 par value per share (the "Preferred Stock").

The Board of Directors is authorized, subject to limitations prescribed by law, to provide for the issuance of the shares of Preferred Stock in one or more series, and by filing a certificate as required by the General Corporation Law of the State of Delaware, to establish from time to time the number of shares to be included in each such series, and to fix the designation, powers, preferences and relative, participating, optional or other special rights of the shares of each such series and any qualifications, limitations or restrictions thereof.

ARTICLE 5

A director of this Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided that this provision shall not eliminate or limit the liability of a director: (i) for any breach of his duty of loyalty to the Corporation or its stockholders; (ii) for acts or omissions not in good faith or which involve

intentional misconduct or a knowing violation of the law: (iii) under Section 174 of the Delaware General Corporation Law; or (iv) for any transaction from which the director derives an improper personal benefit. If the Delaware General Corporation Law is hereafter amended to authorize corporate action further limiting or eliminating the personal liability of directors, then the liability of the directors of the Corporation shall be limited or eliminated to the fullest extent permitted by the Delaware General Corporation Law, as so amended from time to time. Any repeal or modification of this Article 5 by the stockholders of the Corporation shall be prospective only, and shall not adversely affect any limitation on the personal liability of a director of the Corporation existing at the time of such repeal or modification.

ARTICLE 6

Elections of directors need not be by written ballot unless otherwise provided in the Bylaws of the Corporation.

ARTICLE 7

The Board of Directors of the Corporation shall have the power to make, alter, amend, change, add to or repeal the Bylaws of the Corporation.

ARTICLE 8

Any action which may be taken at any annual or special meeting of stockholders may be taken without a meeting, without prior notice and without a vote, if and only if a consent or consents in writing, setting forth the action so taken, is signed by the holders of all of the outstanding shares of capital stock of the corporation entitled to vote on that action.

ARTICLE 9

The name and address of the Incorporator of the Corporation is as follows:

Matthew P. Thullen, Esq.
660 Newport Center Drive
Suite 1600
Newport Beach, California 92660-6441

I, THE UNDERSIGNED, being the Incorporator, for the purpose of forming a corporation under the laws of the State of Delaware, do make, file and record this Certificate of Incorporation, do certify that the facts herein stated are true, and accordingly, have hereinto set my hand this 6th day of May, 1997.

/s/ Matthew P. Thullen
Matthew P. Thullen, Esq.

**AGREEMENT AND PLAN OF MERGER
OF
NEOTHERAPEUTICS, INC., A DELAWARE CORPORATION,
AND
NEOTHERAPEUTICS, INC., A COLORADO CORPORATION**

THIS AGREEMENT AND PLAN OF MERGER, dated as of June 17, 1997 ("Merger Agreement") is entered into by and between NeoTherapeutics, Inc., a Colorado corporation ("NeoTherapeutics Colorado"), and NeoTherapeutics, Inc., a Delaware corporation ("NeoTherapeutics Delaware"), which corporations are sometimes referred to herein as the "Constituent Corporations."

RECITALS

A. NeoTherapeutics Colorado is a corporation duly organized and existing under the laws of the State of Colorado and has authorized capital of 25,000,000 shares of Common Stock, no par value (the "NeoTherapeutics Colorado Common Stock"), and 5,000,000 shares of Preferred Stock, no par value. As of June 17, 1997, 5,371,807 shares of NeoTherapeutics Colorado Common Stock were issued and outstanding and no shares of Preferred Stock were issued and outstanding.

B. NeoTherapeutics Delaware is a corporation duly organized and existing under the laws of the State of Delaware and has authorized capital of 25,000,000 shares of Common Stock, par value \$.001 per share (the "NeoTherapeutics Delaware Common Stock"), and 5,000,000 shares of Preferred Stock, par value \$.001 per share. As of June 17, 1997, 100 shares of NeoTherapeutics Delaware Common Stock were issued and outstanding, all of which were held by NeoTherapeutics Colorado. No shares of Preferred Stock were issued and outstanding.

C. The Board of Directors of NeoTherapeutics Colorado has determined that it is advisable and in the best interests of NeoTherapeutics Colorado and its shareholders that NeoTherapeutics Colorado merge with and into NeoTherapeutics Delaware upon the terms and subject to the conditions of this Merger Agreement for the purpose of effecting the reincorporation of NeoTherapeutics Colorado in the State of Delaware.

D. The respective Boards of Directors of NeoTherapeutics Colorado and NeoTherapeutics Delaware have adopted and approved the terms and conditions of this Merger Agreement.

E. The parties intend by this Merger Agreement to effect a reorganization under Section 368 of the Internal Revenue Code of 1986, as amended.

NOW, THEREFORE, in consideration of the promises and the mutual covenants and agreements contained herein, the parties hereto agree, subject to the terms and conditions set forth herein, as follows:

**I.
MERGER**

1.1 *Merger.* In accordance with the provisions of this Merger Agreement, the Colorado Business Corporation Act and the Delaware General Corporation Law, NeoTherapeutics Colorado shall be merged with and into NeoTherapeutics Delaware (the "Merger"), the separate existence of NeoTherapeutics Colorado shall cease and NeoTherapeutics Delaware shall be, and is herein sometimes

referred to as, the “Surviving Corporation,” and the name of the Surviving Corporation shall be “NeoTherapeutics, Inc.”

1.2 *Filing and Effectiveness.* The Merger shall become effective when the following actions have been completed:

(a) All of the conditions precedent to the consummation of the Merger specified in this Merger Agreement and required under the Colorado Business Corporation Act and the Delaware General Corporation Law have been satisfied or duly waived by the party entitled to satisfaction thereof:

(b) An executed Articles of Merger or an executed counterpart of this Merger Agreement meeting the requirements of the Colorado Business Corporation Act has been filed with the Secretary of State of the State of Colorado; and

(c) An executed Certificate of Merger or an executed counterpart of this Merger Agreement meeting the requirements of the Delaware General Corporation Law has been filed with the Secretary of State of the State of Delaware.

The date and time when the Merger shall become effective is herein called the “Effective Time of the Merger.”

1.3 *Effect of the Merger.* At the Effective Time of the Merger, the separate existence and corporate organization of NeoTherapeutics Colorado shall cease and NeoTherapeutics Delaware, as the Surviving Corporation, (i) shall continue to possess all of its assets, rights, powers and property as constituted immediately before the Effective Time of the Merger, (ii) shall be subject to all actions previously taken by its and NeoTherapeutics Colorado’s Board of Directors, (iii) shall succeed, without other transfer, to all of the assets, rights, powers and property of NeoTherapeutics Colorado in the manner more fully set forth in Section 259(a) of the Delaware General Corporation Law, (iv) shall continue to be subject to all of its debts, liabilities and obligations as constituted immediately before the Effective Time of the Merger and (v) shall succeed, without other transfer, to all of the debts, liabilities and obligations of NeoTherapeutics Colorado in the same manner as if NeoTherapeutics Delaware had itself incurred them, all as more fully provided under the applicable provisions of the Delaware General Corporation Law and the Colorado Business Corporation Act.

II. CHARTER DOCUMENTS, DIRECTORS AND OFFICERS

2.1 *Certificate of Incorporation.* The Certificate of Incorporation of NeoTherapeutics Delaware as in effect immediately before the Effective Time of the Merger shall continue in full force and effect as the Certificate of Incorporation of the Surviving Corporation until duly amended or repealed in accordance with the provisions thereof and applicable law.

2.2 *Bylaws.* The Bylaws of NeoTherapeutics Delaware as in effect immediately before the Effective Time of the Merger shall continue in full force and effect as the Bylaws of the Surviving Corporation until duly amended or repealed in accordance with the provisions thereof and applicable law.

2.3 *Officers and Directors.* The persons who are officers and directors of NeoTherapeutics Colorado immediately prior to the Effective Time of the Merger shall, after the Effective Time of the Merger, be the officers and directors of the Surviving Corporation, without change until their successors have been duly elected or appointed and qualified or until their earlier death, resignation or removal in accordance with the Surviving Corporation's Certificate of Incorporation, Bylaws and applicable law; *provided, however,* that Frank M. Meeks and Dr. Paul H. Silverman shall serve as Class I directors of NeoTherapeutics Delaware, with their term of office to expire at the 1998 Annual Meeting of Stockholders of NeoTherapeutics Delaware, and Dr. Alvin J. Glasky Mark J. Glasky and Dr. Carol O'Cleireacain shall serve as Class II directors of NeoTherapeutics Delaware, with their term of office to expire at the 1999 Annual Meeting of Stockholders of NeoTherapeutics Delaware.

III. MANNER OF CONVERSION OF STOCK

3.1 *NeoTherapeutics Colorado Shares.* Upon the Effective Time of the Merger, each share of NeoTherapeutics Colorado Common Stock, no par value, issued and outstanding immediately before the Effective Time of the Merger shall by virtue of the Merger and without any action by the Constituent Corporations, by the holder of such shares or by any other person, be converted into and become one fully paid and nonassessable share of Common Stock, \$.001 par value per share, of the Surviving Corporation.

3.2 *NeoTherapeutics Colorado Options, Warrants and Convertible Securities.* At the Effective Time of the Merger, the Surviving Corporation shall assume and continue the stock option plans of NeoTherapeutics Colorado (including the 1987 Incentive Stock Option Plan, the 1991 Stock Incentive Plan and the 1997 Stock Incentive Plan), the Warrant Agreement between NeoTherapeutics Colorado and U.S. Stock Transfer Corporation dated as of September 25, 1996, and all other options, warrants and rights to purchase or acquire shares of NeoTherapeutics Colorado Common Stock. At the Effective Time of the Merger, each outstanding and unexercised option, warrant and right to purchase or acquire shares of NeoTherapeutics Colorado Common Stock shall, by virtue of the Merger and without any action on the part of the holder thereof, be converted into and become an option, warrant or right to purchase or acquire shares of the Surviving Corporation's Common Stock on the basis of one share of the Surviving Corporation's Common Stock for each share of NeoTherapeutics Colorado Common Stock issuable pursuant to any such option, warrant or right, and under the same terms and conditions and at an exercise price per share equal to the exercise price per share applicable to any such NeoTherapeutics Colorado option, warrant or right. No options, warrants or rights to purchase or acquire Preferred Stock of NeoTherapeutics Colorado currently exist.

A number of shares of the Surviving Corporation's Common Stock shall be reserved for issuance upon the exercise of options, warrants and other securities equal to the number of shares of NeoTherapeutics Colorado Common Stock so reserved immediately before the Effective Time of the Merger.

3.3 *NeoTherapeutics Delaware Common Stock.* Upon the Effective Time of the Merger, each share of NeoTherapeutics Delaware Common Stock, \$.001 par value per share, issued and outstanding immediately before the Effective Time of the Merger shall, by virtue of the Merger and without any action by NeoTherapeutics Delaware, by the holder of such shares or by any other person, be canceled and returned to the status of authorized but unissued shares.

3.4 *Exchange of Certificates.* After the Effective Time of the Merger, each holder of an outstanding certificate representing shares of NeoTherapeutics Colorado Common Stock may, at such shareholder's option, surrender the same for cancellation to U.S. Stock Transfer Corporation, as transfer agent (the "Transfer Agent"), and each such holder shall be entitled to receive in exchange therefor a certificate or certificates representing the number of shares of the Surviving Corporation's Common Stock into which the surrendered shares were converted as herein provided. Until so surrendered, each outstanding certificate theretofore representing shares of NeoTherapeutics Colorado Common Stock shall be deemed for all purposes to represent the number of whole shares of the Surviving Corporation's Common Stock into which the shares of NeoTherapeutics Colorado Common Stock were converted in the Merger.

The registered owner on the books and records of the Surviving Corporation or the Transfer Agent of any such outstanding certificate shall, until such certificate has been surrendered for transfer or conversion or otherwise accounted for to the Surviving Corporation or the Transfer Agent, have and be entitled to exercise any voting or other rights with respect to and to receive dividends and other distributions upon the shares of Common Stock of the Surviving Corporation represented by such outstanding certificate as provided above.

Each certificate representing Common Stock of the Surviving Corporation so issued in the Merger shall bear the same legends, if any, with respect to restrictions on transferability as the certificates of NeoTherapeutics Colorado so converted and given in exchange therefor, unless otherwise determined by the Board of Directors of the Surviving Corporation in compliance with applicable laws.

IV. GENERAL

4.1 *Covenants of NeoTherapeutics Delaware.* NeoTherapeutics Delaware covenants and agrees that it will, on or before the Effective Time of the Merger, take such actions as may be required by the Colorado Business Corporation Act in order to effectuate the Merger.

4.2 *Further Assurances.* From time to time, as and when required by NeoTherapeutics Delaware or by its successors or assigns, there shall be executed and delivered on behalf of NeoTherapeutics Colorado such deeds and other instruments, and there shall be taken or caused to be taken by it such further and other actions as shall be appropriate or necessary in order to vest or perfect in or conform of record or otherwise by NeoTherapeutics Delaware the title to and possession of all the property, interests, assets, rights, privileges, immunities, powers, franchises and authority of NeoTherapeutics Colorado and otherwise to carry out the purposes of this Merger Agreement, and the officers and directors of NeoTherapeutics Delaware are fully authorized in the name and on behalf of NeoTherapeutics Colorado or otherwise to take all such actions and to execute and deliver all such deeds and other instruments.

4.3 *Deferral.* Consummation of the Merger may be deferred by the Board of Directors of NeoTherapeutics Colorado for a reasonable period of time if the Board of Directors determines that deferral would be in the best interests of NeoTherapeutics Colorado and its shareholders.

4.4 *Amendment.* The parties hereto, by mutual consent of their respective Boards of Directors, may amend, modify or supplement this Merger Agreement in such manner as may be agreed upon by them in writing at any time before or after approval of this Merger Agreement by the shareholders of NeoTherapeutics Colorado and NeoTherapeutics Delaware, but not later than the Effective Time of the

Merger; provided, however, that no such amendment, modification or supplement not approved by the shareholders of NeoTherapeutics Colorado and NeoTherapeutics Delaware shall adversely affect the rights of such shareholders or change any of the principal terms of this Merger Agreement.

4.5 *Abandonment.* At any time before the Effective Time of the Merger, this Merger Agreement may be terminated and the Merger may be abandoned for any reason whatsoever by the Board of Directors of either NeoTherapeutics Colorado or of NeoTherapeutics Delaware, or of both, notwithstanding the approval of this Merger Agreement by the shareholders of NeoTherapeutics Colorado or NeoTherapeutics Delaware, or by both, if circumstances arise which make the Merger inadvisable. In the event of abandonment of this Merger Agreement, as above provided, this Merger Agreement shall become wholly void and of no effect, and no liability on the part of the Board of Directors or shareholders of NeoTherapeutics Colorado or NeoTherapeutics Delaware shall arise by virtue of such termination.

4.6 *Expenses.* If the Merger becomes effective, the Surviving Corporation shall assume and pay all expenses in connection therewith not theretofore paid by the respective parties. If for any reason the Merger shall not become effective, NeoTherapeutics Colorado shall pay all expenses incurred in connection with all the proceedings taken in respect of this Merger Agreement or relating thereto.

4.7 *Registered Office.* The registered office of the Surviving Corporation in the State of Delaware is located at 1013 Centre Road, Wilmington, Delaware 19805, and Corporation Service Company is the registered agent of the Surviving Corporation at such address.

4.8 *Agreement.* An executed copy of this Merger Agreement will be on file at the principal place of business of the Surviving Corporation at One Technology Drive, Suite I-821, Irvine, California 92618, and, upon request and without cost, a copy thereof will be furnished to any shareholder.

4.9 *Governing Law.* This Merger Agreement shall in all respects be construed, interpreted and enforced in accordance with and governed by the laws of the State of Delaware and, so far as applicable, the Merger provisions of the Colorado Business Corporation Act.

4.10 *Counterparts.* This Merger Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original and all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, NeoTherapeutics Colorado and NeoTherapeutics Delaware have caused this Merger Agreement to be signed by their respective duly authorized officers.

NEOTHERAPEUTICS, INC.,
a Colorado corporation

/s/ Alvin J. Glasky
Alvin J. Glasky, President and Chief Executive
Officer

ATTEST:

/s/ Rosalie H. Glasky
Rosalie H. Glasky, Secretary

NEOTHERAPEUTICS, INC.,
a Delaware corporation

/s/ Alvin J. Glasky
Alvin J. Glasky,
President and Chief Executive Officer

ATTEST:

/s/ Rosalie H. Glasky
Rosalie H. Glasky, Secretary

**CERTIFICATE OF SECRETARY
OF NEOTHERAPEUTICS INC.,
a Delaware corporation**

The undersigned, Secretary of NeoTherapeutics, Inc., a corporation organized and existing under the laws of the State of Delaware (“NeoTherapeutics Delaware”), hereby certifies, pursuant to the provisions of Sections 103 and 252 of the General Corporation Law of the State of Delaware, that NeoTherapeutics, Inc., a Colorado corporation (“NeoTherapeutics Colorado”), the sole stockholder of NeoTherapeutics Delaware, has voted all outstanding shares of NeoTherapeutics Delaware in favor of the merger of NeoTherapeutics Colorado with and into NeoTherapeutics Delaware on the terms and conditions set forth in the Agreement and Plan of Merger to which this certification is appended.

IN WITNESS WHEREOF, I have subscribed my name this 17th day of June, 1997.

/s/ Rosalie Glasky

Rosalie Glasky, Secretary

**CERTIFICATE OF DESIGNATION
OF
5 % SERIES A PREFERRED STOCK WITH CONVERSION FEATURES
OF
NEOTHERAPEUTICS, INC.**

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

NEOTHERAPEUTICS, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (the "Corporation"), hereby certifies, pursuant to the authority contained in the Certificate of Incorporation and in accordance with the provisions of Section 151 of the General Corporation Law of the State of Delaware that the following resolution was duly adopted by the Board of Directors of the Corporation on January 25, 1999, creating a series of its Preferred Stock designated as 5% Series A Preferred Stock with Conversion Features:

RESOLVED, that pursuant to the authority expressly granted to and vested in the Board of Directors of the Corporation (the "Board") by the provisions of the Certificate of Incorporation of the Corporation (the "Certificate of Incorporation"), there hereby is created, out of the 5,000,000 shares of Preferred Stock, par value \$0.001 per share, of the Corporation authorized in Article 4 of the Certificate of Incorporation (the "Preferred Stock"), a series of the Preferred Stock of the Corporation consisting of 400 shares, which shall be designated 5% Series A Preferred Stock with Conversion Features, which series shall have the powers, designations, preferences and relative, participating, optional and other rights, and the qualifications, limitations and restrictions set forth below:

Section 1. Designation, Amount and Par Value. The series of preferred stock shall be designated as 5% Series A Preferred Stock with Conversion Features (the "Preferred Stocks") and the number of shares so designated shall be 400 (which shall not be subject to increase without the consent of the holders of the Preferred Stock (each, a "Holder" and collectively, the "Holders")); Each share of Preferred Stock shall have a par value of \$.001 and a stated value of \$10,000 (the "Stated Value").

Section 2. Dividends.

(a) Holders shall be entitled to receive, when and as declared by the Board of Directors out of funds legally available therefore, and the Company shall pay, cumulative dividends at the rate per share (as a percentage of the Stated Value per share) equal 5% per annum, payable, subject to the provisions of this Section 2(a), on a quarterly basis on March 31, June 30, September 30 and December 31 of each year while such share is outstanding (each a "Dividend Payment Date") and on each Conversion Date (as defined herein) for such share, commencing on the earlier to occur of the Conversion Date for such share and March 31, 1999, in cash or shares of Common Stock (as defined in Section 8). Subject to the terms and conditions herein, the decision whether to pay

dividends hereunder in Common Stock or cash shall be at the discretion of the Company. Dividends on the Preferred Stock shall be calculated on the basis of a 360-day year, shall accrue daily commencing on the Original Issue Date (as defined in Section 8), and shall be deemed to accrue from such date whether or not earned or declared and whether or not there are profits, surplus or other funds of the Company legally available for the payment of dividends. A party that holds shares of Preferred Stock on the record date with respect to a Dividend Payment Date will be entitled to receive such dividend payment and any other accrued and unpaid dividends which accrued prior to such Dividend Payment Date, without regard to any sale or disposition of such Preferred Stock subsequent to the applicable record date. Except as otherwise provided herein, if at any time the Company pays less than the total amount of dividends then accrued on account of the Preferred Stock, such payment shall be distributed ratably among the Holders based upon the number of shares of Preferred Stock held by each Holder. The Company shall provide the Holders notice of its intention to pay dividends in cash or shares of Common Stock not less than 10 Trading Days (as defined in Section 8) prior to any Dividend Payment Date, it being understood that a failure of the Company to timely provide such notice shall be deemed an election (if permitted hereunder) to pay such dividend in Shares of Common Stock pursuant to the terms hereof. If the Company has properly elected, and is permitted hereunder, to pay dividends in shares of Common Stock, then such dividends will be due and payable on each Conversion Date for the applicable shares of Preferred Stock (and not on each Dividend Payment Date) and the number of shares of Common Stock issuable on account of such dividend shall equal the cash amount of such dividend on such Conversion Date divided by the Conversion Price (as defined below) on such date. Any dividends to be paid in cash hereunder that are not paid on a Dividend Payment Date shall continue to accrue and shall entail a late fee, which must be paid in cash, at the rate of 15% per annum or the maximum amount that is permitted by applicable law, whichever is less (such fees to accrue daily, from the date such dividend is due hereunder through and including the date of payment).

(b) Notwithstanding anything to the contrary contained herein, the Company may not issue shares of Common Stock in payment of dividends on the Preferred Stock (and must deliver cash in respect thereof) if:

(i) the number of shares of Common Stock at the time authorized, unissued and unreserved for all purposes is insufficient to pay such dividends in shares of Common Stock;

(ii) after the Dividend Effectiveness Date (as defined in Section 8), such shares (x) are not registered for resale pursuant to an effective Underlying Securities Registration Statement (as defined in Section 8) and (y) may not be sold without volume restrictions pursuant to Rule 144 promulgated under the Securities Act (as defined in Section 8), as determined by counsel to the Company pursuant to a written opinion letter, addressed to the Company's transfer agent in the form and substance acceptable to the applicable Holder and such transfer agent (if the Company is permitted and elects to pay dividends in shares of Common Stock under this clause (ii) prior to the Dividend Effectiveness Date and thereafter an Underlying Securities Registration Statement shall be declared effective by the Commission (as defined in Section 8), the Company shall, within three (3) Trading Days after the date of such declaration of effectiveness, exchange such shares for shares of Common Stock that are free of restrictive legends of any kind);

(iii) such shares are not then listed or quoted on the Nasdaq National Market (the “NASDAQ”) ,or on the New York Stock Exchange, American Stock Exchange or Nasdaq SmallCap Market (each, a “Subsequent Market”);

(iv) the Company has failed to timely satisfy its conversion obligations hereunder; or

(v) the issuance of such shares would result in a violation of Section 5(a)(iii).

(c) So long as any Preferred Stock shall remain outstanding, neither the Company nor any subsidiary thereof shall redeem, purchase or otherwise acquire directly or indirectly any Junior Securities (as defined in Section 8), nor shall the Company directly or indirectly pay or declare any dividend or make any distribution, (other than a dividend or distribution described in Section 5 or dividends due and paid in the ordinary course on preference shares of the Company at such times when the Company is in compliance with its payment and other obligations hereunder) upon, nor shall any distribution be made in respect of, any Junior Securities, nor shall any monies be set aside for or applied to the purchase or redemption (through a sinking fund or otherwise) of any Junior Securities.

Section 3. Voting Rights. Except as otherwise provided herein and as otherwise required by law, the Preferred Stock shall have no voting rights. However, so long as any shares of Preferred Stock are outstanding, the Company shall not, without the affirmative vote of the Holders of all of the shares of the Preferred Stock then outstanding, (a) alter or change adversely the powers, preferences or rights given to the Preferred Stock or alter or amend this Certificate of Designation, (b) authorize or create any class of stock ranking as to dividends or distribution of assets upon a Liquidation (as defined in Section 4) senior to or otherwise pari passu with the Preferred Stock, (c) amend its certificate of incorporation or other charter documents so as to affect adversely any rights of the Holders, (d) increase the authorized number of shares of Preferred Stock, or (e) enter into any agreement with respect to the foregoing.

Section 4. Liquidation. Upon any liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary (a “Liquidation”), the Holder shall be entitled to receive out of the assets of the Company, whether such assets are capital or surplus, for each share of Preferred Stock an amount equal to the Stated Value plus all due but unpaid dividends per share, whether declared or not, before any distribution or payment shall be made to the holders of any Junior Securities, and if the assets of the Company shall be insufficient to pay in full such amounts, then the entire assets to be distributed to the Holders shall be distributed among the Holders ratably in accordance with the respective amounts that would be payable on such shares if all amounts payable thereon were paid in full. A sale, conveyance or disposition of all or substantially all of the assets of the Company or the effectuation by the Company of a transaction or series of related transactions in which more than 33% of the voting power of the Company is disposed of, or a consolidation or merger of the Company with or into any other company or companies shall not be treated as a Liquidation, but instead shall be subject to the provisions of Section 5. The Company

shall mail written notice of any such Liquidation, not less than 45 days prior to the payment date stated therein, to each record Holder.

Section 5. Conversion.

(a)(i) Conversions at Option of Holder. Each share of Preferred Stock shall be convertible into shares of Common Stock (subject to the limitations set forth in Section 5(a)(iii) hereof) at the Conversion Ratio (as defined in Section 8) at the option of the Holder, at any time and from time to time, from and after the Original Issue Date; provided, that, (A) from and after the Original Issue Date through the date which is the ninetieth (90th) day after the Original Issue Date (such ninetieth (90) day, the "Record Date"), the Conversion Price applicable to any conversion during such period shall be the Initial Conversion Price (as defined herein), (B) from and after the Record Date through the fourth (4th) month thereafter, any conversions of shares of Preferred Stock shall be limited in each monthly period to 25% of the number of shares of Preferred Stock outstanding on the Record Date, on a cumulative basis (for example, during the first month following the Record Date, the Holder may tender conversions of shares of Preferred Stock of up to 25% of the number of shares of Preferred Stock outstanding on the Record Date and during the second month following the Record Date, the Holder may tender conversions of shares of Preferred Stock of up to 50% of the number of shares Preferred Stock outstanding on the Record Date less such number of shares of Preferred Stock for which conversions have previously been honored), provided, further, that the restrictions on conversion set forth in this Section 5(a)(i) shall be null and void ab initio from and after the earlier of (i) the date that the Company delivers to the Holders an Optional Redemption Notice (as defined in Section 6(a)) and (ii) the date that the Company delivers to the Holders a Subsequent Financing Notice (as defined in the Purchase Agreement). Holders shall effect conversions by surrendering the certificate or certificates representing the shares of Preferred Stock to be converted to the Company, together with the form of conversion notice attached hereto as Exhibit A (a "Conversion Notice"). Each Conversion Notice shall specify the number of shares of Preferred Stock to be converted and the date on which such conversion is to be effected, which date may not be prior to the date the Holder delivers such Conversion Notice by facsimile (the "Conversion Date"). If no Conversion Date is specified in a Conversion Notice, the Conversion Date shall be the date that the Conversion Notice is deemed delivered hereunder. If the Holder is converting Less than all shares of Preferred Stock represented by the certificate or certificates tendered by the Holder with the Conversion Notice, or if a conversion hereunder cannot be effected in full for any reason, the Company shall promptly deliver to such Holder (in the manner and within the time set forth in Section 5(b)) a certificate representing the number of shares of Preferred Stock as have not been converted.

(ii) Automatic Conversion. Subject to the provisions in this paragraph, all outstanding shares of Preferred Stock for which conversion notices have not previously been received or for which redemption has not been made or required hereunder shall be automatically converted on the third anniversary of the later to occur of (i) the Effectiveness Date (as defined in the Registration Rights Agreement) or (ii) the date that the Commission declares effective an Underlying Securities Registration Statement, at the Conversion Price on such date. The conversion contemplated by this paragraph shall not occur at such time as (a) (1) an Underlying Securities Registration Statement is not then effective or (2) the Holder is not permitted to resell Underlying Shares (as defined in Section 8) pursuant to Rule 144(k) promulgated under the

Securities Act, without volume restrictions, as evidenced by an opinion letter of counsel acceptable to the Holder and the transfer agent for the Common Stock; (b) there are not sufficient shares of Common Stock authorized and reserved for issuance upon such conversion; or (c) the Company shall have defaulted on its covenants and obligations hereunder or under the Purchase Agreement or Registration Rights Agreement.

Notwithstanding the foregoing, the three-year period for conversion under this Section shall be extended (on a day-for-day basis) for any Trading Days after the date that the Commission declares effective an Underlying Securities Registration Statement that the purchaser is unable to resell Underlying Shares under an Underlying Securities Registration Statement due to (a) the Common Stock not being listed for trading on the NASDAQ or any Subsequent Market, (b) the failure of such Underlying Securities Registration Statement to remain effective during the Effectiveness Period (as defined in the Registration Rights Agreement) as to all Underlying Shares, or (c) the suspension of the Holder's ability to resell Underlying Shares thereunder.

(iii) Certain Conversion Restrictions.

(A)(1) A Holder may not convert shares of Preferred Stock or receive shares of Common Stock as payment of dividends hereunder to the extent such conversion or receipt of such dividend payment would result in the Holder beneficially owning (as determined in accordance with Section 13(d) of the Exchange Act and the rules thereunder) in excess of 4.999% of the then issued and outstanding shares of Common Stock, including shares issuable upon conversion of, and payment of dividends on, the shares of Preferred Stock held by such Holder after application of this Section. The Holder shall have the sole authority and obligation to determine whether the restriction contained in this Section applies and to the extent that the Holder determines that the limitation contained in this Section applies, the determination of which shares of Preferred Stock are convertible shall be in the sole discretion of the Holder. The provisions of this Section may be waived by a Holder (but only as to itself and not to any other Holder) upon not less than 75 days prior notice to the Company. Other Holders shall be unaffected by any such waiver.

(2) A Holder may not convert shares of Preferred Stock or receive shares of Common Stock as payment of dividends hereunder to the extent such conversion or receipt of such dividend payment would result in the Holder beneficially owning (as determined in accordance with Section 13(d) of the Exchange Act (as defined in Section 8) and the rules thereunder) in excess of 9.999% of the then issued and outstanding shares of Common Stock, including shares issuable upon conversion of, and payment of dividends on, the shares of Preferred Stock held by such Holder after application of this Section. The Holder shall have the sole authority and obligation to determine whether the restriction contained in this Section applies and to the extent that the Holder determines that the limitation contained in this Section applies, the determination of which shares of Preferred Stock are convertible shall be in the sole discretion of the Holder. The provisions of this Section may be waived by a Holder (but only as to itself and not to any other Holder) upon not less than 75 days prior notice to the Company. Other Holders shall be unaffected by any such waiver.

(B) If on any Conversion Date (A) the Common Stock is listed for trading on the NASDAQ or the Nasdaq SmallCap Market, (B) the Conversion Price then in effect is such that the aggregate number of shares of Common Stock that would then be issuable upon conversion in full of all then outstanding shares of Preferred Stock and as payment of dividends

thereon in shares of Common Stock, together with any shares of Common Stock previously issued upon conversion of shares of Preferred Stock and as payment of dividends thereon, would equal or exceed 20% of the number of shares of Common Stock outstanding on the Series A Closing Date (as defined in the Purchase Agreement) (such number of shares as would not equal or exceed such 20% limit, the “Issuable Maximum”), and (C) the Company shall not have previously obtained the vote of shareholders (the “Shareholder Approval”), if any, as may be required by the applicable rules and regulations of the Nasdaq Stock Market (or any successor entity) applicable to approve the issuance of shares of Common Stock in excess of the Issuable Maximum pursuant to the terms hereof, then the Company shall issue to the Holder so requesting a conversion a number of shares of Common Stock equal to its pro rata share of the Issuable Maximum (determined by reference to the number of shares of Preferred Stock issued to all Holders on the Series A Closing Date) and, with respect to the remainder of the aggregate Stated Value of the shares of Preferred Stock then held by such Holder for which a conversion in accordance with the Conversion Price would result in an issuance of shares of Common Stock in excess of the Issuable Maximum (the “Excess Stated Value”), the converting Holder shall have the option to require the Company to either (1) use its best efforts to obtain the Shareholder Approval applicable to such issuance as soon as is possible, but in any event not later than the 75th day after such request, or (2)(i) issue and deliver to such Holder a number of shares of Common Stock as equals (x) the Excess Stated Value, plus accrued dividends on all shares of Preferred Stock being converted, divided by (y) the closing sales price of the Common Stock as reported by the NASDAQ on the Series A Closing Date, and (ii) cash in an amount equal to the product of (x) the Per Share Market Value on the Conversion Date and (y) the number of shares of Common Stock in excess of such Holder’s pro rata portion of the Issuable Maximum that would have otherwise been issuable to the Holder in respect of such conversion but for the provisions of this Section (such amount of cash being hereinafter referred to as the “Discount Equivalent”), or (3) pay cash to the converting Holder in an amount equal to the Mandatory Redemption Amount (as defined in Section 8) for the Excess Stated Value. If the Company fails to pay the Discount Equivalent or the Mandatory Redemption Amount, as the case may be, in full pursuant to this Section within seven (7) days after the date payable, the Company will pay interest thereon at a rate of 15% per annum (or the maximum rate permitted by applicable law, whichever is less) to the converting Holder, accruing daily from the Conversion Date until such amount, plus all such interest thereon, is paid in full.

(C) Notwithstanding anything herein to the contrary, the Company shall not be obligated to issue in excess of 1,450,000 Underlying Shares upon conversion of shares of Preferred Stock and as payment of dividends thereon.

(b)(i) Not later than three (3) Trading Days after any Conversion Date, the Company will deliver to the Holder (i) a certificate or certificates which shall be free of restrictive legends and trading restrictions (other than those required by Section 3.1(b) of the Purchase Agreement) representing the number of shares of Common Stock being acquired upon the conversion of shares of Preferred Stock (subject to the limitations set forth in Section 5(a)(iii) hereof), (ii) one or more certificates representing the number of shares of Preferred Stock not converted, (iii) a bank check in the amount of accrued and unpaid dividends (if the Company has elected to pay accrued dividends in cash), and (iv) if the Company has elected and is permitted hereunder to pay accrued dividends in shares of Common Stock, certificates, which shall be free of restrictive legends and trading restrictions (other than those required by Section 3.1 (b) of the Purchase Agreement), representing such shares of Common Stock; provided, however, that the

Company shall not be obligated to issue certificates evidencing the shares of Common Stock issuable upon conversion of any shares of Preferred Stock until certificates evidencing such shares of Preferred Stock are delivered for conversion to the Company, or the Holder of such Preferred Stock notifies the Company that such certificates have been lost, stolen or destroyed and provides a bond (or other adequate security) reasonably satisfactory to the Company to indemnify the Company from any loss incurred by it in connection therewith. The Company shall, upon request of the Holder, if available, use its best efforts to deliver any certificate or certificates required to be delivered by the Company under this Section electronically through the Depository Trust Corporation or another established clearing corporation performing similar functions. If in the case of any Conversion Notice such certificate or certificates, including for purposes hereof, any shares of Common Stock to be issued on the Conversion Date on account of accrued but unpaid dividends hereunder, are not delivered to or as directed by the applicable Holder by the third (3rd) Trading Day after the Conversion Date, the Holder shall be entitled by written notice to the Company at any time on or before its receipt of such certificate or certificates thereafter, to rescind such conversion, in which event the Company shall immediately return the certificates representing the shares of Preferred Stock tendered for conversion.

(ii) If the Company fails to deliver to the Holder such certificate or certificates pursuant to Section 5(b)(i), including for purposes hereof, any shares of Common Stock to be issued on the Conversion Date on account of accrued but unpaid dividends hereunder, by the third (3rd) Trading Day after the Conversion Date, the Company shall pay to such Holder, in cash, as liquidated damages and not as a penalty, \$5,000 for each Trading Day after such third (3rd) Trading Day until such certificates are delivered. Nothing herein shall limit a Holder's right to pursue actual damages for the Company's failure to deliver certificates representing shares of Common Stock upon conversion within the period specified herein and such Holder shall have the right to pursue all remedies available to it at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief. The exercise of any such rights shall not prohibit the Holders from seeking to enforce damages pursuant to any other Section hereof or under applicable law. Further, if the Company shall not have delivered any cash due in respect of conversions of Preferred Stock or as payment of dividends thereon by the third (3rd) Trading Day after the Conversion Date, the Holder may, by notice to the Company, require the Company to issue shares of Common Stock pursuant to Section 5(c), except that for such purpose the Conversion Price applicable thereto shall be the lesser of the Conversion Price on the Conversion Date and the Conversion Price on the date of such Holder demand. Any such shares will be subject to the provision of this Section.

(iii) In addition to any other rights available to the Holder, if the Company fails to deliver to the Holder such certificate or certificates pursuant to Section 5(b)(i), including for purposes hereof, any shares of Common Stock to be issued, on the Conversion Date on account of accrued but unpaid dividends hereunder, by the third (3rd) Trading Day after the Conversion Date, and if after such third (3rd) Trading Day the Holder purchases (in an open market transaction or otherwise) Common Stock to deliver in satisfaction of a sale by such Holder of the Underlying Shares which the Holder was entitled to receive upon such conversion (a "Buy-In"), then the Company shall (A) pay in cash to the Holder (in addition to any remedies available to or elected by the Holder) the amount by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the Common Stock so, purchased exceeds (y) the product of (1) the aggregate number of shares of Common Stock that such Holder was entitled to receive from the

conversion at issue multiplied by (2) the market price of the Common Stock at the time of the sale giving rise to such purchase obligation and (B) at the option of the Holder, either return the shares of Preferred Stock for which such conversion was not honored or deliver to such Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its conversion and delivery obligations under Section 5(b)(i). For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted conversion of shares of Preferred Stock with respect to which the market price of the Underlying Shares on the date of conversion was a total of \$10,000 under clause (A) of the immediately preceding sentence, the Company shall be required to pay the Holder \$1,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Day-In. Notwithstanding anything contained herein to the contrary, if a Holder requires the Company to make payment in respect of a Buy-In for the failure to timely deliver certificates hereunder and the Company timely pays in full such payment, the Company shall not be required to pay such Holder liquidated damages under Section 5(b)(ii) in respect of the certificates resulting in such Buy-In.

(c)(i) The conversion price for each share of Preferred Stock (the “Conversion Price”) in effect on any Conversion Date shall be the lesser of (a) 125% of the average of the Per Share Market Values for the fifteen (15) Trading Days immediately preceding the Original Issue Date (the “Initial Conversion Price”) and (b) 101% of the average of the ten (10) lowest Per Share Market Values during the thirty (30) Trading Days immediately preceding the applicable Conversion Date (which, at the Holder’s option, may include Trading Days prior to the 120th day following the Original Issue Date), provided, that such thirty (30) Trading Day period shall be extended for the number of Trading Days, if any, during such period in which (A) trading in the Common Stock is suspended from the NASDAQ or a Subsequent Market on which it is listed for trading prior to such suspension, or (B) after the date declared effective by the Commission, the Underlying Securities Registration Statement is not effective, or (C) after the date declared effective by the Commission, the Prospectus included in the Underlying Securities Registration Statement may not be used by the Holder for the resale of Underlying Shares, provided, further, that during the period from the Original Issue Date until the 120th day following the Original Issue Date, the Conversion Price shall be the Initial Conversion Price.

If (a) the Underlying Securities Registration Statement is not filed on or prior to the Filing Date (if the Company files such Underlying Securities Registration Statement without affording the Holder the opportunity to review and comment on the same as required by Section 3(a) of the Registration Rights Agreement, the Company shall not be deemed to have satisfied this clause (a)), or (b) after the earlier of March 31, 1999 and the date of acceptance by the Commission of the Company’s Annual Report on Form 10-K for the annual period ended December 31, 1998 the Company is notified (orally or in writing, whichever is earlier) by the Commission that an Underlying Securities Registration Statement will not be “reviewed,” or not subject to further review or comment and the Company fails to file with the Commission a request for acceleration in accordance with Rule 12d1-2 promulgated under the Securities Exchange Act of 1934, as amended, within five (5) days of the date of such notification, or (c) the Underlying Securities Registration Statement is not declared effective by the Commission on or prior to the Effectiveness Date, or (d) such Underlying Securities Registration Statement is filed with and declared effective by the Commission but thereafter ceases to be effective as to all Registrable Securities (as defined in the Registration Rights Agreement) at any time prior to the expiration of the Effectiveness Period

without being succeeded within ten (10) days by a subsequent Underlying Securities Registration Statement filed with and declared effective by the Commission, or (e) trading in the Common Stock shall be suspended from the NASDAQ or a Subsequent Market for more than three (3) Business Days (which need not be consecutive days) other than any halts in trading, which do not continue for an entire Trading Day, to allow for the release of information by the Company, (f) the conversion rights of the Holders are suspended for any reason or (g) unless the Company is notified by the Commission that it is not eligible to file the Underlying Securities Registration Statement on Form S-3, an amendment to the Underlying Securities Registration Statement is not filed by the Company with the Commission within fifteen (15) Business Days of the Commission's notifying the company that such amendment is required in order for the Underlying Securities Registration Statement to be declared effective (if the Company files such amendment without affording the Holder the opportunity to review and comment on the same as required by Section 3(a) of the Registration Rights Agreement, the Company shall not be deemed to have satisfied this clause (g)) (any such failure or breach being referred to as an "Event," and for purposes of clauses (a), (c), (f) the date on which such Event occurs, or for purposes of clause (b) the date on which such five (5) day period is exceeded, or for purposes of clause (d) the date which such 10 day-period is exceeded, for purposes of clause (e) the date on which such three (3) Business Day-period is exceeded, or for purposes of clause (g) the date which such 15 Business Day-period is exceeded, being referred to as "Event Date"), then, on the Event Date and each monthly anniversary thereof until the earlier to occur of the second month after the Event Date and such time as the applicable Event is cured, the Company shall pay to the Holder 1.0% of the aggregate Stated Value of the shares of Preferred Stock then held by such Holder (which, for purposes hereof shall include all shares of Preferred Stock tendered for conversion by such Holder but for which Underlying Shares due in respect thereof shall not have been received by such Holder) in cash, as liquidated damages and not as a penalty. Commencing on the second month anniversary after the Event Date and on each monthly anniversary thereof until such time as the applicable Event is cured, the Company shall pay to the Holder 1.5% of the aggregate Stated Value of the shares of Preferred Stock then held by such Holder (which, for purposes hereof shall include all shares of Preferred Stock tendered for conversion by such Holder but for which Underlying Shares due in respect thereof shall not have been received by such Holder) in cash, as liquidated damages and nor as a penalty. The provisions of this Section are not exclusive and shall in no way limit the Company's obligations under the Registration Rights Agreement.

(ii) If the Company, at any time while any shares of Preferred Stock are outstanding, shall (a) pay a stock dividend or otherwise make a distribution or distributions on shares of its Junior Securities or pari passu securities payable in shares of Common Stock, (b) subdivide outstanding shares of Common Stock into a larger number of shares, (c) combine outstanding shares of Common Stock into a smaller number of shares, or (d) issue by reclassification and exchange of the Common Stock any shares of capital stock of the Company, then the Initial Conversion Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock outstanding before such event and of which the denominator shall be the number of shares of Common Stock outstanding after the event. Any adjustment made pursuant to this Section 5(c)(ii) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

(iii) If the Company, at any time while any shares of Preferred Stock are outstanding, shall issue rights, warrants or options to all holders of Common Stock

entitling them to subscribe for or purchase shares of Common Stock at a price per share less than the Per Share Market Value at the record date mentioned below, then the Initial Conversion Price shall be multiplied by a fraction, the numerator of which shall be (the number of shares of Common Stock outstanding immediately prior to the issuance of such rights, warrants or options, plus the number of shares of Common Stock which the aggregate offering price of the total number of shares so offered would purchase at such Per Share Market Value, and the denominator of which shall be the sum of the number of shares of Common Stock outstanding immediately prior to such issuance plus the number of shares of Common Stock offered for subscription or purchase. Such adjustment shall be made whenever such rights or warrants are issued, and shall become effective immediately after the record date for the determination of stockholders entitled to receive such rights or warrants. However, upon the expiration of any right, warrant or option to purchase shares of Common Stock the issuance of which resulted in an adjustment in the Conversion Price pursuant to this Section 5(c)(iii), if any such right, warrant or option shall expire and shall not have been exercised, the Conversion Price shall immediately upon such expiration shall be recomputed and effective immediately upon such expiration shall be increased to the price which it would have been (but reflecting any other adjustments in the Conversion Price made pursuant to the provisions of this Section 5 upon the issuance of other rights or warrants) had the adjustment of the Conversion Price made upon the issuance of such rights, warrants, or options been made on the basis of offering for subscription or purchase only that number of shares of Common Stock actually purchased upon the exercise of such rights, warrants or options actually exercised.

(iv) If the Company or any subsidiary thereof, as applicable with respect to Common Stock Equivalents (as defined below), at any time while any shares of Preferred Stock are outstanding, shall issue shares of Common Stock or rights, warrants, options or other securities or debt that is convertible into or exchangeable for shares) of Common Stock, other than (i) the granting of options or warrants to employees, officers, directors, consultants and other service providers (but not Strategic Partners (as defined in the Purchase Agreement)), and the issuance of shares of Common Stock upon exercise of options granted, under any stock option plan heretofore or hereinafter duly adopted by the Company and (ii) the issuance of shares of Common Stock issuable pursuant to the Private Equity Line of Credit Agreement dated March 27, 1998 between the Company and Kingsbridge Capital Limited, as described in the Company's Amendment No. 2 on Form SB-2, filed with the Commission on August 13, 1998 (but not pursuant to any amendment or modification thereto) ("Common Stock Equivalents") entitling any Person to acquire shares of Common Stock at a price per share less than the Conversion Price, then the Conversion Price shall be multiplied by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to the issuance of such Common Stock or such Common Stock Equivalents plus the number of shares of Common Stock which the offering price for such shares of Common Stock or Common Stock Equivalents would purchase at the Conversion Price, and the denominator of which shall be the sum of the number of shares of Common Stock outstanding immediately prior to such issuance this the number of shares of Common Stock so issued or issuable, provided, that for purposes hereof, all shares of Common Stock that are issuable upon conversion, exercise or exchange of Common Stock Equivalents shall be deemed outstanding immediately after the issuance of such Common Stock Equivalents. Such adjustment shall be made whenever such Common Stock or Common Stock Equivalents are issued.

(v) If the Company, at any time while shares of Preferred Stock are outstanding, shall distribute to all holders of Common Stock (and not to Holders) evidences of its

indebtedness or assets or rights or warrants to subscribe for or purchase any security (excluding those referred to in Sections 5(c)(ii)-(iv) above), then in each such case the Initial Conversion Price at which each share of Preferred Stock shall thereafter be convertible shall be determined by multiplying the Initial Conversion Price in effect immediately prior to the record date fixed for determination of stockholders entitled to receive such distribution by a fraction of which the denominator shall be the Per Share Market Value determined as of the record date mentioned above, and of which the numerator shall be such Per Share Market Value on such record date less the then fair market value at such record date of the portion of such assets or evidence of indebtedness so distributed applicable to one outstanding share of Common Stock as determined by the Board of Directors in good faith; provided, however, that in the event of a distribution exceeding ten percent (10%) of the net assets of the Company, if the Holders of a majority in interest of the Preferred Stock dispute such valuation, such fair market value shall be determined by a nationally recognized or major regional investment banking firm or firm of independent certified public accountants of recognized standing (which may be the firm that regularly examines the financial statements of the Company) (an “Appraiser”) selected in good faith by the Holders of a majority in interest of the shares of Preferred stock then outstanding; and provided, further, that the Company, after receipt of the determination by such Appraiser shall have the right to select an additional Appraiser, in good faith, in which case the fair market value shall be equal to the average of the determinations by each such Appraiser. In either case the adjustments shall be described in a statement provided to the Holders of the portion of assets or evidences of indebtedness so distributed or such subscription rights applicable to one share of Common Stock. Such adjustment shall be made whenever any such distribution is made and shall become effective immediately after the record date mentioned above.

(vi) All calculations under this Section 5 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be.

(vii) Whenever the Conversion Price is adjusted pursuant to Section 5(c)(ii), (iii), (iv), or (v) the Company shall promptly mail to each Holder, a notice setting forth the Conversion Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

(viii) In case of any reclassification of the Common Stock, or any compulsory share exchange pursuant to which the Common Stock is converted into other securities, cash or property (other than compulsory share exchanges which constitute Change of Control Transactions), the Holders of the Preferred Stock then outstanding shall have the right thereafter to convert such shares only into the shares of stock and other securities, cash and property receivable upon or deemed to be held by holders of Common Stock following such reclassification or share exchange, and the Holders of the Preferred Stock shall be entitled upon such event to receive such amount of securities, cash or property as a holder of the number of shares of Common Stock of the Company into which such shares of Preferred Stock could have been converted immediately prior to such reclassification or share exchange would have been entitled. This provision shall similarly apply to successive reclassifications or share exchanges.

(ix) If (a) the Company shall declare a dividend (or any Other distribution) on the Common Stock, (b) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (c) the Company shall authorize the granting to all holders of Common Stock rights or warrants to subscribe for or purchase any shares of capital

stock of any class or of any rights, (d) the approval of any stockholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company is a party, any sale or transfer of all or substantially all of the assets of the Company, of any compulsory share of exchange whereby the Common Stock is converted into other securities, cash or property, or (e) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company; then the Company shall cause to be filed at each office or agency maintained for the purpose of conversion of Preferred Stock, and shall cause to be mailed to the Holders at their last addresses as they shall appear upon the stock books of the Company, at least 20 calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of Common Stock of record shall be entitled to exchange their Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange. Holders are entitled to convert shares of Preferred Stock during the 20-day period commencing the date of such notice to the effective date of the event triggering such notice.

(x) In case of any (1) merger or consolidation of the Company with or into another Person that would constitute a Change of Control Transaction, or (2) sale by the Company of more than one-half of the assets of the Company (on an as valued basis) in one or a series of related transactions, or (3) tender or other offer or exchange (whether by the Company or another Person) pursuant to which holders of Common Stock are permitted to tender or exchange their shares for other securities, stock, cash or property of the Company or another Person; then, if a Holder has not exercised its rights of redemption, if any, under Section 7 hereof, such Holder shall have the right thereafter to (A) if permitted under Section 7 hereof, exercise its rights of redemption under Section 7 with respect to such event, (B) convert its shares of Preferred Stock into the shares of stock and other securities, cash and property receivable upon or deemed to be held by holders of Common Stock following such merger, consolidation or sale, and such Holder shall be entitled upon such event or series of related events to receive such amount of securities, cash and property as the shares of Common Stock into which such shares of Preferred Stock could have been converted immediately prior to such merger, consolidation or sale would have been entitled, (C) in the case of a merger or consolidation, (x) require the surviving entity to issue shares of convertible preferred stock or convertible debentures with such aggregate stated value or in such fees amount, as the case may be, equal to the Stated Value of the shares of Preferred Stock then held by such Holder, plus all accrued and unpaid dividends and other amounts owing thereon, which newly issued shares of preferred stock or debentures shall have terms identical (including with respect to conversion) to the terms of the Preferred Stock (except, in the case of debentures, as may be required to reflect the differences between debt and equity) and shall be entitled to all of the rights, and privileges of a Holder of Preferred Stock set forth herein and the agreements pursuant to which the Preferred Stock was issued (including, without limitation, as such rights relate to the acquisition, transferability, registration and listing of such shares of stock other securities issuable upon conversion thereof), and (y) simultaneously with the issuance of such convertible preferred stock or convertible debentures, shall have the right to convert such instrument only into shares and other securities cash and property receivable upon or deemed to be held by holders of Common Stock following such

merger or consolidation, or (D) in the event of an exchange or tender offer or other transaction contemplated by clause (3) of this Section, tender or exchange its shares of Preferred Stock for such securities, stock, cash and other property receivable upon or deemed to be held by holders of Common Stock that have tendered or exchanged their shares of Common Stock following such tender or exchange, and such Holder shall be entitled upon such exchange or tender to receive such amount of securities, cash and property as the shares of Common Stock into which such shares of Preferred Stock could have been converted (taking into account all then accrued and unpaid dividends) immediately prior to such tender or exchange would have been entitled as would have been issued. In the case of clause (C), the conversion price applicable for the newly issued shares of convertible preferred stock or convertible debentures shall be based upon the amount of securities, cash and property that each share of Common Stock would receive in such transaction, the Conversion Ratio immediately prior to the effectiveness or closing date for such transaction and the Conversion Price stated herein. The terms of any such merger, sale, consolidation, tender or exchange shall include such terms so as continue to give the Holders of Preferred Stock the right to receive the securities, cash and property set forth in this Section upon any conversion or redemption following such event. This provision shall similarly apply to successive such events.

(d) The Company covenants that it will at all times reserve and keep available out of its authorized and unissued shares of Common Stock solely for the purpose of issuance upon conversion of Preferred Stock and payment of dividends on Preferred Stock, each as herein provided, free from preemptive rights or any other actual contingent purchase rights of persons other than the Holders, not less than such number of shares of Common Stock as shall (subject to any additional requirements of the Company as to reservation of such shares set forth in the Purchase Agreement) be issuable (taking into account the adjustments and restrictions of Section 5(a) and Section 5(c)) upon the conversion of all outstanding shares of Preferred Stock and payment of dividends hereunder (assuming all such dividends are paid in shares of Common Stock). The Company covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly and validly authorized, issued and fully paid, non assessable and freely tradeable, subject to the legend requirements of Section 3.1(b) of the Purchase Agreement

(e) Upon a conversion hereunder the Company shall not be required to issue stock certificate representing fraction of shares of Common Stock, but may if otherwise permitted, make a cash payment in respect of any final fraction of a share based on the Per Share Market Value at such time. If the Company elects not, or is unable, to make such a cash payment, the Holder of a share of Preferred Stock shall be entitled to receive, in lieu of the final fraction of a share, one whole share of Common Stock.

(f) The issuance of certificates for Common Stock on conversion of Preferred Stock and as payment of dividends in shares of Common Stock shall be made without charge to the Holders thereof for any documentary stamp or similar taxes that may be payable in respect of the issue or delivery of such certificate, provided that the Company shall not be required to pay any tax that may be payable in respect of any transfer involved in the issuance and delivery of any such certificate upon conversion in a name other than that of the Holder of such shares of Preferred Stock so converted.

(g) Shares of Preferred Stock converted into Common Stock or redeemed in accordance with the terms hereof shall be canceled and may not be reissued.

(h) Any and all notices or other communications or deliveries to be provided by the Holders of the Preferred Stock hereunder, including, without limitation, any Conversion Notice, shall be in writing and delivered personally, by facsimile or sent by a nationally recognized overnight courier service, addressed to the attention of the Chief Financial Officer of the Company at the facsimile telephone number or address of the principal place of business of the Company as set forth in the Purchase Agreement. Any and all notices or other communications or deliveries to be provided by the Company hereunder shall be in writing and delivered personally, by facsimile or sent by a nationally recognized overnight courier service, addressed to each Holder at the facsimile telephone number or address of such Holder appearing on the books of the Company, or if no such facsimile telephone number or address appears, at the principal place of business of the Holder. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile telephone number specified in this Section prior to 8:00 p.m. (New York City time), (ii) the date after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile telephone number specified in this Section later than 8:00 pm. (New York City time) on any date and earlier than 11:59 p.m. (New York City time) on such date, (iii) upon receipt, if sent by a nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given.

Section 6. Optional Redemption.

(a) Subject to the provisions of this Section 6, the Company shall have the right, exercisable upon five (5) Trading Days' notice (an "Optional Redemption Notice") to the Holders of the Preferred Stock after any date on which the closing sales price for the Common Stock as reported by Bloomberg Information Services, Inc., or any successor to its function of reporting prices, for the previous ten (10) consecutive Trading Days is either (i) less than \$5.00 or (ii) greater than \$20.00 (such date, the "Optional Redemption Qualifying Date"), to redeem all or any portion of the shares of Preferred Stock which have not previously been converted or redeemed, at a price equal to the Optional Redemption Price (as defined below), provided, that if the Company shall not have provided a Holder with notice of its intent to redeem shares of Preferred Stock pursuant to this Section 6 within twenty (20) Trading Days from the Optional Redemption Qualifying Date, the Company shall be precluded from redeeming shares of Preferred Stock pursuant to this Section until the next Optional Redemption Qualifying Date, if any (the calculation for one Optional Redemption Qualifying Date may not include any Trading Days used to calculate a prior Optional Redemption Qualifying Date). The Company shall not be entitled to deliver an Optional Redemption Notice to the Holders if: (i) the number of shares of Common Stock at the time authorized, unissued and unreserved for all purposes is insufficient to satisfy the Company's conversion obligations of all shares of Preferred Stock then outstanding, or (ii) neither the Underlying Shares then outstanding are registered for resale pursuant to an effective Underlying Securities Registration Statement nor may such Underlying Shares be sold without volume restrictions pursuant to Rule 144 promulgated under the Securities Act, as determined by counsel to the Company pursuant to a written opinion letter, addressed to the Company's transfer agent in the form and substance acceptable to the Holders and such transfer agent, or (iii) the Common Stock is not then listed for trading on the NASDAQ or on a Subsequent Market. The entire Optional Redemption Price shall be paid in cash. Holders may convert (and the Company shall honor such conversions in accordance with the terms hereof) any shares of Preferred Stock, including shares subject to an Optional Redemption Notice, during the

period from the date thereof through the 4th Trading Day after the receipt of an Optional Redemption Notice, provided, that, notwithstanding anything herein to the contrary, the Conversion Price applicable to such conversions shall be subject to a floor of \$5.00.

(b) If any portion of the Optional Redemption Price shall not be paid by the Company by the 20th Trading Day after the delivery of an Optional Redemption Notice, interest shall accrue thereon at the rate of 15% per annum (or the maximum rate permitted by applicable law, whichever is less) until the Optional Redemption Price plus all such interest is paid in full. In addition, if any portion of the Optional Redemption Price remains unpaid after the date due, the Holder of the Preferred Stock subject to such redemption may elect, by written notice to the Company given at any time thereafter, to either (i) demand conversion of all or any portion of the shares of Preferred Stock for which such Optional Redemption Price, plus interest thereof, has not been paid in full (the "Unpaid Redemption Shares"), in which event the Per Share Market Value for such shares shall be the lower of the Per Share Market Value calculated on the date the Optional Redemption Price was originally due and the Per Share Market Value as of the Holder's written demand for conversion, or (ii) invalidate ab initio such redemption, notwithstanding anything herein contained to the contrary. If the Holder elects option (i) above, the Company shall within three (3) Trading Days of its receipt of such election deliver to the Holder the share of Common Stock, issuable upon conversion of the Unpaid Redemption Shares subject to such Holder conversion demand and otherwise perform its obligations hereunder with respect thereto; or, If the Holder elects option (ii) above, the Company shall promptly, and in any event not later than three (3) Trading Days from receipt of Holder's notice of such election, return to the Holder all of the Unpaid Redemption Shares.

(c) The "Optional Redemption Price" shall equal the sum of (i) the greater of (A) the Stated Value of the shares of Preferred Stock to be redeemed and all accrued dividends thereon and (B) the product of (x) the number of shares of Preferred Stock to be redeemed and (y) the product of (1) the average Per Share Market Value for the five (5) Trading Days immediately preceding (x) the date of the Optional Redemption Notice or (y) the date of payment in full by the Company of the Optional Redemption Price, whichever is greater, and (2) the Conversion Ratio calculated on the date of the Optional Redemption Notice, and (ii) all other amounts, costs, expenses and liquidated damages due in respect of such shares of Preferred Stock.

Section 7. Redemption Upon Triggering Events.

(a) Upon the occurrence of a Triggering Event, each Holder shall (in addition to all other rights it may have hereunder or under applicable law), have the right, exercisable at the sole option of such Holder, to require the Company to redeem all or a portion of the Preferred Stock then held by such Holder for a redemption price, in cash, equal to the sum of (i) the Mandatory Redemption Amount plus (ii) the product of (A) the number of Underlying Shares issued in respect of conversions or as payment of dividends hereunder and then held by the Holder and (B) the Per Share Market Value on the date such redemption is demanded or the date the redemption price hereunder is paid in full, whichever is greater (such sum, the "Redemption Price"). The Redemption Price shall be due and payable within (10) days of the date on which the notice for the payment therefor is provided by a Holder. If the Company fails to pay the redemption price hereunder in full pursuant to this Section on the date such amount is due in accordance with this Section, the

Company will pay interest thereon at a rate of 15% (or the maximum amount permitted under applicable law, whichever is less) per annum, accruing daily from such date until the redemption price, plus all such interest thereon, is paid in full. For purposes of this Section, a share of Preferred Stock is outstanding until such date as the Holder shall have received Underlying Shares upon & conversion (or attempted conversion) thereof that meets the requirements hereof.

A “Triggering Events” means any one or more of the following events (whatever the reason and whether it shall be voluntary or involuntary or effected by operation of law or pursuant to any judgement, decree or order of any court, or any order, rule or regulation of any administrative or governmental body):

- (i) the failure of an Underlying Securities Registration Statement to be declared effective by the Commission on or prior to the 180th day after the Original Issue Date;
- (ii) if, during the Effectiveness Period, the effectiveness of the Underlying Securities Registration Statement lapses for any reason for more than an aggregate of three (3) Trading Days, or the Holder shall not be permitted to resell Registrable Securities under the Underlying Securities Registration Statement for more than an aggregate of three (3) Trading Days (which need not be consecutive Trading Days);
- (iii) the failure of the Common Stock to be listed for trading on the NASDAQ or on a Subsequent Market or the suspension of the Common Stock from trading on the NASDAQ or on a Subsequent Market, in either case, for more than three (3) Trading Days (which need not be consecutive Trading Days);
- (iv) the Company shall fail for any reason to deliver certificates representing Underlying Shares issuable upon a conversion hereunder that comply with the provisions hereof prior to the 10th day after the Conversion Date or the Company shall provide notice to any Holder, including by way of public announcement, at any time, of its intention not to comply with requests for conversion of any Preferred Stock in accordance with the terms hereof;
- (v) the Company shall be a party to any Change of Control Transaction, shall agree to sell (in one or a series of related transactions) all or substantially all of its assets (whether or not such sale would constitute a Change of Control Transaction) or shall redeem more than a de minimis number of Common Stock or other Junior Securities (other than redemptions of Underlying Shares);
- (vi) an Event shall not have been cured to the satisfaction of the Holders prior to the expiration of thirty (30) days from the Event Date relating thereto;
- (vii) the Company shall fail for any reason to pay in full the amount of cash due pursuant to a Buy-In within seven (7) days after notice therefor is delivered hereunder; or
- (viii) the Company shall fail to have available a sufficient number of authorized and unreserved shares of Common Stock to issue to such Holder upon a conversion hereunder.

Section 8. Definitions. For the purposes hereof, the following terms shall have the following meanings:

“Change of Control Transaction” means the occurrence of any of (i) an acquisition after the date hereof by an individual or legal entity or “group” (as described in Rule 13d-5(b)(1) promulgated under the Exchange Act) of effective control (whether through legal or beneficial ownership of capital stock of the Company, by contract or otherwise) of in excess of 33% of the voting securities of the Company, (ii) a replacement at one time or over time of more than one-half of the members of the Company’s board of directors which is not approved by a majority of those individuals who are members of the board of directors on the date hereof (or by those individuals who are serving as members of the board of directors on any date whose nomination to the board of directors was approved by a majority of the members of the board of directors who are members on the date hereof), (iii) the merger of the Company with or into another entity, consolidation or sale of all or substantially all of the assets of the Company in one or a series of related transactions, or (iv) the execution by the Company of an agreement to which the Company is a party or by which it is bound, providing for any of the events set forth above in (i), (ii) or (iii).

“Commission” means the Securities and Exchange Commission.

“Common Stock” means the Company’s Common Stock, par value \$.001 per share, and stock of any other class into which such shares may hereafter have been reclassified or changed.

“Conversion Ratio” means, at any time, a fraction, the numerator of which is Stated Value plus accrued but unpaid dividends but only to the extent not paid in Common Stock in accordance with the terms hereof, and the denominator of which is the Conversion Price at such time.

“Dividend Effectiveness Date” means the earlier to occur of (x) the Effectiveness Date (as defined in the Registration Rights Agreement) and (y) the date that an Underlying Securities Registration Statement is declared effective by the Commission.

“Exchange Act” means the Securities Exchange Act of 1934, as amended.

“Junior Securities” means the Common Stock and all other equity securities of the Company which are junior in rights and liquidation preference to the Preferred Stock.

“Mandatory Redemption Amount” for each share of Preferred Stock means the sum of (i) the greater of (A) the Stated Value and all accrued dividends with respect to such share and (B) the product of (a) the Per Share Market Value on the Trading Day immediately preceding (x) the date of the Triggering Event or the Conversion Date, as this case may be, or (y) the date of payment in full by the Company of the applicable redemption price, whichever is greater, and (b) the Conversion Ratio calculated on the date of the Triggering Event, or the Conversion Date, as the case may be, and (ii) all other amounts, costs, expenses and liquidated damages due in respect of such share of Preferred Stock.

“Original Issue Date” shall mean the date of the first issuance of any shares of the Preferred Stock regardless of the number of transfers of any particular shares of Preferred Stock and regardless of the number of certificates which may be issued to evidence such Preferred Stock.

“Per Share Market Value” means on any particular date (a) the closing bid price per share of Common Stock on such date on the NASDAQ or on the Subsequent Market on which the Common Stock is then listed or quoted, or if there is no such price on such date, then the closing bid price on the NASDAQ or on such Subsequent Market on the date nearest preceding such date, or (b) if the Common Stock is not then listed or quoted on the NASDAQ or on a Subsequent Market, the closing bid price for a shares of Common Stock in the over-the-counter market, as reported by the National Quotation Bureau Incorporated or similar organization or agency succeeding to its functions of reporting prices) at the close of business on such date, or (c) if the Common Stock is not then reported by the National Quotation Bureau Incorporated (or similar organization or agency succeeding to its functions of reporting prices), then the average of the “Pink Sheet” quotes for the relevant conversion period, as determined in good faith by the Holder, or (d) if the Common Stock are not then publicly traded the fair market value of a Common Share as determined by an Appraiser selected in good faith by the Holders of a majority of the shares of the Preferred Stock.

“Person” means a corporation, an association, a partnership, organization, a business, an individual, a government or political subdivision thereof or a governmental agency.

“Purchase Agreement” means the Convertible Preferred Stock Purchase Agreement, dated as of the Original Issue Date, between the Company and the original Holder.

“Registration Rights Agreement” means the Registration Rights Agreement, dated as of the Original Issue Date, between the Company and the original Holder.

“Securities Act” means the Securities Act of 1933, as amended.

“Trading Day” means (a) a day on which the Common Stock is traded on the NASDAQ or on the Subsequent Market on which the Common Stock is then listed or quoted, as the case may be, or (b) if the Common Stock is not listed on the NASDAQ or on a Subsequent Market, a day on which the Common Stock is traded in the over-the-counter market, as reported by the OTC Bulletin Board, or (c) if the Common Stock is not quoted on the OTC Bulletin Board, a day on which the Common Stock is quoted in the over-the-counter market as reported by the National Quotation Bureau Incorporated (or any similar organization or agency succeeding its functions of reporting prices); provided, however, that in the event that the Common Stock is not listed or quoted as set forth in (a), (b) and (c) hereof, then Trading Day shall mean any day except Saturday, Sunday and any day which shall be a legal holiday or a day on which banking institutions in the State of New York are authorized or required by law or other government action to close.

“Underlying Securities Registration Statement” means a registration statement that meets the requirements of the Registration Rights Agreement and registers the resale of all Underlying Shares by the recipient thereof, who shall be named as a “selling stockholder” thereunder.

“Underlying Shares” means, collectively, the shares of Common Stock into which the Shares are convertible and the shares of Common Stock issuable upon payment of dividends thereon in accordance with the terms hereof.

IN WITNESS WHEREOF, the undersigned has caused this Certificate of Designation to be duly executed by its Chief Financial Officer this 28th day of January, 1999.

NEOTHERAPEUTICS, INC.

By: /s/ Samuel Gulko
Samuel Gulko, Chief Financial Officer

EXHIBIT A

NOTICE OF CONVERSION

(To be Executed by the Registered Holder
in order to Convert shares of Preferred Stock)

The undersigned hereby elects to convert the number of shares of 5% Series A Preferred Stock with Conversion Features indicated below, into shares of Common Stock, par value \$.001 per share (the "Common Stock"), of NeoTherapeutics, Inc. (the "Company") according to the conditions hereof, as of the date written below. If shares are to be issued in the name of a person other than undersigned, the undersigned will pay all transfer taxes payable with respect thereto and is delivering herewith such certificates and opinions as reasonably requested by the Company in accordance therewith. No fee will be charged to the Holder for any conversion, except for such transfer taxes, if any.

Conversion calculations:

Date to Effect Conversion

Number of shares of Preferred Stock to be Converted

Number of shares of Common Stock to be Issued

Applicable Conversion Price

Signature

Name

Address

CERTIFICATE OF DESIGNATION OF RIGHTS, PREFERENCES AND PRIVILEGES

OF

SERIES B JUNIOR PARTICIPATING PREFERRED STOCK

OF

NEOTHERAPEUTICS, INC.

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

Alvin J. Glasky, Ph.D., the Chief Executive Officer, and Samuel Gulko, the Chief Financial Officer of NeoTherapeutics, Inc., a corporation organized and existing under the General Corporation Law of the State of Delaware, in accordance with the provisions of Section 103 thereof, DO HEREBY CERTIFY:

That pursuant to the authority conferred upon the Board of Directors by the Certificate of Incorporation of said Corporation, the Board of Directors on December 13, 2000, adopted the following resolution creating a series of 200,000 shares of Preferred Stock designated as Series B Junior Participating Preferred Stock:

“RESOLVED, that pursuant to the authority vested in the Board of Directors of the corporation by the Certificate of Incorporation, the Board of Directors does hereby provide for the issue of a series of Preferred Stock, \$.001 par value, of the Corporation, to be designated “Series B Junior Participating Preferred Stock,” initially consisting of 200,000 shares and to the extent that the designations, powers, preferences and relative and other special rights and the qualifications, limitations and restrictions of the Series B Junior Participating Preferred Stock are not stated and expressed in the Certificate of Incorporation, does hereby fix and herein state and express such designations, powers, preferences and relative and other special rights and the qualifications, limitations and restrictions thereof, as follows (all terms used herein which are defined in the Certificate of Incorporation shall be deemed to have the meanings provided therein):

Section 1. Designation and Amount. The shares of such series shall be designated as “Series B Junior Participating Preferred Stock,” par value \$.001 per share, and the number of shares constituting such series shall be 200,000. Such number of shares may be increased or decreased by resolution of the Board of Directors; provided, that no decrease shall reduce the number of shares of Series B Junior Participating Preferred Stock to a number less than the number of shares then outstanding plus the number of shares reserved for issuance upon the exercise of outstanding options, rights, warrants or upon the conversion of any outstanding securities issued by the Corporation convertible into Series B Junior Participating Preferred Stock.

Section 2. Dividends and Distributions.

(A) Subject to the prior and superior right of the holders of any shares of any series of Preferred Stock ranking prior and superior to the shares of Series B Junior Participating Preferred Stock with respect to dividends, the holders of shares of Series B Junior Participating Preferred Stock shall be entitled to receive when, as and if declared by the Board of Directors out of funds legally available for the purpose, quarterly dividends payable in cash on the last day of March, June, September and December in each year (each such date being referred to herein as a "Quarterly Dividend Payment Date"), commencing on the first Quarterly Dividend Payment Date after the first issuance of a share or fraction of a share of Series B Junior Participating Preferred Stock, in an amount per share (rounded to the nearest cent) equal to, subject to the provision for adjustment hereinafter set forth, 100 times the aggregate per share amount of all cash dividends, and 100 times the aggregate per share amount (payable in kind) of all non-cash dividends or other distributions other than a dividend payable in shares of Common Stock or a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise), declared on the Common Stock of the Corporation (the "Common Stock") since the immediately preceding Quarterly Dividend Payment Date, or, with respect to the first Quarterly Dividend Payment Date, since the first issuance of any share or fraction of a share of Series B Junior Participating Preferred Stock. In the event the Corporation shall at any time after December 13, 2000 (the "Rights Declaration Date") (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case, the amount to which holders of shares of Series B Junior Participating Preferred Stock were entitled immediately prior to such event under the preceding sentence shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(B) The Corporation shall declare a dividend or distribution on the Series B Junior Participating Preferred Stock as provided in paragraph (A) above immediately after it declares a dividend payable in shares of Common Stock.

(C) Dividends shall begin to accrue and be cumulative on outstanding shares of Series B Junior Participating Preferred Stock from the Quarterly Dividend Payment Date next preceding the date of issue of such shares of Series B Junior Participating Preferred Stock, unless the date of issue of such shares is prior to the record date for the first Quarterly Dividend Payment Date, in which case dividends on such shares shall begin to accrue from the date of issue of such shares, or unless the date of issue is a Quarterly Dividend Payment Date or is a date after the record date for the determination of holders of shares of Series B Junior Participating Preferred Stock entitled to receive a quarterly dividend and before such Quarterly Dividend Payment Date, in either of which events such dividends shall begin to accrue and be cumulative from such Quarterly Dividend Payment Date. Accrued but unpaid dividends shall not bear interest. Dividends paid on the shares of Series B Junior Participating Preferred Stock in an amount less than the total amount of such dividends at the time accrued and payable on such shares shall be allocated pro rata on a share-by-share basis among all such shares at the time outstanding. The Board of Directors may fix a record date for the determination of holders of shares of Series B Junior Participating Preferred Stock entitled to receive payment of a dividend or distribution declared thereon, which record date shall be no more than thirty (30) days prior to the date fixed for the payment thereof.

Section 3. Voting Rights. The holders of shares of Series B Junior Participating Preferred Stock shall have the following voting rights:

(A) Subject to the provision for adjustment hereinafter set forth, each share of Series B Junior Participating Preferred Stock shall entitle the holder thereof to 100 votes on all matters submitted to a vote of the stockholders of the Corporation. In the event the Corporation shall at any time after the Rights Declaration Date (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the number of votes per share to which holders of shares of Series B Junior Participating Preferred Stock were entitled immediately prior to such event shall be adjusted by multiplying such number by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(B) Except as otherwise provided herein or by law, the holders of shares of Series B Junior Participating Preferred Stock and the holders of shares of Common Stock shall vote together as one class on all matters submitted to a vote of stockholders of the Corporation.

(C) Except as required by law, holders of Series B Junior Participating Preferred Stock shall have no special voting rights and their consent shall not be required (except to the extent they are entitled to vote with holders of Common Stock as set forth herein) for taking any corporate action.

Section 4. Certain Restrictions.

(A) The Corporation shall not declare any dividend on, make any distribution on, or redeem or purchase or otherwise acquire for consideration any shares of Common Stock after the first issuance of a share or fraction of a share of Series B Junior Participating Preferred Stock unless concurrently therewith it shall declare a dividend on the Series B Junior Participating Preferred Stock as required by Section 2 hereof.

(B) Whenever quarterly dividends or other dividends or distributions payable on the Series B Junior Participating Preferred Stock as provided in Section 2 are in arrears, thereafter and until all accrued and unpaid dividends and distributions, whether or not declared, on shares of Series B Junior Participating Preferred Stock outstanding shall have been paid in full, the Corporation shall not:

(i) declare or pay dividends on, make any other distributions on, or redeem or purchase or otherwise acquire for consideration any shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series B Junior Participating Preferred Stock;

(ii) declare or pay dividends on, make any other distributions on any shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with Series B Junior Participating Preferred Stock, except dividends paid ratably on the Series B Junior Participating Preferred Stock and all such parity stock on which dividends are payable or in arrears in proportion to the total amounts to which the holders of all such shares are then entitled;

(iii) redeem or purchase or otherwise acquire for consideration shares of any stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series B Junior Participating Preferred Stock, provided that the Corporation may at any time redeem purchase or otherwise acquire shares of any such parity stock in exchange for shares of any stock of the Corporation ranking junior (either as to dividends or upon dissolution, liquidation or winding up) to the Series B Junior Participating Preferred Stock; or

(iv) purchase or otherwise acquire for consideration any shares of Series B Junior Participating Preferred Stock, or any shares of stock ranking on a parity with the Series B Junior Participating Preferred Stock, except in accordance with a purchase offer made in writing or by publication (as determined by the Board of Directors) to all holders of such shares upon such terms as the Board of Directors, after consideration of the respective annual dividend rates and other relative rights and preferences of the respective series and classes, shall determine in good faith will result in fair and equitable treatment among the respective series or classes.

(C) The Corporation shall not permit any subsidiary of the Corporation to purchase or otherwise acquire for consideration any shares of stock of the Corporation unless the Corporation could, under paragraph (A) of this Section 4, purchase or otherwise acquire such shares at such time and in such manner.

Section 5. Reacquired Shares. Any shares of Series B Junior Participating Preferred Stock purchased or otherwise acquired by the Corporation in any manner whatsoever shall be retired and cancelled promptly after the acquisition thereof. All such shares shall upon their cancellation become authorized but unissued shares of Preferred Stock and may be reissued as part of a new series of Preferred Stock to be created by resolution or resolutions of the Board of Directors, subject to the conditions and restrictions on issuance set forth herein.

Section 6. Liquidation, Dissolution or Winding Up.

(A) Upon any liquidation (voluntary or otherwise), dissolution or winding up of the Corporation, no distribution shall be made to the holders of shares of stock ranking Junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series B Junior Participating Preferred Stock unless, prior thereto, the holders of shares of Series B Junior Participating Preferred Stock shall have received an amount equal to accrued and unpaid dividends and distributions thereon, whether or not declared, to the date of such payment, plus an amount equal to the greater of (1) \$100.00 per share, provided that in the event the Corporation does not have sufficient assets, after payment of its liabilities and distribution to holders of Preferred Stock ranking prior to the Series B Junior Participating Preferred Stock, available to permit payment in full of the \$100.00 per share amount, the amount required to be paid under this Section 6(A)(1) shall, subject to Section 6(B) hereof, equal the value of the amount of available assets divided by the number of outstanding shares of Series B Junior Participating Preferred Stock or (2) subject to the provisions for adjustment hereinafter set forth, 100 times the aggregate per share amount to be distributed to the holders of Common Stock (the greater of (1) or (2), the "Series B Liquidation Preference"). In the event the Corporation shall at any time after the Rights Declaration Date (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the amount to which holders of shares of Series B Junior Participating Preferred Stock were entitled immediately prior to such event under clause (2) of the preceding sentence shall be adjusted by

multiplying such amount by a fraction the numerator of which is the number of shares of Common Stock that were outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(B) In the event, however, that there are not sufficient assets available to permit payment in full of the Series B Liquidation Preference and the liquidation preferences of all other series of Preferred Stock, if any, which rank on a parity with the Series B Junior Participating Preferred Stock, then such remaining assets shall be distributed ratably to the holders of such parity shares in proportion to their respective liquidation preferences.

Section 7. Consolidation, Merger, etc. In case the Corporation shall enter into any consolidation, merger, combination or other transaction in which the shares of Common Stock are exchanged for or changed into other stock or securities, cash and/or any other property, then in any such case the shares of Series B Junior Participating Preferred Stock shall at the same time be similarly exchanged or changed in amount per share (subject to the provision for adjustment hereinafter set forth) equal to 100 times the aggregate amount of stock, securities, cash and/or any other property (payable in kind), as the case may be, into which or for which each share of Common Stock is changed or exchanged. In the event the Corporation shall at any time after the Rights Declaration Date (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the amount set forth in the preceding sentence with respect to the exchange or change of shares of Series B Junior Participating Preferred Stock shall be adjusted by multiplying such amount by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

Section 8. Redemption. The shares of Series B Junior Participating Preferred Stock shall not be redeemable.

Section 9. Ranking. The Series B Junior Participating Preferred Stock shall rank junior to all other series of the Corporation's Preferred Stock as to the payment of dividends and the distribution of assets, unless the terms of any such series shall provide otherwise. The Series B Junior Participating Preferred Stock shall rank senior to the Corporation's Common Stock.

Section 10. Amendment. The Certificate of Incorporation of the Corporation shall not be further amended in any manner which would materially alter or change the powers, preference or special rights of the Series B Junior Participating Preferred Stock so as to affect them adversely without the affirmative vote of the holders of a majority or more of the outstanding shares of Series B Junior Participating Preferred Stock, voting separately as a class

Section 11. Fractional Shares. Series B Junior Participating Preferred Stock may be issued in fractions of a share which shall entitle the holder, in proportion to such holder's fractional shares, to exercise voting rights, receive dividends, participate in distributions and to have the benefit of all other rights of holders of Series B Junior Participating Preferred Stock.

IN WITNESS WHEREOF, we have executed and subscribed this Certificate and do affirm the foregoing as true under the penalties of perjury this 13th day of December 2000.

/s/ Alvin J. Glasky
Alvin J. Glasky, Ph.D.
Chief Executive Officer

ATTEST:

/s/ Samuel Gulko
Samuel Gulko
Chief Financial Officer

**CERTIFICATE OF AMENDMENT
OF
CERTIFICATE OF INCORPORATION
OF
NEOTHERAPEUTICS, INC.
a Delaware corporation**

NeoTherapeutics, Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (this "Corporation"), DOES HEREBY CERTIFY:

1. That the Board of Directors of this Corporation adopted a resolution setting forth a proposed amendment of the Certificate of Incorporation of this Corporation at a meeting held on February 12, 2001. The resolution setting forth the proposed amendment is as follows:

"FURTHER, that subject to the approval of the stockholders of the Company, the first sentence of Article 4 of the Certificate of Incorporation of the Company, be and hereby is amended to read in its entirety as follows:

The aggregate number of shares of all classes of stock which the Corporation shall have the authority to issue is 55,000,000 shares, consisting of (a) 50,000,000 shares of common stock, \$.001 par value per share (the "Common Stock"), and (b) 5,000,000 shares of preferred stock, \$.001 par value per share (the "Preferred Stock")."

2. That said amendment was duly adopted and approved by the stockholders of this Corporation at a meeting called for that purpose held on April 6, 2001, in accordance with the provisions of Section 242 of the Delaware General Corporation Law.

IN WITNESS WHEREOF the undersigned has caused this Certificate of Amendment of Certificate of Incorporation to be duly executed as of the 6th day of April, 2001 and hereby affirm and acknowledge under penalty of perjury that the filing of this Certificate of Amendment of Certificate of Incorporation of NeoTherapeutics, Inc. is the act and deed of NeoTherapeutics, Inc.

**NeoTherapeutics, Inc.,
a Delaware corporation**

By: /s/ Samuel Gulko

Samuel Gulko
Senior Vice President Finance,
Chief Financial Officer,
Secretary and Treasurer

*STATE OF DELAWARE
SECRETARY OF STATE
DIVISION OF CORPORATIONS
FILED 09:00 AM 04/06/2001
010170629 - 2742853*

**CERTIFICATE OF DESIGNATIONS
OF
7% SERIES C PREFERRED STOCK
OF
NEOTHERAPEUTICS, INC.**

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

NEOTHERAPEUTICS, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware (the "Corporation"), hereby certifies, pursuant to the authority contained in the Certificate of Incorporation and in accordance with the provisions of Section 151 of the General Corporation Law of the State of Delaware that the following resolution was duly adopted by the Board of Directors of the Corporation as of June 25, 2001, creating a series of its Preferred Stock designated as 7% Series C Preferred Stock:

RESOLVED, that pursuant to the authority expressly granted to and vested in the Board of Directors of the Corporation (the "Board") by the provisions of the Certificate of incorporation of the Corporation (the "Certificate of Incorporation"), there hereby is created, out of the 5,000,000 shares of Preferred Stock, par value \$0,001 per share, of the Corporation authorized in Article 4 of the Certificate of Incorporation, a series of the preferred stock of the Corporation consisting of shares, which shall be designated 7% Series C Preferred Stock, which series shall have the powers, designations, preferences and relative participating, optional and other rights, and the qualifications, limitations and restrictions set forth below:

SECTION 1. Designation, Amount and Par Value. The series of preferred stock shall be designated as 7% Series C Preferred Stock (the "Preferred Stock") and the number of shares so designated shall be 200 (which shall not be subject to increase without the consent of the holders of the Preferred Stock (each, a "Holder" and collectively, the "Holders")). Each share of Preferred Stock shall have a par value of \$0.001 and a stated value of \$ 10,000 (the "Stated Value").

SECTION 2. Dividends.

(a) Holders shall be entitled to receive, when and as declared by the Board of Directors out of funds legally available therefor, and the Corporation shall pay, cumulative dividends at the rate per share (as a percentage of the Stated Value per share) equal to 7% per annum, payable, subject to the provisions of this Section 2(a), on each yearly anniversary of the Original Issue Date (as defined in Section 8) while such share is outstanding (each a "Dividend Payment Date") and on each Conversion Date (as defined herein) for such share, commencing on the earlier to occur of the Conversion Date for such share and the first Dividend Payment Date following the Original Issue Date, in cash or shares of Common Stock (as defined in Section 8); provided, however, that in the event that the payment of such dividend in shares of Preferred Stock would violate the provisions of Section 5(a)(iv)(B) such dividends shall be paid monthly in arrears in cash on the first business day of each month until the required Shareholder

Approval has been obtained. Subject to the terms and conditions herein, the decision whether to pay dividends hereunder in Common Stock or cash shall be at the discretion of the Corporation. Dividends on the Preferred Stock shall be calculated on the basis of a 360-day year, shall accrue daily commencing on the Original Issue Date and shall be deemed to accrue from such date whether or not earned or declared and whether or not there are profits, surplus or other funds of the Corporation legally available for the payment of dividends. A party that holds shares of Preferred Stock on the record date with respect to a Dividend Payment Date will be entitled to receive such dividend payment and any other accrued and unpaid dividends which accrued prior to such Dividend Payment Date, without regard to any sale or disposition of Such Preferred Stock subsequent to the applicable record date. Except as otherwise provided herein, if at any time the Corporation pays less than the total amount of dividends then accrued on account of the Preferred Stock, Such payment shall be distributed ratably among the Holders based upon the number of shares of Preferred Stock held by each Holder. The Corporation shall provide the Holders notice of its intention to pay dividends in cash or shares of Common Stock not less than 10 Trading Days (as defined in Section 8) prior to any Dividend Payment Date, it being understood that a failure of the Corporation to timely provide such notice shall be deemed an election (if permitted hereunder) to pay such dividends in shares of Common Stock pursuant to the terms hereof. If the Corporation has properly elected, and is permitted hereunder, to pay dividends in shares of Common Stock, then such dividends will be due and payable on each Conversion Date for the applicable shares of Preferred Stock (and not on each Dividend Payment Date) and the number of shares of Common Stock issuable on account of such dividend shall equal the cash amount of such dividend on such Conversion Date divided by the Conversion Price (as defined below) on such date. Any dividends to be paid in cash hereunder that are not paid on a Dividend Payment Date shall continue to accrue and shall entail a late fee, which must be paid in cash, at the rate of 15% per annum or the maximum amount that is permitted by applicable law, whichever is less (such fees to accrue daily, from the date such dividend is due hereunder through and including the date of payment).

(b) Notwithstanding anything to the contrary contained herein, the Corporation may not issue shares of Common Stock in payment of dividends on the Preferred Stock (and must deliver cash in respect thereof) if:

(i) the number of shares of Common Stock at the time authorized, unissued and unreserved for all purposes is insufficient to pay such dividends in shares of Common Stock;

(ii) after the Dividend Effectiveness Date (as defined in Section 8), such shares (x) are not registered for resale pursuant to an effective Underlying Securities Registration Statement (as defined in Section 8) and (y) may not be sold without volume and manner of sale restrictions pursuant to Rule 144 promulgated under the Securities Act (as defined in Section 8), as determined by counsel to the Corporation pursuant to a written opinion letter addressed to the Corporation's transfer agent in the form and substance acceptable to the applicable Holder and such transfer agent;

(iii) such shares are not then listed or quoted on the Nasdaq National Market (the “NASDAQ”), or on the New York Stock Exchange, American Stock Exchange or Nasdaq SmallCap Market (each, a “Subsequent Market”);

(iv) the Corporation has failed to timely satisfy its conversion obligations hereunder; or

(v) the issuance of such shares would result in a violation of Section 5(a)(iv)

(c) So long as any Preferred Stock shall remain outstanding, neither the Corporation nor any subsidiary thereof shall redeem, purchase or otherwise acquire directly or indirectly any Junior Securities (as defined in Section 8), nor shall the Corporation directly or indirectly pay or declare any dividend or make any distribution (other than dividends due and paid in the ordinary course on preference shares of the Corporation at such times when the Corporation is in compliance with its payment and other obligations hereunder) upon, nor shall any distribution be made in respect of, any Junior Securities, nor shall any monies be set aside for or applied to the purchase or redemption (through a sinking fund or otherwise) of any Junior Securities.

SECTION 3. Voting Rights. Except as otherwise provided herein and as otherwise required by law, the Preferred Stock shall have no voting rights. However, so long as any shares of Preferred Stock are outstanding, the Corporation shall not, without the affirmative vote of the Holders of all of the shares of the Preferred Stock then outstanding, alter or change adversely the powers, preferences or rights given to the Preferred Stock or alter or amend this Certificate of Designation, authorize or create any class of stock ranking as to dividends or distribution of assets upon a Liquidation (as defined in Section 4) senior to or otherwise pari passu with the Preferred Stock, amend its certificate of incorporation or other charter documents so as to affect adversely any rights of the Holders, increase the authorized number of shares of Preferred Stock, or enter into any agreement with respect to the foregoing that is not conditioned upon the receipt of an affirmative vote pursuant to this Section.

SECTION 4. Liquidation. Upon any liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary (a “Liquidation”), the Holders shall be entitled to receive out of the assets of the Corporation, whether such assets are capital or surplus, for each share of Preferred Stock an Amount equal to the Stated Value plus all due but unpaid dividends per share, whether declared or not, on a *pari passu* basis with any distributions payable by the Corporation upon such Liquidation to the holders of any shares of preferred stock of the Corporation issued pursuant to Section 5 or Section 6 of that certain Securities Purchase Agreement, dated as of September 21, 2000, by and among the Corporation, NeoGene Technologies, Inc., Montrose Investments Ltd. and Strong River Investments, Inc. (the “Pari Passu Stock”), before any distribution or payment shall be made to the holders of any Junior Securities in respect of such Junior Securities, and if the assets of the Corporation shall be insufficient to pay in full such amounts, then the entire assets to be distributed to the Holders and the holders of any outstanding Pari Passu Stock shall be distributed among the Holders and such holders ratably in accordance with the respective amounts that would be payable on such shares

if all amounts payable thereon were paid in full. A sale, conveyance or disposition of all or substantially all of the assets of the Corporation or the effectuation by the Corporation of a transaction or series of related transactions in which more than 33% of the voting power of the Corporation is disposed of, or a consolidation or merger of the Corporation with or into any other company or companies shall not be treated as a Liquidation, but instead shall be subject to the provisions of Section 5. The Corporation shall mail written notice of any such Liquidation, not less than 45 days prior to the payment date stated therein, to each record Holder.

SECTION 5. Conversion.

(a)

(i) Conversions at Option of Holder. Each share of Preferred Stock shall be convertible into shares of Common Stock (subject to the limitations set forth in Section 5(a)(iv) hereof) at the Conversion Ratio (as defined in Section 8) at the option of the Holder, at any time and from time to time, from and after the Original Issue Date. Holders shall effect conversions by surrendering the certificate or certificates representing the shares of Preferred Stock to be converted to the Corporation, together with the form of conversion notice attached hereto as Exhibit A (a "Conversion Notice"), provided, that Holders shall not be required to surrender any such certificate if the Corporation has failed to deliver such certificate to the Holders pursuant to the Purchase Agreement prior the applicable Conversion Date. Each Conversion Notice shall specify the number of shares of Preferred Stock to be converted and the date on which such conversion is to be effected, which date may not be prior to the date the Holder delivers such Conversion Notice by facsimile (the "Conversion Date"). If no Conversion Date is specified in a Conversion Notice, the Conversion Date shall be the date that the Conversion Notice is deemed delivered hereunder. If the Holder is converting less than all shares of Preferred Stock represented by the certificate or certificates tendered by the Holder with the Conversion Notice, or if a conversion hereunder cannot be effected in full for any reason, the Corporation shall promptly deliver to such Holder (in the manner and within the time set forth in Section 5(b)) a certificate representing the number of shares of Preferred Stock as have not been converted.

(ii) Conversion at Option of Corporation. Upon written notice (the date on which such notice is given, the "Notice Date"), the Corporation shall have the right to force the Holders to convert on the Notice Date any or all of the shares of Preferred Stock into shares of Common Stock (subject to the limitations set forth in Section 5(a)(iv) hereof) at the applicable Conversion Price on the Notice Date if (i) the Per Share Market Value of the Common Stock on each of the 10 Trading Days immediately preceding (but excluding) the Notice Date is equal to or greater than three times the Per Share Market Value of the Common Stock on the Closing Date (subject to adjustment consistent with any adjustments to the Initial Conversion Price pursuant to this Section 5), and (ii) the Common Stock issuable upon such conversion will be freely tradable, without restriction.

(iii) Automatic Conversion. Subject to the provisions in this paragraph, all outstanding shares of Preferred Stock for which conversion notices have not previously been received or for which redemption has not been made or required hereunder shall

be automatically converted on the fifth anniversary of the Closing Date (as defined in Section 8). The conversion contemplated by this paragraph shall not occur at such time as (a) (I) an Underlying Securities Registration Statement is not then effective or (2) the Holder is not permitted to resell Underlying Shares (as defined in Section 8) pursuant to Rule 144(k) promulgated under the Securities Act, without volume or manner of sale restrictions, as evidenced by an opinion letter of counsel acceptable to the Holder and the transfer agent for the Common Stock; (b) there are not sufficient shares of Common Stock authorized and reserved for issuance upon such conversion; or (c) the Corporation shall have defaulted on its covenants and obligations hereunder or under the Purchase Agreement (as defined in Section 8) or Registration Rights Agreement (as defined in Section 8). Notwithstanding the foregoing, the five-year period for conversion under this Section shall be extended (on a day-for-day basis) for any Trading Days after the date that the Commission declares effective an Underlying Securities Registration Statement that a Holder is both unable to resell Underlying Shares pursuant to Rule 144(k) promulgated under the Securities Act, without volume or manner of sale restrictions and unable to resell Underlying Shares under an Underlying Securities Registration Statement due to (a) the Common Stock not being listed for trading on the NASDAQ or any Subsequent Market, (b) the failure of such Underlying Securities Registration Statement to remain effective during the Effectiveness Period (as defined in the Registration Rights Agreement) as to all Underlying Shares; or (c) the suspension of the Holder's ability to resell Underlying Shares thereunder. Notwithstanding anything to the contrary contained herein, a conversion pursuant to this Section shall not be subject to the provisions of Section 5(a)(iv)(A).

(iv) Certain Conversion Restrictions.

(A) Notwithstanding any other provision hereof, the aggregate number of shares of Common Stock into which the Preferred Stock may be converted, together with any other shares of Common Stock then beneficially owned (as defined in the Securities Exchange Act of 1934, as amended) by the Holder and its affiliates, shall not exceed 4.9% of the total outstanding shares of Common Stock as of Such date. The Corporation shall have no obligation to monitor compliance with the foregoing limitation.

(B) [Intentionally Deleted]

(b)

(i) Not later than three (3) Trading Days after any Conversion Date, the Corporation will deliver to the Holder (i) a certificate or certificates which shall be free of restrictive legends and trading restrictions (other than those required by Section 4.9 of the Purchase Agreement) representing the number of shares of Common Stock being acquired upon the conversion of shares of Preferred Stock (subject to the limitations set forth in Section 5(a)(iv) hereof), (ii) one or more certificates representing the number of shares of Preferred stock converted, (iii) a bank check in the amount of accrued and unpaid dividends (if the Corporation has elected to pay accrued dividends in cash) and the Floor Redemption Price (as defined in Section 5(c)(ii)(B), if applicable, and (iv) if the Corporation has elected and is permitted hereunder to pay accrued dividends in shares of Common Stock, certificates, which shall be free of restrictive legends and trading restrictions (other than those required by Section 4.9 of the

Purchase Agreement), representing such shares of Common Stock; provided, however, that the Corporation shall not be obligated to issue certificates evidencing the shares of Common Stock issuable upon conversion of any shares of Preferred Stock until one Trading Day after certificates evidencing such shares of Preferred Stock are delivered for conversion to the Corporation, or the Holder of such Preferred Stock notifies the Corporation that such certificates have been lost, stolen or destroyed and provides a bond (or other adequate security) reasonably satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection therewith. The Corporation shall, upon request of the Holder, if available, use its best efforts to deliver any certificate or certificates required to be delivered by the Corporation under, this Section electronically through the Depository Trust Corporation or another established clearing corporation performing similar functions. If in the case of any Conversion Notice such certificate or certificates, including for purposes hereof, any shares of Common Stock to be issued on the Conversion Date on account of accrued but unpaid dividends hereunder, are not delivered to or as directed by the applicable Holder by the third (3rd) Trading Day after the Conversion Date, the Holder shall be entitled by written notice to the Corporation at any time on or before its receipt of such certificate or certificates thereafter, to rescind such conversion, in which event the Corporation shall immediately return the certificates representing the shares of Preferred Stock tendered for conversion.

(ii) If the Corporation fails to deliver to the Holder such certificate or certificates pursuant to Section 5(b)(i), including for purposes hereof, any shares of Common Stock to be issued on the Conversion Date on account of accrued but unpaid dividends hereunder, by the third (3rd) Trading Day after the Conversion Date, the Corporation shall pay to such Holder, in cash, as liquidated damages and not as a penalty, \$5,000 for each Trading Day after such third (3rd) Trading Day until such certificates are delivered. Nothing herein shall limit a Holder's right to pursue actual damages for the Corporation's failure to deliver certificates representing shares of Common Stock upon conversion within the period specified herein and such Holder shall have the right to pursue all remedies available to it at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief. The exercise of any such rights shall not prohibit the Holders from seeking to enforce damages pursuant to any other Section hereof or under applicable law. Further, if the Corporation shall not have delivered any cash due in respect of conversions of Preferred Stock or as payment of dividends thereon by the third (3rd) Trading Day after the Conversion Date, the Holder may, by notice to the Corporation, require the Corporation to issue shares of Common Stock pursuant to Section 5(c), except that for such purpose the Conversion Price applicable thereto shall be the lesser of the Conversion Price on the Conversion Date and the Conversion Price on the date of such Holder demand. Any such shares will be subject to the provision of this Section.

(iii) In addition to any other rights available to the Holder, if the Corporation fails to deliver to the Holder such certificate or certificates pursuant to Section 5(b)(i), including for purposes hereof, any shares of Common Stock to be issued on the Conversion Date on account of accrued but unpaid dividends hereunder, by the third (3rd) Trading Day after the Conversion Date, and if after such third (3rd) Trading Day the Holder purchases (in an open market transaction or otherwise) Common Stock to deliver in satisfaction of a sale by such Holder of the Underlying Shares which the Holder was entitled to receive upon such conversion (a "Buy-In"), then the Corporation shall (A) pay in cash to the Holder (in

addition to any remedies available to or elected by the Holder) the amount by which (x) the Holder's total purchase price (including brokerage commissions, if any) For the Common Stock so purchased exceeds (y) the product of (1) the aggregate number of shares of Common Stock that such Holder was entitled to receive from the conversion at issue multiplied by (2) the market price of the Common Stock at the time of the sale giving rise to such purchase obligation and (B) at the option of the Holder, either return the shares of Preferred Stock for which such conversion was not honored or deliver to such Holder the number of shares of Common Stock that would have been issued had the Corporation timely complied with its conversion and delivery obligations under Section 5(b)(i). For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted conversion of shares of Preferred Stock with respect to which the market price of the Underlying Shares on the date of conversion was a total of \$10,000 under clause (A) of the immediately preceding sentence, the Corporation shall be required to pay the Holder \$1,000. The Holder shall provide the Corporation written notice indicating the amounts payable to the Holder in respect of the Buy-In. Notwithstanding anything contained herein to the contrary, if a Holder requires the Corporation to make payment in respect of a Buy-In for the failure to timely deliver certificates hereunder and the Corporation timely pays in full such payment, the Corporation shall not be required to pay such Holder liquidated damages under Section 5(b)(ii) in respect of the certificates resulting in such Buy-In.

(c)

(i) The conversion price for each share of Preferred Stock (the "Conversion Price") in effect on any Conversion Date shall be the lesser of (x) 150% of the average Per Share Market Value on the five (5) Trading Days immediately preceding (but excluding) the Original Issue Date (the "Initial Conversion Price") and (y) 100% of the average of the seven (7) lowest Per Share Market Values during the thirty (30) Trading Days immediately preceding the applicable Conversion Date (which, at the Holder's option, may include Trading Days prior to the Original Issue Date), provided, that such thirty (30) Trading Day period shall be extended for the number of Trading Days, if any, during such period in which (A) trading in the Common Stock is suspended from the NASDAQ or a Subsequent Market on which it is listed for trading prior to such suspension, or (B) during the Effectiveness Period (as defined in the Registration Rights Agreement), the Underlying Securities Registration Statement is not effective, or (C) during the Effectiveness Period, the Prospectus included in the Underlying Securities Registration Statement may not be used by the Holder for the resale of Underlying Shares

(ii) If on any Conversion Date, the Conversion Price shall be lower than \$2.50 (which number shall be subject to equitable adjustments for stock splits, recombinations and similar events) (such Conversion Price, the "Floor Price" and a Conversion Date on which such condition is met, a "Record Date"), then the Corporation will have the right, exercisable by delivery of a written notice to the Holders delivered no later than twenty Trading Days prior to the Record Date (the "Corporation Notice"), which notice shall remain in effect until a subsequent such notice is provided by the Corporation to the Holders, to elect to honor the conversion at issue by either: (x) issuing all number of shares of Common Stock issuable at the actual Conversion Price pursuant to Section 5(c)(i), or (y) issue the number of shares of Common

Stock issuable upon the conversion at issue, as if the conversion price applicable to such conversion was equal to the Floor Price and pay cash, no later than the third Trading Day following the Record Date, to the Holder, in an amount equal to the product of (A) the average of the Per Share Market Values for the five Trading Days preceding the Conversion Date for such conversion and (B) the number of shares of Common Stock otherwise issuable at the actual Conversion Price then in effect less the number of shares of Common Stock issuable upon such conversion at the Floor Price (the "Floor Redemption Price"). Failure by the Corporation to timely deliver the Corporation Notice to the Holder pursuant to the terms of this Section shall result conclusively be deemed an election by the Corporation under subsection (x) hereunder. Failure by the Corporation to pay any portion of the Floor Redemption Price by the third Trading Day following the applicable Conversion Date shall result in the invalidation *ab initio* of the unpaid portion of such optional redemption. In such event, the Corporation shall, at the option of the Holder, either, (i) not later than three Trading Days from receipt of Holder's request for such election, return to the Holder all of the shares of Preferred Stock for which such Floor Redemption Price has not been paid in full (the "Unpaid Redemption Shares") or (ii) convert all or any portion of the Unpaid Redemption Shares in which event the applicable Conversion Price shall be the lower of the Conversion Price calculated on the date the Floor Redemption Price was originally due and the Conversion Price as of the Holder's Written demand for conversion, If the Holder elects option (ii) above, the Corporation shall within three Trading Days of its receipt of such election deliver to the Holder the shares of Common Stock issuable upon conversion of the Unpaid Redemption Shares subject to such Holder conversion demand and otherwise perform its obligations hereunder with respect thereto.

(iii) If the Corporation, at any time while any shares of Preferred Stock are outstanding, shall (a) pay a stock dividend or otherwise make a distribution or distributions on shares of its Junior Securities or *pari passu* securities payable in shares of Common Stock, (b) subdivide outstanding shares of Common Stock into a larger number of shares, (c) combine outstanding shares of Common Stock into a smaller number of shares, or (d) issue by reclassification and exchange of the Common Stock any shares of capital stock of the Corporation, then the Initial Conversion Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock outstanding before such event and of which the denominator shall be the number of shares of Common Stock outstanding after such event. Any adjustment made pursuant to this Section 5(c) (iii) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

(iv) If the Corporation, at any time while shares of Preferred Stock are outstanding, shall distribute to all holders of Common Stock (and not to Holders) evidences of its indebtedness or assets or rights or warrants to subscribe for or purchase any security other than with respect to rights granted pursuant to a stockholders rights, plan adopted by the Corporation, then in each such case the Initial Conversion Price shall be adjusted by multiplying the Initial Conversion Price in effect immediately prior to the record date fixed for determination of stockholders entitled to receive such distribution by a fraction of which the denominator shall be the Per Share Market Value determined as of the record date mentioned above, and of which the numerator shall be such Per Share Market Value on such record date less

the then fair market value at such record date of the portion of such assets or evidence of indebtedness or rights or warrants so distributed applicable to one outstanding share of the Common Stock as determined by the Board of Directors in good faith. In either case the adjustments shall be described in a statement provided to the Holders of the portion of assets or evidences of indebtedness or rights or warrants so distributed or such subscription rights applicable to one share of Common Stock. Such adjustment shall be made whenever any such distribution is made and shall become effective immediately after the record date mentioned above.

(v) All calculations under this Section 5 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be.

(vi) Whenever the Initial Conversion Price is adjusted pursuant to the terms hereof, the Corporation shall promptly mail to each Holder, a notice setting forth the Initial Conversion Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

(vii) In case of any reclassification of the Common Stock, or any compulsory share exchange pursuant to which the Common Stock is converted into other securities, cash or property (other than compulsory share exchanges which constitute Change of Control Transactions), the Holders of the Preferred Stock then outstanding shall have the right thereafter to convert such shares only into the shares of stock and other securities, cash and property receivable upon or deemed to be held by holders of Common Stock following such reclassification or share exchange, and the Holders of the Preferred Stock shall be entitled upon such event to receive such amount of securities, cash or property as a holder of the number of shares of Common Stock of the Corporation into which such shares of Preferred Stock could have been converted immediately prior to such reclassification or share exchange would have been entitled. This provision shall similarly apply to successive reclassifications or share exchanges.

(viii) If (a) the Corporation shall declare a dividend (or any other distribution) on the Common Stock, (b) the Corporation shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (c) the Corporation shall authorize the granting to all holders of Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (d) the approval of any stockholders of the Corporation shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Corporation is a party, any sale or transfer of all or substantially all of the assets of the Corporation, of any compulsory share of exchange whereby the Common Stock is converted into other securities, cash or property, or (e) the Corporation shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Corporation; then the Corporation shall cause to be filed at each office or agency maintained for the purpose of conversion of Preferred Stock, and shall cause to be mailed to the Holders at their last addresses as they shall appear upon the stock books of the Corporation, at least 20 calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which

the holders of Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of Common Stock of record shall be entitled to exchange their Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange. Holders are entitled to convert shares of Preferred Stock during the 20-day period commencing the date of such notice to the effective date of the event triggering such notice.

(ix) In case of the closing of any: (1) merger or consolidation of the Corporation with or into another Person, or (2) sale by the Corporation of more than one-half of the assets of the Corporation (on a market value basis) in one or a series of related transactions, a Holder shall have the right to: (A) if permitted under Section 7 hereof, exercise its rights of redemption under Section 7 with respect to such event, or (B) convert its shares of Preferred Stock into the shares of stock and other securities, cash and property receivable upon or deemed to be held by holders of Common Stock following such merger, consolidation or sale, and such Holder shall be entitled upon conversion of its shares of Preferred Stock to receive such amount of securities, cash and property as the shares of Common Stock into which such shares of Preferred Stock could have been converted immediately prior to such merger, consolidation or sales would have been entitled. The terms of any such merger, sale or consolidation shall include such terms so as to continue to give the Holders the right to receive the securities, cash and property set forth in this Section upon any conversion or redemption following such event. This provision shall similarly apply to successive such events.

(d) The Corporation covenants that it will at all times reserve and keep available out of its authorized and unissued shares of Common Stock solely for the purpose of issuance upon conversion of Preferred Stock and payment of dividends on Preferred Stock, each as herein provided, free from preemptive rights or any other actual contingent purchase rights of persons other than the Holders, not less than, such number of shares of Common Stock as shall (subject to any additional requirements of the Corporation as to reservation of such shares set forth in the Purchase Agreement) be issuable (taking into account the adjustments and restrictions of Section 5(a) and Section 5(c)) upon the conversion of all outstanding shares of Preferred Stock and payment of dividends hereunder (assuming all such dividends are paid in shares of Common Stock). The Corporation covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly and validly authorized, issued and fully paid, nonassessable and freely tradeable, subject to the legend requirements of Section 4.9 of the Purchase Agreement.

(e) Upon a conversion hereunder the Corporation shall not be required to issue stock certificates representing fractions of shares of Common Stock, but may if otherwise permitted, make a cash payment in respect of any final fraction of a share based on the Per Share Market Value at such time. If the Corporation elects not, or is unable, to make such a cash payment, the Holder of a share of Preferred Stock shall be entitled to receive, in lieu of the final fraction of a share, one whole share of Common Stock.

(f) The issuance of certificates for Common Stock on conversion of Preferred Stock and as payment of dividends in shares of Common Stock shall be made without charge to the Holders thereof for any documentary stamp or similar taxes that may be payable in respect of the issue or delivery of such certificate, provided that the Corporation shall not be required to pay any tax that may be payable in respect of any transfer involved in the issuance and delivery of any such certificate upon conversion in a name other than that of the Holder of such shares of Preferred Stock so converted.

(g) Shares of Preferred Stock converted into Common Stock or redeemed in accordance with the terms hereof shall be canceled and may not be reissued.

(h) Any and all notices or other communications or deliveries to be provided by the Holders of the Preferred Stock hereunder, including, without limitation, any Conversion Notice, shall be in writing and delivered personally, by facsimile or sent by a nationally recognized overnight courier service, addressed to the attention of the Chief Financial Officer of the Corporation at the facsimile telephone number or address of the principal place of business of the Corporation as set forth in the Purchase Agreement. Any and all notices or other communications or deliveries to be provided by the Corporation hereunder shall be in writing and delivered personally, by facsimile or sent by a nationally recognized overnight courier service, addressed to each Holder at the facsimile telephone number or address of such Holder appearing on the books of the Corporation, or if no such facsimile telephone number or address appears, at the principal place of business of the Holder. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile telephone number specified in this Section prior to 8:00 p.m. (New York City time), (ii) the date after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile telephone number specified in this Section later than 8:00 p.m. (New York City time) on any date and earlier than 11:59 p.m. (New York City time) on such date, (iii) upon receipt, if sent by a nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given.

SECTION 6. Optional Redemption.

(a) During the time that any shares of Preferred Stock remain outstanding, the Corporation shall have the right, exercisable on any Trading Day in which the Conversion Price shall be less than \$1.00 (which number shall be subject to equitable adjustments for stock splits, recombinations and similar events), in accordance with the terms hereof and upon three Trading Days' prior written notice to the Holders to be redeemed (an "Optional Redemption Notice"), to redeem all or any portion of the outstanding shares of Preferred Stock which have not previously been redeemed or for which Conversion Notices have not previously been delivered. The redemption price applicable to redemptions under this Section 6 shall equal the Optional Redemption Price (as defined in Section 8) and shall be paid in cash. The Holders shall have the right to tender, and the Corporation shall honor, Conversion Notices delivered on or prior to the expiration of the fifteenth Trading Day after receipt by the Holders of an Optional Redemption Notice for such Preferred Stock (the fifteenth Trading Day

after receipt by the Holders of an Optional Redemption Notice is referred to herein as the “Optional Redemption Date”).

(b) The Corporation shall not be entitled to deliver an Optional Redemption Notice to the Holder (and, if after delivery thereof and prior to the Optional Redemption Date, any of the following conditions shall cease to be met, such notice, at the option of the Holders, shall be deemed no longer effective) if: (i) the number of shares of Common Stock at the time authorized, unissued and unreserved for all purposes is insufficient to satisfy the Corporation’s conversion obligations of the shares of Preferred Stock then outstanding, or (ii) there is neither an effective Underlying Shares Registration Statement under which the Holders can resell all of the issued Underlying Shares and all of the Underlying Shares as are issuable upon conversion in full of the shares of Preferred Stock subject to an Optional Redemption Notice nor may all of such issued and issuable Underlying Shares be sold by the Holders subject to such redemption without volume restrictions pursuant to Rule 144 promulgated under the Securities Act, as determined by counsel to the Corporation pursuant to a written opinion letter, addressed to the Corporation’s transfer agent in the form and substance acceptable to the Holders and such transfer agent, or (iii) the Common Stock is not then listed for trading on the NASDAQ or on a Subsequent Market.

(c) If any portion of the Optional Redemption Price shall not be paid by the Corporation by the Optional Redemption Date, the Optional Redemption Price shall bear interest at the rate of 18% per annum (or such lesser maximum amount that is permitted to be paid by applicable law) to accrue daily from the date such interest is due hereunder through and including the date of payment (which amount shall be paid as liquidated damages and not as a penalty). In addition, if any portion of the Optional Redemption Price remains unpaid through the expiration of the Optional Redemption Date, the Holder subject to such redemption may elect by written notice to the Corporation to either (x) demand conversion in accordance with the formula and the time period therefor set forth in Section 5 of any portion of the shares of Preferred Stock for which the Optional Redemption Price, plus accrued interest thereon, has not been paid in full (the “Unpaid Redemption Amount”), in which event the applicable Conversion Price shall be the lower of the Conversion Price calculated on the Optional Redemption Date and the Conversion Price as of the Holder’s written demand for conversion, or (y) invalidate *ab initio* such optional redemption, notwithstanding anything herein contained to the contrary. If the Holder elects option (x) above, the Corporation shall, within three Trading Days after such election is deemed delivered hereunder, deliver to the Holder the shares of Common Stock issuable upon conversion of the Unpaid Redemption Amount subject to such conversion demand and otherwise perform its obligations hereunder with respect thereto. If the Holder elects option (y) above, the Corporation shall promptly, and in any event not later than three (3) Trading Days from receipt of notice of such election, return to the Holder new shares of Preferred Stock for the full Unpaid Redemption Amount and shall no longer have any redemption rights under this Section. If, upon an election under option (x) above, the Corporation fails to deliver certificates representing the shares of Common Stock issuable upon conversion, of the Unpaid Redemption Amount within the time period set forth in this Section, the Corporation shall pay to the Holder in cash, as liquidated damages and not as a penalty, \$5,000 per day until the Corporation delivers such certificates to the Holder.

SECTION 7 Redemption Upon Triggering Events. Upon the occurrence of a Triggering Event, each Holder shall (in addition to all other rights it may have hereunder or under applicable law), have the right, exercisable at the sole option of such Holder, to require the Corporation to redeem all or a portion of the Preferred Stock then held by such Holder for a redemption price, in cash, equal to the sum of (i) the Mandatory Redemption Amount plus (ii) the product of (A) the number of Underlying Shares issued in respect of conversions or as payment of dividends hereunder and then held by the Holder (the "Redeemable Stock") and (B) the Per Share Market Value on the date such redemption is demanded or the date the redemption price hereunder is paid in full, whichever is greater (such sum, the "Redemption Price"). The Redemption Price shall be due and payable within (10) days of the date on which the notice for the payment therefor is provided by a Holder. If the Corporation fails to pay the redemption price hereunder in full pursuant to this Section on the date such amount is due in accordance with this Section, the Corporation will pay interest thereon at a rate of 15% (or the maximum amount permitted under applicable law, whichever is less) per annum, accruing daily from such date until the redemption price, plus all such interest thereon, is paid in full. For purposes of this Section, a share of Preferred Stock is outstanding until such date as the Holder shall have received Underlying Shares upon a conversion (or attempted conversion) thereof that meets the requirements hereof. Upon receipt of the full Redemption Price, the Holder shall deliver the Redeemable Stock to the Corporation

A "Triggering Event" means any one or more of the following events (whatever the reason and whether it shall be voluntary or involuntary or effected by operation of law or pursuant to any judgement, decree or order of any court, or any order, rule or regulation of any administrative or governmental body):

(i) the failure of an Underlying Securities Registration Statement to be declared effective by the Commission on or prior to the 240th day after the Closing Date;

(ii) if, during the Effectiveness Period, the effectiveness of the Underlying Securities Registration Statement lapses for any reason for more than an aggregate of ten (10) Trading Days, or the Holder shall not be permitted to resell Registrable Securities under the Underlying Securities Registration Statement for more than 10 consecutive Trading Days or an aggregate of 20 Trading Days (which need not be consecutive Trading Days);

(iii) the failure of the Common Stock to be listed for trading on the NASDAQ or on a Subsequent Market or the suspension of the Common Stock from trading on the NASDAQ or on a Subsequent Market, in either case, for more than 10 consecutive Trading Days or an aggregate of 20 Trading Days (which need not be consecutive Trading Days);

(iv) the Corporation shall fail for any reason to deliver certificates representing Underlying Shares issuable upon a conversion hereunder that comply with the provisions hereof prior to the 10th day after the Conversion Date or the Corporation shall provide notice to any Holder, including by way of public announcement, at any time, of its intention not to comply with requests for conversion of any Preferred Stock in accordance with the terms hereof;

(v) the Corporation shall, without the consent of the Holders of a majority of the then outstanding shares of Preferred Stock, be a party to any Change of Control Transaction, shall agree to sell (in one or a series of related transactions) all or substantially all of its assets (whether or not such sale would constitute a Change of Control Transaction) or shall redeem more than a de minimis number of Common Stock or other Junior Securities (other than redemptions of Underlying Shares);

(vi) as Event (as defined in the Registration Rights Agreement) shall not have been cured to the satisfaction of the Holders prior to the expiration of thirty (30) days from the Event Date (as defined in the Registration Rights Agreement) relating thereto other than an Event resulting from a failure of an Underlying Shares Registration Statement to be timely declared effective by the Commission;

(vii) the Corporation shall fail for any reason to pay in full the amount of cash due pursuant to a Buy-In within seven (7) days after notice therefor is delivered hereunder; or the Corporation shall fail to have available a sufficient number of authorized and unreserved shares of Common Stock to issue to such Holder upon a conversion hereunder.

SECTION 8. Definitions. For the purposes hereof, the following terms shall have the following meanings:

“Change of Control Transaction” means the occurrence of any of (i) an acquisition after the date hereof by an individual or legal entity or “group” (as described in Rule 13d-5(b)(1) promulgated under the Exchange Act) of effective control (whether through legal or beneficial ownership of capital stock of the Corporation, by contract or otherwise) of in excess of 33% of the voting securities of the Corporation, (ii) a replacement at one time or over time of more than one-half of the members of the Corporation’s board of directors which is not approved by a majority of those individuals who are members of the board of directors on the date hereof (or by those individuals who are serving as members of the board of directors on any date whose nomination to the board of directors was approved by a majority of the members of the board of directors who are members on the date hereof), (iii) the merger of the Corporation with or into another entity, consolidation or sale of all or substantially all of the assets of the Corporation in one or a series of related transactions, or (iv) the execution by the Corporation of an agreement to which the Corporation is a party or by which it is bound, providing for any of the events set forth above in (i), (ii) or (iii).

“Closing Date” shall have the meaning set forth in the Purchase Agreement.

“Commission” means the Securities and Exchange Commission.

“Common Stock” means the Corporation’s Common Stock, par value \$.001 per share, and stock of any other class into which such shares may hereafter have been reclassified or changed.

“Conversion Ratio” means, at any time, a fraction, the numerator of which is Stated Value plus accrued but unpaid dividends but only to the extent not paid in Common Stock

in accordance with the terms hereof, and the denominator of which is the Conversion Price at such time.

“Dividend Effectiveness Date” means the earlier to occur of (x) the Effectiveness Date (as defined in the Registration Rights Agreement) and (y) the date that an Underlying Securities Registration Statement is declared effective by the Commission.

“Exchange Act” means the Securities Exchange Act of 1934, as amended.

“Junior Securities” means the Common Stock and all other equity securities of the Corporation which are junior in rights and liquidation preference to the Preferred Stock.

“Mandatory Redemption Amount” for each share of Preferred Stock means the sum of (i) the greater of (A) the Stated Value and all accrued dividends with respect to such share and (B) the product of (a) the Per Share Market Value on the Trading Day immediately preceding (x) the date of the Triggering Event or the Conversion Date, as the case may be, or (y) the date of payment in full by the Corporation of the applicable redemption price, whichever is greater, and (b) the Conversion Ratio calculated on the date of the Triggering Event, or the Conversion Date, as the case may be, and (ii) all other amounts, costs, expenses and liquidated damages due in respect of such share of Preferred Stock.

“Optional Redemption Price” shall be sum of 106% of the Stated Value of the shares of Preferred Stock to be redeemed pursuant to the terms hereof and all other amounts, costs, expenses and liquidated damages due in respect of such shares of Preferred Stock.

“Original Issue Date” shall mean the date of the first issuance of any shares of the Preferred Stock regardless of the number of transfers of any particular shares of Preferred Stock and regardless of the number of certificates which may be issued to evidence such Preferred Stock.

“Per Share Market Value” means on any particular date (a) the closing bid price per share of Common Stock on such date on the NASDAQ or on the Subsequent Market on which the Common Stock is then listed or quoted, or if there is no such price on such date, then the closing bid price on the NASDAQ or on such Subsequent Market on the date nearest preceding such date, or (b) if the Common Stock is not then listed or quoted on the NASDAQ or on a Subsequent Market, the closing bid price for a shares of Common Stock in the over-the-counter market, as reported by the National Quotation Bureau Incorporated or similar organization or agency succeeding to its functions of reporting prices) at the close of business on such date, or (c) if the Common Stock is not then reported by the National Quotation Bureau Incorporated (or similar organization or agency succeeding to its functions of reporting prices), then the average of the “Pink Sheet” quotes for the relevant conversion period, as determined in good faith by the Holder, or (d) if the Common Stock are not then publicly traded the fair market value of a Common Share as determined by an Appraiser selected in good faith by the Holders of a majority of the shares of the Preferred Stock.

“Person” means a corporation, an association, a partnership, organization, a business, an individual, a government or political subdivision thereof or a governmental agency.

“Purchase Agreement” means the Securities Purchase Agreement, dated as of December 18, 2000, to which the Corporation, NeoGene Technologies, Inc. and the original Holders are parties, as amended, modified or supplemented from time to time in accordance with its terms.

“Registration Rights Agreement” means the Registration Rights Agreement, dated December 18, 2000, to which the Corporation and the original Holders are parties, as amended, modified or supplemented from time to time in accordance with its terms.

“Securities Act” means the Securities Act of 1933, as amended.

“Trading Day” means (a) a day on which the Common Stock is traded on the NASDAQ or on the Subsequent Market on which the Common Stock is then listed or quoted, as the case may be, or (b) if the Common Stock’s not listed on the NASDAQ or on a Subsequent Market, a day on which the Common Stock is traded in the over-the-counter market, as reported by the OTC Bulletin Board, or (c) if the Common Stock is not quoted on the OTC Bulletin Board, a day on which the Common Stock is quoted in the over-the-counter market as reported by the National Quotation Bureau Incorporated (or any similar organization or agency succeeding its functions of reporting prices); provided, however, that in the event that the Common Stock is not listed or quoted as set forth in (a), (b) and (c) hereof, then Trading Day shall mean any day except Saturday, Sunday and any day which shall be a legal holiday or a day on which banking institutions in the State of York are authorized or required by law or other government action to close.

“Underlying Securities Registration Statement” means a registration statement that meets the requirements of the Registration Rights Agreement and registers the resale of all Underlying Shares by the recipient thereof, who shall be named as a “selling stockholder” thereunder.

“Underlying Shares” means, collectively, the shares of Common Stock into which the Shares are convertible and the shares of Common Stock issuable upon payment of dividends thereon in accordance with the terms hereof.

IN WITNESS WHEREOF, NeoTherapeutics, Inc. has caused this Certificate of Designations to be duly executed by its Chief Financial Officer this 26th day of June, 2001.

NEOTHERAPEUTICS, INC.

By: /s/ Samuel Gulko
Samuel Gulko, Chief Financial Officer

EXHIBIT A

NOTICE OF CONVERSION

(To be Executed by the Registered Holder
in order to Convert shares of Preferred Stock)

The undersigned hereby elects to convert the number of shares of 7% Series [] Preferred Stock with Conversion Features indicated below, into shares of Common Stock, par value \$.001 per share (the "Common Stock"), of NeoTherapeutics, Inc. (the "Corporation") according to the conditions hereof, as of the date written below. If shares are to be issued in the name of a person other than undersigned, the undersigned will pay all transfer taxes payable with respect thereto and is delivering herewith such certificates and opinions as reasonably requested by the Corporation in accordance therewith. No fee will be charged to the Holder for any conversion, except for such transfer taxes, if any.

Conversion calculations:

Date to Effect Conversion

Number of shares of Preferred Stock to be Converted

Number of shares of Common Stock to be Issued

Applicable Conversion Price

Signature

Name

Address

**CERTIFICATE OF OWNERSHIP AND MERGER
OF
ADVANCED IMMUNOTHERAPEUTICS, INC.
(a California corporation)
INTO
NEOTHERAPEUTICS, INC.
(a Delaware corporation)**

NeoTherapeutics, Inc., a corporation organized and existing under Laws of the State of Delaware, does hereby certify:

1. NeoTherapeutics, Inc. (hereinafter sometimes referred to as the "Corporation") is a business corporation of the State of Delaware.
2. The Corporation is the owner of all of the outstanding shares of stock of Advanced ImmunoTherapeutics, Inc., which is a business corporation of the State of California.
3. The laws of the jurisdiction of organization of NeoTherapeutics, Inc. permit the merger of a business corporation of that jurisdiction with a business corporation of another jurisdiction.
4. The laws of the jurisdiction of organization of Advanced ImmunoTherapeutics, Inc. permit the merger of a business corporation of that jurisdiction with a business corporation of another jurisdiction.
5. The Corporation hereby merges Advanced ImmunoTherapeutics, Inc. into the Corporation.
6. The following is a copy of the resolutions adopted on August 17, 2001 by the Board of Directors of the Corporation to merge Advanced ImmunoTherapeutics, Inc. into the Corporation:

RESOLVED, that Advanced immunoTherapeutics, Inc. be merged into this Corporation, and that all of the estate, property, rights, privileges, powers, and franchises of Advanced ImmunoTherapeutics, Inc. be vested in and held and enjoyed by this Corporation as fully and entirely and without change or diminution as the same were before held and enjoyed by Advanced ImmunoTherapeutics, Inc. in its respective name.

RESOLVED FURTHER, that this Corporation assume all of the obligations and liabilities of Advanced ImmunoTherapeutics, Inc.

RESOLVED FURTHER, that the form, content, terms and conditions of the attached Agreement and Plan of Merger by and

between this Corporation and Advanced ImmunoTherapeutics, Inc. (the "Merger Agreement"), is hereby approved and adopted.

RESOLVED FURTHER, that the officers of this Corporation be, and each of them acting alone hereby is, authorized to execute, deliver and carry out the terms of the Merger Agreement.

RESOLVED FURTHER, that the outstanding shares of Advanced ImmunoTherapeutics, Inc. shall not be converted in any manner, nor shall any cash or other consideration be paid or delivered therefor, but each such share shall be canceled upon the effective time of the merger.

RESOLVED FURTHER, that this Corporation shall cause to be executed and filed and/or recorded the documents prescribed by the laws of the State of Delaware, by the laws of the State of California, and by the laws of any other appropriate jurisdiction to effect the merger and will cause to be performed all necessary acts within the jurisdiction of organization of Advanced ImmunoTherapeutics, Inc. and of this Corporation and in any other appropriate jurisdiction to effect the merger.

7. Attached hereto as Exhibit A is a copy of the Agreement and Plan of Merger as executed by NeoTherapeutics, Inc. and Advanced ImmunoTherapeutics, Inc.

Executed on this 28th day of August, 2001.

NEOTHERAPEUTICS, INC.

By: /s/ Samuel Gulko

Samuel Gulko
Senior Vice President Finance,
Chief Financial Officer,
Secretary and Treasurer

AGREEMENT AND PLAN OF MERGER

AGREEMENT AND PLAN OF MERGER dated as of August 28, 2001 (the "Merger Agreement"), by and among NeoTherapeutics, a Delaware corporation ("NeoTherapeutics") and Advanced ImmunoTherapeutics, Inc., a California corporation (the "Merging Subsidiary").

WITNESSETH:

WHEREAS, NeoTherapeutics is a corporation duly organized and validly existing under and by virtue of the laws of the State of Delaware;

WHEREAS, the Merging Subsidiary is a corporation duly organized and validly existing under the laws of its state of incorporation;

WHEREAS, NeoTherapeutics is the holder of 100% of the authorized, issued and outstanding capital stock of the Merging Subsidiary (the "Merging Capital Stock");

WHEREAS, the Board of Directors of NeoTherapeutics deems it advisable that the Merging Subsidiary merge with and into NeoTherapeutics, upon the terms and subject to the conditions set forth herein and in accordance with the laws of the States of California and Delaware (the "Merger"), and that the shares of Merging Capital Stock be cancelled upon consummation of the Merger as set forth herein;

WHEREAS, the parties hereto intend that the Merger qualify as tax-free reorganization for federal income tax purposes; and

WHEREAS, the Board of Directors of NeoTherapeutics has, by resolutions, duly approved and adopted the provisions of this Merger Agreement as the agreement of merger required by Section 252 of the General Corporation Law of the State of Delaware (the "Delaware Law") and Section 1110 of the General Corporation Law of the State of California (the "California Law"), and in each case as the foregoing may be applicable to NeoTherapeutics, the Merging Subsidiary and the Merger.

NOW, THEREFORE, the parties hereto agree as follows:

SECTION 1. Effect of the Merger; Manner and Basis of Converting and Canceling Shares.

1.1 At the Effective Time (as hereinafter defined), the Merging Subsidiary shall be merged with and into NeoTherapeutics, the separate corporate existence of the Merging Subsidiary (except as may be continued by operation of law) shall cease, and NeoTherapeutics shall continue as the surviving corporation, all with the effects provided by applicable law. NeoTherapeutics, in its capacity as the surviving corporation of the Merger, is hereinafter sometimes referred to as the "Surviving Corporation."

1.2 At the Effective Time, each share of Merging Capital Stock issued and outstanding immediately prior to the Effective Time shall, by virtue of the Merger and without

any action by the Merging Subsidiary, NeoTherapeutics or any other person, be cancelled and no cash or securities or other property shall be payable in respect thereof.

1.3 At and after the Effective Time, the Surviving Corporation shall possess all the rights, privileges, immunities and franchises, of both a public and private nature, and be subject to all the duties and liabilities, of the Merging Subsidiary; and all rights, privileges immunities and franchises of the Merging Subsidiary, and all property, real, personal and mixed, and all debts due on whatever account, including subscriptions to shares, and all other choses in action, and all and every other interest, of or belonging to the Merging Subsidiary shall be taken and deemed to be transferred to and vested in the Surviving Corporation without further act or deed; and title to any real estate, or any interest therein, vested in any of the Merging Subsidiary shall not revert or be in any way impaired by reason of the Merger; and the Surviving Corporation shall thenceforth be responsible and liable for all liabilities and obligations of the Merging Subsidiary; and any claim existing or action or proceeding pending by or against the Merging Subsidiary may be prosecuted to judgment as if the Merger had not taken place or the Surviving Corporation may be substituted in its place; all with the effect set forth in Section 253 of the Delaware Law. The authority of the officers of the Merging Subsidiary shall continue with respect to the due execution in the name of the Merging Subsidiary of tax returns, instruments of transfer or conveyance and other documents where the execution thereof is required or convenient to comply with any provision of the Delaware Law and California Law, any contract to which the Merging Subsidiary is or was a party or this Merger Agreement.

SECTION 2. Effective Time.

2.1 As soon as is reasonably practicable after the execution of this Agreement, NeoTherapeutics and the Merging Subsidiary shall cause a Certificate of Ownership and Merger to be executed, acknowledged and filed with the Secretary of State of the State of Delaware, all as provided for in and in accordance with Section 253 of the Delaware Law.

2.2 As soon as is reasonably practicable after the execution of this Agreement, NeoTherapeutics and the Merging Subsidiary shall deliver for filing to the Secretary of State of the State of California the original of the Certificate of Ownership as provided for in and in accordance with Section 1110 of the California Law.

2.3 The Merger shall become effective at the time and date as provided by applicable law (the "Effective Time").

SECTION 3. Certificate of Incorporation and Bylaws; Board of Directors.

3.1 The Certificate of Incorporation and Bylaws of NeoTherapeutics as in effect at the Effective Time shall govern the Surviving Corporation.

3.2 The members of the Board of Directors and the officers of NeoTherapeutics holding office immediately prior to the Effective Time shall be the members of the Board of Directors and the officers (holding the same positions as they held with NeoTherapeutics immediately prior to the Effective Time) of the Surviving Corporation and shall hold such offices until the expiration of their current terms, or until their earlier death, resignation or removal.

SECTION 4. Amendment and Termination.

4.1 NeoTherapeutics may amend, modify or supplement this Merger Agreement with respect to the Merging Subsidiary.

4.2 This Merger Agreement may be terminated and the Merger may be abandoned for any reason with respect to the Merging Subsidiary by a resolution adopted by the Board of Directors of the Merging Subsidiary or NeoTherapeutics at any time prior to the Effective Time. In the event of the termination of this Merger Agreement with respect to any party as provided herein, this Merger Agreement shall forthwith become void with respect to such party and there shall be no liability hereunder on the part of such party or its respective officers and directors, except liability for intentional breach or misrepresentation or common law fraud.

SECTION 5. Service of Process.

5.1 The Surviving Corporation hereby agrees that it may be served with process in the State of California in any proceeding for the enforcement of any obligation of Advanced ImmunoTherapeutics, Inc., and hereby irrevocably appoints the Secretary of State of the State of California as its agent to accept service of process in any such proceeding.

A copy of any service of process received in connection with Section 7.1 above should be mailed to:

NeoTherapeutics, Inc.
157 Technology Drive
Irvine, California 92618
Attn: Chief Executive Officer

with copies to:

Latham & Watkins
650 Town Center Drive, 20th Floor
Costa Mesa, California 92626
Attn: Alan W. Pettis

SECTION 6. Miscellaneous.

6.1 This Merger Agreement may be executed in one or more counterparts, all of which taken together shall constitute one and the same instrument.

6.2 The internal law, not the law of conflicts, of the State of Delaware will govern all questions concerning the construction, validity and interpretation of this Merger Agreement, except so far as the California Law applies to the Merger.

6.3 This Merger Agreement is not intended to confer upon any person (other than the parties hereto and their respective successors and assigns) any rights or remedies hereunder or by reason hereof.

IN WITNESS WHEREOF, the parties hereto have caused this Merger Agreement to be signed by their respective officers thereunto duly authorized all as of the day and year first written above.

NeoTherapeutics, Inc.

By: /s/ Alvin J. Glasky
Alvin J. Glasky
Chief Executive Officer

By: /s/ Samuel Gulko
Samuel Gulko
Senior Vice President Finance,
Chief Financial Officer,
Secretary and Treasurer

Advanced ImmunoTherapeutics, Inc.

By: /s/ Alvin J. Glasky
Alvin J. Glasky
Chief Executive Officer

By: /s/ Samuel Gulko
Samuel Gulko
Senior Vice President Finance,
Chief Financial Officer,
Secretary and Treasurer

**CERTIFICATE OF AMENDMENT
OF
CERTIFICATE OF INCORPORATION
OF
NEOTHERAPEUTICS, INC.,**

NeoTherapeutics, Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "Corporation"), does hereby certify that:

1. Article 4 of the Corporation's Certificate of Incorporation is hereby amended by adding the following three paragraphs at the end of said Article 4:

"Effective as of 11:59 p.m. Eastern Time on the date of the filing of the Certificate of Amendment that adds this paragraph to this Article 4 (the time of such filing, the "Effective Time"), all issued and outstanding shares of Common Stock ("Existing Common Stock") shall be and hereby are automatically combined and reclassified as follows: each twenty-five (25) shares of Existing Common Stock shall be combined and reclassified as one (1) share of issued and outstanding Common Stock ("New Common Stock"), provided, that there shall be no fractional shares of New Common Stock. In the case of any holder of any number of shares of Existing Common Stock which, when divided by twenty-five (25), does not result in a whole number, the holder shall receive cash in lieu of any fractional share of New Common Stock at a price per share equal to the product of (a) the number of shares of Existing Common Stock held by such holder immediately prior to the Effective Time which have not been classified into a whole share of New Common Stock, multiplied by (b) the closing price of the Existing Common Stock as reported on the Nasdaq National Market on the date of the filing of the Certificate of Amendment.

The Corporation shall, through its transfer agent, provide certificates representing shares of New Common Stock to holders of Existing Common Stock in exchange for certificates representing shares of Existing Common Stock. From and after the Effective Time, certificates representing shares of Existing Common Stock are hereby cancelled and shall represent only the right of the holders thereof to receive shares of New Common Stock.

From and after the Effective Time, the term "New Common Stock" as used in this Article 4 shall mean Common Stock as provided in this Certificate of Incorporation. The par value of the Common Stock shall remain \$0.001 per share."

2. The amendment of the certificate of incorporation herein certified has been duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Amendment of Certificate of Incorporation on September 5, 2002.

NEOTHERAPEUTICS, INC.,
a Delaware corporation

By: /s/ Rajesh C. Shrotriya, M.D.
Rajesh C. Shrotriya, M.D.
Chairman of the Board, Chief
Executive Officer and President

**CERTIFICATE OF OWNERSHIP AND MERGER
OF
SPECTRUM PHARMACEUTICALS, INC.
(a Delaware corporation)
INTO
NEOTHERAPEUTICS, INC.
(a Delaware corporation)**

NeoTherapeeutics, Inc., a corporation organized and existing under Laws of the State of Delaware, does hereby certify:

1. NeoTherapeutics, Inc. (hereinafter sometimes referred to as the "Corporation" is a business corporation of the State of Delaware.

2. The Corporation is the owner of all of the outstanding shares of stock of Spectrum Pharmaceuticals, Inc., which is a business corporation of the State of Delaware.

3. The laws of the jurisdiction of organization of NeoTherapeutics, Inc. permit the merger of a business corporation of that jurisdiction with a business corporation of the same jurisdiction.

4. The laws of the jurisdiction of organization of Spectrum Pharmaceuticals, Inc. permit the merger of a business corporation of that jurisdiction with a business corporation of the same jurisdiction.

5. The Corporation hereby merges Spectrum Pharmaceuticals, Inc. into the Corporation.

6. The following is a copy of the November 15, 2002 resolutions adopted by the Board of Directors at a meeting of the Board of Directors of the Corporation to merge Spectrum Pharmaceuticals into the Corporation:

RESOLVED, that Spectrum Pharmaceuticals, Inc. be merged into this Corporation, and that all of the estate, property, rights, privileges, powers and franchises of Spectrum Pharmaceuticals, Inc. be vested in and held and enjoyed by this Corporation as fully and entirely and without change or diminution as the same were before held and enjoyed by Spectrum Pharmaceuticals, Inc. in its respective name.

RESOLVED FURTHER, that this Corporation assume all of the obligations and liabilities of Spectrum Pharmaceuticals, Inc.

RESOLVED FURTHER, upon effectiveness of the merger of Spectrum Pharmaceuticals, Inc. into this corporation, the name of this corporation shall be changed to Spectrum Pharmaceuticals, Inc.

RESOLVED FURTHER, that the outstanding shares of Spectrum Pharmaceuticals, Inc. shall not be converted in any manner, nor shall any cash or other consideration be paid or delivered therefore, but each such shares shall be cancelled upon the effective time of the merger.

RESOLVED FURTHER, that this Corporation shall cause to be executed and filed and/or recorded the documents prescribed by the laws of the State of Delaware and by the laws of any other appropriate jurisdiction to effect the merger and will cause to be performed all necessary acts within the jurisdiction of organization of Spectrum Pharmaceuticals, Inc. and of this Corporation and in any other appropriate jurisdiction to effect the merger.

Executed on this 3rd day of December, 2002.

NEOTHERAPEUTICS, INC.

By: /s/ Rajesh C. Shrotriya

Rajesh C. Shrotriya, M.D.

Chairman, Chief Executive Officer
and President

**Certificate of Designations, Rights and Preferences
of the
Series D 8% Cumulative Convertible Voting Preferred Stock
of
Spectrum Pharmaceuticals, Inc.**

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

The undersigned, being the Chief Executive Officer of Spectrum Pharmaceuticals, Inc., a Delaware corporation (the "Corporation"), does hereby certify, that the following resolution has been duly adopted by the board of directors of the Corporation:

Resolved, that pursuant to the authority expressly granted to and vested in the board of directors of the Corporation (the "Board") pursuant to the General Corporation Law of the State of Delaware, as amended, and by the provisions of the Corporation's Certificate of Incorporation, as amended to date (the "Certificate of Incorporation"), the Board hereby creates a series of preferred stock of the Corporation, par value \$0.001 per share, each share having a stated value (the "Stated Value") of \$10,000.00, such series consisting of 444 shares (which shall not be subject to increase without the consent of the Holders (as defined below) of a majority of the outstanding Preferred Stock, which majority shall include each Holder who acquired in the aggregate more than 100 shares of Preferred Stock, no long as such Holder continues to hold more than 100 shares of Preferred Stock, which such majority is hereinafter referred to as a "Special Majority"), which shall be designated as the "Series D 8% Cumulative Convertible Voting Preferred Stock" (hereinafter, the "Convertible Preferred Stock" or the "Preferred Stock"), which series shall have the following powers, designations, preferences and relative participating, optional, voting or other rights, and the following qualifications, limitations or restrictions:

1. Dividends: The holders of the Convertible Preferred Stock (each, a "Holder" and collectively, the "Holders") shall be entitled to receive, when, if and as declared by the Corporation's Board of Directors, out of funds legally available therefore, cumulative dividends payable as set forth in this Section 1.

a. Dividends on the Convertible Preferred Stock shall accrue and shall be cumulative from the date of issuance of the shares of Convertible Preferred Stock (the "Date of Original Issue"), whether or not earned or declared by the Board of Directors of the Corporation. Until paid, the right to receive dividends on the Convertible Preferred Stock shall accumulate, and shall be payable in cash or shares of common stock, par value \$0.001 per share, of the Corporation, or stock of any other class into which such shares may hereafter have been reclassified or changed (the "Common Stock"), in arrears, on March 31, June 30, September 30 and December 31 of each year (a "Dividend Payment Date"), commencing on June 30, 2003 (the "Initial Dividend Payment Date") except that if such Dividend Payment Date is not a business day, then the Dividend Payment Date will be the immediately preceding business day. The decision whether to pay dividends hereunder in Common Stock or cash shall be at the discretion of the Corporation; *provided, however,*

*State of Delaware
Secretary of State
Division of Corporations
Delivered 08:36 AM 05/07/2003
FILED 08:36 AM 05/07/2003
SRV 030294814 - 2742853 FILE*

that if the Corporation elects to pay a dividend in Common Stock and the receipt thereof by a Holder would be in excess of the Beneficial Ownership Cap (as defined in Section 5(g)), then such dividend shall cumulate for up to 10 years (the "Final Distribution Date") and shall be paid, in whole or in part, on the first date when such payment would not be in excess of the Beneficial Ownership Cap, and the unpaid portion of any such dividend shall continue to cumulate and be paid thereafter on the next date when such payment would not be in excess of the Beneficial Ownership Cap. Any dividends not paid pursuant to the preceding sentence shall be paid on the Final Distribution Date. It shall be the responsibility of each Holder to determine such Holder's compliance with the Beneficial Ownership Cap and to advise the Corporation of whether or not, and how much, if any, of the dividends payable in Common Stock may then be paid to such Holder, and the Corporation, when advised in writing to make such dividend payment, shall do so promptly. Subject to the foregoing, each such dividend declared by the Board of Directors on the Convertible Preferred Stock shall be paid to the Holders of record as they appear on the stock register of the Corporation on the Record Date (defined below). Dividends in arrears for any past dividend period may be declared by the Board of Directors of the Corporation and, subject to the provisions with respect to the Beneficial Ownership Cap, paid on shares of the Convertible Preferred Stock on any date fixed by the Board of Directors of the Corporation, whether or not a regular Dividend Payment Date, to Holders of record as they appear on the Corporation's stock register on the record date. The record date (the "Record Date"), shall be fixed in advance by the Board of Directors, or to the extent not fixed, shall be the business day immediately preceding the date such dividend is paid. Any dividend payment made on shares of the Convertible Preferred Stock shall first be credited against the dividends accumulated with respect to the earliest dividend period for which dividends have not been paid. Dividends not paid on a Dividend Payment Date shall bear interest, whether or not such dividend has been declared, at the Dividend Rate (or such lesser rate equal to the highest rate permitted by applicable law) until paid.

b. The dividend rate (the "Dividend Rate") on each share of Convertible Preferred Stock shall be 8% per share per annum compounded quarterly on the Stated Value of each such share for the period from the Date of Original Issue until the Initial Dividend Payment Date and, for each dividend period thereafter, which shall commence on the last day of the preceding dividend period and shall end on the next Dividend Payment Date, shall be at the Dividend Rate on such Stated Value. The amount of dividends per share of the Convertible Preferred Stock payable for each dividend period or part thereof (the "Dividend Value") shall be computed by multiplying the Dividend Rate for such dividend period by a fraction the numerator of which shall be the number of days in the dividend period or part thereof (calculated by counting the first day thereof but excluding the last day thereof) on which such share was outstanding and the denominator of which shall be 360 and multiplying the result by the Stated Value. If a dividend is to be paid in kind in Common Stock, the Common Stock shall be valued at the Current Market Price (as hereinafter defined) as of the Record Date for such payment date. In furtherance thereof, the Corporation shall reserve out of the authorized but unissued shares of Common Stock, solely for issuance in respect of the payment of dividends as herein described, a sufficient number of shares of Common Stock to pay such dividends, when, if and as and as declared by the Board of Directors.

For purposes hereof, "Current Market Price" means, in respect of any share of Common Stock on any date herein specified:

(i) if there shall not then be a public market for the Common Stock, the Appraised Value (as hereinafter defined) per share of Common Stock at such date, or

(ii) if there shall then be a public market for the Common Stock, the average of the daily market prices for the 20 consecutive trading days immediately before such date. The daily market price for each such trading day shall be (I) the last sale price on such day on the principal stock exchange (including NASDAQ) on which such Common Stock is then listed or admitted to trading, or quoted, as applicable, (II) if no sale takes place on such day on any such exchange, the average of the last reported closing bid and asked prices on such day as officially quoted on any such exchange (including NASDAQ), (III) if the Common Stock is not then listed or admitted to trading on any stock exchange, the average of the last reported closing bid and asked prices on such day in the over-the-counter market, as furnished by the National Association of Securities Dealers Automatic Quotation System or the National Quotation Bureau, Inc., (IV) if neither such corporation at the time is engaged in the business of reporting such prices, as furnished by any similar firm then engaged in such business, or (V) if there is no such firm, as furnished by any member of the NASD selected mutually by the Holders of a Special Majority of the Preferred Stock and the Corporation or, if they cannot agree upon such selection, as selected by two such members of NASD, one of which shall be selected by a Special Majority of the Holders and one of which shall be selected by the Corporation.

For purposes hereof, "Appraised Value" means, in respect of any share of Common Stock on any date herein specified, the fair saleable value of such share of Common Stock (determined without giving effect to the discount for (i) a minority interest or (ii) any lack of liquidity of the Common Stock or to the fact that the Corporation may have no class of equity registered under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of the last day of the most recent fiscal month and prior to such date specified, based on the value of the Corporation, as determined by a nationally recognized investment banking firm selected by the Corporation's Board of Directors and having no prior relationship with the Corporation, and reasonably acceptable to a Special Majority of the Holders.

c. Except as hereinafter provided, no dividends shall be declared or paid or set apart for the payment on the shares of Common Stock or any other class or series of capital stock of the Corporation for any dividend period unless full cumulative dividends have been or contemporaneously are declared and paid on the Convertible Preferred Stock through the most recent Dividend Payment Date. If full cumulative dividends have not been paid on shares of the Convertible Preferred Stock, all dividends declared on shares of the Convertible Preferred Stock shall be paid pro rata to the Holders in proportion to the full accrued but unpaid dividends attributable to each such Holder's Preferred Stock. No dividend on any other class or series of

capital stock of the Corporation shall be paid unless, at the time of such payment, all accrued dividends on the Series D Preferred Stock have been paid, and the Corporation has on hand cash and other liquid assets sufficient to pay in full, in cash, the Liquidation Preference that would be payable to the holders of the Series D Preferred Stock under Section 3(a) below, as if such Liquidation Preference were then payable.

d. So long as any shares of the Convertible Preferred Stock are outstanding, the Corporation may not, without the prior consent of the Holders of a Special Majority of the outstanding Preferred Stock, purchase or otherwise acquire for any consideration (except through a redemption of all the outstanding shares of the Convertible Preferred Stock) any shares of the Common Stock or any other outstanding shares of the capital stock of the Corporation.

2. Voting Rights. Except as otherwise provided herein or by law, the Holders shall have full voting rights and powers, subject to the Beneficial Ownership Cap (as defined in Section 5(g)), equal to the voting rights and powers of holders of Common Stock and shall be entitled to notice of any stockholders meeting in accordance with the Bylaws of the Corporation, and shall be entitled to vote, with respect to any question upon which holders of Common Stock have the right to vote, including, without limitation, the right to vote for the election of directors, voting together with the holders of Common Stock as one class. Each Holder shall be entitled to the number of votes equal to the number of shares of Common Stock into which such shares of Convertible Preferred Stock could be converted on the record date for the taking of a vote at the then current Conversion Value (as hereinafter defined), subject to the Beneficial Ownership Cap, or, if no record date is established, at the day prior to the date such vote is taken or any written consent of shareholders is first executed. Fractional votes shall not be permitted, and any fractional voting rights resulting from the above formula (after aggregating all shares into which shares of Convertible Preferred Stock held by each Holder could be converted) shall be rounded to the nearest whole number (with one-half being rounded upward), subject to the Beneficial Ownership Cap.

3. Rights on Liquidation.

a. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation (any such event being hereinafter referred to as a "Liquidation"), before any distribution of assets of the Corporation shall be made to or set apart for the holders of Common Stock, the Holders shall be entitled to receive payment out of such assets of the Corporation in an amount equal to the greater of (i) the Liquidation Preference for the Convertible Preferred Stock, or (ii) the cash or other property distributable upon such Liquidation with respect to the shares of Common Stock into which such shares of Series D Preferred Stock, including any accrued dividends thereon, could have been converted immediately prior to such payment. The "Liquidation Preference for the Convertible Preferred Stock shall be an amount equal to 120% of the Stated Value per share of Convertible Preferred Stock plus any accumulated and unpaid dividends thereon (whether or not earned or declared). If the assets of the Corporation available for distribution to the Holders shall not be sufficient to make in full the payment herein required, such assets shall be distributed pro-rata among the Holders based on the aggregate Liquidation Preferences of the shares of Convertible Preferred Stock held by each such Holder.

b. If the assets of the Corporation available for distribution to shareholders exceed the aggregate amount of payable pursuant to paragraph 3(a) above with respect to all shares of Convertible Preferred Stock then outstanding, then, after the payment required by paragraph 3(a) above shall have been made or irrevocably set aside, the holders of Common Stock shall be entitled to receive with respect to each share of Common Stock payment of a pro rata portion of such assets based on the aggregate number of shares of Common Stock held by each such holder.

4. Actions Requiring the Consent of Holders. As long as more than 20% of the shares of Convertible Preferred Stock issued on the Date of Original Issue are outstanding, the consent of the Holders of a Special Majority of the outstanding Preferred Stock, given in person or by proxy, either in writing without a meeting or by vote at a meeting called for the purpose, shall be necessary for effecting or validating any of the following transactions or acts:

(a) Any amendment, alteration or repeal of any provision of the Charter or Bylaws which adversely affects the terms of the Preferred Stock or the relative rights, preferences and privileges of the Holders of the Preferred Stock as such holders;

(b) Any amendments or changes to the Rights Plan or the adoption of any other similar plans or arrangements, provided that nothing herein shall be deemed to restrict the right of the Corporation to redeem all, but not less than all, of the outstanding Rights (as defined in the Rights Plan) or otherwise terminate the Rights Plan (as defined in Section 5(h) hereof);

(c) The offer, sale, designation or issuance by the Corporation or any of its subsidiaries of any equity or debt security senior to or *pari passu* with the Preferred Stock in any respect;

(d) The sale or issuance of any shares of Common Stock, any warrant, option, subscription or purchase right with respect to shares of Common Stock, any security convertible into, exchangeable for, or otherwise entitling the holder thereof to acquire shares of Common Stock, or any warrant, option, subscription or purchaser right with respect to any such convertible, exchangeable or other security at a price below the Conversion Value (as hereinafter defined), other than (A) options, warrants, and other rights outstanding on the date hereof to acquire, directly or indirectly, Common Stock and Common stock acquirable thereunder, and (B) options granted hereafter to any employee, officer, Director or consultant pursuant to any plan approved by stockholders for the benefit of employees, officers, Directors and consultants ("Incentive Options"), and the Common stock acquirable thereunder, and (C) awards presently outstanding or hereafter awarded under the Seller's employee stock purchase plan effective as of January 26, 2001 (the "ESPP"), provided that the aggregate number of shares of Common Stock acquirable under such Incentive Options and awards under the ESPP, and the options which may hereafter be issued as disclosed in Schedule 3.21, is not greater than 1,300,000;

(e) The entering into by the Corporation or any Subsidiary of any bank or other non-trade indebtedness for borrowed money;

(f) The granting or making by the Corporation or any of its Subsidiaries of any mortgage or pledge, or the assumption or suffering to exist on, or the imposition on, any of its material properties or assets any Lien;

(g) The liquidation, dissolution or winding-up of the Corporation or any of its Subsidiaries or any merger or consolidation of the Corporation or any of its Subsidiaries with or into another entity or the sale, conveyance or other disposition of all, or substantially all, the assets, property or business of the Corporation or any of its Subsidiaries;

(h) The reorganization, recapitalization, sale, conveyance, or other disposition of or encumbrance of all or substantially all of the property or business of the Corporation or any of its Subsidiaries or the merger into or consolidation with any other corporation (other than a wholly owned subsidiary corporation) or effect any transaction or series of related transactions in which, in any case, more than 20% of the voting power of the corporation is disposed of;

(i) The redemption, purchase, repurchase or other acquisition, directly or indirectly, of any shares of capital stock of the Corporation, or any of its Subsidiaries or any option, warrant or other right to purchase or acquire any such shares;

(j) The declaration or payment of any dividend or other distribution (whether cash, stock, or property) with respect to the capital stock of the Corporation, other than the Preferred Stock; and

(k) The taking of any action by the Corporation with the primary intent of causing the Common Stock to be delisted from any securities exchange or quotation system upon which the Common Stock is then listed.

The restrictions contained in this Section 4 shall cease to apply if for no less than 20 trading days during any period of 30 consecutive trading days following the Date of Original Issue (i) the Fair Market Value (as defined in that certain purchase agreement between the Corporation and the original purchase of the Convertible Preferred Stock by which such purchases agreed to acquire the Convertible Preferred Stock on the Original Issue Date (the "Purchase Agreement")) of the Common Stock exceeds five dollars (\$5) per share, (ii) all of the Conversion Shares, Warrants Shares and Dividend Shares (as defined in the Purchase Agreement) have been duly registered for sale under an effective registration statement pursuant to the Securities Act of 1933, as amended (the "Securities Act") and such registration statement is effective throughout the aforesaid 30-day period, and (iii) the actual daily trading volume of the Common Stock is greater than 100,000 shares per day on each day on which the Fair Market Value is greater than five dollars (\$5).

5. Conversion.

a. Right to Convert. Subject to the limitation set forth in Section 5(g) hereof, each Holder shall have the right at any time, at such Holder's option, to convert all any whole number of such Holder's shares of Convertible Preferred Stock into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing (i) the aggregate Stated Value

of the shares of Convertible Preferred Stock to be converted plus any accrued but unpaid dividends thereon by (ii) the Conversion Value (as hereinafter defined) then in effect for such Convertible Preferred Stock. No fractional shares or scrip representing fractional shares shall be issued upon the conversion of any Convertible Preferred Stock. With respect to any fraction of a share of Common Stock called for upon any conversion, the Corporation shall pay to the Holder an amount in cash equal to such fraction multiplied by the Current Market Price per share of the Common Stock.

b. Mechanics of Conversion. Such right of conversion shall be exercised by any Holder by delivering to the Corporation a conversion notice in the form attached hereto as Exhibit A (the "Conversion Notice"), appropriately completed and duly signed and specifying the number of whole shares of Convertible Preferred Stock that the Holder elects to convert (the "Converting Shares") into shares of Common Stock on the date specified in the Conversion Notice (which date shall not be earlier than the date on which the Conversion Notice is delivered to the Corporation), and by surrender of the certificate or certificates representing such Converting Shares. The Conversion Notice shall also contain a statement of the name or names (with addresses and tax identification or social security numbers) in which the certificate or certificates for Common Stock shall be issued, if other than the name in which the Converting Shares are registered. Promptly, but in no event more than two business days, after the receipt of the Conversion Notice and surrender of the Converting Shares, the Corporation shall issue and deliver, or cause to be delivered, to the holder of the Converting Shares or such holder's nominee, a certificate or certificates for the number of shares of Common Stock issuable upon the conversion of such Converting Shares together with cash in lieu of any fractional interest in a share of Common Stock together with a new certificate covering the number of shares of Preferred Stock representing the uncovered portions of the shares represented by the Preferred Stock certificate surrendered. Such conversion shall be deemed to have been effected as of the close of business on the date specified in the Conversion Notice in accordance with the terms hereof (the "Conversion Date"), and the person or persons entitled to receive the shares of Common Stock issuable upon conversion shall be treated for all purposes as the holder or holders of record of such shares of Common Stock as of the close of business on the Conversion Date.

c. Common Stock Reserved. The Corporation shall at all times reserve and keep available out of its authorized but unissued Common Stock, solely for issuance upon the conversion of shares of Convertible Preferred Stock as herein provided, such number of shares of Common Stock as shall from time to time be issuable upon the conversion of all the shares of Convertible Preferred Stock at the time outstanding.

d. Conversion Value. The initial conversion value for the Convertible Preferred Stock shall be \$2.35 per share of Common Stock, such value to be subject to adjustment in accordance with the provisions of this Section 5. Such conversion value in effect from time to time, as adjusted pursuant to this Section 5, is referred to herein as a "Conversion Value." All of the remaining provisions of this Section 5 shall apply separately to each Conversion Value in effect from time to time with respect to Convertible Preferred Stock.

e. Stock Dividends, Subdivisions and Combinations. If at any time while the Preferred Stock is outstanding, the Corporation shall:

- i. take a record of the holders of its Common Stock for the purpose of entitling them to receive a dividend payable in, or other distribution of, additional shares of Common Stock,
- ii. subdivide its outstanding shares of Common Stock into a larger number of shares of Common Stock, or
- iii. combine its outstanding shares of Common Stock into a smaller number of shares of Common Stock,

then in each such case the Conversion Value shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately after such event. Any adjustment made pursuant to clause (i) of this paragraph shall become effective immediately after the record date for the determination of shareholders entitled to receive such dividend or distribution, and any adjustment pursuant to clauses (ii) or (iii) of this paragraph shall become effective immediately after the effective date of such subdivision or combination. If any event requiring an adjustment under this paragraph occurs during the period that a Conversion Value is calculated hereunder, then the calculation of such Conversion Value shall be adjusted appropriately to reflect such event.

f. Certain Other Distributions. If, at any time while the Series D Preferred Stock is outstanding, the Corporation shall take a record of the holders of its Common Stock for the purpose of entitling them to receive any dividend or other distribution of:

- i. cash (other than a cash dividend payable out of earnings or earned surplus legally available for the payment of dividends under the laws of the jurisdiction of incorporation of the Corporation),
- ii. any evidences of its indebtedness, any shares of stock of any class or any other securities or property of any nature whatsoever (other than cash, convertible securities or additional shares of Common Stock), or
- iii. any warrants or other rights to subscribe for or purchase any evidences of its indebtedness, any shares of stock of any class or any other securities or property of any nature whatsoever (other than cash, convertible securities or additional shares of Common Stock) (in each case set forth in subparagraphs (i), (ii) and (iii) hereof, the "Distributed Property"),

then upon any conversion of Series D Preferred Stock that occurs after such record date, the holder of Series D Preferred Stock shall be entitled to receive, in addition to the Conversion Shares otherwise issuable upon such conversion, the Distributed Property that such holder would have been entitled to receive if the Series D Preferred Stock had been converted into Common Stock as of such record date. If the Distributed Property consists of property other than cash, then the fair value of such Distributed Property shall be as determined in good faith by the Board of Directors and set forth in reasonable detail in a written valuation report (the "Valuation Report") prepared by the Board of Directors. The Corporation shall give written notice of such determination and a copy of the Valuation Report to all holders of Series D Preferred Stock, and if the holders of 25% of the outstanding Series D Preferred Stock object to such determination within twenty (20) business days following the date such notice is given to all of the holders of Series D Preferred Stock, the Corporation shall submit such valuation to an investment banking firm of recognized national standing selected by holders of not less than 75% of the Series D Preferred Stock, and the opinion of such investment banking firm shall be binding upon the Corporation and the holders of all the Series D Preferred Stock. A reclassification of the Common Stock (other than a change in par value, or from par value to no par value or from no par value to par value) into shares of Common Stock and shares of any other class of stock shall be deemed a distribution by the Corporation to the holders of its Common Stock of such shares of such other class of stock within the meaning of this Section 5(f); and if the outstanding shares of Common Stock shall be changed into a larger or smaller number of share of Common Stock as a part of such reclassification, such change shall be deemed a subdivision or combination, as the case may be, of the outstanding shares of Common Stock within the meaning of Section 5(e).

g. Blocking Provision. Notwithstanding any contrary or inconsistent provision hereof, the number of shares of Convertible Preferred Stock that may be acquired by any Holder upon any conversion of Convertible Preferred Stock or that shall be entitled to voting rights under Section 2 hereof shall be limited to the extent necessary to insure that, following such conversion, the number of shares of Common Stock then beneficially owned by such Holder and any other persons or entities whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Exchange Act (including shares held by any "group" of which the Holder is a member) does not exceed 4.95% of the total number of shares of Common Stock of the Corporation then issued and outstanding (the "Beneficial Ownership Cap"). For purposes hereof, "group" has the meaning set forth in Section 13(d) of the Exchange Act and applicable regulations of the Securities and Exchange Commission, and the percentage held by the Holder shall be determined in a manner consistent with the provisions of Section 13(d) of the Exchange Act. Each delivery of a Conversion Notice by a Holder will constitute a representation by such Holder that it has evaluated the limitation set forth in this paragraph and determined, subject to the accuracy of information filed under the Securities Act and the Exchange Act by any person other than such Holder with respect to the outstanding Common Stock of the Corporation (including securities or property convertible into or exchangeable for Common Stock, with or without the payment of consideration), that the issuance of the full number of shares of Common Stock requested in such Conversion Notice is permitted under this paragraph, and the Corporation shall have no obligations to such Holder to verify compliance with the Beneficial Ownership Cap. This paragraph shall be construed and administered in such manner as shall be consistent with the intent of the first

sentence of this paragraph. Any provision hereof which would require a result that is not consistent with such intent shall be deemed severed here from and of no force or affect with respect to the conversion contemplated by a particular Conversion Notice.

h. Rights Distributed Under Rights Agreement. Capitalized terms used in this Section 5(h) and which are not otherwise defined herein, shall have the meanings ascribed to them in the Rights Agreement (the "Rights Agreement") dated as of December 13, 2000 between the Corporation and U.S. Stock Transfer Corporation. While the Rights Agreement or any other poison pill, rights plan or similar arrangement (each, a "Rights Plan") shall be in effect:

i. Holders who convert Preferred Stock before the Distribution Date or before any Rights Certificates or similar right (each a "Right") shall be evidenced by a separate rights certificate or shall otherwise be transferable otherwise than in connection with the transfer of the underlying shares of Common Stock (the date of the occurrence of any of the foregoing being referred to herein as a "Rights Distribution Date"), will receive, in addition to shares of Common Stock issued on conversion, one Right for each such shares of Common Stock.

ii. Upon the occurrence of a Rights Distribution Date, each Holder shall receive, without any further action by the Corporation, such number of Rights equal to the number of Rights such Holder would have held if, immediately prior to the Rights Distribution Date, all of the shares of Convertible Preferred Stock has been converted into shares of Common Stock at the then current Conversion Value. The Corporation shall issue to each Holder certificates evidencing such Rights, no later than five business days following such Rights Distribution Date. In the event the applicable Rights Plan does not permit such Rights to be granted to each Holder, the Corporation shall promptly (i) amend the applicable Rights Plan to permit the Corporation to take the actions set forth in this Section 5(h), or (ii) issue to each Holder an option, right or similar arrangement giving each Holder the same, rights and benefits as they would have held upon the receipt of the applicable number of Rights.

6. Other Provisions Applicable to Adjustments. The following provisions shall be applicable to the making of adjustments of the number of shares of Common Stock into which the Preferred Stock is convertible and the current Conversion Value provided for in Section 5:

a. When adjustment to be Made. The adjustments required by Section 5 shall be made whenever and as often as any specified event requiring an adjustment shall occur, except that any adjustment to the Conversion Value that would otherwise be required may be postponed up to, but not beyond the Conversion Date if such adjustment either by itself or with other adjustments not previously made adds or subtracts less than 1% of the shares of Common Stock into which the

Preferred Stock is convertible immediately prior to the making of such adjustment. Any adjustment representing a change of less than such minimum amount (except as aforesaid) which is postponed shall be carried forward and made as soon as such adjustment, together with other adjustments required by Section 5 and not previously made, would result in a minimum adjustment or on the Conversion Date. For the purpose of any adjustment, any specified event shall be deemed to have occurred at the close of business on the date of its occurrence.

b. Fractional Adjustments. In computing adjustments under Section 5, fractional adjustments to the Conversion Value shall be taken into account to the nearest 1/100th of a cent.

c. Escrow of Stock. If after any property becomes distributable pursuant to Section 5 by reason of the taking of any record of the holders of Common Stock, but prior to the occurrence of the event for which such record is taken, a holder of the Preferred Stock converts the Preferred Stock, such holder of Preferred Stock shall continue to be entitled to receive any shares of Common Stock issuable upon conversion under Section 5 by reason of such adjustment and such shares or other property shall be held in escrow for the holder of the Preferred Stock by the Corporation to be issued to holder of the Preferred Stock upon and to the extent that the event actually takes place. Notwithstanding any other provision to the contrary herein, if the event for which such record was taken fails to occur or is rescinded, then such escrowed shares shall be canceled by the Corporation and escrowed property returned to the Corporation.

7. Merger, Consolidation or Disposition of Assets. If, while the Preferred Stock is outstanding, there occurs: (i) an acquisition by an individual or legal entity or group (as defined in Rule 13-d of the Exchange Act) of more than one-half of the voting rights or equity interests in the Corporation; or (ii) a merger or consolidation of the Corporation or a sale, transfer or other disposition of all or substantially all the Corporation's property, assets or business to another corporation where the holders of the Corporation's voting securities prior to such transaction fail to continue to hold at least a majority of the voting power of the surviving or acquiring corporation (a "Change of Control"), and, pursuant to the terms of such Change of Control, shares of common stock of the surviving or acquiring corporation, or any cash, shares of stock or other securities or property of any nature whatsoever (including warrants or other subscription or purchase rights) in addition to or in lieu of common stock of the successor or acquiring corporation ("Other Property"), are to be received by or distributed to the holders of Common Stock of the Corporation, then the certificates evidencing the Convertible Preferred Stock shall, as of and after the Change of Control, evidence only the right to receive, at each Holder's election, which must be delivered by each Holder to the Corporation within 20 days after receiving notice from the Corporation of the right to make such election, either:

i. the number of shares of common stock of the successor or acquiring corporation or of the Corporation, if it is the surviving corporation, and Other Property receivable upon or as a result of such Change of Control by a holder of the number of shares of Common Stock into which the Convertible Preferred Stock is convertible immediately prior to such event, or

ii. at the effective time of such Change of Control, such Holder's Liquidation Preference.

If a timely election is not made pursuant to this Section 7(a), the holder shall receive the benefit of Section 7(a)(i) and shall not be entitled to the benefit of Section 7(a)(ii). If notice of a Change of Control is given but the Change of Control transaction is not, for any reason, consummated, the elections of the Holders given in connection with such notice shall be of no force or effect, *ab initio*.

8. Other Action Affecting Common Stock. In case at any time or from time to time the Corporation shall take any action in respect of its Common Stock, other than the payment of dividends permitted by Section 5 or any other action described in Section 5, then, unless such action will not have a materially adverse effect upon the rights of the holder of Convertible Preferred Stock, the number of shares of Common Stock or other stock into which the Convertible Preferred Stock is convertible exercisable and/or the purchase price thereof shall be adjusted in such manner as may be equitable in the circumstances.

9. Certain Limitations. Notwithstanding anything herein to the contrary, the Corporation agrees not to enter into any transaction which, by reason of any adjustment hereunder, would cause the current Conversion Value to be less than the par value per share of Common Stock.

10. Stock Transfer Taxes. The issue of stock certificates upon conversion of the Convertible Preferred Stock shall be made without charge to the converting holder for any tax in respect of such issue; provided, however, that the Corporation shall be entitled to withhold any applicable withholding taxes with respect to such issue, if any.

11. Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Value, the Corporation, at its expense, shall promptly compute each adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each Holder a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, upon the written request at any time of any Holder, furnish or cause to be furnished to such holder a like certificates setting forth (i) such adjustments and readjustments, (ii) the Conversion Value at the time in effect for the Convertible Preferred Stock and (iii) the number of shares of Common Stock and the amount, if any, or other property which at the time would be received upon the conversion of Convertible Preferred Stock owned by such holder.

12. Notices of Record Date. In the event of any fixing by the Corporation of a record date for the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend (other than a cash dividend) or other distribution, any shares of Common Stock or other securities, or any right to subscribe for, purchase or otherwise acquire, or any option for the purchase of, any shares of stock of any class or any other securities or property, or to receive any other right, the Corporation shall mail to each Holder at least twenty (20) days prior to the date specified therein, a notice specifying the date on which any such record is to be taken for the

purpose of such dividend, distribution or rights, and the amount and character of such dividend, distribution or right.

13. Redemption.

a. Redemption at the Holders' Elections. If a Redemption Triggering Event (as defined below) has occurred, and a holder has so elected, the Corporation shall redeem the Convertible Preferred Stock of any Holder who gives a Demand for Redemption (as defined below). The Corporation shall, promptly thereafter, redeem the shares of Convertible Preferred Stock as set forth in the Demand for Redemption, to the extent permitted under Section 160 of the Delaware General Corporation Law. The Corporation shall effect such redemption by paying in cash for each such share to be redeemed an amount equal to the sum of such Holder's Liquidation Preference (the "Redemption Price"). A "Redemption Triggering Event" is any one of the following:

i. The Corporation's failure or refusal to convert any shares of Convertible Preferred Stock in accordance with the terms hereof, or the Corporation's breach of any other term or provision of the terms of the Convertible Preferred Stock, other than Section 4(d) hereof; *provided, however,* that with respect to the Corporation's obligation to deliver certificates evidencing the Common Stock acquired upon conversion of the Convertible Preferred Stock, the Corporation shall have a grace period of 3 business days in addition to the two trading days within which the Corporation is required to issue such certificates in Section 5(b) (Mechanics of Conversion) hereof, it being understood that the aforesaid grace period is applicable only with respect to the right of the Holder to make a Demand for Redemption, and such grace period is not applicable with respect to any other liability of the Corporation arising out of the Corporation's failure or refusal to deliver certificates evidencing such Common Stock within the period of two business days required by Section 5(b) hereof.

ii. Any breach of any warranty, covenant (other than Section 5.8(d) of the Purchase Agreement), or representation of the Corporation or any of its subsidiaries in the Purchase Agreement or the Registration Rights Agreement (as such term are defined in the Purchase Agreement) that is reasonably likely to have a material adverse effect on the Corporation or the Preferred Stock and which breach, if reasonably capable of being cured, has not been cured within ten (10) days after the Corporation has notice of such breach (the "Breach Cure Period"); *provided, however,* that for purposes of this Section 13(a)(ii), the Corporation's breach of, among other provision of paragraph (c) of Section 4 of this Certificate of Designation or paragraph (c) of Section 5.8 of the Purchase Agreement shall be deemed to constitute a breach "that is reasonably likely to have a material adverse effect on the Corporation or the Preferred Stock"; *provided, further, that* the preceding clause shall not be construed to imply that any breach of any other paragraph of Section 4 of the Certificate of Designation or any other paragraph of Section 5.8 of the Purchase Agreement does not constitute a breach "that is reasonably likely to have a material adverse effect on the Corporation or the Preferred Stock."

The Corporation shall promptly notify each Holder of the occurrence of a Redemption Triggering Event.

b. Demand for Redemption. A Holder desiring to elect a redemption as herein provided shall deliver a notice (the "Demand for Redemption") to the Corporation specifying the following:

- i. The approximate date and nature of the Redemption Triggering Event;
- ii. The number of shares of Convertible Preferred Stock to be redeemed; and
- iii. The address to which the payment of the Redemption Price shall be delivered, or, at the election of the Holder, wire instructions with respect to the account to which payment of the Redemption Price shall be required.

A Holder may deliver the certificate evidencing the Convertible Preferred Stock to be redeemed with the Demand for Redemption or under separate cover. Payment of the Redemption Price shall be made not later than two (2) business days following the Redemption Date. The Redemption Date shall be the date on which each of the following conditions has been satisfied: (i) a Holder has delivered a Demand for Redemption and the certificate evidencing the shares of Convertible Preferred Stock to be redeemed; and (ii) the Breach Cure Period has expired.

c. Early Redemption at the Corporation's Election.

i. If, at any time after the third anniversary of the issuance of the first share of Preferred Stock, (A) the Common Stock is traded on my national securities exchange or quoted on the Nasdaq National Market or Nasdaq SmallCap Market, and (B) the closing price per share of the Common Stock exceeds \$10.00 per share for at least 20 consecutive trading days (the "Trading Period"), and (C) in such Trading Period the average daily trading volume is greater than 200,000 shares per day, then the Corporation may, not later than 5 business days after the end of any such Trading Period (the "Call Notice Period"), call for the redemption of all (but not less than all) the Preferred Stock. If the Corporation does not timely call for such redemption, the Corporation may thereafter call for redemption as herein provided only if the conditions set forth in clauses (A), (B), and (C) of the preceding sentence are again fulfilled, and the Corporation calls for redemption within the new Call Notices Period.

ii. If the corporation elects to redeem the Preferred Stock, the Corporation shall give written notice thereof (the "Call for Redemption"), signed by the Chief Executive Officer or Chief Financial Officer, to the Holders of the Preferred Stock not later than the end of the Call Notice Period. The Call for Redemption shall (A) specify the beginning and end of the Trading Period and shall (B) set forth the Corporation's undertaking to pay the Stated Value on each outstanding share of Preferred Stock plus any accrued but unpaid dividends thereon, and (C) certify that the Corporation has the funds on hand to make such payments, and that the Corporation is not under any lawful order of any court or other governmental authority restricting or prohibiting such payment and not bound by any

agreement, undertaking or other obligation which would prohibit or restrict the authority of the Corporation to make such payment, and (D) set forth the name and address of the Corporation or, if applicable, any transfer or paying agent, to which the Holders shall deliver their certificates evidencing the Preferred Stock to obtain payment therefore.

iii. Simultaneously with the Corporation's issuance of any Call for Redemption, the Corporation shall set, aside, in a segregated account, sufficient funds to pay all amounts owed to the Holders of the Preferred Stock on account of such redemption.

iv. The issuance of a Call for Redemption shall not impair or diminish in any way the right of the Holders of the Preferred Stock to convert the Preferred Stock into Common Stock; *provided, however*, that sixty days after the Call for Redemption, the Preferred Stock not otherwise converted or redeemed shall be deemed redeemed, and the certificates therefore shall evidence only the right of the Holder to receive the payments payable by the Corporation upon redemption.

v. Payment of the Stated Value, plus all accrued, accumulated and unpaid dividends, shall be made to each Holder not later than two (2) business days following the Corporation's receipt of such Holder's certificates evidencing the Preferred Stock, or the usual and customary proof of loss of such certificates, if applicable.

d. Status of Redeemed or Purchased Shares. Any shares of the Convertible Preferred Stock at any time purchased, redeemed or otherwise acquired by the Corporation shall not be reissued and shall be retired.

e. Insufficient Funds. If the funds of the Corporation legally available for redemption of shares of the Preferred Stock on any Redemption Date are insufficient to redeem the total number of shares of Preferred Stock to be redeemed on such date, those funds which are legally available, if any, will be used to redeem the maximum possible number of such shares ratably among the Holders of such shares to be redeemed based upon the total Redemption Price applicable to each such Holder's shares of Preferred Stock which are subject to redemption on such Redemption Date. The shares of Preferred Stock not redeemed shall remain outstanding and entitled to all the rights and preferences provided herein. At any time thereafter when additional funds of the Corporation are legally available for the redemption of shares of the Preferred Stock, such funds will immediately be used to redeem the balance of the shares which the Corporation has become obliged to redeem on any Redemption Date but which it has not redeemed.

14. Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of (a) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number specified in this Section prior to 4:00 p.m. (New York City time) on a business day, (b) the next business day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number specified in this Section on a day that is not a business day or later than 4:00 p.m. (New York City time) on any business day, or (c) the

business day following the date of mailing, if sent by U.S. nationally recognized overnight courier service such as Federal Express. The address for such notices and communications shall be as follows: (i) if to the Corporation, to 157 Technology Drive, Irvine, California 92618, facsimile: 949.788.6706, Attention: Chief Executive Officer or (ii) if to a holder of Preferred Stock, to the address or facsimile number appearing on the Corporation's shareholder records or, in either case, to such other address or facsimile number as the Corporation or a holder of Preferred Stock may provide to the other in accordance with this Section.

In Witness Whereof, the undersigned has executed this Certificate of Designation on behalf of the Corporation this 6th day of May, 2003.

/s/ Rajesh G. Shrotriya
Name: Rajesh G. Shrotriya, M.D.
Title: Chairman, Chief Executive Officer and President

FORM OF CONVERSION NOTICE

(To be executed by the registered Holder in order to convert shares of Preferred Stock)

The undersigned hereby irrevocably elects to convert the number of shares of Series D 8% Cumulative Convertible Voting Preferred Stock (the "Preferred Stock") indicated below into shares of common stock, par value \$.001 per share (the "Common Stock"), of Spectrum Pharmaceuticals, Inc., a Delaware corporation (the "Company"), according to the Certificate of Designations of the Preferred Stock and the conditions hereof, as of the date written below. The undersigned hereby requests that certificates for the shares of Common Stock to be issued to the undersigned pursuant to this Conversion Notice be issued in the name of, and delivered to, the undersigned or its designee as indicated below. A copy of the certificate representing the Preferred Stock being converted is attached hereto.

Date to Effect Conversion

Number of shares of Preferred Stock owned prior to Conversion

Number of shares of Preferred Stock to be Converted

Stated Value of Preferred Stock to be Converted

Amount of accumulated and unpaid dividends on shares of Preferred Stock to be Converted

Number of shares of Common Stock to be Issued (including conversion of accrued but unpaid dividends on shares of Preferred Stock to be Converted)

Applicable Conversion Value

Number of shares of Preferred Stock owned subsequent to Conversion

Conversion Information:

[NAME OF HOLDER]

By: _____

Name:

Title:

Address of Holder:

Issue Common Stock to (if different than above):

Name: _____

Address: _____

The undersigned represents, subject to the accuracy of information filed under the Securities Act and the Exchange Act by any person other than such holder with respect to the outstanding Common Stock of the Company (including securities or property convertible into or exchangeable for Common Stock, with or without the payment of consideration), as of the date hereof that, after giving effect to the conversion of Preferred Shares pursuant to this Conversion Notice, the undersigned will not exceed the "Beneficial Ownership Cap" contained in Section 5(g) of the Certificate of Designations of the Preferred Stock.

Name of Holder

By: _____

Name: _____

Title: _____

**CERTIFICATE OF INCREASE
OF
SPECTRUM PHARMACEUTICALS INC.**

*Pursuant to Section 151(g) of the General
Corporation Law of the State of Delaware*

Spectrum Pharmaceuticals, Inc., a corporation organized and existing under and by virtue of the laws of the State of Delaware (the "Corporation"), DOES HEREBY CERTIFY:

1. That pursuant to the authority conferred upon the Board of Directors of the Corporation by the certificate of incorporation of the Corporation, as amended, the Board unanimously adopted the following recitals and resolutions on May 9, 2003 authorizing the issuance of the Series D 8% Cumulative Convertible Voting Preferred Stock of the Corporation, which recitals and resolutions are still in full force and effect and are not in conflict with any provisions of the certificate of incorporation or bylaws of the Corporation.

WHEREAS, the resolutions adopted by the Board on April 16, 2003 and the Certificate of Designation, Preferences and Rights of Series D 8% Cumulative Convertible Voting Preferred Stock, filed with the Delaware Secretary of State on May 7, 2003 (the "Series D Certificate of Designation") stated the number of authorized shares of Series D 8% Cumulative Convertible Voting Preferred Stock (the "Series D Preferred Stock") as 444;

WHEREAS, the Board has determined that it is in the best interest of the Corporation to increase the number of authorized shares of Series D Preferred Stock to 600;

NOW, THEREFORE, BE IT RESOLVED, that pursuant to authority vested in the Board of Directors by the Certificate of Incorporation, the Board does hereby increase the number of authorized shares of Series D Preferred Stock to 600, and does hereby amend and restate the first paragraph of the Series D Certificate of Designation in its entirety to read as follows:

"Resolved, that pursuant to the authority expressly granted to and vested in the board of directors of the Corporation (the "Board") pursuant to the General Corporation Law of the State of Delaware, as amended, and by the provisions of the Corporation's Certificate of Incorporation, as amended to date (the "Certificate of Incorporation"), the Board hereby creates a series of preferred stock of the Corporation, par value \$0.001 per share, each share having a stated value (the "Stated Value") of \$10,000.00, such series consisting of 600 shares (which shall not be subject to increase without the consent of the Holders (as defined below) of a majority of the outstanding Preferred Stock, which majority shall include each Holder who acquired in the aggregate more than 100 shares of Preferred Stock so long as such Holder continues to hold more than 100 shares of Preferred Stock, which such majority is hereinafter referred to as a "Special Majority"), which shall be designated as the "Series D 8% Cumulative Convertible Voting Preferred Stock" (hereinafter, the "Convertible Preferred Stock" or the "Preferred Stock"), which series shall have the following powers, designations, preferences and relative participating, optional, voting or other rights, and the following qualifications, limitations or restrictions."

2. That the holders of the shares of the Series D Preferred Stock duly approved of the increase in the number of authorized shares of Series D Preferred Stock to 600 by written consent on May 12, 2003, in accordance with the Series D Certificate of Designation.

[Signature Page Follows]

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Increase to be executed by Rajesh C. Shrotriya, M.D., its Chairman, Chief Executive Officer and President, this 13th day of May, 2003

SPECTRUM PHARMACEUTICALS, INC.
a Delaware corporation

By: /s/ Rajesh C. Shrotriya
Rajesh C. Shrotriya, M.D.
Chairman, Chief Executive Officer and
President

**Certificate of Designations, Rights and Preferences
of the
Series E Convertible Voting Preferred Stock
of
Spectrum Pharmaceuticals, Inc.**

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

The undersigned, being the Chief Executive Officer of Spectrum Pharmaceuticals, Inc., a Delaware corporation (the “*Corporation*”), does hereby certify, that the following resolution has been duly adopted by the board of directors of the Corporation:

Resolved, that pursuant to the authority expressly granted to and vested in the board of directors of the Corporation (the “*Board*”) pursuant to the General Corporation Law of the State of Delaware, as amended, and by the provisions of the Corporation’s Certificate of Incorporation, as amended to date (the “*Certificate of Incorporation*”), the Board hereby creates a series of preferred stock of the Corporation, par value \$0,001 per share, each share having a stated value (the “*Stated Value*”) of \$10,000.00, such series consisting of 2,000 shares (which shall not be subject to increase without the consent of the Holders (as defined below) of a majority of the outstanding Series E Preferred Stock), which shall be designated as the “Series E Convertible Voting Preferred Stock” (the “*Series E Preferred Stock*”), which series shall have the following powers, designations, preferences and relative participating, optional, voting or other rights, and the following qualifications, limitations or restrictions:

1. Dividends. The holders of the Series E Preferred Stock (each, a “*Holder*” and collectively, the “*Holders*”) shall be entitled to receive dividends, when, if and as declared by the Board, out of funds legally available therefor. Such dividends shall be payable only when, as and if declared by the Board.

2. Voting Rights. Except as otherwise provided herein or by law, the Holders shall have full voting rights and powers, subject to the Beneficial Ownership Cap (as defined in Section 5(g)), equal to the voting rights and powers of holders of common stock, par value \$.001 of the Corporation (the “*Common Stock*”) and shall be entitled to notice of any stockholders meeting in accordance with the Bylaws of the Corporation, and shall be entitled to vote, with respect to any question upon which holders of Common Stock have the right to vote, including, without limitation, the right to vote for the election of directors, voting together with the holders of Common Stock as one class. Each Holder shall be entitled to the number of votes equal to the

number of shares of Common Stock into which such shares of Series E Preferred Stock could be converted on the record date for the taking of a vote at the then current Conversion Value (as hereinafter defined), subject to the Beneficial Ownership Cap, or, if no record date is established, at the day prior to the date such vote is taken or any written consent of shareholders is first executed. Fractional votes shall not be permitted, and any fractional voting rights resulting from the above formula (after aggregating all shares into which shares of Series E Preferred Stock held by each Holder could be converted) shall be rounded to the nearest whole number (with one-half being rounded upward), subject to the Beneficial Ownership Cap.

3. Rights on Liquidation.

(a) The Series E Preferred Stock shall rank, as to liquidation preference provided below, *pari passu* with the Corporation's Series D 8% Cumulative Convertible Preferred Stock (the "*Series D Preferred Stock*").

(b) In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation (any such event being hereinafter referred to as a "*Liquidation*"), before any distribution of assets of the Corporation shall be made to or set apart for the holders of Common Stock, the Holders shall be entitled to receive payment out of such assets of the Corporation in an amount equal to the greater of (i) the Liquidation Preference for the Series E Preferred Stock, or (ii) the cash or other property distributable upon such Liquidation with respect to the shares of Common Stock into which such shares of Series E Preferred Stock, including any accrued dividends thereon, could have been converted immediately prior to such payment. The "*Liquidation Preference*" for the Series E Preferred Stock shall be an amount equal to 120% of the Stated Value per share of Series E Preferred Stock plus any declared and unpaid dividends thereon. If the assets of the Corporation available for distribution to the Holders shall not be sufficient to make in full the payment herein required, such assets shall be distributed pro-rata among the holders of the Series D Preferred Stock and the Holders of the Series E Preferred Stock based on the aggregate liquidation preferences of the shares of Series D Preferred Stock and the aggregate Liquidation Preferences of the shares of Series E Preferred Stock held by each such Holder.

(c) If the assets of the Corporation available for distribution to shareholders exceed the aggregate amount of payable pursuant to paragraph 3(b) above with respect to all shares of Series E Preferred Stock then outstanding, then, after the payment required by paragraph 3(b) above shall have been made or irrevocably set aside, the holders of Common Stock shall be entitled to receive with respect to each share of Common Stock payment of a pro rata portion of such assets based on the aggregate number of shares of Common Stock held by each such holder.

4. Actions Requiring the Consent of Holders. (a) Subject to the rights of the holders of the Series D Preferred Stock, as long as more than 20% of the shares of Series E Preferred Stock issued on the date of original issuance of the shares of Series E Preferred Stock (the "*Date*

of Original Issue”) are outstanding, none of the following actions will take place without the prior written consent of the holders of a majority of the outstanding Series E Preferred Stock, which consent may be withheld for any or no reason:

- (i) Any amendment, alteration or repeal of any provision of the Certificate of Incorporation or the Corporation’s Bylaws which adversely affects the terms of the Series E Preferred Stock or the relative rights, preferences and privileges of the Holders of the Series E Preferred Stock as such holders;
- (ii) Any amendments or changes to the Rights Plan or the adoption of any other similar plans or arrangements, provided that nothing herein shall be deemed to restrict the right of the Corporation to redeem all, but not less than all, of the outstanding Rights (as defined in the Rights Plan (as defined in Section 5(b) hereof)) or otherwise terminate the Rights Plan;
- (iii) The offer, sale, designation or issuance by the Corporation or any of its Subsidiaries of any equity or debt security senior to or *pari passu* with the Series E Preferred Stock in any respect;
- (iv) The sale or issuance of any shares of Common Stock, any warrant, option, subscription or purchase right with respect to shares of Common Stock, any security convertible into, exchangeable for, or otherwise entitling the holder thereof to acquire shares of Common Stock, or any warrant, option, subscription or purchase right with respect to any such convertible, exchangeable or other security at a price below the Conversion Value (as hereinafter defined), other than (A) options, warrants, and other rights outstanding on the date hereof to acquire, directly or indirectly, Common Stock, and the Common Stock acquirable thereunder (including, without limitation, shares of Common Stock acquirable upon conversion of, or issuable as dividends on, the Series D Preferred Stock), and (B) options granted hereafter to any employee, officer, Director or consultant pursuant to any plan approved by stockholders for the benefit of employees, officers, Directors and consultants (“Incentive Options”), and the Common Stock acquirable thereunder, and (C) awards presently outstanding or hereafter awarded under the Seller’s employee stock purchase plan effective as of January 26, 2001 (the “ESPP”);
- (v) The entering into by the Corporation or any subsidiary of any bank or other non-trade indebtedness for borrowed money;
- (vi) The granting or making by the Corporation or any of its Subsidiaries of any mortgage or pledge, or the assumption or suffering to exist on, or the imposition on, any of its material properties or assets any Lien;

- (vii) The liquidation, dissolution or winding-up of the Corporation or any of its subsidiaries or any merger or consolidation of the Corporation or any of its subsidiaries with or into another entity or the sale, conveyance or other disposition of all, or substantially all, the assets, property or business of the Corporation or any of its subsidiaries;
- (viii) The reorganization, recapitalization, sale, conveyance, or other disposition of or encumbrance of all or substantially all of the property or business of the Corporation or any of its Subsidiaries or the merger into or consolidation with any other corporation (other than a wholly owned subsidiary corporation) or effect any transaction or series of related transactions in which, in any case, more than 20% of the voting power of the corporation is disposed of, calculated on a post-transaction basis;
- (ix) The redemption, purchase, repurchase or other acquisition, directly or indirectly, of any shares of capital stock of the Corporation or any of its Subsidiaries or any option, warrant or other right to purchase or acquire any such shares;
- (x) The declaration or payment of any dividend or other distribution (whether cash, stock or property) with respect to the capital stock of the Corporation, other than the Series E Preferred Stock and the Series D Preferred Stock; and
- (xi) The taking of any action by the Corporation with the primary intent of causing the Common Stock to be delisted from any securities exchange or quotation system upon which the Common Stock is then listed.

(b) The restrictions contained in this Section 4 (except for the restriction in Section 4(c)) shall cease to apply if for no less than 10 trading days during any period of 30 consecutive trading days following the Date of Original Issue (i) the Fair Market Value (as defined in that certain purchase agreement between the Corporation and the original purchasers of the Series E Preferred Stock by which such purchasers agreed to acquire the Series E Preferred Stock on the Original Issue Date (the "*Purchase Agreement*")) of the Common Stock exceeds five dollars (\$5) per share and (ii) all of the Conversion Shares and Warrants Shares have been duly registered for sale under an effective registration statement pursuant to the Securities Act of 1933, as amended (the "*Securities Act*") and such registration statement is effective throughout the aforesaid 30-day period.

(c) So long as any shares of the Series E Preferred Stock are outstanding, the Corporation may not, without the prior consent of the Holders of a majority of the outstanding Series E Preferred Stock, purchase or otherwise acquire for any consideration (except through a redemption of all the outstanding shares of the Series D Preferred Stock or Series E Preferred

Stock) any shares of the Common Stock or any other outstanding shares of the capital stock of the Corporation.

5. Conversion.

(a) Right to Convert. Subject to the limitation set forth in Section 5(g) hereof, each Holder shall have the right at any time, at such Holder's option, to convert all or any whole number of such Holder's shares of Series E Preferred Stock into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing (i) the aggregate Stated Value of the shares of Series E Preferred Stock to be converted plus any declared but unpaid dividends thereon by (ii) the Conversion Value (as hereinafter defined) then in effect for such Series E Preferred Stock. No fractional shares or scrip representing fractional shares shall be issued upon the conversion of any Series E Preferred Stock. With respect to any fraction of a share of Common Stock called for upon any conversion, the Corporation shall pay to the Holder an amount in cash equal to such fraction multiplied by the Current Market Price (as defined below) per share of the Common Stock.

"*Current Market Price*" means, in respect of any share of Common Stock on any date herein specified:

(i) if there shall not then be a public market for the Common Stock, the Appraised Value (as hereinafter defined) per share of Common Stock at such date, or

(ii) if there shall then be a public market for the Common Stock, the average of the daily market prices for the 20 consecutive trading days immediately before such date. The daily market price for each such trading day shall be (I) the last sale price on such day on the principal stock exchange (including Nasdaq) on which such Common Stock is then listed or admitted to trading, or quoted, as applicable, (II) if no sale takes place on such day on any such exchange, the average of the last reported closing bid and asked prices on such day as officially quoted on any such exchange (including Nasdaq), (III) if the Common Stock is not then listed or admitted to trading on any stock exchange, the average of the last reported closing bid and asked prices on such day in the over-the-counter market, as furnished by the National Association of Securities Dealers Automatic Quotation System or the National Quotation Bureau, Inc., (IV) if neither such corporation at the time is engaged in the business of reporting such prices, as furnished by any similar firm then engaged in such business, or (V) if there is no such firm, as furnished by any member of the NASD selected mutually by the Holders of a majority of the Series E Preferred Stock and the Corporation or, if they cannot agree upon such selection, as selected by two such members of the NASD, one of which shall be selected by a majority in interest of the Holders and one of which shall be selected by the Corporation.

“*Appraised Value*” means, in respect of any share of Common Stock on any date herein specified, the fair saleable value of such share of Common Stock (determined without giving effect to the discount for (i) a minority interest or (ii) any lack of liquidity of the Common Stock or to the fact that the Corporation may have no class of equity registered under the Securities Exchange Act of 1934, as amended (the “*Exchange Act*”), as of the last day of the most recent fiscal month end prior to such date specified, based on the value of the Corporation, as determined by a nationally recognized investment banking firm selected by the Corporation’s Board of Directors and having no prior relationship with the Corporation, and reasonably acceptable to a majority in interest of the Holders.

(b) Mechanics of Conversion. Such right of conversion shall be exercised by any Holder by delivering to the Corporation a conversion notice in the form attached hereto as Exhibit A (the “*Conversion Notice*”), appropriately completed and duly signed and specifying the number of whole shares of Series E Preferred Stock that the Holder elects to convert (the “*Converting Shares*”) into shares of Common Stock on the date specified in the Conversion Notice (which date shall not be earlier than the date on which the Conversion Notice is delivered to the Corporation), and by surrender of the certificate or certificates representing such Converting Shares. The Conversion Notice shall also contain a statement of the name or names (with addresses and tax identification or social security numbers) in which the certificate or certificates for Common Stock shall be issued, if other than the name in which the Converting Shares are registered. Promptly, but in no event more than two business days, after the receipt of the Conversion Notice and surrender of the Converting Shares, the Corporation shall issue and deliver, or cause to be delivered, to the holder of the Converting Shares or such holder’s nominee, a certificate or certificates for the number of shares of Common Stock issuable upon the conversion of such Converting Shares together with cash in lieu of any fractional interest in a share of Common Stock together with a new certificate covering the number of shares of Series E Preferred Stock representing the unconverted portion of the shares represented by the Series E Preferred Stock certificate surrendered. Such conversion shall be deemed to have been effected as of the close of business on the date specified in the Conversion Notice in accordance with the terms hereof (the “*Conversion Date*”), and the person or persons entitled to receive the shares of Common Stock issuable upon conversion shall be treated for all purposes as the holder or holders of record of such shares of Common Stock as of the close of business on the Conversion Date.

(c) Common Stock Reserved. The Corporation shall at all times reserve and keep available out of its authorized but unissued Common Stock, solely for issuance upon the conversion of shares of Series E Preferred Stock as herein provided, such number of shares of Common Stock as shall from time to time be issuable upon the conversion of all the shares of Series E Preferred Stock at the time outstanding.

(d) Conversion Value. The initial conversion value for the Series E Preferred Stock shall be \$5.00 per share of Common Stock, such value to be subject to adjustment in accordance with the provisions of this Section 5. Such conversion value in effect from time to

time, as adjusted pursuant to this Section 5, is referred to herein as the “*Conversion Value*.” All of the remaining provisions of this Section 5 shall apply separately to each Conversion Value in effect from time to time with respect to Series E Preferred Stock.

(e) Stock Dividends, Subdivisions and Combinations. If at any time while the Series E Preferred Stock is outstanding, the Corporation shall:

- (i) take a record of the holders of its Common Stock for the purpose of entitling them to receive a dividend payable in, or other distribution of, additional shares of Common Stock,
- (ii) subdivide its outstanding shares of Common Stock into a larger number of shares of Common Stock, or
- (iii) combine its outstanding shares of Common Stock into a smaller number of shares of Common Stock,

then in each such case the Conversion Value shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately after such event. Any adjustment made pursuant to clause (i) of this paragraph shall become effective immediately after the record date for the determination of shareholders entitled to receive such dividend or distribution, and any adjustment pursuant to clauses (ii) or (iii) of this paragraph (e) shall become effective immediately after the effective date of such subdivision or combination. If any event requiring an adjustment under this paragraph occurs during the period that a Conversion Value is calculated hereunder, then the calculation of such Conversion Value shall be adjusted appropriately to reflect such event.

(f) Certain Other Distributions. If, at any time while the Series E Preferred Stock is outstanding, the Corporation shall take a record of the holders of its Common Stock for the purpose of entitling them to receive any dividend or other distribution of:

- (i) cash (other than a cash dividend payable out of earnings or earned surplus legally available for the payment of dividends under the laws of the jurisdiction of incorporation of the Corporation),
- (ii) any evidences of its indebtedness, any shares of stock of any class or any other securities or property of any nature whatsoever (other than cash, convertible securities or additional shares of Common Stock), or
- (iii) any warrants or other rights to subscribe for or purchase any evidences of its indebtedness, any shares of stock of any class or any other securities or property of

any nature whatsoever (other than cash, convertible securities or additional shares of Common Stock) (in each case set forth in subparagraphs (i), (ii) and (iii) hereof, the “*Distributed Property*”),

then upon any conversion of Series E Preferred Stock that occurs after such record date, the holder of Series E Preferred Stock shall be entitled to receive, in addition to the Conversion Shares otherwise issuable upon such conversion, the Distributed Property that such Holder would have been entitled to receive if the Series E Preferred Stock had been converted into Common Stock as of such record date. If the Distributed Property consists of property other than cash, then the fair value of such Distributed Property shall be as determined in good faith by the Board of Directors and set forth in reasonable detail in a written valuation report (the “*Valuation Report*”) prepared by the Board of Directors. The Corporation shall give written notice of such determination and a copy of the Valuation Report to all holders of Series E Preferred Stock, and if the holders of 25% of the outstanding Series E Preferred Stock object to such determination within twenty (20) business days following the date such notice is given to all of the holders of Series E Preferred Stock, the Corporation shall submit such valuation to an investment banking firm of recognized national standing selected by holders of not less than 75% of the Series E Preferred Stock, and the opinion of such investment banking firm shall be binding upon the Corporation and the holders of all the Series E Preferred Stock. A reclassification of the Common Stock (other than a change in par value, or from par value to no par value or from no par value to par value) into shares of Common Stock and shares of any other class of stock shall be deemed a distribution by the Corporation to the holders of its Common Stock of such shares of such other class of stock within the meaning of this Section 5(f); and if the outstanding shares of Common Stock shall be changed into a larger or smaller number of shares of Common Stock as a part of such reclassification, such change shall be deemed a subdivision or combination, as the case may be, of the outstanding shares of Common Stock within the meaning of Section 5(e).

(g) Blocking Provision. Notwithstanding any contrary or inconsistent provision hereof, the number of shares of Common Stock that may be acquired by any Holder upon any conversion of Series E Preferred Stock or that shall be entitled to voting rights under Section 2 hereof shall be limited to the extent necessary to insure that, following such conversion, the number of shares of Common Stock then beneficially owned by such Holder and any other persons or entities whose beneficial ownership of Common Stock would be aggregated with the Holder’s for purposes of Section 13(d) of the Exchange Act (including shares held by any “group” of which the Holder is a member) does not exceed 4.95% of the total number of shares of Common Stock of the Corporation then issued and outstanding (the “*Beneficial Ownership Cap*”). For purposes hereof, “group” has the meaning set forth in Section 13(d) of the Exchange Act and applicable regulations of the Securities and Exchange Commission, and the percentage held by the Holder shall be determined in a manner consistent with the provisions of Section 13(d) of the Exchange Act. Each delivery of a Conversion Notice by a Holder will constitute a representation by such Holder that it has evaluated the limitation set forth in this paragraph and determined, subject to the accuracy of information filed under the Securities Act and the Exchange Act by any person other than such Holder with respect to the outstanding

Common Stock of the Corporation (including securities or property convertible into or exchangeable for Common Stock, with or without the payment of consideration), that the issuance of the full number of shares of Common Stock requested in such Conversion Notice is permitted under this paragraph, and the Corporation shall have no obligations to such Holder to verify compliance with the Beneficial Ownership Cap. This paragraph shall be construed and administered in such manner as shall be consistent with the intent of the first sentence of this paragraph. Any provision hereof which would require a result that is not consistent with such intent shall be deemed severed herefrom and of no force or effect with respect to the conversion contemplated by a particular Conversion Notice. Notwithstanding the foregoing provisions of Section 5(g), any Holder of Series E Preferred Stock shall have the right prior to the Date of Original Issue upon written notice to the Corporation, or after the Date of Original Issue upon 61 days prior written notice to the Corporation, to choose not to be governed by the Beneficial Ownership Cap provided herein.

(h) Rights Distributed Under Rights Agreement. Capitalized terms used in this Section 5(h) and which are not otherwise defined herein, shall have the meanings ascribed to them in the Rights Agreement (the "*Rights Agreement*") dated as of December 13, 2000 between the Corporation and U.S. Stock Transfer Corporation. While the Rights Agreement or any other poison pill, rights plan or similar arrangement (each, a "*Rights Plan*") shall be in effect:

(i) Holders who convert Series E Preferred Stock before the Distribution Date or before any Rights Certificates or similar right (each a "*Right*") shall be evidenced by a separate rights certificate or shall otherwise be transferable otherwise than in connection with the transfer of the underlying shares of Common Stock (the date of the occurrence of any of the foregoing being referred to herein as a "*Rights Distribution Date*"), will receive, in addition to shares of Common Stock issued on conversion, one Right for each such shares of Common Stock.

(ii) Upon the occurrence of a Rights Distribution Date, each Holder shall receive, without any further action by the Corporation, such number of Rights equal to the number of Rights such Holder would have held if, immediately prior to the Rights Distribution Date, all of the shares of Series E Preferred Stock had been converted into shares of Common Stock at the then current Conversion Value. The Corporation shall issue to each Holder certificates evidencing such Rights, no later than five business days following such Rights Distribution Date. In the event the applicable Rights Plan does not permit such Rights to be granted to each Holder, the Corporation shall promptly (i) amend the applicable Rights Plan to permit the Corporation to take the actions set forth in this Section 5(h), or (ii) issue to each Holder an option, right or similar arrangement giving each Holder the same rights and benefits as they would have held upon the receipt of the applicable number of Rights.

6. Other Provisions Applicable to Adjustments. The following provisions shall be applicable to the making of adjustments of the number of shares of Common Stock into which

the Series E Preferred Stock is convertible and the current Conversion Value provided for in Section 5:

(a) When Adjustments to Be Made. The adjustments required by Section 5 shall be made whenever and as often as any specified event requiring an adjustment shall occur, except that any adjustment to the Conversion Value that would otherwise be required may be postponed up to, but not beyond the Conversion Date if such adjustment either by itself or with other adjustments not previously made adds or subtracts less than 1% of the shares of Common Stock into which the Series E Preferred Stock is convertible immediately prior to the making of such adjustment. Any adjustment representing a change of less than such minimum amount (except as aforesaid) which is postponed shall be carried forward and made as soon as such adjustment, together with other adjustments required by Section 5 and not previously made, would result in a minimum adjustment on the Conversion Date. For the purpose of any adjustment, any specified event shall be deemed to have occurred at the close of business on the date of its occurrence.

(b) Fractional Adjustments. In computing adjustments under Section 5, fractional adjustments to the Conversion Value shall be taken into account to the nearest 1/100th of a cent.

(c) Escrow of Stock. If after any property becomes distributable pursuant to Section 5 by reason of the taking of any record of the holders of Common Stock, but prior to the occurrence of the event for which such record is taken, a holder of the Series E Preferred Stock converts the Series E Preferred Stock, such holder of Series E Preferred Stock shall continue to be entitled to receive any shares of Common Stock issuable upon conversion under Section 5 by reason of such adjustment and such shares or other property shall be held in escrow for the holder of the Series E Preferred Stock by the Corporation to be issued to holder of the Series E Preferred Stock upon and to the extent that the event actually takes place. Notwithstanding any other provision to the contrary herein, if the event for which such record was taken fails to occur or is rescinded, then such escrowed shares shall be canceled by the Corporation and escrowed property returned to the Corporation.

7. Merger, Consolidation or Disposition of Assets. If, while the Series E Preferred Stock is outstanding, there occurs: (i) an acquisition by an individual or legal entity or group (as defined in Section 13(d) of the Exchange Act) of more than one-half of the voting rights or equity interests in the Corporation; or (ii) a merger or consolidation of the Corporation or a sale, transfer or other disposition of all or substantially all the Corporation's property, assets or business to another person or entity where the holders of the Corporation's voting securities prior to such transaction fail to continue to hold at least a majority of the voting power of the surviving or acquiring entity (a "*Change of Control*"), and, pursuant to the terms of such Change of Control, shares of common stock of the surviving or acquiring entity (or other interests, as applicable), or any cash, shares of stock or other securities or property of any nature whatsoever (including warrants or other subscription or purchase rights) in addition to or in lieu of common

stock of the successor or acquiring entity ("*Other Property*"), are to be received by or distributed to the holders of Common Stock of the Corporation, then the certificates evidencing the Series E Preferred Stock shall, as of and after the Change of Control, evidence only the right to receive, at each Holder's election, which must be delivered by each Holder to the Corporation within 20 days after receiving notice from the Corporation of the right to make such election, either:

(i) the number of shares of common stock of the successor or acquiring person (or other interests, as applicable) or of the Corporation, if it is the surviving person, and Other Property receivable upon or as a result of such Change of Control by a holder of the number of shares of Common Stock into which the Series E Preferred Stock is convertible immediately prior to such event, or

(ii) at the effective time of such Change of Control, such Holder's Liquidation Preference.

If a timely election is not made pursuant to this Section 7(a), the holder shall receive the benefit of Section 7(a)(i) and shall not be entitled to the benefit of Section 7(a)(i). If notice of a Change of Control is given but the Change of Control transaction is not, for any reason, consummated, the elections of the Holders given in connection with such notice shall be of no force or effect, *ab initio*.

8. Other Action Affecting Common Stock. In case at any time or from time to time the Corporation shall take any action in respect of its Common Stock, other than the payment of dividends permitted by Section 5 or any other action described in Section 5, then, unless such action will not have a materially adverse effect upon the rights of the holder of Series E Preferred Stock, the number of shares of Common Stock or other stock into which the Series E Preferred Stock is convertible exercisable and/or the purchase price thereof shall be adjusted in such manner as may be equitable in the circumstances.

9. Certain Limitations. Notwithstanding anything herein to the contrary, the Corporation agrees not to enter into any transaction which, by reason of any adjustment hereunder, would cause the current Conversion Value to be less than the par value per share of Common Stock.

10. Stock Transfer Taxes. The issue of stock certificates upon conversion of the Series E Preferred Stock shall be made without charge to the converting holder for any tax in respect of such issue; provided, however, that the Corporation shall be entitled to withhold any applicable withholding taxes with respect to such issue, if any.

11. Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Value, the Corporation, at its expense, shall promptly compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each Holder a certificate setting forth such adjustment or readjustment and showing in detail the

facts upon which such adjustment or readjustment is based. The Corporation shall, upon the written request at any time of any Holder, furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Conversion Value at the time in effect for the Series E Preferred Stock and (iii) the number of shares of Common Stock and the amount, if any, or other property which at the time would be received upon the conversion of Series E Preferred Stock, owned by such holder.

12. Notices of Record Date. In the event of any fixing by the Corporation of a record date for the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend (other than a cash dividend) or other distribution, any shares of Common Stock or other securities, or any right to subscribe for, purchase or otherwise acquire, or any option for the purchase of, any shares of stock of any class or any other securities or property, or to receive any other right, the Corporation shall mail to each Holder at least twenty (20) days prior to the date specified therein, a notice specifying the date on which any such record is to be taken for the purpose of such dividend, distribution or rights, and the amount and character of such dividend, distribution or right.

13. Redemption at the Corporation's Election.

(a) If at any time (A) the Common Stock is traded on any national securities exchange or quoted on the Nasdaq National Market or Nasdaq SmallCap Market, (B) the closing price per share of the Common Stock exceeds \$12.00 per share for at least 20 consecutive trading days (the "*Trading Period*"), (C) in such Trading Period the average daily trading volume is greater than 100,000 shares per day, and (D) the Corporation has, legally available for such purpose, sufficient funds to pay all amounts owed to the Holders on account of the redemption of all of the Series E Preferred Stock, then the Corporation may, not later than 5 business days after the end of any such Trading Period (the "*Call Notice Period*"), call for the redemption of all (but not less than all) the Series E Preferred Stock. If the Corporation does not timely call for such redemption, the Corporation may thereafter call for redemption as herein provided only if the conditions set forth in clauses (A), (B), (C), and (D) of the preceding sentence are again fulfilled, and the Corporation calls for redemption within the new Call Notice Period.

(b) If the Corporation elects to redeem the Series E Preferred Stock, the Corporation shall give written notice thereof (the "*Call for Redemption*"), signed by the Chief Executive Officer or Chief Financial Officer, to the Holders of the Series E Preferred Stock not later than the end of the Call Notice Period. The Call for Redemption shall (A) specify the beginning and end of the Trading Period and shall (B) set forth the Corporation's undertaking to pay the Stated Value on each outstanding share of Series E Preferred Stock plus any declared but unpaid dividends thereon, and (C) certify that the Corporation has the funds on hand to make such payments, and that the Corporation is not under any lawful order of any court or other governmental authority restricting or prohibiting such payment and not bound by any agreement, undertaking or other obligation which would prohibit or restrict the authority of the Corporation

to make such payment, and (D) set forth the name and address of the Corporation or, if applicable, any transfer or paying agent, to which the Holders shall deliver their certificates evidencing the Series E Preferred Stock to obtain payment therefor.

(c) Simultaneously with the Corporation's issuance of any Call for Redemption, the Corporation shall set aside, in a segregated account, sufficient funds to pay all amounts owed to the Holders of the Series E Preferred Stock on account of such redemption.

(d) The issuance of a Call for Redemption shall not impair or diminish in any way the right of the Holders of the Series E Preferred Stock to convert the Series E Preferred Stock into Common Stock; *provided, however*, that at the end of the third business day after the Call for Redemption is received by the Holders, the Series E Preferred Stock not otherwise converted or redeemed shall be deemed redeemed, and; *provided, further*, that certificates for any shares of Series E Preferred Stock deemed redeemed shall evidence only the right of the Holder to receive the payments payable by the Corporation upon redemption.

(e) Payment of the Stated Value, plus all accrued, accumulated and unpaid dividends, shall be made to each Holder not later than two (2) business days following the Corporation's receipt of such Holder's certificates evidencing the Series E Preferred Stock, or the usual and customary proof of loss of such certificates, if applicable.

(f) To the extent that following a Call for Redemption, any Holder of shares of Series E Preferred Stock delivers to the Corporation a Conversion Notice and any such shares of Series E Preferred Stock are not converted on the date specified in the Conversion Notice due to the operation of Section 5(g), all such shares of Series E Preferred Stock that are not so converted shall be deemed converted automatically under Section 5 at the first moment thereafter when Section 5(g) would not prevent such conversion. Notwithstanding the preceding sentence, following the Call for Redemption, the right to: (a) the liquidation preference of the Series E Preferred Stock, including, without limitation, the right to be treated as holders of Series E Preferred Stock in the event of a merger or consolidation; (b) the consent rights described in Section 4 hereof and those consent rights described in Section 5.8 of the Purchase Agreement; (c) the redemption rights in Section 14 hereof, and (d) all other preferential contractual rights granted to holders of the Series E Preferred Stock (but not the Common Stock), shall cease immediately. The Corporation shall not be obligated to deliver Common Stock certificates in respect of Series E Preferred Stock that is automatically converted pursuant to this Section 13(f) until the Holder notifies the Corporation in writing that such shares are no longer subject to the operation of Section 5(g).

14. Product-Triggered Redemption.

(a) Definition of Product-Triggered Redemption Event. A "*Product-Triggered Redemption Event*" shall mean that the Corporation has failed to acquire from another person or entity, by December 26, 2003, either (A) all right, title and interest to an oncology-

related molecule or compound that it previously had no rights in or to and that has entered at least a Phase I clinical trial (a “*Compound*”) or (B) an exclusive license or sublicense to further develop a Compound together with (i) the right to practice under all Intellectual Property Rights necessary for the further development of such Compound throughout North America and (ii) one or more agreements providing that the Corporation or another party to such agreements shall have all Intellectual Property Rights necessary to manufacture, promote, market and sell the Compound throughout North America. If any of the rights (as set forth in the previous sentence) to the Compound are acquired by means of one or more license or sublicense agreements, such agreements would satisfy the requirements set forth in the previous sentence notwithstanding that they may require the Corporation to pay reasonable royalties to the licensor or sublicensor. In addition, if the Corporation acquires a Compound indirectly through the acquisition by the Corporation of another person or entity (whether by stock, merger or otherwise) that has the rights listed above in (A) or (B) to such Compound, then such acquisition would satisfy the requirements set forth in the first sentence of this Section 14(a). For purposes of this Section 14, “*Intellectual Property Rights*” shall mean all patents (including any registrations, continuations, continuations in part, renewals, reissues, extensions and applications for any of the foregoing), confidential or proprietary information that derives economic value (actual or potential) from not being generally known to other persons who can obtain economic value from its disclosure, know how, copyrights and trademarks.

(b) Product-Triggered Redemption Notice. The Corporation shall notify each holder in reasonable detail not later than December 30, 2003 (or not later than five days after the date of an event described in clause (y) hereof) if (x) a Product-Triggered Redemption Event has taken place or (y) the Corporation has completed the acquisition of a Compound as contemplated in Section 14(a) hereof (the “*Product-Triggered Redemption Notice*”), and such Product-Triggered Redemption Notice shall be reasonably acceptable in substance to the Holder. To the extent such Technology-Triggered Redemption Notice contains material non-public information of the Corporation, the Corporation shall simultaneously disclose such information in a filing on Form 8-K, provided, however, that if a Holder determines that the Product-Triggered Redemption Notice is not reasonably acceptable in substance, and the Holder demands that the Company provide additional information that constitutes material non-public information, then the Holder shall enter into a standard confidentiality agreement with respect to the additional information prior to the Company’s disclosure to the Holder and the Company shall not be required to disclose such additional information in a filing on Form 8-K.

(c) Redemption. If a Product-Triggered Redemption Event has occurred, the Corporation shall redeem on a pro rata basis up to one-half of the Series E Preferred Stock issued on the Date of Original Issue to any Holder who gives a Demand for Product-Triggered Redemption (as defined in Section 14(d) below). The Corporation shall effect such redemption by paying in cash for each such share to be redeemed an amount equal to the “*Product-Triggered Redemption Price*”, which shall equal (i) all declared but unpaid dividends as of the Product-Triggered Redemption Date (as defined below) with respect to each share to be redeemed, plus (ii) 100% of the Stated Value of each share to be redeemed. A redemption pursuant to this Section 14(c) shall be referred to as a “*Product-Triggered Redemption*.”

(d) Demand for Product-Triggered Redemption. (i) A Holder desiring to elect a redemption as herein provided shall deliver a notice (the “*Demand for Product-Triggered Redemption*”) to the Corporation specifying the following:

- (A) The number of shares of Series E Preferred Stock to be redeemed; and
- (B) the address to which the payment of the Product-Triggered Redemption Price shall be delivered, or, at the election of the Holder, wire instructions with respect to the account to which payment of the Product-Triggered Redemption Price shall be required.

(ii) A Holder may deliver the certificates evidencing the Series E Preferred Stock to be redeemed with the Demand for Product-Triggered Redemption or under separate cover not later than January 27, 2004. Payment of the Product-Triggered Redemption Price shall be made promptly, but in any case not later than January 30, 2004 (the “*Product-Triggered Redemption Date*”).

(e) Status of Redeemed or Purchased Shares. Any shares of the Series E Preferred Stock at any time purchased, redeemed or otherwise acquired by the Corporation (whether due to a Product-Triggered Redemption or otherwise) shall not be reissued and shall be retired.

(f) Insufficient Funds. If the funds of the Corporation legally available for redemption of shares of the Series E Preferred Stock on any Product-Triggered Redemption Date are insufficient to redeem the total number of shares of Series E Preferred Stock to be redeemed on such date, those funds which are legally available, if any, will be used to redeem the maximum possible number of such shares ratably among the Holders of such shares to be redeemed based upon the total Product-Triggered Redemption Price applicable to each such Holder’s shares of Series E Preferred Stock which are subject to redemption on such Product-Triggered Redemption Date. The shares of Series E Preferred Stock not redeemed shall remain outstanding and entitled to all the rights and preferences provided herein. At any time thereafter when additional funds of the Corporation are legally available for the redemption of shares of the Series E Preferred Stock, such funds will immediately be used to redeem the balance of the shares which the Corporation has become obliged to redeem on any Product-Triggered Redemption Date but which it has not redeemed.

(g) Waiver of Product-Triggered Redemption Right. Any Holder may at any time irrevocably waive its Product-Triggered Redemption Right with respect to all or any part of its Series E Preferred Stock by delivering a written notice to the Company to such effect.

15. Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of (a) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number specified in this Section prior to 4:00 p.m. (New York City time) on a business day, (b) the next business day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number specified in this Section on a day that is not a business day or later than 4:00 p.m. (New York City time) on any business day, or (c) the business day following the date of mailing, if sent by U.S. nationally recognized overnight courier service such as Federal Express. The address for such notices and communications shall be as follows: (i) if to the Corporation, to 157 Technology Drive, Irvine, California 92618, facsimile: 949.788.6706, Attention: Chief Executive Officer or (ii) if to a holder of Series E Preferred Stock, to the address or facsimile number appearing on the Corporation's shareholder records or, in either case, to such other address or facsimile number as the Corporation or a holder of Series E Preferred Stock may provide to the other in accordance with this Section.

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Designation on behalf of the Corporation this 26th day of September, 2003

/s/ Rajesh C. Shrotriya, M.D.

Rajesh C. Shrotriya, M.D.

Chairman, President and Chief Executive Officer

FORM OF CONVERSION NOTICE

(To be executed by the registered Holder in order to convert shares of Series E Preferred Stock)

The undersigned hereby irrevocably elects to convert the number of shares of Series E Convertible Voting Preferred Stock (the “**Series E Preferred Stock**”) indicated below into shares of common stock, par value \$.001 per share (the “**Common Stock**”), of Spectrum Pharmaceuticals, Inc., a Delaware corporation (the “**Company**”), according to the Certificate of Designations of the Series E Preferred Stock and the conditions hereof, as of the date written below. The undersigned hereby requests that certificates for the shares of Common Stock to be issued to the undersigned pursuant to this Conversion Notice be issued in the name of, and delivered to, the undersigned or its designee as indicated below. A copy of the certificate representing the Series E Preferred Stock being converted is attached hereto.

Date to Effect Conversion

Number of shares of Series E Preferred Stock owned prior to Conversion

Number of shares of Series E Preferred Stock to be Converted

Stated Value of Series E Preferred Stock to be Converted

Amount of declared and unpaid dividends on shares of Series E Preferred Stock to be Converted

Number of shares of Common Stock to be Issued (including conversion of declared but unpaid dividends on shares of Series E Preferred Stock to be Converted)

Applicable Conversion Value

Number of shares of Series E Preferred Stock owned subsequent to Conversion

Conversion Information:

[NAME OF HOLDER]

By: _____

Name: _____

Title: _____

Address of Holder: _____

Issue Common Stock to (if different than above):

Name: _____

Address: _____

The undersigned represents, subject to the accuracy of information filed under the Securities Act and the Exchange Act by any person other than such holder with respect to the outstanding Common Stock of the Company (including securities or property convertible into or exchangeable for Common Stock, with or without the payment of consideration), as of the date hereof that, after giving effect to the conversion of Preferred Shares pursuant to this Conversion Notice, the undersigned will not exceed the "Beneficial Ownership Cap" contained in Section 5(g) of the Certificate of Designations of the Series E Preferred Stock.

Name of Holder

By: _____

Name: _____

Title: _____

CERTIFICATE OF AMENDMENT
OF
CERTIFICATE OF INCORPORATION
OF
SPECTRUM PHARMACEUTICALS, INC.,
a Delaware corporation

SPECTRUM PHARMACEUTICALS, INC., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (f/k/a Neotherapeutics, Inc.) (the "Corporation"), DOES HEREBY CERTIFY:

1. That the Board of Directors of this Corporation adopted a resolution setting forth a proposed amendment of the first paragraph of Article 4 of our Certificate of Incorporation, as amended, which would read in its entirety as follows:

"The aggregate number of shares of all classes of stock which the Corporation shall have authority to issue is 105,000,000 shares, consisting of (a) 100,000,000 shares of common stock, \$.001 par value per share (the "Common Stock"), and (b) 5,000,000 shares of preferred stock, \$.001 par value per share (the "Preferred Stock")."

2. This Certificate of Amendment of Certificate of incorporation as amended was duly adopted and approved by the stockholders of this Corporation in accordance with the provisions of Section 242 of the Delaware General Corporation Law.

{Signatures follow on next page}

IN WITNESS WHEREOF, SPECTRUM PHARMACEUTICALS, INC, has caused this Certificate of Amendment of Certificate of Incorporation to be duly executed by its Chief Executive Officer and President.

Dated: July 6, 2006

SPECTRUM PHARMACEUTICALS, INC.

/s/ Rajesh C. Shrotriya

By: Rajesh C. Shrotriya, M.D.

Title: Chief Executive Officer

**FIRST AMENDMENT TO THE
CERTIFICATE OF DESIGNATION OF
SERIES B JUNIOR PARTICIPATING PREFERRED STOCK
OF
SPECTRUM PHARMACEUTICALS, INC.**

SPECTRUM PHARMACEUTICALS, INC., a Delaware corporation (f/k/a Neotherapeutics, Inc.) (the "Corporation"), by its Chief Executive Officer and President, certifies that pursuant to the authority contained in Article 4 of its Certificate of Incorporation (as amended and restated from time to time), and the Certificate of Designation of Rights, Preferences and Privileges of Series B Junior Participating Preferred Stock and in accordance with the provisions of Section 151 of the General Corporation Law of the State of Delaware, its Board of Directors has adopted the following resolution to amend the Certificate of Designation of Rights, Preferences and Privileges of Series B Junior Participating Preferred Stock filed with the Delaware Secretary of State on December 18, 2000, as follows:

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors hereby amends Section 1 of the Certificate of Designation of Series B Junior Participating Preferred Stock ("Certificate of Designation") in its entirety to read as follows:

Section 1. Designation and Amount. The shares of such series shall be designated as "Series B Junior Participating Preferred Stock," par value \$.001 per share, and the number of shares constituting such series shall be 1,000,000. Such number of shares may be increased or decreased by resolution of the Board of Directors; provided, that no decreased shall reduce the number of shares of Series B Junior Participating Preferred Stock to a number less than the number of shares then outstanding plus the number of shares reserved for issuance upon the exercise of outstanding options, rights, warrants or upon the conversion of any outstanding securities issued by the Corporation convertible into Series B Junior Participating Preferred Stock.

IN WITNESS WHEREOF, SPECTRUM PHARMACEUTICALS, INC. has caused this First Amendment to the Certificate of Designation of Series B Junior Participating Preferred Stock to be duly executed by its Chief Executive Officer and President.

{Signatures follow on next page}

IN WITNESS WHEREOF, SPECTRUM PHARMACEUTICALS, INC. has caused this First Amendment to the Certificate of Designation of Series B Junior Participating Preferred Stock to be duly executed by its Chief Executive Officer and President.

Dated: July 6, 2006

SPECTRUM PHARMACEUTICALS, INC.

/s/ Rajesh C. Shrotriva

By: Rajesh C. Shrotriva, M.D.

Title: Chief Executive Officer and President

Confidential treatment has been requested for portions of this Exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated by ***. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

LICENSE AGREEMENT

THIS AGREEMENT, effective this 23rd day of May, 2006, between Merck Eprova AG, a Swiss corporation organized and existing under the laws of Switzerland and with its principal place of business at Im Laternenacker 5, 8200 Schaffhausen, Switzerland (“**EPRO**”), and Spectrum Pharmaceuticals, Inc., a Delaware corporation with its principal place of business at 157 Technology Drive, Irvine, California 92688, United States (“**Spectrum**”). EPRO and Spectrum may hereinafter each be referred to as a Party or collectively as the Parties.

WITNESSETH, That:

WHEREAS, EPRO has certain technical information and patent rights relating to the Licensed Technology (as hereinafter defined);

WHEREAS, Targent, Inc., a Delaware corporation (“Targent”) and EPRO had entered into a License Agreement regarding the Licensed Technology.

WHEREAS, Spectrum has acquired from Targent all rights and assets regarding the Licensed Technology and EPRO gives its consent to a transfer of such rights and assets from Targent to Spectrum.

WHEREAS, Spectrum desires to obtain such license under the Licensed Technology to undertake development of the Licensed Product for commercialization in the Territory in the Field of Use (all foregoing capitalized terms as hereinafter defined) after receipt of approval from the Food and Drug Administration for the Licensed Product, and to have EPRO manufacture the active pharmaceutical ingredient (“API”) of Licensed Product for Spectrum the same pursuant to the terms of a Manufacturing and Supply Agreement executed by EPRO and Spectrum as soon as practicable the terms of which shall be negotiated in good faith (the “Manufacturing and Supply Agreement”).

NOW, THEREFORE, in consideration of the promises and the mutual covenants herein contained, and other good and valuable consideration, the receipt of which are acknowledged by the Parties, the Parties agree as follows:

ARTICLE I – DEFINITIONS

As used in this Agreement the following terms, whether singular or plural, shall have the following meanings:

A. "Affiliate" shall mean any entity that owns or controls or is owned or controlled by a Party through ownership of more than fifty percent (50%) of the stock entitled to vote for election of directors of that Party or the maximum percentage of stock interest that a foreign investor may own, whether fifty percent or less, pursuant to the local laws, regulations or administrative orders of any country, provided the party exercises a substantial control of general policy of the company.

B. "Confidential Information" shall mean information ancillary to the Licensed Technology, as further defined in Article III.

C. "Documents" shall mean the regulatory filings made in the Territory related to the Licensed Technology, including, but not limited to, ***, *** and *** and the related orphan drug designations.

D. "Effective Date" shall mean the date indicated first above as the effective date of this Agreement.

E. "FDA" shall mean the United States Food and Drug Administration, or any successor agency thereto.

F. "Field of Use" shall mean all uses in the field of oncology.

G. "GAAP" shall mean generally accepted accounting principles in the United States or International Accounting Standards outside the United States, in each case as consistently applied by Spectrum, its Affiliates or its Sublicensees in their respective financial statements, audited if applicable.

H. "Improvements" shall mean one or more enhancements, improvements or modifications in the manufacture, formulation, ingredients, preparation, dosage, administration or packaging of a License Product or the Licensed Technology made during the term of this Agreement.

I. "IND" shall mean (i) an Investigational New Drug application as defined in the United States Food, Drug & Cosmetic Act and applicable regulations promulgated thereunder, as amended from time to time or (ii) an equivalent application or filing with the applicable regulatory authority in any country other than the United States allowing the commencement of human clinical trials.

J. "License" shall mean the license granted pursuant to Article II of this Agreement.

K. "Licensed Know-How" shall mean any technical or manufacturing

information and data, methods, processes, drawings, inventions, formulas, data on safety and efficacy, patent applications, trade secrets materials, models, designs, prototypes or samples, relating to all forms (including but not limited to both the injectable and oral forms) of Levofolinic Acid as either the free acid or in any salt form, including any information, data, or other materials necessary or useful for the submission to the appropriate U.S. regulatory authorities by Spectrum to obtain the registration or approval of the Licensed Product.

L. "Licensed Patents" shall mean those patents and patent applications in existence as of the Effective Date and listed in Exhibit A, and any divisions, reissues, continuations and continuations-in-part or their equivalents, and the foreign equivalents thereof.

M. "Licensed Product" shall mean any product in any form (including but not limited to both the injectable and oral forms) made, have made, used, sold, or otherwise disposed of:

- i) which is covered by the Licensed Technology;
- ii) the manufacture of which requires use of the Licensed Technology; or
- iii) which would, but for the License granted herein, otherwise directly infringe, contributorily infringe or induce the infringement of any of the Licensed Patents.

N. "Licensed Technology" shall mean the Licensed Patents and the Licensed Know-How of EPRO.

O. "Net Sales" shall mean with respect to any period for any country in the Territory, the gross receipts, by Spectrum (for purposes of this Article I (O)), the term "Spectrum" shall include Third Parties used by Spectrum to market the Licensed Product) its Affiliates or its Sublicensees, as applicable, from unrelated third parties for sales of Licensed Product, less the following deductions if actually allowed and allocable to Licensed Product: (i) discounts, credits, rebates, allowances, adjustments, rejections, recalls, and returns for which the customer has been credited; (ii) trade, quantity, or cash discounts or rebates customary to the industry and actually allowed, given or accrued (including, but not limited to, cash, governmental and managed care rebates, hospital or other buying group charge backs, and governmental taxes in the nature of a rebate based on usage levels or sales of the Licensed Product); (iii) sales, excise, turnover, inventory, value-added, and similar taxes assessed on the sale of the Licensed Product; (iv) an allowance for actual transportation, distribution, importation, insurance and other handling fees; (v) sales, transfers or dispositions of Licensed Product for charitable, promotional (including samples), pre-clinical, clinical or regulatory purposes will be excluded from Net Sales, as will sales or transfers of Licensed Product among Spectrum and its Affiliates, and Sublicensees. For the avoidance of doubt, for each Licensed Product the Net Sales shall be calculated only once for the first sale of such Licensed Product by Spectrum, its Affiliate or its Sublicensees, as the case may

be, to a Third Party which is neither an Affiliate or Sublicensee of Spectrum. A sale of Licensed Products by Spectrum, its Affiliate or its Sublicensees to a wholesaler, distributor or any other Third Party shall be regarded as the first sale of the Licensed Product for the purpose of calculating Net Sales. Net Sales shall not include the amount received on account of sales of a Licensed Product or of sales of a Licensed Product in a particular country for which the term of this Agreement has expired.

P. "NDA" shall mean a New Drug Application, as defined in the United States Food, Drug & Cosmetic Act and applicable regulations promulgated thereunder, as amended from time to time, to obtain approval from the FDA for commercial sale of a Licensed Product.

Q. "Regulatory Exclusivity Period" shall mean any period of data, market or other regulatory exclusivity, including any such periods listed in the FDA's Orange Book.

R. "Sublicensee" shall mean any Third Party granted a sublicense by Spectrum of no greater scope than granted by EPRO to Spectrum, whose identity shall be disclosed confidentially by Spectrum to EPRO prior to the execution of such Sublicense. ***.

S. "Territory" shall mean North America (namely, the United States and its territories and protectorates, Canada and Mexico).

T. "Third Party" shall mean any person or entity other than a Party or an Affiliate or Sublicensee.

U. ***.

V. "Valid Claim" shall mean a claim in any unexpired, issued patent (and as applicable, patents and patent applications covering Improvements) within the Licensed Patents which has not been held invalid and/or unenforceable in a decision by a court or other body of competent jurisdiction from which there is no appeal or, if appealable, from which no appeal has been taken.

ARTICLE II – GRANT OF LICENSE

A. Grant of License.

As of the Effective Date of this Agreement, EPRO hereby grants to Spectrum during the term of this Agreement and subject to the terms hereof,

- (1) an exclusive license (even as to EPRO) to use the Documents and a non-exclusive license under the Licensed Technology to develop,

Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

make, have made, use, sell and have sold a Licensed Product in the Field of Use in the Territory;

- (2) the right to grant to Sublicensees, a sublicense under the Documents and the Licensed Technology licensed by subparagraph (1) of this Article II (A) of no greater scope than the license granted hereunder to Spectrum, provided that party shall have agreed with Spectrum to be bound by the terms of this Agreement insofar as they relate to the operations of that party.
- (3) EPRO agrees not to grant any further licenses under the Documents and the Licensed Technology to Third Parties in the Field of Use in the Territory.

B. Improvements that are made by an employee, agent or consultant of Spectrum, solely or jointly with a Third Party, shall be owned by Spectrum.

Improvements that are made by an employee, agent or consultant of EPRO, solely or jointly with a Third Party, shall be owned by EPRO. Improvements that are made jointly by employees, agents or consultants of Spectrum and EPRO and its employees, agents or consultants ("Joint Inventions") shall be jointly owned by Spectrum and EPRO and treated as joint inventions under U.S. laws applicable to joint inventions. EPRO shall, and hereby does, grant Spectrum the exclusive and unrestricted right in the Field of Use in the Territory to make, have made, use, sell, have sold, import, export and license EPRO's interest in all Joint Inventions. EPRO hereby grants to Spectrum the exclusive and unrestricted right in the Field of Use to make, have made, use, sell, have sold, import, export and license all Improvements made solely by EPRO, its employees or consultants in accordance with the provisions of the present Agreement. Spectrum hereby grants to EPRO the exclusive and unrestricted right in the Field of Use outside the Territory and/or outside the Field of Use in or outside the Territory to make, have made, use, sell, have sold, import, export and license Spectrum's improvements and interest in all Joint Inventions, subject to the provisions of Article II (D) of this Agreement under commercially reasonable conditions to be negotiated in good faith between the parties which conditions shall be similar to those contained in this Agreement. In addition, the Parties agree to negotiate in good faith the terms of a license agreement governing EPRO's use of such Improvements and Joint Inventions. EPRO shall, and hereby does, after Spectrum's royalty obligations under Article V (A)(2) have expired or been terminated by Spectrum due to a breach of this Agreement by EPRO or due to the insolvency of EPRO pursuant to Article IX, grant Spectrum a perpetual, royalty-free license to use all Improvements owned by EPRO and all information, know-how and other data pertaining to all Improvements and the Joint Inventions. Spectrum shall own any trademarks associated with the Licensed Products that it creates.

C. To the extent that EPRO has granted or, during the term of this Agreement until acceptance of Phase IV data by regulatory agencies, grants, a license under the Licensed Technology to make, have made, use and sell the Licensed Product

in the Field of Use outside the Territory to any Third Party, EPRO shall require such Third Party licensee(s) to promptly forward any and all safety data obtained by any such Third Party pursuant to such license to Spectrum for it to use in its Phase IV clinical trials. Spectrum will treat such data as confidential in accordance with Article III (B) herein and, upon written request by EPRO, will return such data to EPRO upon acceptance of Phase IV data by regulatory agencies.

D. EPRO shall have the right to license the Licensed Technology to a Third Party or Third Parties for use outside the Field of Use in the Territory or develop the Licensed Technology itself to market a Product for use outside the Field of Use in the Territory; provided, however, that EPRO shall first give an opportunity to Spectrum for an exclusive license under the Licensed Technology to manufacture, have manufactured, use and sell Licensed Product outside the Field of Use in the Territory using Levofolinic Acid as either the free acid or in any salt form through a right of final negotiation to be completed not later than three (3) months after the date of receipt by Spectrum of written notice from EPRO of such an opportunity. Both Parties agree to negotiate in good faith to reach such an agreement.

E. Manufacturing Information.

EPRO shall disclose all information it owns, or has the right to disclose to Spectrum to enable Spectrum to manufacture and use Licensed Products. This information shall include complete details of the manufacturing process to produce Licensed Product in finished form.

F. Non-Assert Provision.

EPRO will not,

- (1) assert any of the Licensed Patents to prevent the use or sale of the Licensed Product in the Territory by any Third Party obtaining Licensed Product from Spectrum (for purposes of this Article II (F), the term "Spectrum" shall include Third Parties used by Spectrum to market the Licensed Product), its Affiliate or by a Sublicensee; nor
- (2) assert any other patent or patent application now or hereafter controlled (in the sense of having the right to grant licenses or sublicenses) by EPRO to the Licensed Technology to prevent any party obtaining Licensed Product from Spectrum, its Affiliate or a Sublicensee from using or selling any Licensed Product.

G. EPRO shall during the initial Regulatory Exclusivity Period not introduce, market or sell in the Territory any product which would be a substitute for Leucovorin and that directly competes with a Licensed Product. Notwithstanding the foregoing,

EPRO shall be able to manufacture and/or supply a product that competes with a Licensed Product to a Third Party. For the avoidance of doubt, it is acknowledged, that this paragraph shall not bind any other company of the Merck Group, to which EPRO belongs.

H. EPRO shall not take any action against the *** in connection with the patents listed in Schedule A of the *** the result of which causes Spectrum to lose its exclusive license to such patents.

ARTICLE III – TECHNICAL INFORMATION AND CONFIDENTIALITY

A. Information to be Transmitted.

EPRO shall, upon the Effective Date of this Agreement, deliver to Spectrum any Licensed Know-How necessary for Spectrum to fulfill its obligations pursuant to Article VI(A).

B. Confidentiality.

The terms of that certain Mutual Confidentiality Agreement by and between the Parties, dated November 1, 2005, (to the extent such Mutual Confidentiality Agreement is not inconsistent with this Agreement) shall be in addition to the provisions of this subsection. The Parties contemplate that during the course of their relationship it may be necessary to provide the other with Confidential Information to facilitate the performance of their obligations pursuant to this Agreement. Confidential Information received from the disclosing Party which is in writing and identified as confidential or, if disclosed orally, is summarized in writing and designated confidential, shall be maintained in confidence and that reasonable and prudent practices shall be followed to maintain the information in confidence including, where necessary, obtaining written confidentiality agreements from employees not already bound by such agreements who have access to the Confidential Information. Confidential Information shall be used by a Party only for the purpose of and in connection with its performance under this Agreement. The obligation to maintain information in confidence shall survive this Agreement or termination thereof for any reason for a period of seven (7) years thereafter. However, the obligations of nondisclosure and limited use shall not apply to information which can be shown by written documentation:

- i. to have been publicly known prior to disclosure by the disclosing Party to the receiving Party; or
- ii. to have been known or available to the receiving Party prior to disclosure by the disclosing Party as shown by its prior written records; or

Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

- iii. to have become publicly known, without fault on part of the receiving Party, subsequent to disclosure by the disclosing Party; or
- iv. to have been received by the receiving Party from a Third Party legally having possession of the information without obligations of confidentiality; or
- v. to have been independently developed by or for the receiving Party without reliance on information received from the disclosing Party; or
- vi. to be required to be disclosed pursuant to order of any court or governmental agency having jurisdiction thereof after notice to the disclosing Party sufficient to afford it an opportunity to intervene in the proceeding where disclosure is required.

Confidential Information shall not be deemed to be within the foregoing exceptions merely because it is embraced within broader or general disclosures known to the public or the recipient Party, and any combination of features shall not be deemed to be within the foregoing exceptions merely because individual features are known to the public or to the recipient unless the whole combination of features and its principle of operation are known.

ARTICLE IV – REPRESENTATIONS, WARRANTIES AND INDEMNIFICATION

A. Mutual Representations. Each of the Parties represents and warrants that:

- (a) It is a corporation or entity duly organized and validly existing under the laws of the state or other jurisdiction of its incorporation or formation.
- (b) The execution, delivery and performance of this Agreement by such Party have been duly authorized by all requisite corporate action.
- (c) It has the power and authority to execute and deliver this Agreement and perform its obligations hereunder and thereunder.
- (d) The execution, delivery and performance by such Party of this Agreement does not and will not conflict with or result in breach of the terms and provisions of any other agreement or constitute a default under (i) a loan agreement, guaranty, financing agreement,

affecting a product or other agreement or instrument binding or affecting it or its property; (ii) the provisions of its charter or operative documents or bylaws; or (iii) any order, writ, injunction or decree of any court or governmental authority entered against it or by which any of its property is bound.

- (e) The execution, delivery and performance of this Agreement by such Party does not require the consent, approval or authorization of, or notice, declaration, filing or registration with, any governmental or regulatory authority in the Territory and the execution, delivery and performance of this Agreement does not violate any law, rule or regulation applicable to such Party. Notwithstanding the foregoing, Spectrum may be required to file notices with the necessary regulatory authorities to notify them of Spectrum's ownership of the regulatory filings described in Article VI (A) (3).
- (f) This Agreement has been duly authorized, executed and delivered and constitutes such Party's legal, valid, and binding obligation enforceable against it in accordance with their terms subject, as to enforcement, to bankruptcy, insolvency, reorganization and other laws of general applicability relating to or affecting creditors' rights and to the availability of particular remedies under general equity principles.
- (g) It shall comply with all applicable laws and regulations relating to its activities under this Agreement.
- (h) It is not debarred and has not and will not use in any capacity the services of any person debarred under subsections 306 (a) and (b), of the Generic Drug Enforcement Act of 1992. If at any time during the term of this Agreement this warranty is no longer accurate, the affected Party shall immediately notify the other and the Parties shall negotiate to resolve issues that may affect Spectrum's ability to manufacture, have manufactured, use or sell Licensed Products.

B. EPRO Representations.

EPRO represents and warrants that, as of the Effective Date: (a) to the best of its knowledge, it is the owner of all right, title and interest in and to the Licensed Technology; (b) it has not received any written notice and, to the best of its knowledge, operating under the Licensed Technology does not infringe the proprietary rights of any Third Party; (c) there are no claims, judgments or settlements against or owed by EPRO, or pending or threatened claims, or litigation, relating to the Licensed Technology; (d) to the best of its knowledge, Exhibit A is a complete and accurate listing of all patents and patent applications subject to grant hereunder; (e) EPRO has not

granted any right, license or interest in or to the Licensed Technology, or any portion thereof, inconsistent with the rights granted to Spectrum herein; (f) to the best of its knowledge, no Third Party has any right or authority to prohibit Spectrum from using the Licensed Technology in the Territory in any way; and ***.

In the event an injunction is issued against Spectrum because of infringement of Third Party intellectual property rights, the parties will share liability for Spectrum's expenses. If the injunction is not dissolved within three (3) months after issuance, then Spectrum shall be solely responsible for its legal expenses in attempting to dissolve such injunction thereafter.

C. Indemnification.

EPRO shall indemnify and hold Spectrum harmless from and against any liability, loss, cost, expense (including reasonable attorneys' fees), damage, or penalty of any kind, on account of or resulting from (i) any breach by EPRO of its representations and warranties contained in this Article IV, (ii) any breach by EPRO of any covenant contained in this Agreement, and (iii) any claim or action for infringement of any Third Party intellectual property rights as a result of Spectrum's operations under the Licensed Technology in the Territory in accordance with this Agreement claimed or issued before the Effective Date, ***. EPRO's liability under this paragraph IV(C)(iii) shall be limited to the amount of damages/royalties imposed on Spectrum by judgment or settlement upon the finding of infringement and shall be further limited to the amount of Fees (as hereinafter defined) paid by Spectrum to EPRO. EPRO shall have the right, at any time, to join negotiations with a Third Party whose intellectual property rights are alleged to be infringed or to take over negotiations with that Third Party if the scope of the alleged infringement is outside the scope of Spectrum's operations under this Agreement. Any settlement of such alleged infringement shall be agreed to by both parties, which EPRO's consent shall not be unreasonably withheld.

Spectrum shall indemnify EPRO and hold EPRO harmless from and against any liability, loss, cost, expense (including reasonable attorneys' fees), damage, or penalty of any kind, on account of or resulting from (i) any breach by Spectrum of its representations and warranties contained in this Article IV and (ii) any breach by Spectrum of any covenant contained in this Agreement.

ARTICLE V—PAYMENTS AND REPORTS

A. Fees. In consideration for the license granted hereunder, Spectrum shall pay EPRO the following fees in U.S. Dollars ("Fees"):

(1) Up-Front and Progress Payments (all payments are one-time payments):

(a) Within *** after NDA approval by the FDA for an ***, a progress payment of ***dollars (\$***);

Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(b) Within *** after NDA approval by the FDA of an ***, a progress payment of *** (\$***).

(2) Royalties:

Spectrum shall pay EPRO, beginning with the first commercial sale of the Licensed Product in a particular country and expiring on the later of (a) the expiration of the last of the patents licensed hereunder issued in that country that includes a Valid Claim that would, in the absence of the license granted hereunder, be infringed by the sale of a Licensed Product, or (b) the expiration of all Regulatory Exclusivity Periods with respect to the Licensed Product in such country, royalties based on quantities of the Licensed Product sold by Spectrum, its Affiliates; and/or its Sublicensees in accordance with the following formula:

- (a) *** percent (***) of Net Sales of the Licensed Product for sales annually of up to and including *** dollars (\$***);
- (b) ***percent (***) % of Net Sales of the Licensed Product for sales annually between *** dollars (\$**) and up to and including *** dollars (\$**);
- (c) *** percent (***) of Net Sales of the Licensed Product for sales annually between *** dollars (\$**) and up to and including *** dollars (\$**);
- (d) *** percent (***) % of Net Sales of the Licensed Product for sales annually of over *** dollars (\$**);

After Spectrum is no longer required to pay any royalty described under subparagraphs (a) through (d) above in a particular country in the Territory, then Spectrum shall pay EPRO a royalty of *** (***) percent of Net Sales of the Licensed Product in such country until a generic version of such Licensed Product is sold within such country.

(3) EPRO shall be responsible for any fees owed by Spectrum to the *** pursuant to Articles III (A) (1) & (2) of the **. Therefore, Spectrum shall be able to deduct from any payments owed to EPRO under Articles V (A) (1) & (2) of this Agreement, any amounts owed to the *** pursuant to Articles III (A) (1) & (2) of the **. Information regarding such deductions shall be included in the reports provided in

Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Article (V) (B) below. In addition, in the situation where Spectrum owes an amount to the *** pursuant to Articles III (A) (1) & (2) of the ***, but Spectrum is unable to deduct it from a payment owed to EPRO, Spectrum shall provide EPRO with a report of such amount paid to the *** and EPRO shall pay Spectrum such amount within thirty (30) days. EPRO shall not be responsible for any fees owed by Spectrum to the *** pursuant to Article III (A) (3) of the ***.

B. Reports and Remittances. Until such time as Spectrum, its Affiliates, its Sublicensees have sold all quantities of the Licensed Product subject to fee hereunder, Spectrum shall report in writing to EPRO within *** after the end of *** the quantities of each Licensed Product subject to fee hereunder that were sold by Spectrum, its Affiliates, its Sublicensees during said quarter and the calculation of the fees thereon. With said report Spectrum shall pay to EPRO the total amount of the said fees. If no Licensed Product subject to fee hereunder has been sold by Spectrum, its Affiliates, any Sublicensees during any such period, Spectrum shall so report in writing to EPRO within *** after the end of such period. Reports, notices and other communications to EPRO hereunder shall be sent to:

Merck Eprova AG
Im Laternenacker 5
8200 Schaffhausen
Switzerland
Attention: Martin Ulmann
General Manager
Fax: __ ++41 (0)52 630 72 55_____

Each payment to EPRO hereunder shall be sent to EPRO under separate cover along with a copy of the relevant report to:

Merck Eprova AG
Im Laternenacker 5
8200 Schaffhausen
Switzerland
Attention: Martin Ulmann
General Manager

Notices to Spectrum shall be sent to the address set forth above unless a different address is designated in writing by Spectrum.

C. Taxes. If laws, rules or regulations require withholding of income taxes or other rates imposed upon payments set forth in this Article V, Spectrum may make such withholding payments as required and subtract such withholding payments from the payments set forth in this Article V. Spectrum shall submit appropriate proof of payment of the withholding rates to EPRO within a reasonable period of time. Spectrum shall use efforts consistent with its usual business practices to ensure that any withholding

Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

taxes imposed are reduced as far as possible under the provisions of the current or any future double taxation treaties or agreements between foreign countries, and the Parties shall cooperate with each other with respect thereto, with the appropriate Party under the circumstances providing the documentation required under such treaty or agreement to claim benefits thereunder.

D. Records. Spectrum shall keep full, complete and proper records and accounts of all sales of Licensed Products by Spectrum, its Affiliates, and to the extent it acquires rights to do so, its Sublicensees, in accordance with GAAP, in sufficient detail and in the currencies in which the sale was made to enable the royalties payable on each Licensed Product to be determined. All such records, statements, reports and accounts referred to in this Article shall be retained for a period of three (3) years after the end of the period to which they apply.

E. Audit. If EPRO disagrees with a report provided by Spectrum, pursuant to Article V (B), EPRO, at its own expense, shall have the right, upon reasonable prior notice during regular business hours, to meet with Spectrum's independent auditor to inspect and discuss the books and accounts of Spectrum or its Affiliates, related to the payment and calculation of royalties arising under this Agreement. After this inspection, if EPRO still disagrees with the report provided by Spectrum, with reasonable justification for such disagreement, EPRO, at its own expense, shall have the right, upon reasonable prior notice during regular business hours, to appoint independent auditors reasonably acceptable to Spectrum and have them during normal business hours, inspect the books and accounts of Spectrum or its Affiliates, related to the payment and calculation of royalties arising under this Agreement. Spectrum shall cooperate and cause Spectrum's Affiliates, to cooperate with such auditors. The auditors performing the audit shall disclose to EPRO only information relating to the accuracy of records kept and the payments made, and shall be under a duty to keep confidential any other information obtained from such records. If any such audit establishes that Spectrum has underpaid or overpaid the amount due, Spectrum shall promptly pay any remaining amounts due as established by such audit or EPRO shall promptly refund any over payment. If the underpayment is by *** percent (***) or more during any ***, Spectrum shall reimburse EPRO for the reasonable expenses of such audit.

ARTICLE VI – SPECTRUM DELIVERABLES

A. Government Approvals.

- (1) In consideration for the licenses granted hereunder, Spectrum, at its cost and expense, shall use commercially reasonable efforts to complete, file and actively pursue an NDA for one or more Licensed Products in the Territory. Spectrum shall use its commercially reasonable efforts to file a reasonable response to the most recent

Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

deficiency letter from the FDA for the NDA for the use of a Licensed Product for injection for methotrexate rescue within *** after signing of this Agreement.

- (2) The Parties shall form a committee with two (2) representatives each from both Parties in order to provide a forum whereby Spectrum can regularly update EPRO on the progress in developing the Licensed Product(s).
- (3) Any and all registrations and/or regulatory filings with the FDA or other appropriate regulatory agency in the Territory for the Licensed Products in the Field of Use will be filed in the name of Spectrum as the sponsor of the NDA or other appropriate registration in the Territory and shall be owned by Spectrum. In addition, any registrations and/or regulatory filings that have been previously filed shall be transferred and placed in the name of Spectrum and shall be owned by Spectrum.
- (4) It is the parties' expectation that EPRO shall be permitted to make reference to and utilize the technical, manufacturing, safety and efficacy clinical data included in Spectrum's application for the development and use of, and regulatory approval for, the manufacture, use and sale of Licensed Product except where such use of data would derogate from Spectrum's exclusive rights in the Field of Use in the Territory. EPRO shall also be permitted such use of data outside the Field of Use in the Territory under the conditions described in the preceding sentence with the *proviso* that EPRO obtains Spectrum's prior written consent and subject to Article II (D) of this Agreement.

B. Product Marketing. Spectrum will, at its expense and upon approval of the NDA for the Licensed Product, begin marketing efforts in the Territory to promote and sell the Licensed Product, and will provide EPRO marketing plans to that end on an *** basis.

C. Spectrum Efforts. Spectrum, its Affiliates, and/or its Sublicensees shall perform their obligations under the Agreement by expending their commercially reasonable efforts by exercising the same level of effort to promote, advertise and market Licensed Product as they expend for their other respective products with similar sales potential.

D. Non-Competition. Spectrum, and its Sublicensees will not, for a period of *** from the first commercial sale of the Licensed Product, as long as the Agreement is in effect, introduce, market or sell in the Territory and in the same Field of Use any new

Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

product which is an isomeric form of leucovorin.

ARTICLE VII – INTELLECTUAL PROPERTY

A. Trademarks. EPRO shall have the right, in its sole discretion and at its own expense, to select and register such trademarks as it wishes to employ in connection with the sale of the Licensed Product outside the Field of Use throughout the Territory and EPRO shall have legal and equitable ownership of the entire right, title and interest in and to the trademarks and registrations EPRO elects to use. In the event that any trademarks applications are filed or registrations issued, EPRO hereby grants to Spectrum, for the term of this Agreement, a non-exclusive license to use such trademarks in connection with the promotion and sale of the Licensed Product in the Field of Use.

B. Prosecution of Patents. EPRO shall be solely responsible for preparing, prosecuting and maintaining the Licensed Patents, including payment of all necessary filing and maintenance fees.

(a) Each Party shall cooperate with the other Party to execute all required papers and instruments and to make all required oaths and declarations as may be necessary in the preparation and prosecution of all such patents and other applications and protections referred to in this Article.

(b) In the event that EPRO wishes to abandon any patent within the Licensed Patents, EPRO will offer to assign to Spectrum, free of charge, any such patent prior to effectuating the abandonment. Spectrum shall bear the costs connected with any assignment, and recordation thereof, hereunder.

ARTICLE VIII – ABATEMENT OF INFRINGEMENT

A. If at any time any Third Party shall infringe to a commercially substantial extent any patent licensed hereunder then Spectrum shall promptly inform EPRO of such infringement and EPRO shall, subject to Paragraph (C) of this Article, either (a) obtain a discontinuance of said infringing operations or (b) bring suit at its own expense against such infringer, bringing said suit in the name of EPRO and, if so required by the law of the forum, bringing suit in the name of Spectrum or joining Spectrum as a party plaintiff with EPRO. In such an event and until EPRO effectuates discontinuance of infringement, Spectrum's applicable royalty rates shall be reduced to ***. Upon discontinuance of such infringement, Spectrum shall resume paying royalties at the rates indicated in Article V(A)(2). EPRO shall be entitled to receive and retain all recoveries from such infringement.

Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

B. Spectrum shall have the right, in any suit brought by EPRO pursuant to paragraph (A) of this Article, to be represented at its own expense by counsel of its own selection to the extent of having access to full information and opportunity to be heard in the councils of EPRO.

C. In the event that EPRO neither brings suit against a Third Party as provided in paragraph (A) of this Article nor obtains a discontinuance of such infringing operations within six (6) months of the date of receipt of such notice, then Spectrum may at its election bring suit in its own name against such infringer. Should Spectrum bring suit in its own name, EPRO shall execute such legal papers necessary for the prosecution of such suit as may be requested by Spectrum, and Spectrum shall be liable for all costs and expenses of such litigation and shall be entitled to receive and retain all recoveries therefrom. During the pendency of such suit by Spectrum, and in the event of an adverse outcome of such suit, Spectrum's royalty obligations shall be reduced as indicated in paragraph (A) of this Article or eliminated in the latter case.

D. If a Third Party makes or threatens against Spectrum, its Affiliates or its Sublicensees any claim of infringement of a patent right based upon the use of, or arising as a result of the exercise of the rights and licenses granted hereunder to the Licensed Technology (each an "**Alleged Infringement**"), Spectrum shall have the right to respond to and defend any and all such Alleged Infringements at its own cost and expense, and in its sole discretion. EPRO agrees to provide any necessary assistance that Spectrum may reasonably require in any such defense action for which Spectrum shall pay to EPRO a reasonable hourly rate of compensation. EPRO shall have the right, at its own expense, to retain counsel of its choice to represent it in any such defense action. Spectrum shall notify EPRO in writing and provide a copy of (i) any claim of Alleged Infringement filed with a court or governmental authority or (ii) any written notice of an Alleged Infringement from an attorney or law firm. Within a reasonable period of time in advance of any responsive deadline required by law or otherwise set forth in the claim or notice of Alleged Infringement, Spectrum shall notify EPRO in writing as to whether or not Spectrum intends to respond to such Alleged Infringement. In the event that Spectrum does not intend to respond to any such claim or notice or, if Spectrum, in its sole discretion, asks EPRO to respond to any such claim or notice, EPRO shall have the right, in its sole discretion, to respond to and litigate or settle such Alleged Infringement, in which case EPRO shall pay any and all future costs and expenses incurred by Spectrum in such action, and shall indemnify, defend and hold Spectrum, its Affiliates and its Sublicensees harmless from any future costs, expenses or liability respecting all such actions undertaken by EPRO. This Article VIII (D) shall not amend or reduce EPRO's indemnification obligations under Article IV (C).

ARTICLE IX – TERMINATION

A. Termination. Unless terminated early in accordance with the provisions of this Agreement, the term of this Agreement shall endure on a Licensed Product-by-

Licensed Product and country-by-country basis until the expiration of the obligation to pay royalties under Article V (A) (2) above applicable to such Licensed Product in such country. This Agreement shall expire in its entirety after the date that Spectrum no longer owes any royalties to EPRO under Article V (A) (2).

B. Early Termination by Spectrum. Spectrum shall have the unilateral right to terminate this Agreement, in its entirety or on a Licensed Product-by-Licensed Product or country-by-country basis, at any time for any reason upon prior written notice to EPRO given at least *** prior to the desired termination.

C. Early Termination by EPRO. EPRO shall have the unilateral right to terminate this Agreement, in its entirety upon prior written notice to Spectrum if Spectrum has failed to comply with the obligations laid down in ***.

D. Termination upon Breach. In the event that any stipulation or provision of this Agreement is materially breached by a Party, the other Party may terminate this Agreement upon *** written notice to the breaching party. However, if such breach is corrected within the *** period, and there are no unreimbursed damages resulting from the breach, this Agreement shall continue in force. A material breach by Spectrum of its obligations under Article VI (A) (1) shall be governed by Article IX (C).

E. Insolvency. Should a Party (1) become insolvent or unable to pay its debts as they mature, (2) make an assignment for the benefit of creditors, (3) permit or procure the appointment of a receiver for its assets, or (4) become the subject of any bankruptcy, insolvency or similar proceeding, then the other Party may at any time thereafter on written notice to the insolvent Party, effective forthwith, cancel this Agreement.

F. Effect of Termination.

- (1) Upon termination of this Agreement pursuant to Article IX (A), the licenses granted hereunder shall be considered fully-paid and Spectrum and its Sublicensees shall be free to continue to use the Licensed Technology and Documents to make, use and sell the Licensed Products without further financial obligations to EPRO hereunder. Other than rights intended to survive expiration, or royalties or fees that accrued during the term of the Agreement in accordance with Article V (A) (2), neither Party shall have any further rights or obligations upon the expiration of this Agreement.
- (2) Upon termination of this Agreement by EPRO pursuant to Articles IX (C), (D) or (E), or by Spectrum pursuant to Article IX (B), occurring prior to the regularly scheduled expiration date of this Agreement, (i) all rights and licenses granted by EPRO to Spectrum including any rights to the Licensed Product shall terminate and

Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

revert to EPRO and (ii) Spectrum shall return to EPRO or destroy at EPRO' option all copies of the Licensed Know-How. The foregoing provisions shall also apply to the partial termination of this Agreement by Spectrum in accordance with Article IX (B), provided, however, that in such event: (1) only those rights that solely pertain to the Licensed Product and/or country being terminated would revert back to EPRO; (2) only copies of the Licensed Know-How that solely pertain to the Licensed Product and/or country being terminated would be returned or destroyed by Spectrum. Notwithstanding the foregoing, Spectrum shall retain its right, title and interest under Article II (B) in any Improvements made solely by Spectrum and in any Joint Inventions.

- (3) Upon any termination of this Agreement by Spectrum under Articles IX (D) or (E) occurring prior to the regularly scheduled expiration date of this Agreement, the license rights granted by EPRO to Spectrum contained in this Agreement shall continue in full force and effect, however, Spectrum's obligations under this Agreement to pay royalties shall terminate.

G. Obligations of the Parties. The obligations of the Parties under Articles II (F), III (B), IV(C), V (A) (3), IX (F) & (G), and Articles VIII, XI, XIII and XV and any other provisions which are expressly indicated to survive expiration or termination, shall remain in effect upon any termination or expiration of this Agreement as shall Spectrum's obligations under Articles V (A) (2) (a)—(d) for Licensed Products sold prior to such termination or expiration.

ARTICLE X – ASSIGNABILITY

Except for sublicensing rights as set forth in Article II (A) (2), this Agreement shall not be assignable in whole or part to any Third Party without the prior written consent of the other Party (such consent not to be unreasonably withheld), except, to a successor in interest pursuant to a merger, acquisition or sale of all or substantially all of the assignor's assets to which this Agreement relates. Any attempted assignment in violation of this provision shall be null and void.

ARTICLE XI – APPLICABLE LAW

This Agreement is acknowledged to have been made in and shall be construed in accordance with the laws of Switzerland without regard to the principles thereof relating to the conflict of laws; provided that all questions concerning the construction or effect of patent applications and patents shall be decided in accordance with the laws of

the country in which the particular patent application or patent concerned has been filed or granted, as the case may be.

ARTICLE XII – FORCE MAJEURE

Neither Party shall be responsible to the other for delay or failure in performance of any of the obligations imposed by this Agreement, provided such delay or failure shall be occasioned by a cause beyond the control of and without the fault or negligence of such Party, including fire, flood, explosion, lightning, windstorm, earthquake, subsidence of soil, failure of machinery or equipment or supply of materials, discontinuity in the supply of power, court order or governmental interference, civil commotion, riot, war, terrorism or terroristic threats, strikes, labor disturbances, transportation difficulties or labor shortage. Notwithstanding the aforesaid, if either Party fails to a substantial extent for at least *** to fulfill any of its obligations under this Agreement, the other Party may terminate the Agreement.

ARTICLE XIII – DISPUTE RESOLUTION

In the event that a dispute arises between the Parties, the following procedures shall be followed:

A. Negotiations. In the event that any dispute may arise, the Parties shall first seek to resolve any disputes by negotiation among senior executives who have authority to settle the controversy, as follows:

- (a) Notification. When a Party believes there is a dispute relating to the Agreement, the Party will give the other Party written notice of the dispute.
- (b) Meeting Among Senior Executives. The senior executives shall meet at a mutually acceptable time and place within thirty (30) days after the date of the notice to exchange relevant information and to attempt to resolve the dispute.
- (c) Confidentiality. All negotiations are confidential, shall be treated as compromise and settlement negotiations, and neither party shall use information obtained during such negotiations in any subsequent dispute resolution proceeding.

B. Mediation. If the dispute has not been resolved within thirty (30) days after the date of the notice of a dispute, or if the Party receiving such notice fails or refuses to meet within such time period, either Party may initiate mediation of the dispute by

Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

sending the other Party a written request that the dispute be mediated. The Party receiving such a written request will promptly respond to the requesting Party so that both Parties can jointly select a neutral and impartial mediator and schedule the mediation session. The Parties shall mediate the dispute before a neutral, third-party mediator within thirty (30) days after the date of the written request for mediation.

C. Arbitration. Any controversy or claim arising out of or relating to this Agreement or the breach thereof, and not settled as described in Article XIII (A) or (B), shall be settled by arbitration in accordance with the Licensing Agreement Arbitration Rules of the International Chamber of Commerce, utilizing the laws of Switzerland, without giving effect to its conflicts of laws rules, and judgment upon the award rendered by the Arbitrator(s) may be entered in any Court having jurisdiction thereof. The situs of arbitration shall be Schaffhausen, Switzerland if initiated by Spectrum and Irvine, California if initiated by EPRO.

ARTICLE XIV – ADJUDICATION OF LICENSED PATENTS

Should any Licensed Patents be declared invalid or not infringed or limited in scope by a final decision (from which no appeal is or can be taken) of a court or other tribunal of competent jurisdiction in the country in which said patent was granted, then the construction placed upon the patent by said court or other tribunal shall be followed by the Parties from and after the date of entry of the decree of said court or tribunal and fees shall thereafter be payable to EPRO only in accordance with such construction.

ARTICLE XV – MISCELLANEOUS PROVISIONS

A. The rights and remedies provided in this Agreement are cumulative and not exclusive of any rights or remedies provided by law or in equity.

B. Except as required by law or the rules of the principal stock exchange on which the Party's stock is traded, no Party shall originate any public statement, news release or other written public announcement, whether in the public press, stockholders' reports, or otherwise, relating to this Agreement or to any sublicense hereunder, or to the performance hereunder or any such agreements, or use a Party's name for any purpose, including, without limitation, in connection with the advertising or sale of Licensed Products, without the prior written approval of the other Party, such consent not to be unreasonably withheld. The Parties each agree to respond to each such request within five (5) business days of receipt of a request (unless a shorter period of time is necessary to comply with law). Notwithstanding anything to the contrary in this Agreement, each party shall be permitted to publicly disclose (i) the existence of this Agreement, (ii) that EPRO and Spectrum are the parties to this Agreement, and (iii) the Licensed Technology covered by this Agreement. In the case of unintentional public

disclosure concerning this Agreement, any Licensed Product or any other subject matter hereof, the disclosing Party shall promptly inform the other Party of such disclosure and the other Party shall be entitled to make a public announcement regarding the subject matter of the disclosure. The other Party shall notify the disclosing Party of their intention to make such an announcement. Following a Party's consent to or approval of the public announcement of any information pursuant to this Article, both Parties shall be entitled to make subsequent public announcements of such information without renewed compliance with this Article, unless the scope and/or duration of such consent or approval is expressly limited.

C. This Agreement embodies the entire understanding of the Parties and shall supersede all previous communications, representations, undertakings or agreements, between them, either verbal or written, relating to the subject matter hereof.

D. This Agreement shall be binding upon and enure to the benefit of the successors, permitted assignees and personal representatives of the Parties.

E. In the event that any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision hereof, and this Agreement shall be construed as if such invalid, illegal or unenforceable provisions or provisions had never been contained herein.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties have executed this Agreement and have entered the Effective Date on the first page hereof.

By /s/ Thomas Suter
Title Chief Financial Officer
Date June 1, 2006

Merck Eprova AG
By /s/ Martin Ulmann
Title General Manager
Date June 1, 2006

Spectrum Pharmaceuticals, Inc.

By /s/ Rajesh C. Shrotriya, M.D.
Rajesh C. Shrotriya, M.D.
Title Chairman, CEO & President
Date May 19, 2006

EXHIBIT A

Country.

Patent No.
(Patent Application No.)

Normal
Expiry Date
(Filing Date)

23

Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT B

24

Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Confidential treatment has been requested for portions of this Exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated by ***. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

MANUFACTURING AND SUPPLY AGREEMENT

THIS AGREEMENT ("Agreement") is made and entered into this 23rd day of May 2006, ("Effective Date") by and between Merck Eprova AG, a Swiss corporation, having a place of business at Im Laternenacker 5, 8200 Schaffhausen, Switzerland ("EPRO") and Spectrum Pharmaceuticals, Inc., a Delaware corporation, having a place of business at 157 Technology Drive, Irvine, California, 92618, United States ("SPECTRUM"). EPRO and SPECTRUM may hereinafter each be referred to as a "Party" or collectively as the "Parties". Capitalized terms used in this Agreement shall have the meaning set forth herein or in the License Agreement (as defined below).

WITNESSETH:

WHEREAS, SPECTRUM is licensing certain technology from EPRO (the "Technology") pursuant to a License Agreement dated May 23, 2006 executed by the Parties herewith (the "License Agreement");

WHEREAS, EPRO is engaged in the business of manufacturing drug substances and it has the expertise and appropriate government approvals necessary to manufacture the drug substance incorporating the Technology;

WHEREAS, EPRO and SPECTRUM have agreed to the following terms and conditions, and desire to enter into this Manufacturing and Supply Agreement (the "Agreement"); and

WHEREAS, it is the desire and intention of SPECTRUM that EPRO use the Technology to manufacture or have manufactured the drug substance Calcium Levofolinate (hereinafter "Product"), upon the terms and conditions hereinafter set forth.

NOW, THEREFORE, the Parties, in consideration of the mutual covenants and agreements contained in this Agreement, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, and with the Parties intending to be legally bound do hereby agree as follows:

Article 1 Product Manufacture

(a) During the term of this Agreement, SPECTRUM shall from time to time, place orders with EPRO . EPRO shall process and deliver the Product pursuant to such orders, in compliance with the Specifications as defined in **Exhibit A** attached hereto.

EPRO shall have the right to require SPECTRUM to pay ***.

(b) EPRO shall manufacture and have ready for shipment the ordered quantities of the

Product within *** from receipt of a written purchase order from SPECTRUM hereunder. SPECTRUM shall furnish EPRO with its *** forecast on the Effective Date and every *** with its rolling forecast for the following *** period for the Product, however, any such estimates shall not be binding or otherwise limit or obligate SPECTRUM in any way except for the first *** which shall be binding and shall be referred to as the “Minimum Quantities.”

(c) From time to time during the term of this Agreement, the Parties by mutual consent, may add to or modify the Specifications attached hereto as **Exhibit A** by reasonable advance written notice. EPRO will update its drug master file (DMF) every time the drug substance specifications are changed.

(d) EPRO shall not actively manufacture the Product for any third party for the Field of Use in the Territory and shall cooperate in good faith with Spectrum to insure that Product sold to any third party shall not be re-sold or used by that Party in the Field of Use in the Territory.

(e) SPECTRUM shall purchase its Product requirements exclusively from EPRO during the term of this Agreement.

(f) EPRO shall not manufacture or sell any product using the Technology or license its knowledge of the Technology to enable other manufacturers to make available the Product in the Field of Use in the Territory.

(g) EPRO shall manufacture the Product at its facility located at Schaffhausen, Switzerland (“EPRO’s Facility”), which facility will have to be inspected and approved by SPECTRUM prior to shipment of any commercial Product, and meets with all FDA requirements. EPRO will use commercially reasonable efforts to file a Drug Master File (“DMF”) for the manufacture of the Product before *** and will be responsible for all associated costs. EPRO hereby represents and warrants that EPRO’s Facility, including the real estate on which it is situated and all equipment located therein is now, and shall be for the term of this Agreement, owned and operated solely by EPRO or an Affiliate thereof. EPRO, at its expense, shall furnish upon written request from SPECTRUM, the complete filing of the DMF directly to the United States Food and Drug Administration (“FDA”) under confidentiality obligations prior to SPECTRUM’s submission to the FDA of its deficiency response associated with the New Drug Application (“NDA”) for the Product, and the “open part” of the DMF to SPECTRUM. EPRO shall also furnish, at its expense, all available equivalent documentation to the regulatory authorities in Canada and Mexico to support future regulatory filings in those territories where SPECTRUM has marketing rights, in addition to any other documents, as may be reasonably requested by SPECTRUM and are available at EPRO, related to the Drug Master File.

(h) After NDA-approval of a Licensed Product, EPRO shall be required to maintain an inventory of at least *** of the Product, and will promptly manufacture said Product upon the receipt of a purchase order.

Article 2 Prices

(a) SPECTRUM shall pay to EPRO in full and complete consideration for the manufacture, control and delivery of the Product hereunder, the price as specified in Article 2(b) and (c) hereof (the “Price”). EPRO shall supply all materials necessary for the manufacture and

Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

packaging of the Product.

(b) During the term of this Agreement, the Price of the Product shall be *** per *** calculated as *** from the Effective Date until ***.

(c) SPECTRUM shall pay to EPRO the actual Price of the Product delivered to SPECTRUM hereunder. On ***, and thereafter each ***, the Price of the Product may be renegotiated by the mutual agreement of both Parties. SPECTRUM shall be able to obtain competitive prices and if SPECTRUM is able to obtain a lower price from another manufacturer in a bonafide third party offer for Product in commercial quantities and similar quality (i.e. Product should be acceptable by the health authorities and the alternative supplier shall give proof of its commitment to file a respective DMF for the Territory), then SPECTRUM shall be able to terminate this Agreement and use the other manufacturer provided that EPRO shall have the opportunity to meet such competitive offer price in which case SPECTRUM shall continue to purchase its total demand of Product from EPRO until the following ***.

Article 3 Raw Materials and Packaging

(a) All ingredients and raw materials used by EPRO for the manufacture of the Product shall conform to the set Specifications and must meet the requirements of the FDA for current Good Manufacturing Practices (“cGMP”) compliance.

(b) EPRO will package the Product according to EPRO’s most recent packaging guidelines, which are set forth in **Exhibit B** hereto, and label the Product in accordance with FDA’s and applicable labeling regulations, so that the Product is ready-to-ship to a third party toll manufacturer for finished good production.

(c) EPRO agrees to inform SPECTRUM within fifteen (15) days of the result of any regulatory development or major changes in specifications of the raw materials and/or of the Product that may materially affect the Product. EPRO shall notify SPECTRUM of and require written approval from SPECTRUM for changes as agreed in the Quality Agreement.

(d) The capitalized terms in this Article 3 shall have the meaning set forth below:

- a. BATCH shall mean a specific quantity of Product comprising a number of units mutually agreed upon between SPECTRUM and EPRO, and that (a) is intended to have uniform character and quality within specified limits, and (b) is produced according to a single manufacturing order during the same cycle of Production.
- b. Master Batch Record (MBR) shall mean the formal set of instructions for the Production of Product. The MBR will be developed and maintained in EPRO’s standard format.
- c. Production or Product shall mean the manufacturing operation including compounding, filling, packaging, inspection, labeling, and testing of the Product by EPRO.

Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Article 4 Delivery, Payment and Title to Product

(a) All Product shipments shall be delivered to SPECTRUM or a designated toll manufacturer, *** pursuant to SPECTRUM's written directions. EPRO shall furnish to SPECTRUM sufficient information to verify shipment of the Product.

(b) EPRO shall invoice SPECTRUM for the Product on the date such Product shipment is shipped from EPRO's Facility on instructions from SPECTRUM. Terms of payment shall be net *** from the date of such invoice. Late payments must bear *** (***) percent interests per annum.

SPECTRUM shall bear the risk of loss or damage to any Product after the same shall have been delivered to the possession of either SPECTRUM, the toll manufacturer or to SPECTRUM's carrier pursuant to SPECTRUM's instructions, except for loss or damage caused by the manufacturing, processing, packaging, or quality of the Product, in which case such loss or damage shall be borne solely by EPRO. EPRO shall bear the risk of loss or damage to any Product ordered hereunder prior to the delivery of such Product to SPECTRUM, the toll manufacturer or to the carrier designated by SPECTRUM for transportation thereof.

Article 5 Inspection, Manufacturing Compliance, Acceptance of Product

(a) SPECTRUM may once per year, or more often if reasonably necessary, during normal business hours and with at least ten (10) days prior notice, visit EPRO's facility to observe the manufacture and packaging of the Product, and/or to audit the facility for quality and to collect samples of the Product.

(b) A certificate of analysis for each Batch delivered shall set forth the items tested, Specifications, and test results and a re-test date. EPRO shall send, or cause to be sent, such certificates to SPECTRUM prior to the shipment of Product (unless Product is shipped under quarantine). SPECTRUM shall test, or cause to be tested, for release for further manufacturing, each Batch of Product as meeting the Specifications within thirty (30) days after receipts by SPECTRUM.

(c) SPECTRUM's payments for Product shipments received by SPECTRUM shall not constitute approval or acceptance of such Product. If the Product is defective or does not conform to samples, descriptions or the Specifications attached hereto as **Exhibits A** and/or **B**, SPECTRUM is hereby granted the option to reject all shipped lots of the Product, accept all Batches, or accept any Batches thereof and reject the rest. EPRO shall reimburse SPECTRUM in full for those Products rejected and returned, and EPRO shall assume all costs of transportation and handling both ways. If not rejected within thirty (30) days, the Product shall be deemed accepted.

(d) EPRO shall from time to time furnish to SPECTRUM upon reasonable written request, without charge, pre-shipment samples of the Product that SPECTRUM needs for quality control, testing and evaluation.

(e) In case, EPRO does not agree that the rejected Products are defective or the defectiveness of the Products has not been caused by EPRO, the Parties will appoint an

independent third party expert whose results shall be final and binding. The costs for such procedure and the handling of the defective Product shall be borne by the Party whose determination was in error.

(f) Unless otherwise stated, EPRO is responsible for compliance with cGMP and any applicable United States, Canadian and Mexican Laws and any applicable local laws and regulations (“Regulations”) as they apply generally to production of drug substances at the site of manufacturing. SPECTRUM shall be responsible for compliance with all Regulations as they apply to all other aspects of the use and sale of Product, which responsibility shall include, without limitation, all contact with the FDA regarding the foregoing.

Article 6 Warranties and Representations

(a) The Product manufactured, processed and packaged hereunder shall be manufactured, processed and packaged in conformity with cGMP’s and the Specifications set forth in Article 1, **Exhibits A and B** of this Agreement. EPRO covenants, represents and warrants that the Product shall be produced in accordance with cGMP. EPRO covenants, represents and warrants that it has obtained (or will obtain prior to producing the Product), and will remain in compliance with during the term of this Agreement, all permits, licenses and other authorizations which are required under *federal, state and local laws, rules and regulations* applicable to the production only of the Product.

(b) All materials, ingredients, supplies and packaging materials utilized in the manufacture of Product sold hereunder shall be merchantable, of good quality and fit for the purpose intended.

(c) EPRO has, and shall maintain during the term of this Agreement, the capability to manufacture, package and deliver to SPECTRUM, under the terms of this Agreement, at least *** of the Product per month, if ordered by SPECTRUM. The Parties may adjust the required quantity from time to time.

(d) The execution of this Agreement and performance hereunder does not, and will not, abrogate, breach, or conflict with any agreement, mortgage, pledge, or contract to which EPRO is a Party.

Article 7 Indemnities

EPRO shall assume all responsibility for and shall defend, indemnify and hold SPECTRUM and its directors, members, officers, employees, agents, consultants, shareholders, affiliates, toll manufacturer, partners or advisors or those of its subsidiaries and/or affiliates (“Representatives”) harmless from and against any and all liability, losses, expenses, damages, assessments and claims, causes of action, settlement costs, including reasonable attorney’s fees, or other liabilities of any kind (collectively, “Damages”) arising out of, resulting from or attributable to

(a) defects relating to a defective Product (defectiveness caused by EPRO); or

Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(b) material breach by EPRO of any term or provision of this Agreement; or

(c) negligent act or omission by EPRO and its Representatives; provided, that this (a) shall not obligate EPRO to indemnify SPECTRUM for any portion of Damages directly attributable to, and directly caused by, the negligence or omission of SPECTRUM and/or its Representatives.

SPECTRUM shall assume all responsibility for and shall defend, indemnify and hold EPRO and its Representatives harmless from and against any and all Damages arising out of, resulting from or attributable to:

(a) the use, sale, offer to sell, transfer or import of Product after acceptance by SPECTRUM; or

(b) material breach by SPECTRUM of any term or provision of this Agreement; or

(c) negligent act or omission by SPECTRUM and/or its Representatives; provided, that this (a) shall not obligate SPECTRUM to indemnify EPRO for any portion of Damages directly attributable to, and directly caused by, the negligence or omission of EPRO and/or its Representatives.

A party (the "Indemnitee") which intends to claim indemnification under this Article 7 shall promptly notify the other party (the "Indemnitor") in writing of any action, claim or other matter in respect of which the Indemnitee or any of its Affiliates, or any of their respective directors, officers, employees, subcontractors, or agents, intend to claim such indemnification; provided, however, that failure to provide such notice within a reasonable period of time shall not relieve the Indemnitor of any of its obligations hereunder except to the extent the Indemnitor is prejudiced by such failure. The Indemnitee shall permit, and shall cause its Affiliates, and their respective directors, officers, employees, subcontractors and agents to permit, the Indemnitor, at its discretion, to settle any such action, claim or other matter, and the Indemnitee agrees to the complete control of such defense or settlement by the Indemnitor. Notwithstanding the foregoing, the Indemnitor shall not enter into any settlement that would adversely affect the Indemnitee's rights hereunder, or impose any obligations on the Indemnitee in addition to those set forth herein, in order for it to exercise such rights, without Indemnitee's prior written consent, which shall not be unreasonably withheld or delayed. No such action, claim or other matter shall be settled without the prior written consent of the Indemnitor, which shall not be unreasonably withheld or delayed. The Indemnitee, its Affiliates, and their respective directors, officers, employees, subcontractors and agents shall fully cooperate with the Indemnitor and its legal representatives in the investigation and defense of any action, claim or other matter covered by the indemnification obligations of this Article 7. The Indemnitee shall have the right, but not the obligation, to be represented in such defense by counsel of its own selection and at its own expense.

The indemnification obligations set forth in this Article shall survive the expiration or termination of this Agreement.

Article 8 Insurance

(a) EPRO shall procure and maintain, during the term of this Agreement and for a period one (1) year beyond the expiration date of Product, comprehensive general liability insurance in the amount of \$*** per occurrence and annual aggregate combined single limit for bodily injury and property damage liability and products liability insurance in the amount of \$*** per occurrence and annual aggregate combined single limit for bodily injury and property damage liability. All of such insurance coverage shall be maintained with an insurance company or companies having an A.M. Best rating of A – VII or better. EPRO promptly shall deliver, upon written request by SPECTRUM, a certificate of EPRO’S insurance evidencing such coverage.

(b) SPECTRUM shall procure and maintain, during the term of this Agreement and for a period one (1) year beyond the expiration date of Product, comprehensive general liability insurance in the amount of \$*** per occurrence and annual aggregate combined single limit for bodily injury and property damage liability and products liability insurance in the amount of \$*** per occurrence and annual aggregate combined single limit for bodily injury and property damage liability. All of such insurance coverage shall be maintained with an insurance company or companies having an A.M. Best rating of A – VII or better. EPRO shall be named as an additional insured on the SPECTRUM insurance and SPECTRUM promptly shall deliver, upon written request by EPRO, a certificate of SPECTRUM insurance and endorsement of additional insured to EPRO evidencing such coverage.

Article 9 Intellectual Property Rights

Rights to the intellectual property in the Product and the underlying Technology shall be as set forth in the License Agreement.

Article 10 Assignment

This Agreement shall be binding upon and inure to the benefit of the successors or permitted assigns of each of the Parties and may not be assigned or transferred by either Party without the prior written consent of the other, which consent will not be unreasonably withheld or delayed, except that no consent shall be required in the case of a transfer to a wholly-owned subsidiary or transaction with a third party involving the merger, consolidation or sale of substantially all of the assets of the Party seeking such assignment or transfer and such transaction relates to the business covered by this Agreement and the resulting entity assumes all the obligations under this Agreement. No assignment shall relieve any Party of responsibility for the performance of its obligations hereunder.

Article 11 Confidentiality

The Parties shall be bound to the same confidentiality provisions as set forth in Article III of the License Agreement and set forth in the Mutual Confidentiality Agreement dated November 1, 2005.

Article 12 Term and Termination

- 7 -

Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(a) Subject to Article 2(c) above, this Agreement is effective on the Effective Date and shall remain in full force and effect for as long as SPECTRUM is required to pay EPRO a royalty payment under Article V(A)(2)(a), (b), (c) or (d) under the License Agreement. This Agreement may be renewed only upon written agreement of the Parties.

(b) Either Party may terminate this Agreement in the event of a material breach by the other Party of this Agreement that is not cured within *** from notice of such breach by the non-breaching Party.

(c) Termination, expiration, cancellation or abandonment of this Agreement through any means or for any reason, except as set forth in Articles 12(a) or 12(b), shall be without prejudice to the rights and remedies of either Party with respect to any antecedent breach of any of the provisions of this Agreement. The provisions of Articles 6, 7, 8, 9, 11, 12, 13, 15 and 16 hereof shall survive expiration or termination of this Agreement.

Article 13 Notices

All notices under this Agreement shall be in writing and shall be either mailed, return receipt requested, to the addresses set forth above or transmitted by facsimile, with confirmation of transmission, to the facsimile number listed below:

For EPRO: Merck Eprova AG
Im Laternenacker 5
8200 Schaffhausen
Switzerland
Attention: Martin Ulmann
Fax: ++41 (0)52 630 7255

For SPECTRUM: Spectrum Pharmaceuticals, Inc.
157 Technology Drive
Irvine, CA 92618
U.S.A.
Attention: V.P., General Counsel
Fax: 1 (949) 788-6706

Article 14 Scope of Agreement

This Agreement shall constitute the entire agreement between the Parties pertaining to the subject matter thereof. Neither Party is authorized to make any representation, warranty, or promise on behalf of the other Party. No change, termination or attempted waiver of any of the provisions hereof shall be binding upon a Party unless signed by a duly authorized officer of the Party. Neither Party shall represent that it has power to bind the other Party or to assume or to create any obligation or responsibility, expressed or implied, on behalf of the other Party.

Article 15 Dispute Resolution

- 8 -

Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Any and all disputes under the Agreement shall be settled in accordance with the dispute resolution procedure set forth in Article XIII of the License Agreement.

Article 16 Applicable Law

This Agreement shall be construed in accordance with Article XI of the License Agreement.

Article 17 Severability

If any portion of this Agreement shall be in violation of any applicable law, rule or regulation, such portion shall be inoperative, but the remainder of the Agreement shall remain valid and continue to bind the Parties.

Article 18 Independent Contractors

The Parties are independent contractors and engage in the operation of their own respective businesses, and neither SPECTRUM nor EPRO shall be considered an employee, agent or joint venture partner of the other for any purpose whatsoever. Neither SPECTRUM nor EPRO shall have any authority to enter into any contracts or assume any obligations for the other or to make any warranties or representations on behalf of the other.

Article 19 Headings, Interpretation

The headings used in this Agreement are for convenience only and are not part of this Agreement.

SIGNATURE PAGE FOLLOWS

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives on the day and year first above written.

Merck Eprova AG

By: /s/ Martin Ulmann
Martin Ulmann

Title: General Manager

Date: June 1, 2006

By: /s/ Thomas Suter
Thomas Suter

Title: Chief Financial Officer

Date: June 1, 2006

Spectrum Pharmaceuticals, Inc.

By: /s/ Rajesh C. Shrotriya, M.D.
Rajesh C. Shrotriya, M.D.

Title: Chairman, CEO and President

Date: May 19, 2006

EXHIBIT A
SPECIFICATIONS

CALCIUM LEVOFOLINATE (L-CALCIUM FOLINATE)

SPECIFICATIONS for Purchase by SPECTRUM.

Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT B
PACKAGING GUIDELINES

Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT C
EPRO Bank Account

Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**Certification of Chief Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Rajesh C. Shrotriya, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Spectrum Pharmaceuticals, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 8, 2006

/s/ RAJESH C. SHROTRIYA

Rajesh C. Shrotriya
Chairman, Chief Executive Officer and
President

**Certification of Vice President, Finance
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Shyam K. Kumaria, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Spectrum Pharmaceuticals, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal controls over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 8, 2006

/s/ SHYAM K. KUMARIA

Shyam K. Kumaria
Vice President, Finance

Certification of Chief Executive Officer

Pursuant to 18 U.S.C. § 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Spectrum Pharmaceuticals, Inc. (the "Company") hereby certifies, to such officer's knowledge, that:

(i) the accompanying Quarterly Report on Form 10-Q of the Company for the quarterly period ended June 30, 2006 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: August 8, 2006

/s/ RAJESH C. SHROTRIYA

Rajesh C. Shrotriya
Chairman, Chief Executive Officer and
President

Certification of Vice President, Finance

Pursuant to 18 U.S.C. § 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Spectrum Pharmaceuticals, Inc. (the "Company") hereby certifies, to such officer's knowledge, that:

(i) the accompanying Quarterly Report on Form 10-Q of the Company for the quarterly period ended June 30, 2006 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: August 8, 2006

/s/ SHYAM K. KUMARIA

Shyam K. Kumaria
Vice President, Finance