

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

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

For the quarterly period ended June 30, 2002, or

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

For transition period from _____ .

Commission File Number 0-27352

HYBRIDON, INC.

(Exact name of registrant as specified in its charter)

Delaware

04-3072298

*(State or other jurisdiction of
incorporation or organization)*

*(I.R.S. Employer Identification
Number)*

**345 Vassar Street
Cambridge, Massachusetts 02139**
(Address of principal executive offices)

(617) 679-5500
(Registrant's telephone number, including area code)

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 the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Common Stock, par value \$.001 per share

47,525,043

Class

Outstanding as of July 26, 2002

TABLE OF CONTENTS

PART I — FINANCIAL STATEMENTS

Item 1 — Financial Statements

Consolidated Condensed Balance Sheets

Consolidated Condensed Statements of Operations

Consolidated Condensed Statements of Cash Flows

Notes to Consolidated Condensed Financial Statements

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Item 3. Quantitative and Qualitative Disclosures About Market Risk

PART II

Item 2. Changes in Securities and Use of Proceeds

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

Item 6. Exhibits and Reports on Form 8-K

Signatures

Ex-3.1 Restated Certificate of Incorporation

Ex-10.1 Executive Stock Option Agreement 3,150,000

Ex-10.2 Executive Stock Option Agreement 490,000

Ex-99.1 Section 906 Certificate

HYBRIDON, INC.

FORM 10-Q

INDEX

	<u>Page</u>
PART I — FINANCIAL STATEMENTS	
Item 1 — Financial Statements	
Consolidated Condensed Balance Sheets as of June 30, 2002 and December 31, 2001	3
Consolidated Condensed Statements of Operations for the Three Months and Six Months Ended June 30, 2002 and 2001	4
Consolidated Condensed Statements of Cash Flows for the Six Months Ended June 30, 2002 and 2001	5
Notes to Consolidated Condensed Financial Statements	6
Item 2 — Management's Discussion and Analysis of Financial Condition and Results of Operations	10
Item 3 — Quantitative and Qualitative Disclosures About Market Risk	18
PART II — OTHER INFORMATION	
Item 2 — Changes in Securities and Use of Proceeds	19
Item 4 — Submission of Matters to a Vote of Security Holders	19
Item 6 — Exhibits and Reports on Form 8-K	19
Signatures	21

This quarterly report on Form 10-Q references the following U.S. trademarks owned by us: Hybridon®, GEM®, Cyclicon™, and IMO™. This quarterly report on Form 10-Q also contains trademarks of other companies.

PART I — FINANCIAL STATEMENTS

ITEM 1 — FINANCIAL STATEMENTS

HYBRIDON, INC. AND SUBSIDIARIES

CONSOLIDATED CONDENSED BALANCE SHEETS
(UNAUDITED)

	JUNE 30, 2002	DECEMBER 31, 2001
Assets		
Current assets:		
Cash and cash equivalents	\$ 8,769,560	\$ 20,923,295
Short-term investments	17,888,982	10,910,987
Receivables	307,739	274,863
Prepaid expenses and other current assets	545,788	56,992
	<hr/>	<hr/>
Total current assets	27,512,069	32,166,137
Property and equipment, net	423,688	143,298
Deposits	11,500	—
	<hr/>	<hr/>
	\$ 27,947,257	\$ 32,309,435
	<hr/>	<hr/>
Liabilities and Stockholders' Equity (Deficit)		
Current liabilities:		
Accounts payable	\$ 556,193	\$ 498,642
Accrued expenses	730,650	1,021,660
Current portion of long-term debt	299,549	288,028
Current portion of capital lease	88,306	—
Current portion of deferred revenue (Note 4)	3,098,654	3,098,654
	<hr/>	<hr/>
Total current liabilities	4,773,352	4,906,984
9% convertible subordinated notes payable	1,306,000	1,306,000
Deferred revenue, net of current portion (Note 4)	23,368,471	26,129,725
Stockholders' equity (deficit):		
Preferred stock, \$0.01 par value		
Authorized — 5,000,000 shares		
Series A convertible preferred stock		
Designated — 1,500,000 shares		
Issued and outstanding — 660,643 and 640,166 shares at		
June 30, 2002 and December 31, 2001, respectively	6,606	6,402
Common stock, \$0.001 par value		
Authorized—150,000,000 shares		
Issued and outstanding—47,524,974 and 45,632,525 shares at		
June 30, 2002 and December 31, 2001, respectively	47,525	45,632
Additional paid-in capital	276,837,780	273,870,458
Accumulated deficit	(278,333,346)	(273,868,184)
Deferred compensation	(59,131)	(87,582)
	<hr/>	<hr/>
Total stockholders' deficit	(1,500,566)	(33,274)
	<hr/>	<hr/>
	\$ 27,947,257	\$ 32,309,435
	<hr/>	<hr/>

The accompanying notes are an integral part of these consolidated condensed financial statements.

HYBRIDON, INC. AND SUBSIDIARIES
CONSOLIDATED CONDENSED STATEMENTS OF OPERATIONS
(UNAUDITED)

	THREE MONTHS ENDED JUNE 30,		SIX MONTHS ENDED JUNE 30,	
	2002	2001	2002	2001
Revenues:				
License fees	\$ 621,425	\$ 220,862	\$ 1,240,705	\$ 254,862
Royalty and other income	18,776	32,339	31,293	57,528
Interest income	178,016	134,714	373,979	239,843
Total revenues	818,217	387,915	1,645,977	552,233
Operating expenses:				
Research and development	1,567,567	1,259,014	2,813,734	2,360,065
General and administrative	1,283,049	1,253,436	2,365,983	2,599,974
Stock-based compensation from repriced options (1)	(480,563)	923,780	(744,067)	923,780
Interest	38,263	272,083	76,296	587,152
Total operating expenses	2,408,316	3,708,313	4,511,946	6,470,971
Other income	—	6,890,261	—	6,890,261
(Loss) income before provision for income taxes and extraordinary item	(1,590,099)	3,569,863	(2,865,969)	971,523
Income tax (provision) credit	—	(400,000)	500,000	(400,000)
(Loss) income before extraordinary item	(1,590,099)	3,169,863	(2,365,969)	571,523
Extraordinary item:				
Loss on early retirement of 8% convertible notes payable	—	—	—	(1,411,876)
Net (loss) income	(1,590,099)	3,169,863	(2,365,969)	(840,353)
Accretion of preferred stock dividends	(1,058,944)	(1,181,149)	(2,099,194)	(2,189,033)
Net (loss) income applicable to common stockholders	\$ (2,649,043)	\$ 1,988,714	\$ (4,465,163)	\$ (3,029,386)
Net (loss) income per share applicable to common stockholders (Note 5)				
Basic	\$ (0.06)	\$ 0.11	\$ (0.10)	\$ (0.17)
Diluted	\$ (0.06)	\$ 0.06	\$ (0.10)	\$ (0.17)
Shares used in computing net (loss) income per common share:				
Basic	46,708,200	18,854,291	46,189,027	18,671,211
Diluted	46,708,200	57,173,932	46,189,027	18,671,211
(1) The following summarizes the allocation of stock-based compensation from repriced options:				
Research and development	\$ (383,211)	\$ 609,177	\$ (512,856)	\$ 609,177
General and administrative	(97,352)	314,603	(231,211)	314,603
Total	\$ (480,563)	\$ 923,780	\$ (744,067)	\$ 923,780

The accompanying notes are an integral part of these consolidated condensed financial statements

HYBRIDON, INC. AND SUBSIDIARIES
CONSOLIDATED CONDENSED STATEMENTS OF CASH FLOWS
(UNAUDITED)

	SIX MONTHS ENDED JUNE 30,	
	2002	2001
Cash Flows From Operating Activities:		
Net loss	\$ (2,365,969)	\$ (840,353)
Adjustments to reconcile net loss to net cash used in operating activities —		
Extraordinary loss on exchange of 8% convertible notes payable	—	1,411,876
Issuance of common stock for services rendered	—	26,000
Stock-based compensation	(744,067)	923,780
Depreciation and amortization	275,851	280,751
Gain on sale of property and equipment	—	(20,650)
Non-cash interest expense	11,737	250,556
Changes in operating assets and liabilities —		
Accounts receivable	(32,876)	(874,200)
Prepaid expenses and other assets	(500,296)	49,817
Accounts payable and accrued expenses	128,885	(49,211)
Deferred revenue	(1,957,436)	14,814,246
Net cash (used in) provided by operating activities	(5,184,171)	15,972,612
Cash Flows From Investing Activities:		
Maturities of short-term investments	4,345,000	—
Purchase of marketable securities	(14,582,249)	(5,995,587)
Sale of marketable securities	3,047,724	—
Purchase of property and equipment	(196,807)	—
Proceeds from sale of property and equipment	—	20,650
Net cash (used in) provided by investing activities	(7,386,332)	(5,974,937)
Cash Flows From Financing Activities:		
Proceeds from exercise of common stock options	441,765	31,075
Principal payments on capital leases	(24,997)	—
Payments on long-term debt	—	(3,000,000)
Decrease in restricted cash	—	4,178,750
Net cash provided by financing activities	416,768	1,209,825
Net (decrease) increase in cash and cash equivalents	(12,153,735)	11,207,500
Cash and cash equivalents, beginning of period	20,923,295	1,532,155
Cash and cash equivalents, end of period	\$ 8,769,560	\$ 12,739,655
Supplemental disclosure of cash flow information:		
Cash paid for interest	\$ 58,770	\$ 280,525
Supplemental disclosure of non cash financing and investing activities:		
Exchange of 8% convertible notes payable for Series B convertible preferred stock	\$ —	\$ 7,604,600
Accretion of Series A and Series B convertible preferred stock dividends	\$ 2,099,194	\$ 2,189,033
Issuance of common stock in lieu of cash bonus	\$ —	\$ 88,577
Issuance of stock options to non-employees	\$ —	\$ 20,148
Issuance of warrants in connection with consulting services	\$ —	\$ 569,667

Issuance of common stock as part of license agreement	\$ 1,166,379	\$ —
	<u> </u>	<u> </u>
Equipment acquired under capital lease	\$ 113,303	\$ —
	<u> </u>	<u> </u>

The accompanying notes are an integral part of these consolidated condensed financial statements.

HYBRIDON, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED CONDENSED FINANCIAL STATEMENTS (UNAUDITED)

(1) Organization

Hybridon, Inc. (the Company) was incorporated in the State of Delaware on May 25, 1989. The Company is engaged in the discovery and development of novel therapeutics and diagnostics using synthetic DNA. The Company's activities are based on four technologies: immunomodulatory oligonucleotide (IMO™) technology, which uses synthetic DNA to modulate responses of the immune system; antisense technology, which uses synthetic DNA to inhibit the production of disease-associated proteins at the cellular level; cancer therapy potentiation, which uses synthetic DNA to enhance the antitumor activity of certain marketed anticancer drugs; and Cyclicon™ technology, which uses novel synthetic DNA structures (Cyclicons) in drug target validation and drug discovery.

(2) Unaudited Interim Financial Statements

The accompanying unaudited consolidated condensed financial statements included herein have been prepared by the Company in accordance with generally accepted accounting principals for interim financial information and pursuant to the rules and regulations of the Securities and Exchange Commission. Accordingly, certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted pursuant to such rules and regulations. In the opinion of management, all adjustments, consisting of normal recurring adjustments, considered necessary for a fair presentation of interim period results have been included. The Company believes that its disclosures are adequate to make the information presented not misleading. Interim results for the three and six month periods ended June 30, 2002 are not necessarily indicative of results that may be expected for the year ended December 31, 2002. For further information, refer to the financial statements and footnotes thereto included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2001, which was filed with the Securities and Exchange Commission on April 1, 2002.

(3) Reclassifications

Amounts in the prior-period consolidated financial statements have been reclassified to conform with the current period's presentation.

(4) Collaboration and License Agreement with Isis Pharmaceuticals, Inc.

The Company recognizes revenue related to its Collaboration and License Agreement with Isis Pharmaceuticals, Inc. (the Agreement) ratably over the 10-year term of the Agreement expiring in 2011. "Deferred revenue" on the accompanying consolidated condensed balance sheet relates to the unrecognized portion of the \$32.3 million of cash and Isis stock received by the Company in 2001, the unrecognized expenses related to the Agreement, and the net of \$1.9 million in cash and the Company's common stock paid to Isis in May 2002 and the amortization of the estimated value of all payments made or to be made by the Company to Isis. While the amounts received from Isis are not refundable under any circumstances and the Company does not believe that it will be required to expend any significant future resources under the Agreement, this revenue has been deferred based on SAB 101, which precludes revenue recognition in cases where future obligations are not interpreted to be "inconsequential and perfunctory". An ongoing obligation of the Company to make two representatives available to attend semi-annual telephonic meetings of a collaboration committee with the licensee, led to the accounting treatment described above.

The following are each recognized over the term of the Agreement as a reduction to revenue; direct expenses related to the Agreement and the first tranche payment to Isis consisting of approximately \$716,000 in cash and 1,005,499 shares of common stock having a fair market value of approximately \$1.2 million on the date of issuance.

Based on an agreement reached with Isis on August 14, 2002, neither party will be required to pay any additional tranche payments under the Agreement.

[Table of Contents](#)

The Company recognized revenues under the Agreement of approximately \$611,000 and \$207,000 for the three months ended June 30, 2002 and 2001, respectively, and \$1,220,000 and \$207,000 for the six months ended June 30, 2002 and 2001, respectively. These amounts are net of approximately \$155,000 and \$15,000 for the three months ended June 30, 2002 and 2001, respectively, and \$311,000 and \$15,000 for the six months ended June 30, 2002 and 2001, respectively, which represents the amortization of cash and stock already issued and direct costs and the amortization of the estimated value of the stock to be issued to Isis. Additional information on the Agreement is included in Note (5) to the Consolidated Financial Statements in the Company's Annual Report on Form 10-K for the year ended December 31, 2001.

(5) Net (Loss) Income per Common Share

The following table sets forth the computation of basic and diluted (loss) income per share:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2002	2001	2002	2001
Numerator:				
(Loss) income before extraordinary item	\$ (1,590,099)	\$ 3,169,863	\$ (2,365,969)	\$ 571,523
Extraordinary loss on exchange of 8% convertible note payable	—	—	—	(1,411,876)
Net (loss) income	(1,590,099)	3,169,863	(2,365,969)	(840,353)
Accretion of preferred stock dividends	(1,058,944)	(1,181,149)	(2,099,194)	(2,189,033)
Numerator for basic (loss) income applicable to common shareholders	(2,649,043)	1,988,714	(4,465,163)	(3,029,386)
Effect of dilutive securities:				
Dividends on Series A and B convertible preferred stock	—	1,181,149	—	—
Interest expense related to convertible debt	—	96,686	—	—
Numerator for diluted (loss) income applicable to common shareholders	\$ (2,649,043)	\$ 3,266,549	\$ (4,465,163)	\$ (3,029,386)
Denominator for basic (loss) income per share	46,708,200	18,854,291	46,189,027	18,671,211
Effect of dilutive securities:				
Common stock options and warrants	—	4,043,224	—	—
Convertible debt	—	4,182,995	—	—
Series A and B convertible preferred stock	—	30,093,422	—	—
	—	38,319,641	—	—
Denominator for diluted (loss) income per share	46,708,200	57,173,932	46,189,027	18,671,211
(Loss) income per share — basic				
(Loss) income before extraordinary item	\$ (0.04)	\$ 0.17	\$ (0.05)	\$ 0.03
Extraordinary loss	—	—	—	(0.08)
Net (loss) income per share	(0.04)	0.17	(0.05)	(0.05)
Accretion of preferred stock dividends	(0.02)	(0.06)	(0.05)	(0.12)
Net (loss) income per share applicable to common stockholders	\$ (0.06)	\$ 0.11	\$ (0.10)	\$ (0.17)
(Loss) income per share — diluted				
(Loss) income before extraordinary item	\$ (0.04)	\$ 0.06	\$ (0.05)	\$ 0.03
Extraordinary loss	—	—	—	(0.08)
Net (loss) income per share	(0.04)	0.06	(0.05)	(0.05)
Accretion of preferred stock dividends	(0.02)	—	(0.05)	(0.12)
Net (loss) income per share applicable to common stockholders	\$ (0.06)	\$ 0.06	\$ (0.10)	\$ (0.17)

Basic net (loss) income per common share is computed using the weighted average number of shares of common stock outstanding during the period. For the three and six months ended June 30, 2002 and the six months ended June 30, 2001, diluted net loss per common share is the same as basic net loss per common share, as the effects of the Company's potential common stock equivalents are antidilutive. Total antidilutive securities were 39,166,376 for the three and six months ended June 30, 2002. Total antidilutive securities were 12,092,582 for the three months ended June 30, 2001 and 54,530,048 for the six months ended June 30, 2001. These securities include stock options, warrants, convertible preferred stock and convertible debt instruments (on an as-converted basis) and are not included in the Company's calculation of diluted net loss per common share for the three months ended June 30, 2002 and the six months ended June 30, 2002 and 2001.

(6) Cash Equivalents and Investments

The Company considers all highly liquid investments with maturities of 90 days or less when purchased to be cash equivalents. Cash and cash equivalents at June 30, 2002 and December 31, 2001 consist of the following:

	JUNE 30 2002	DECEMBER 31 2001
Cash and cash equivalents		
Cash and money market funds	\$3,969,560	\$20,923,295
Corporate bonds	4,800,000	—
Total	<u>\$8,769,560</u>	<u>\$20,923,295</u>

The Company accounts for investments in accordance with Statement of Financial Accounting standards (SFAS) No. 115, *Accounting for Certain Investments in Debt and Equity Securities*. In accordance with SFAS No. 115, investments that the Company has the positive intent and ability to hold to maturity are classified as "held to maturity" and reported at amortized cost, which approximates fair market value. Management determines the appropriate classification of marketable securities at the time of purchase and reevaluates such designation at each balance sheet date. All of the Company's short-term investments as of June 30, 2002 and December 31, 2001 are classified as "held-to-maturity." On January 2, 2002 and prior to maturity, the Company sold two of its asset backed securities issued by the same corporation which the Company had classified as "held-to-maturity" as of December 31, 2001. On April 19, 2002 and prior to maturity, the Company sold a corporate bond which had been classified as "held-to-maturity" as of December 31, 2001. The Company sold such securities when it became aware that the securities' assets might be deteriorating which may lead to an early repayment of par value. In order to avoid any potential losses, the Company sold these securities for a price that approximated their book value.

Short-term investments have maturities of greater than three months and mature within one year of the balance sheet date. All short-term investments mature prior to June 30, 2003. At June 30, 2002 and December 31, 2001, the Company's short-term investments consisted of the following (at amortized cost which approximates fair market value):

	JUNE 30 2002	DECEMBER 31 2001
Short-term investments		
Government bonds	\$ 12,747,158	\$ 8,928,847
Corporate bonds	5,141,824	1,982,140
Total	<u>\$17,888,982</u>	<u>\$10,910,987</u>

(7) Stock-Based Compensation

In September 1999, the Company's Board of Directors authorized the repricing of options to purchase 5,251,827 shares of common stock to \$0.50 per share, which represented the market value on the date of the repricing. These options are subject to variable plan accounting which requires the Company to remeasure the intrinsic value of the repriced options, through the earlier of the date of exercise, cancellation or expiration, at each reporting date. The Company recognized a credit of approximately \$481,000 and compensation expense of approximately \$924,000 for the three months ended June 30, 2002 and 2001, respectively, and a credit of approximately \$744,000 and compensation expense of approximately \$924,000 for the six months ended June 30, 2002 and 2001, respectively. A decrease in the intrinsic value of these options between December 31, 2001 and June 30, 2002 resulted in credits to stock compensation from these repriced options in 2002. Compensation expense in 2001 is a result of an increase in the intrinsic value of these options between March 31, 2001 and June 30, 2001.

(8) Income Taxes

During 2001, the Company had a provision for income taxes of \$500,000 for Alternative Minimum Tax (AMT) of which \$450,000 was paid by the Company in 2001. In March 2002, the National Stabilization and Recovery Act temporarily rescinded the AMT with respect to the use of net operating loss carryforwards to offset current taxable income. As a result, the Company recognized a \$500,000 tax benefit in operating results during the six months ended June 30, 2002 and received a refund of \$450,000 during the three months ended June 30, 2002.

(9) Series A Convertible Preferred Stock Dividend

The holders of Series A convertible preferred stock, as of March 15 or September 15, are entitled to receive dividends payable at the rate of 6.5% per annum, payable semi-annually in arrears. Such dividends shall accrue from the date of issuance of such shares and shall be paid semi-annually on April 1 and October 1 of each year. Such dividends shall be paid, at the election of the Company, either in cash or additional duly authorized, fully paid and non assessable shares of Series A convertible preferred stock. Through June 30, 2002, the Company has always chosen to pay these dividends in stock. In calculating the number of shares to be paid with respect to each dividend, the Series A convertible preferred stock is valued at \$100.00 per share. During the three months ended June 30, 2002 and 2001, total Series A dividend accretion was approximately \$1,059,000 and \$1,181,000, respectively. During the six months ended June 30, 2002 and 2001, total Series A dividend accretion was approximately \$2,099,000 and \$2,004,000, respectively.

(10) 8% Convertible Notes Payable

On March 5, 2001, the Company made an offer to the holders of its 8% Convertible Notes Payable (the 8% Notes) to exchange their notes in a ratio of one share of a newly-designated class of Series B convertible preferred stock for each \$100 in principal and interest of notes tendered. On March 30, 2001 holders of 8% Notes in the aggregate original principal amount of \$7,354,000 exchanged their notes for 76,046 shares of Series B convertible preferred stock. The Company recorded an extraordinary loss of \$1.4 million related to the early extinguishment of the 8% Notes. The extraordinary loss represents the difference between the carrying value of the 8% Notes and the fair value of the Series B convertible preferred stock, as determined by the fair market value of the common stock into which the Series B convertible preferred stock was convertible and the write-off of deferred financing costs and related legal fees.

(11) Sale of MethylGene Inc. Shares

On April 27, 2001, the Company closed the sale of 60% of its holding of shares of Class A and Class B stock of MethylGene Inc., to a group of private United States institutional investors. MethylGene is a Canadian pharmaceutical research company in which the Company had a 22% ownership interest. On May 14, 2001, the Company closed the sale of the remaining 40% of its holding with three of MethylGene's other shareholders on terms similar to those agreed to by the institutional investors (\$2.85 Canadian or approximately \$1.84 US per share as of April 27, 2001). The Company received total proceeds of approximately \$7.2 million (US). During the three months ended June 30, 2001, the Company recorded a gain for this transaction of approximately \$6.9 million, which includes approximately \$300,000 in professional fees. This gain is included in other income on the accompanying consolidated statement of operations.

(12) Early Exercise Program

In June 2001, the Company began an "early exercise" program (the Early Exercise Program) to exchange its common stock for its Series B convertible preferred stock, several classes of its warrants and its remaining 8% Notes, in order to simplify the Company's capital structure and to reduce the number of outstanding securities which are exercisable for or convertible into shares of its common stock. At the completion of the Early Exercise Program in 2001, the results were as follows:

All holders of the Company's Series B convertible preferred stock exchanged their shares for 19,564,500 shares of the Company's common stock;

Holders of warrants priced between \$0.60 and \$2.40 exchanged their warrants for 4,669,808 shares of the Company's common stock; and holders of \$456,221 in principal and interest under 8% Notes exchanged their 8% Notes for 1,140,448 shares of the Company's common stock.

(13) Stockholders' Equity

On June 19, 2002, at the Annual Meeting of the Company's stockholders, an amendment to the Company's Restated Certificate of Incorporation increased the number of authorized shares of the Company's Common Stock from 100,000,000 shares to 150,000,000 shares. As of June 30, 2002, 47,524,974 shares of commons stock were issued and outstanding.

ITEM 2. **MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

GENERAL

We are a leading company in the discovery and development of novel therapeutics and diagnostics using synthetic DNA. Our activities are based on four technologies:

- immunomodulatory oligonucleotide, or IMO, technology, which uses synthetic DNA to modulate responses of the immune system;
- antisense technology, which uses synthetic DNA to inhibit the production of disease-associated proteins at the cellular level;
- cancer therapy potentiation, which uses synthetic DNA to enhance the antitumor activity of certain marketed anticancer drugs; and
- Cyclicon technology, which uses novel synthetic DNA structures which we refer to as Cyclicons in drug target validation and drug discovery.

Since we began operations in February 1990, we have been involved primarily in research and development and manufacturing. To date, almost all of our revenues have been from collaborative and license agreements, interest income and manufacturing of synthetic DNA and reagent products by our DNA manufacturing business, known as the Hybridon Specialty Products Division, or HSP, prior to our selling HSP in September 2000.

We have incurred total losses of \$278.3 million through June 30, 2002 and expect to incur substantial operating losses in the future. In order to commercialize our therapeutic products, we need to address a number of technological challenges and to comply with comprehensive regulatory requirements. We expect that our research and development and general and administrative expenses will be significant in 2002 as we use our cash resources to advance more rapidly our discovery and development programs.

CRITICAL ACCOUNTING POLICIES

This management's discussion and analysis of financial condition and results of operations presents 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 management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On an ongoing basis, management evaluates its estimates and judgments, including those related to revenue recognition. Management bases its estimates and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe the most critical accounting policy affecting the portrayal of our financial condition is revenue recognition. We recognize revenue in accordance with SEC Staff Accounting Bulletin (SAB) No. 101. SAB 101 requires that four basic criteria be met before revenue can be recognized:

- persuasive evidence of an arrangement exists;
- delivery has occurred, services have been rendered or obligations have been satisfied;
- the fee is fixed and determinable; and
- collectibility is reasonably assured.

Determination of the last three criteria are based on management's judgments regarding the fixed nature of the fee charged for services rendered or products delivered and the collectibility of these fees. Should changes in conditions cause management to determine these criteria are not met for any future transactions, revenues recognized for any reporting period could be adversely affected.

[Table of Contents](#)

During 2001, we received a total of \$32.3 million in cash and stock under our collaboration and license agreement with Isis Pharmaceuticals, Inc. This amount and future amounts due under this license agreement are non-refundable. We are recognizing the revenue on a straight-line basis over the 10-year term of the agreement, which expires in 2011. This deferral of revenue recognition is based on a continuing obligation contained in the license agreement which has been interpreted as neither inconsequential nor perfunctory according to SAB 101. We believe that the cost of performing the continuing obligation is not material. Direct expenses and cash and stock due to Isis are also recognized on a straight-line basis over the 10-year term of the agreement. In May 2002, we paid Isis \$0.7 million in cash and issued to Isis 1,005,499 shares of our common stock having a fair market value of \$1.2 million on the date of issuance.

Note 2 to our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2001 contains a full description of all our significant accounting policies.

RESULTS OF OPERATIONS

Three and Six Months Ended June 30, 2002 and 2001

Total revenues increased by \$430,000, or 111%, to \$818,000 for the three months ended June 30, 2002 from \$388,000 for the three months ended June 30, 2001 and increased by \$1,094,000, or 198%, to \$1,646,000 for the six months ended June 30, 2002 from \$552,000 for the six months ended June 30, 2001. The increase in revenues was primarily due to the recognition of license fee revenues derived from agreements with Isis Pharmaceuticals, Inc. and EpiGenesis Pharmaceuticals, Inc. which became effective during the second quarter of 2001. In connection with these agreements, we recorded \$621,000 in license fee revenue, which is net of related costs and amortization of future amounts due from us, in the three months ended June 30, 2002 and \$1,241,000 in net license fee revenues for the six months ended June 30, 2002. The increase in revenues for the three and six months ended June 30, 2002 also reflected increased interest income from higher cash and investment balances as a result of the payments received during 2001 from Isis and EpiGenesis, the sale of our interest in MethylGene, Inc. and the remaining contingent payment due us from the sale of Hybridon Specialty Products Division, or HSP.

Research and development expenses increased by \$309,000, or 25%, to \$1,568,000 for the three months ended June 30, 2002 from \$1,259,000 for the three months ended June 30, 2001 and by \$454,000, or 19%, to \$2,814,000 for the six months ended June 30, 2002 from \$2,360,000 for the six months ended June 30, 2001. The increase in both periods was primarily attributable to expanded development efforts with respect to our IMO technology.

In the three and six months ended June 30, 2002 and 2001, our research and development expenses related primarily to the preclinical development of our IMO technology, including the development of HYB-2055. We will continue to incur costs in developing our IMO technology and in conducting preclinical studies of HYB-2055. We expect to submit an IND for HYB-2055 in the first quarter of 2003. In the first quarter of 2002, we commenced a Phase I/II clinical trial of our second generation antisense compound GEM-231 in combination with irinotecan. We are conducting the trial at Vanderbilt University Medical Center and the University of Chicago Medical Center. We are currently seeking to add additional sites to expand this trial.

Given the technological and regulatory hurdles likely to be encountered in the development and commercialization of our products, the future timing and costs of our various research and development programs are uncertain. The cost of clinical trials may vary significantly based on whether they are done alone or in combination with other compounds owned by third parties, the number of sites and the number of enrolled patients. Our ability to fund research and development through strategic alliances will also affect our development costs.

General and administrative expenses increased by \$30,000, or 2%, to \$1,283,000 in the three months ended June 30, 2002 from \$1,253,000 for the three months ended June 30, 2001 and decreased by \$234,000, or 9%, to \$2,366,000 for the six months ended June 30, 2002 from \$2,600,000 for the six months ended June 30, 2001. General and administrative expenses consist primarily of salary expense, consulting fees and professional legal fees associated with our regulatory filing requirements and business development. The decrease in general and administrative expenses for the six months ended June 30, 2002 reflects executive compensation awards approved in the first quarter of 2001 without any similar awards in the first six months of 2002 offset by higher compensation costs in the second quarter of 2002 resulting from an increase in personnel. The decrease in the six months ended June 30, 2002 is also attributed to decreased facility expenses and decreased professional fees associated with financing activities.

[Table of Contents](#)

As a result of a repricing of our stock options in September 1999, certain outstanding stock options are subject to variable plan accounting which requires the Company to remeasure the intrinsic value of the repriced options, through the earlier of the date of exercise, cancellation or expiration, at each reporting date. We recorded a credit to operating results of approximately \$481,000 and stock compensation expense of approximately \$924,000 for the three months ended June 30, 2002 and 2001, respectively. For the six months ended June 30, 2002, we recorded a total credit of approximately \$744,000 compared to stock compensation expense of approximately \$924,000 for the same period in 2001. The credits in 2002 resulted from a decrease in the intrinsic value of these stock options during the first half of 2002. The stock-based compensation expense in 2001 resulted from an increase in the intrinsic value of these stock options during the second quarter of 2001. Compensation charges and credits will likely occur in the future based upon changes in the intrinsic value of our repriced options.

Interest expense decreased by \$234,000, or 86%, to \$38,000 for the three months ended June 30, 2002 from \$272,000 for the three months ended June 30, 2001 and by \$511,000, or 87%, to \$76,000 for the six months ended June 30, 2002 from \$587,000 for the same period in 2001. The decreases for the three and six months ended June 30, 2002 were mainly attributable to a \$13.7 million debt reduction during 2001 which resulted primarily from the conversion of \$7.6 million in principal amount of our 8% notes into equity and the repayment of a \$6.0 million note payable that occurred in the second and fourth quarters of 2001.

For the three and six months ended June 30, 2001, other income consisted of a gain recorded from Hybridon's sale of 100% of its holdings of MethylGene Inc. stock. Hybridon closed the sale of its holding of shares of Class A and Class B stock of MethylGene to a group of private United States institutional investors along with three of MethylGene's other shareholders during April and May 2001 on similar terms (\$2.85 Canadian or approximately \$1.84 US per share as of April 27, 2001). Hybridon received total proceeds of approximately \$7.2 million US. For the second quarter of 2001, Hybridon recorded a net gain for this transaction of approximately \$6.9 million, which includes approximately \$300,000 in professional fees.

In March 2002, the National Economic Stabilization and Recovery Act temporarily rescinded the Alternative Minimum Tax (AMT) with respect to the use of net operating loss carryforwards to offset current taxable income. As a result, we recognized a tax benefit in operating results of \$500,000 for the six months ended June 30, 2002 compared to income tax expense of \$400,000 for the six months ended June 30, 2001. We received a refund of \$450,000 during the three months ended June 30, 2002 reimbursing us for estimated taxes paid during 2001.

We had an extraordinary loss of \$1.4 million for the six months ended June 30, 2001 resulting from the early extinguishment of our 8% Notes.

We pay dividends on our Series A convertible preferred stock of 6.5% per annum, payable semi-annually in arrears. We have the option to pay such dividends in either cash or additional duly authorized, fully paid and non assessable shares of Series A convertible preferred stock. Through June 30, 2002, we had only paid such dividends in Series A convertible preferred stock. Accordingly, during the three months ended June 30 2002 and 2001, 20,659 and 19,922 shares of our Series A convertible preferred stock were issued as dividends to the holders of our Series A preferred stock. We recorded Series A convertible preferred stock dividends of \$1,059,000 for the second quarter of 2002 and \$1,181,000 during the second quarter of 2001 and \$2,099,000 and \$2,189,000 for the six months ended June 30, 2002 and 2001, respectively. Such dividends will continue to be incurred for as long as the Series A convertible preferred stock is outstanding.

As a result of the factors discussed above, our net loss applicable to common stockholders amounted to \$2,649,000 for the three months ended June 30, 2002 compared to our net income applicable to common stockholders of \$1,989,000 for the three months ended June 30, 2001 and net losses applicable to common stockholders of \$4,465,000 for the six months ended June 30, 2002 compared to \$3,029,000 for the six months ended June 30, 2001.

As of December 31, 2002, we had net operating loss carryforwards and tax credit carryforwards expiring in 2007 through 2020 of approximately \$210.0 million and \$4.0 million, respectively, to offset future federal taxable income, if any. Due to the degree of uncertainty related to the ultimate realization of such prior losses, no benefit has been recognized in the financial statements as of June 30, 2002. We would allocate any subsequently recognized tax benefits to operations and additional paid-in capital. Moreover, our ability to utilize these losses in future years may be limited under the change of stock ownership rules of the Internal Revenue Service.

LIQUIDITY AND CAPITAL RESOURCES

[Table of Contents](#)

We require cash to fund our operating expenses, to make capital expenditures and to pay debt service. We expect that our cash requirements for these uses will be substantial and will increase as we expand our operations. Historically, we have funded our operations with revenues from collaborative and license agreements, interest income and manufacturing of synthetic DNA and reagent products by HSP, prior to its sale in September 2000, as well as from a variety of debt and equity financings, lease financings, the sale of our shareholdings in MethylGene, and the sale of HSP. Based on an agreement reached with Isis on August 14, 2002, neither party will be required to pay any additional tranche payments under the collaboration and license agreement, including the final \$4.5 million payment due to us from Isis Pharmaceuticals, Inc. Under our agreement in May 2002, we paid Isis \$0.7 million in cash and issued to Isis shares of our common stock having a fair market value of \$1.2 million.

As of June 30, 2002, we had approximately \$26.7 million in cash, cash equivalents and investments. We used \$5.2 million for operating activities during the six months ended June 30, 2002. The \$5.2 million consisted of a net loss of \$2.4 million combined with non-cash operating adjustments which include stock-based compensation and deferred revenue related to the collaboration and license agreement with Isis and EpiGenesis, an increase in prepaid expenses, and the cash portion of the May 2002 payment to Isis.

We purchased approximately \$7.2 million in short-term investments, net of sales and maturities, during the six months ended June 30, 2002.

During the first half of 2002, financing activities included proceeds from the exercise of stock options, which were offset by payments by the Company under an equipment lease.

As of June 30, 2002, our outstanding indebtedness consisted of \$0.3 million in principal amount of 8% notes maturing in November 2002 and \$1.3 million in principal amount of 9% notes maturing in April 2004. These notes are unsecured.

Based on our current operating plan, we believe that our existing cash and investments will be sufficient to fund our cash requirements at least through the end of 2003. Our actual cash requirements will depend on many factors, including particularly the scope and pace of our research and development efforts and our success in entering into strategic alliances.

We do not expect to generate significant additional funds internally until we successfully complete development and obtain marketing approval for products, either alone or in collaboration with third parties, which we expect will take many years. We expect to seek additional external funds periodically from collaborations with other biotechnology companies or pharmaceutical companies and from additional debt, equity and lease financings. We believe that the key factors that will affect our internal and external sources of cash are:

- the success of our clinical and preclinical development programs;
- the receptivity of the capital markets to financings by biotechnology companies; and
- our ability to enter into strategic collaborations with biotechnology and pharmaceutical companies and the success of such collaborations.

We may not be successful in generating funds internally or from external sources. Lack of necessary funds may require us to delay, scale back or eliminate some or all of our research and development programs.

FORWARD-LOOKING STATEMENTS

This quarterly report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 that involve risks and uncertainties. We may, in some cases, use words such as "project," "believe," "anticipate," "plan," "expect," "estimate," "intend," "should," "would," "could," "will," "may" or other words that convey uncertainty of future events or outcomes to identify these forward-looking statements. There are a number of important factors that could cause actual results to differ materially from the results anticipated by these forward-looking statements, including those set forth below under the caption "Risk Factors". These factors and the other cautionary statements made in this quarterly report should be read as being applicable to all related forward-looking statements wherever they appear in this quarterly report. If one or more of these factors materialized, or if any underlying assumptions prove incorrect, our actual results, performance or achievements may vary materially from any future results, performance or achievements expressed or implied by these forward-looking statements. In addition, any forward-looking statements represent our estimates only as of the date this quarterly report was filed with the Securities and Exchange Commission and should not be relied upon as representing the Company's estimates as of any subsequent date. While we may elect to update forward-looking statements at some point in the future, we specifically disclaim any obligation to do so, even if our estimates change.

RISK FACTORS

Risks Relating to Our Business, Strategy and Industry

If our clinical trials are unsuccessful, or if they are significantly delayed, we may not be able to develop and commercialize our products.

In order to obtain regulatory approvals for the commercial sale of our products, we will be required to complete extensive clinical trials in humans to demonstrate the safety and efficacy of our drug candidates. We may not be able to obtain authority from the FDA or other equivalent foreign regulatory agencies to commence or complete these clinical trials.

The results from preclinical testing of a drug candidate that is under development may not be predictive of results that will be obtained in human clinical trials. In addition, the results of early human clinical trials may not be predictive of results that will be obtained in larger scale, advanced stage clinical trials. Furthermore, we, one of our collaborators, or a regulatory agency with jurisdiction over the trials, may suspend clinical trials at any time if the subjects or patients participating in such trials are being exposed to unacceptable health risks, or for other reasons. As an example, in 1997, after reviewing the results from the most recent clinical trial of GEM 91, our lead antisense compound at the time, we determined not to continue the development of GEM 91 and suspended clinical trials of this product candidate.

The rate of completion of clinical trials is dependent in part upon the rate of enrollment of patients. Patient accrual is a function of many factors, including the size of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the study, the nature of the study, the existence of competitive clinical trials and the availability of alternative treatments. Delays in planned patient enrollment may result in increased costs and prolonged clinical development.

We may not be able to successfully complete any clinical trial of a potential product within any specified time period. In some cases, we may not be able to complete the trial at all. Moreover, clinical trials may not show our potential products to be both safe and efficacious. Thus, the FDA and other regulatory authorities may not approve any of our potential products for any indication.

We face substantial competition which may result in others discovering, developing or commercializing drugs before or more successfully than us.

The field of drug discovery is highly competitive and characterized by rapid and significant technological change. Many of our competitors are substantially larger than us and have substantially greater capital resources, research and development staffs and facilities than us. Furthermore, many of our competitors are more experienced than us in drug discovery, development and commercialization, obtaining regulatory approvals and drug manufacturing and marketing. As a result, our competitors may discover, develop and commercialize drugs based on synthetic DNA before us. In addition, our competitors may discover, develop and commercialize drugs that render non-competitive or obsolete the drugs that we or our collaborators are seeking to develop and commercialize.

Because the products that we may develop will be based on new technologies and therapeutic approaches, the market may not be receptive to these products upon their introduction.

The commercial success of any of our products for which we may obtain marketing approval from the FDA or other regulatory authorities will depend upon their acceptance by the medical community and third party payors as clinically useful, cost-effective and safe. Many of the products that we are developing are based upon new technologies or therapeutic approaches that are relatively new and unproven. As a result, it may be more difficult for us to achieve market acceptance of our products. Our efforts to educate the medical community on these potentially unique approaches may require greater resources than would be typically required for products based on conventional technologies or therapeutic approaches. The safety, efficacy, convenience and cost-effectiveness of our products as compared to competitive products will also affect market acceptance.

Competition for technical and management personnel is intense in our industry and we may not be able to sustain our operations or grow if we are unable to attract and retain key personnel.

Our success is highly dependent on the retention of principal members of our technical and management staff, including Stephen Seiler and Sudhir Agrawal. Furthermore, our future growth will require hiring a significant number of qualified technical and management personnel. Accordingly, recruiting and retaining such personnel in the future will be critical to our success. There is intense competition from other companies and research and academic institutions for qualified personnel in the areas of our activities. If we are not able to continue to attract and retain, on acceptable terms, the qualified personnel necessary for the continued development of our business, we may not be able to sustain our operations or grow.

Regulatory Risks

We may not be able to obtain marketing approval for products resulting from our development efforts.

All of the products that we are developing will require additional research and development, extensive preclinical studies and/or clinical trials and regulatory approval prior to any commercial sales. This process is lengthy, often taking a number of years, and expensive.

We may need to successfully address a number of technological challenges in order to complete development of our products. Moreover, these products may not be effective in treating any disease or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining regulatory approval or prevent or limit commercial use.

If we fail to comply with the extensive regulatory requirements to which our products are subject, we could be subject to adverse consequences and penalties.

The testing, manufacturing, labeling, advertising, promotion, export, and marketing, among other things, of our products are subject to extensive regulation by governmental authorities in Europe, the United States, and elsewhere throughout the world.

In general, there can be no assurance that submission of materials requesting permission to conduct clinical trials will result in authorization by the FDA or equivalent foreign regulatory agency to commence clinical trials, or that once clinical trials have begun, testing will be completed successfully within any specific time period, if at all, with respect to any of our products. Once trials are complete and an application for marketing approval has been submitted to the relevant regulatory agency, the regulatory agency may deny the application if applicable regulatory criteria are not satisfied, or may require additional testing or information.

If regulatory approval of a product is granted, such approval may be subject to limitations on the indicated uses for which the product may be marketed or contain requirements for costly post-marketing testing and surveillance to monitor the safety or efficacy of the product. As to any product for which we obtain marketing approval, the product, the facilities at which the product is manufactured, any post-approval clinical data and our promotional activities will be subject to continual review and periodic inspections by the FDA and other regulatory agencies.

Both before and after approval is obtained, violations of regulatory requirements may result in various adverse consequences, including the regulatory agency's delay in approving, or refusal to approve a product, suspension or withdrawal of an approved product from the market, operating restrictions, or the imposition of civil or criminal penalties.

We have only limited experience in regulatory affairs and our products are based on new technologies; these factors may affect our ability or the time we require to obtain necessary regulatory approvals.

We have only limited experience in filing and prosecuting the applications necessary to gain regulatory approvals. Moreover, the products that result from our research and development programs will likely be based on new technologies and new therapeutic approaches that have not been extensively tested in humans. The regulatory requirements governing these types of products may be more rigorous than for conventional drugs. As a result, we may experience a longer regulatory process in connection with any product that we develop based on these new technologies or new therapeutic approaches.

Risks Relating to Our Financial Results and Need for Financing

We have incurred substantial losses and expect to continue to incur losses. We will not be successful unless we reverse this trend.

We have incurred losses in every year since our inception. As of June 30, 2002, we had incurred operating losses of approximately \$278.3 million. We expect to continue to incur substantial operating losses in future periods. We have received no revenues from the sale of drugs. To date, almost all of our revenues have been from collaborative and license agreements, interest income and manufacturing of synthetic DNA and reagent products by HSP prior to our selling HSP in September 2000.

We expect to increase our spending significantly in order to expand our infrastructure and research and development programs. As a result, we will need to generate significant revenues to fund this spending. We cannot be certain whether or when we will become profitable because of the significant uncertainties with respect to our ability to generate revenues from the sale of products and from any potential strategic alliances.

We may need additional financing, which may be difficult to obtain. Our failure to obtain necessary financing or doing so on unattractive terms could adversely affect our discovery and development programs and other operations.

We will require substantial funds to conduct research and development, including preclinical testing and clinical trials of our drugs. We will also require substantial funds to conduct regulatory activities and to establish commercial manufacturing, marketing and sales capabilities. Additional financing may not be available when we need it or may not be available on favorable terms.

If we are unable to obtain adequate funding on a timely basis, we may be required to significantly curtail one or more of our discovery or development programs. For example, we significantly curtailed expenditures on our research and development programs during 1999 and 2000 because we did not have sufficient funds available to advance these programs at planned levels. We could be required to seek funds through arrangements with collaborators or others that may require us to relinquish rights to certain of our technologies, drug candidates or drugs which we would otherwise pursue on our own.

If we raise additional funds by issuing equity securities, further dilution to our then existing stockholders will result. In addition, the terms of the financing may adversely affect the holdings or the rights of such stockholders.

Risks Relating to Collaborators

We need to establish collaborative relationships in order to succeed.

An important element of our business plan is entering into collaborative relationships for the development and commercialization of products based on our discoveries. We face significant competition in seeking appropriate collaborators. Moreover, these arrangements are complex to negotiate and time-consuming to document. We may not be successful in our efforts to establish collaborative relationships or other alternative arrangements.

Reliance on collaborative relationships poses a number of risks, including the following:

- we cannot effectively control whether our collaborators will devote sufficient resources to our programs or products;
- disputes may arise in the future with respect to the ownership of rights to technology developed with collaborators;
- disagreements with collaborators could delay or terminate the research, development or commercialization of products, or result in litigation or arbitration;
- contracts with our collaborators may fail to provide sufficient protection;
- we may have difficulty enforcing the contracts if one of these collaborators fails to perform;
- our collaborators may terminate their collaborations with us, which could make it difficult for us to attract new collaborators or adversely affect the perception of us in the business or financial communities;
- collaborators have considerable discretion in electing whether to pursue the development of any additional drugs and may pursue technologies or products either on their own or in collaboration with our competitors and
- collaborators with marketing rights may choose to devote fewer resources to the marketing of our products than they do to products that they develop.

Given these risks, it is possible that any collaborative arrangements into which we enter may not be successful. Previous collaborative arrangements to which we were a party with F. Hoffmann-La Roche and G.D. Searle & Co. both were terminated prior to the development of any product. Failure of these efforts could delay our drug development or impair commercialization of our products.

Risks Relating to Intellectual Property

If we are unable to obtain patent protection for our discoveries, the value of our technology and products will be adversely affected. If we infringe patent or other intellectual property rights of third parties, we may not be able to develop and commercialize our products or the cost of doing so may increase.

Our patent positions, and those of other drug discovery companies, are generally uncertain and involve complex legal, scientific and factual questions.

Our ability to develop and commercialize drugs depends in significant part on our ability to:

- obtain patents;

[Table of Contents](#)

- obtain licenses to the proprietary rights of others on commercially reasonable terms;
- operate without infringing upon the proprietary rights of others;
- prevent others from infringing on our proprietary rights; and
- protect trade secrets.

Third parties may own or control patents or patent applications and require us to seek licenses, which could increase our development and commercialization costs, or prevent us from developing or marketing products.

We may not have rights under some patents or patent applications related to our products. Third parties may own or control these patents and patent applications in the United States and abroad. Therefore, in some cases, to develop, manufacture, sell or import certain of our products, we or our collaborators may choose to seek, or be required to seek, licenses under third party patents issued in the United States and abroad or those that might issue from United States and foreign patent applications. In such event, we would be required to pay license fees or royalties or both to the licensor. If licenses are not available to us on acceptable terms, we or our collaborators may not be able to develop, manufacture, sell or import these products.

We may become involved in expensive patent litigation or other proceedings, which could result in our incurring substantial costs and expenses or substantial liability for damages or require us to stop our development and commercialization efforts.

There has been substantial litigation and other proceedings regarding the patent and other intellectual property rights in the biotechnology industry. We may become a party to patent litigation or other proceedings regarding intellectual property rights. The cost to us of any patent litigation or other proceeding, even if resolved in our favor, could be substantial. Some of our competitors may be able to sustain the cost of such litigation or proceedings more effectively than we can because of their substantially greater financial resources. If a patent litigation or other proceeding is resolved against us, we or our collaborators may be enjoined from developing, manufacturing, selling or importing our drugs without a license from the other party and we may be held liable for significant damages. We may not be able to obtain any required license on commercially acceptable terms or at all.

Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace. Patent litigation and other proceedings may also absorb significant management time.

Risks Relating to Product Manufacturing, Marketing and Sales

We have no experience selling, marketing or distributing products and no internal capability to do so.

If we receive regulatory approval to commence commercial sales of any of our products, we will face competition with respect to commercial sales, marketing and distribution. These are areas in which we have no experience. To market any of our products directly, we would need to develop a marketing and sales force with technical expertise and with supporting distribution capability. Alternatively, we could engage a pharmaceutical or other healthcare company with an existing distribution system and direct sales force to assist us. There can be no assurance that we will successfully establish sales and distribution capabilities or gain market acceptance for our products. To the extent we enter co-promotion or other licensing arrangements, any revenues we receive will depend on the efforts of third parties and there can be no assurance that our efforts will succeed. If in the future we elect to perform sales, marketing and distribution functions for such types of products ourselves, we would face a number of additional risks, including the need to recruit a large number of additional experienced marketing and sales personnel.

Because we have limited manufacturing experience, we will be dependent on third-party manufacturers to manufacture products for us or will be required to incur significant costs and devote significant efforts to establish our own manufacturing facilities and capabilities.

We have limited manufacturing experience and no commercial scale manufacturing capabilities. In order to continue to develop our products, apply for regulatory approvals and commercialize products, we will need to develop, contract for or otherwise arrange for the necessary manufacturing capabilities.

We currently rely upon third parties to produce material for preclinical and clinical testing purposes and expect to continue to do so in the future. We also expect to rely upon third parties to produce materials required for clinical trials and for the commercial production of our products.

There are a limited number of manufacturers that operate under the FDA's good manufacturing practices regulations capable of manufacturing our products. As a result, we may have difficulty finding manufacturers for our products with adequate capacity for our needs. If we are unable to arrange for third party manufacturing of our products on a timely basis, or to do so on commercially reasonable terms, we may not be able to complete development of our products or market them.

[Table of Contents](#)

Reliance on third party manufacturers entails risks to which we would not be subject if we manufactured products ourselves, including reliance on the third party for regulatory compliance and quality assurance, the possibility of breach of the manufacturing agreement by the third party because of factors beyond our control and the possibility of termination or nonrenewal of the agreement by the third party, based on its own business priorities, at a time that is costly or inconvenient for us.

If we fail to obtain an adequate level of reimbursement for our products by third party payors, there may be no commercially viable markets for our products.

The availability and levels of reimbursement by governmental and other third party payors affect the market for healthcare products. These third party payors continually attempt to contain or reduce the costs of healthcare by challenging the prices charged for medical products and services. We may not be able to sell our products profitably if reimbursement is unavailable or limited in scope or amount.

In both the United States and certain foreign jurisdictions, there have been a number of legislative and regulatory proposals to change the healthcare system. Further proposals are likely. The potential for adoption of these proposals affects or will affect our ability to raise capital, obtain collaborators and market our products.

We expect to experience pricing pressures in connection with the sale of our drugs due to the trend toward managed health care, the increasing influence of health maintenance organizations and additional legislative proposals.

We face a risk of product liability claims and may not be able to obtain insurance.

Our business exposes us to the risk of product liability claims that is inherent in the manufacturing, testing and marketing of human therapeutic drugs. Although we have product liability and clinical trial liability insurance that we believe is appropriate, this insurance is subject to deductibles and coverage limitations. We may not be able to obtain or maintain adequate protection against potential liabilities. If we are unable to obtain insurance at acceptable cost or otherwise protect against potential product liability claims, we will be exposed to significant liabilities, which may materially and adversely affect our business and financial position. These liabilities could prevent or interfere with our commercialization efforts.

Risks Relating to an Investment in Our Common Stock

Certain provisions of our charter documents, our rights agreement and Delaware law could delay or prevent the sale of our company.

Provisions of our charter documents, our rights agreement and Delaware law may make it more difficult for a third party to acquire, or attempt to acquire, control of our company, even if a change in control would result in the purchase of shares of our common stock at a premium to the market price. In addition, these provisions may limit the ability of stockholders to approve transactions that they may deem to be in their best interest.

Our common stock is considered a "penny stock" and may be difficult to sell.

The SEC has adopted regulations which generally define "penny stock" to be an equity security that has a market price of less than \$5.00 per share or an exercise price of less than \$5.00 per share, subject to specific exemptions. Presently, the market price of our common stock is substantially less than \$5.00 per share and therefore is designated as a "penny stock" according to SEC rules. This designation requires any broker or dealer selling these securities to disclose certain information concerning the transaction, obtain a written agreement from the purchaser and determine that the purchaser is reasonably suitable to purchase the securities. These rules may restrict the ability of brokers or dealers to sell our common stock and may affect the ability of investors to sell their shares. In addition, since our common stock is traded on the OTC Bulletin Board, investors may find it difficult to obtain accurate quotations of our common stock.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Historically, our primary exposures have been related to nondollar-denominated operating expenses in Europe. As of June 30, 2002, we have no assets and liabilities related to nondollar denominated currencies.

We maintain investments in accordance with our investment policy. The primary objectives of our investment activities are to preserve principal, maintain proper liquidity to meet operational needs and maximize yield. Although our investments are subject to credit risk, our investment policy specifies credit quality standards for our investments and limits the amount of credit exposure from any single issue, issuer or type of investment. We do not own derivative financial investment instruments in our investment portfolio.

HYBRIDON, INC.**PART II****OTHER INFORMATION****ITEM 2. CHANGES IN SECURITIES AND USE OF PROCEEDS**

On May 24, 2002, we issued 1,005,499 shares of our Common Stock to Isis Pharmaceuticals, Inc. pursuant to the terms of our Master Agreement, dated May 24, 2001, with Isis and in consideration for certain licenses and sublicenses of intellectual property of Isis to Hybridon pursuant to the terms of our Collaboration and License Agreement with Isis, dated May 24, 2001. These shares were issued to an "accredited investor" without registration under the Securities Act of 1933, as amended, in reliance on the exemptions provided by Section 4(2) of the Securities Act and Regulation D promulgated thereunder.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

On June 19, 2002, the following proposals were voted on at the Annual Meeting of Stockholders:

<u>Proposal</u>	<u>For</u>	<u>Against/Withheld</u>	<u>Abstain</u>	<u>Broker Non-Votes</u>
To elect Arthur W. Berry to serve as a Class I Director until the 2005 annual meeting of stockholders	37,602,012	749,299	0	0
To elect C. Keith Hartley to serve as a Class I Director until the 2005 annual meeting of stockholders	35,933,724	2,417,587	0	0
To elect Nasser Menhall to serve as a Class I Director until the 2005 annual meeting of stockholders	37,600,012	751,299	0	0
To approve an amendment to the Company's Restated Certificate of Incorporation increasing the number of authorized shares of the Company's Common Stock from 100,000,000 shares to 150,000,000 shares	37,391,519	835,781	124,011	0

In addition to the three directors listed above who were elected at the meeting, the terms of the following directors continued after the meeting: Dr. Sudhir Agrawal, Camille A. Chebeir, Youssef El-Zein, Stephen R. Seiler, Dr. James B. Wyngaarden and Dr. Paul C. Zamecnik.

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K

(a) Exhibits

<u>Exhibit No.</u>	
3.1	Restated Certificate of Incorporation of the Registrant, as amended.
10.1	Executive Stock Option Agreement for 3,150,000 Shares of Common Stock effective July 25, 2001 between the Registrant and Stephen R. Seiler.
10.2	Executive Stock Option Agreement for 490,000 Shares of Common Stock effective July 25, 2001 between the Registrant and Stephen R. Seiler.

[Table of Contents](#)

Exhibit No.

99.1 Certification Pursuant to 18.U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

- (b) A Current Report of Form 8-K was filed with the Securities and Exchange Commission on May 1, 2002 reporting in Item 4 that on April 25, 2002, the Company's Board of Directors, upon recommendation of the Audit Committee, selected Ernst & Young LLP to serve as the Company's independent auditors for the year ending December 31, 2002 and dismissed Arthur Andersen LLP. A letter from the Arthur Andersen LLP was included as an exhibit in Item 7.

SIGNATURES

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

HYBRIDON, INC

Date: August 14, 2002

/s/ Stephen R. Seiler

Stephen R. Seiler
Chief Executive Officer

Date: August 14, 2002

/s/ Robert G. Andersen

Robert G. Andersen
Chief Financial Officer and Vice
President of Operations
(Principal Financial Officer)

RESTATED
CERTIFICATE OF INCORPORATION
OF
HYBRIDON, INC.

Hybridon, Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, does hereby certify as follows:

1. The Corporation filed its original Certificate of Incorporation with the Secretary of State of Delaware on May 25, 1989, which Certificate of Incorporation was amended by a Certificate of Amendment of Certificate of Incorporation filed on February 21, 1990, and amended and restated by a Restated Certificate of Incorporation filed on June 5, 1990. A Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on November 20, 1990, which Restated Certificate of Incorporation was amended by a Certificate of Amendment of Restated Certificate of Incorporation filed on October 16, 1991, a Certificate of Amendment of Restated Certificate of Incorporation filed on March 3, 1992, a Certificate of Amendment of Restated Certificate of Incorporation filed on March 23, 1992, a Certificate of Amendment of Restated Certificate of Incorporation filed on October 23, 1992, a Certificate of Amendment of Restated Certificate of Incorporation filed on February 12, 1993, a Certificate of Amendment of Restated Certificate of Incorporation filed on June 17, 1993, a Certificate

of Amendment of Restated Certificate of Incorporation filed on July 13, 1993, a Certificate of Amendment of Restated Certificate of Incorporation filed on September 9, 1994, a Certificate of Amendment of Restated Certificate of Incorporation filed on July 7, 1995, a Certificate of Amendment of Restated Certificate of Incorporation filed on December 19, 1995, and a Certificate of Retirement of Stock filed on even date herewith.

2. At a meeting of the Board of Directors of the Corporation, a resolution was duly adopted, pursuant to Sections 141(f) and 245 of the General Corporation Law of the State of Delaware, setting forth a Restated Certificate of Incorporation of the Corporation and declaring said Restated Certificate of Incorporation advisable. The resolution setting forth the Restated Certificate of Incorporation is as follows:

RESOLVED: That the Restated Certificate of Incorporation of the Corporation, as amended, be and hereby is amended and restated in its entirety so that the same shall read as follows:

FIRST. The name of the Corporation is:

Hybridon, Inc.

SECOND. The address of its registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

THIRD. The nature of the business or purposes to be conducted or promoted by the Corporation is as follows:

To engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of Delaware.

FOURTH. The total number of shares of all classes of stock which the

Corporation shall have authority to issues is One Hundred Million (100,000,000) shares of Common Stock, \$.001 par value per share ("Common Stock"), and (ii) Five Million (5,000,000) shares of Preferred Stock, \$.01 par value per share ("Preferred Stock"), which may be issued from time to time in one or more series as set forth in Part B of this Articles FOURTH.

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

A. COMMON STOCK.

1. GENERAL. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights of the holders of the Preferred Stock of any series as may be designated by the Board of Directors upon any issuance of the Preferred Stock of any series.

2. VOTING. The holders of the Common Stock are entitled to one vote for each share held at all meetings of stockholders (and written actions in lieu of meetings). There shall be no cumulative voting.

The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law of Delaware.

3. DIVIDENDS. Dividends may be declared and paid on the Common Stock from funds lawfully available therefor as and when determined by the Board of Directors and subject to any preferential dividend rights of any then outstanding Preferred Stock.

4. LIQUIDATION. Upon the dissolution or liquidation of the Corporation, whether voluntary or involuntary, holders of Common Stock will be entitled to receive all assets of the Corporation available for distribution to its stockholders, subject to any preferential rights of any then outstanding Preferred Stock.

-3-

B. PREFERRED STOCK.

Preferred Stock may be issued from time to time in one or more series, each of such series to have such terms as stated or expressed herein and in the resolution or resolutions providing for the issue of such series adopted by the Board of Directors of the Corporation as hereinafter provided. Any shares of Preferred Stock which may be redeemed, purchased or acquired by the Corporation may be reissued except as otherwise provided by law. Different series of Preferred Stock shall not be construed to constitute different classes of shares for the purposes of voting by classes unless expressly provided.

Authority is hereby expressly granted to the Board of Directors from time to time to issue the Preferred Stock in one or more series, and in connection with the creation of any such series, by resolution or resolutions providing for the issue of the shares thereof, to determine and fix such voting powers, full or limited, or no voting powers, and such designations, preferences and relative participating, optional or other special rights, and qualifications, limitations or restrictions thereof, including without limitation thereof, dividend rights, conversion rights, redemption privileges and liquidation preferences, as shall be stated and expressed in such resolutions, all to the full extent now or hereafter permitted by the General Corporation Law of Delaware. Without limiting the generality of the foregoing, the resolutions providing for issuance of any series of Preferred Stock may provide that such series shall be superior or rank equally or be junior to the Preferred Stock of any other series to the extent permitted by law. Except as otherwise specifically provided in this Certificate of Incorporation, no vote of the holders of the Preferred Stock or Common Stock shall be a prerequisite to

the issuance of any shares of any series of the Preferred Stock authorized by and complying with the conditions of the Certificate of Incorporation, the right to have such vote being expressly waived by all present and future holders of the capital stock of the Corporation.

FIFTH. The name and mailing address of the sole incorporator are as follows:

NAME ----	MAILING ADDRESS -----
David P. Johst	60 State Street Boston, MA 02109

SIXTH. In furtherance of and not in limitation of powers conferred by statute, it is further provided:

-4-

1. Election of directors need not be by written ballot.

2. The Board of Directors is expressly authorized to adopt, amend or repeal the By-Laws of the Corporation.

SEVENTH. Whenever a compromise or arrangement is proposed between this corporation and its creditors or any class of them and/or between this corporation and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware may, on the application in a summary way of this corporation or of any creditor or stockholder thereof, or on the application of any receiver or receivers appointed for this corporation under the provisions of section 291 of Title 8 of the Delaware Code or on the application of trustees in dissolution or of any receiver or receivers appointed for this corporation under the provisions of section 279 of Title 8 of the Delaware Code order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this corporation, as the case may be, to be summoned in such manner as the said court directs. If a majority in number representing three-fourths in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this corporation, as the case may be, agree to any compromise or arrangement and to any promise or arrangement, the said compromise or arrangement and the said reorganization shall, if sanctioned by the court to which the said application has been made, be binding on all the creditors or class of creditors, and/or on all the stockholders or class of stockholders, of this corporation, as the case may be, and also on this corporation.

EIGHTH. Except to the extent that the General Corporation Law of the State of Delaware prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty, no director of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability. No amendment to or repeal of this provision shall apply to or have any effect on the liability or alleged liability of any director of the Corporation for or with respect to any acts or omissions of such director occurring prior to such amendment.

NINTH. 1. ACTION, SUITS AND PROCEEDINGS OTHER THAN BY OR IN THE RIGHT OF THE CORPORATION. The Corporation shall indemnify each person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Corporation), by reason of the fact that he is or was, or has

-5-

agreed to become, a director or officer of the Corporation, or is or was serving, or has agreed to serve, at the request of the Corporation, as a director, officer or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (including any employee benefit plan) (all such persons being referred to hereafter as an "Indemnatee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) judgment, fines and amounts paid in settlement actually and reasonably incurred by him or on his behalf in connection with such action, suit or proceeding and any appeal therefrom, if he acted in good faith and in a manner he reasonably believed to be in, or not opposed to, the best interests of the Corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction or upon a plea of NOLO CONTENDERE or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he reasonably believed to be in, or not opposed to, the best interests of the Corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his conduct was unlawful. Notwithstanding anything to the contrary in this Article, except as set forth in Section 6 below, the Corporation shall not indemnify an Indemnatee seeking indemnification in connection with a proceeding (or part thereof) initiated by the Indemnatee unless the initiation thereof was approved by the Board of Directors of the Corporation.

2. ACTIONS OR SUITS BY OR IN THE RIGHT OF THE CORPORATION. The Corporation shall indemnify any Indemnatee who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Corporation to procure a judgment in its favor by reason of the fact that he is or was, or has agreed to become, a director or officer of the Corporation, or is or was serving, or has agreed to serve, at the request of the Corporation, as a director, officer or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (including any employee benefit plan), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and amounts paid in settlement actually and reasonably incurred by him or on his behalf in connection with such action, suit or proceeding and any appeal therefrom, if he acted in good faith and in a manner he reasonably believed to be in, or not opposed to, the best interests of the Corporation, except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the Corporation unless and only to the extent that the Court of Chancery of Delaware or

-6-

the court in which such action or suit was brought shall determine upon application that, despite the adjudication of such liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses (including attorneys' fees) which the Court of Chancery of Delaware or such other court shall deem proper.

3. INDEMNIFICATION FOR EXPENSES OF SUCCESSFUL PARTY. Notwithstanding the other provisions of this Article, to the extent that an Indemnatee has been successful, on the merits or otherwise, in defense of any action, suit or proceeding referred to in Sections 1 and 2 of this Article, or in defense of any claim, issue or matter therein, or on appeal from any such action, suit or proceeding, he shall be indemnified against all expenses (including attorneys' fees) actually and reasonably incurred by him or on his behalf in connection therewith. Without limiting the foregoing, if any action, suit or proceeding is disposed of, on the merits or otherwise (including a disposition without prejudice), without (i) the disposition being adverse to the Indemnatee, (ii) an adjudication that the Indemnatee was liable to the Corporation, (iii) a plea of guilty or NOLO CONTENDERE by the Indemnatee, (iv) an adjudication that the Indemnatee did not act in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Corporation, and (v) with respect to any criminal proceeding, an adjudication that the Indemnatee had reasonable cause to believe his conduct was unlawful, the Indemnatee shall be

considered for the purposes hereof to have been wholly successful with respect thereto.

4. NOTIFICATION AND DEFENSE OF CLAIM. As a condition precedent to his right to be indemnified, the Indemnitee must notify the Corporation in writing as soon as practicable of any action, suit, proceeding or investigation involving him for which indemnity will or could be sought. With respect to any action, suit, proceeding or investigation of which the Corporation is so notified, the Corporation will be entitled to participate therein at its own expense and/or to assume the defense thereof at its own expense, with legal counsel reasonably acceptable to the Indemnitee. After notice from the Corporation to the Indemnitee of its election so to assume such defense, the Corporation shall not be liable to the Indemnitee for any legal or other expenses subsequently incurred by the Indemnitee in connection with such claim, other than as provided below in this Section 4. The Indemnitee shall have the right to employ his own counsel in connection with such claim, but the fees and expenses of such counsel incurred after notice from the Corporation of its assumption of the defense thereof shall be at the expense of the Indemnitee unless (i) the employment of counsel by the Indemnitee has been authorized by the Corporation, (ii) counsel to the Indemnitee shall have reasonably concluded that there may be a

-7-

conflict of interest or position on any significant issue between the Corporation and the Indemnitee in the conduct of the defense of such action or (iii) the Corporation shall not in fact have employed counsel to assume the defense of such action, in each of which cases the fees and expenses of counsel for the Indemnitee shall be at the expense of the Corporation, except as otherwise expressly provided by this Article. The Corporation shall not be entitled, without the consent of the Indemnitee, to assume the defense of any claim brought by or in the right of the Corporation or as to which counsel for the Indemnitee shall have reasonably made the conclusion provided for in clause (ii) above.

5. ADVANCE OF EXPENSES. Subject to the provisions of Section 6 below, in the event that the Corporation does not assume the defense pursuant to Section 4 of this Article of any action, suit, proceeding or investigation of which the Corporation receives notice under this Article, any expenses (including attorneys' fees) incurred by an Indemnitee in defending a civil or criminal action, suit, proceeding or investigation or any appeal therefrom shall be paid by the Corporation in advance of the final disposition of such matter, PROVIDED, HOWEVER, that the payment of such expense incurred by an Indemnitee in advance of the final disposition of such matter shall be made only upon receipt of an undertaking by or on behalf of the Indemnitee to repay all amounts so advanced in the event that it shall ultimately be determined that the Indemnitee is not entitled to be indemnified by the Corporation as authorized in this Article. Such undertaking may be accepted without reference to the financial ability of such person to make such repayment.

6. PROCEDURE FOR INDEMNIFICATION. In order to obtain indemnification or advancement of expenses pursuant to Section 1, 2, 3 or 5 of this Article, the Indemnitee shall submit to the Corporation a written request, including in such request such documentation and information as is reasonably available to the Indemnitee and is reasonably necessary to determine whether and to what extent the Indemnitee is entitled to indemnification or advancement of expenses. Any such indemnification or advancement of expenses shall be made promptly, and in any event within 60 days after receipt by the Corporation of the written request of the Indemnitee, unless with respect to requests under Section 1, 2 or 5 the Corporation determines, by clear and convincing evidence, within such 60-day period that the Indemnitee did not meet the applicable standard of conduct set forth in Section 1 or 2, as the case may be. Such determination shall be made in each instance by (a) a majority vote of a quorum of the directors of the Corporation consisting of persons who are not at that time parties to the action, suit or proceeding in question ("disinterested directors"), (b) if no such quorum is obtainable, a majority vote of a committee of two or more disinterested directors,

(c) a majority vote of a quorum of the outstanding shares of stock of all classes entitled to vote for directors, voting as a single class, which quorum shall consist of stockholders who are not at that time parties to the action, suit or proceeding in question, (d) independent legal counsel (who may be regular legal counsel to the Corporation), or (e) a court of competent jurisdiction.

7. REMEDIES. The right to indemnification or advances as granted by this Article shall be enforceable by the Indemnitee in any court of competent jurisdiction if the Corporation denies such request, in whole or in part, or if no disposition thereof is made within the 60-day period referred to above in Section 6. Unless otherwise provided by law, the burden of proving that the Indemnitee is not entitled to indemnification or advanced of expenses under this Article shall be on the Corporation. Neither the failure of the Corporation to have made a determination prior to the commencement of such action that indemnification is proper in the circumstances because the Indemnitee has met the applicable standard of conduct, nor an actual determination by the Corporation pursuant to Section 6 that the Indemnitee has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that the Indemnitee has not met the applicable standard of conduct. The Indemnitee's expenses (including attorneys' fees) incurred in connection with successfully establishing his right to indemnification, in whole or in part, in any such proceeding shall also be indemnified by the Corporation.

8. SUBSEQUENT AMENDMENT. No amendment, termination or repeal of this Article or of the relevant provisions of the General Corporation Law of Delaware or any other applicable laws shall affect or diminish in any way the rights of any Indemnitee to indemnification under the provisions hereof with respect to any action, suit, proceeding or investigation arising out of or relating to any actions, transactions or facts occurring prior to the final adoption of such amendment, termination or repeal.

9. OTHER RIGHTS. The indemnification and advancement of expenses provided by this Article shall not be deemed exclusive of any other rights to which an Indemnitee seeking indemnification or advancement of expenses may be entitled under any law (common or statutory), agreement or vote of stockholders or disinterested directors or otherwise, both as to action in his official capacity and as to action in any other capacity while holding office for the Corporation, and shall continue as to an Indemnitee who has ceased to be a director or officer, and shall inure to the benefit of the estate, heirs, executors and administrators of the Indemnitee. Nothing contained in this Article shall be deemed to prohibit, and the Corporation is specifically authorized to enter into, agreements with officers and directors providing

indemnification rights and procedures different from those set forth in this Article. In addition, the Corporation may, to the extent authorized from time to time by its Board of Directors, grant indemnification rights to other employees or agents of the Corporation or other persons serving the Corporation and such rights may be equivalent to, or greater or less than, those set forth in this Article.

10. PARTIAL INDEMNIFICATION. If an Indemnitee is entitled under any provision of this Article to indemnification by the Corporation for some or a portion of the expenses (including attorneys' fees), judgments, fines or amounts paid in settlement actually and reasonably incurred by him or on his behalf in connection with any action, suit, proceeding or investigation and any appeal, therefrom but not, however, for the total amount thereof, the Corporation shall nevertheless indemnify the Indemnitee for the portion of such expenses (including attorneys' fees), judgments, fines or amounts paid in settlement to which the Indemnitee is entitled.

11. INSURANCE. The Corporation may purchase and maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or

other enterprise (including any employee benefit plan) against any expense, liability or loss incurred by him in any such capacity, or arising out of his status as such, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under the General Corporation law of Delaware.

12. MERGER OR CONSOLIDATION. If the Corporation is merged into or consolidated with another corporation and the Corporation is not the surviving corporation, the surviving corporation shall assume the obligations of the Corporation under this Article with respect to any action, suit, proceeding or investigation arising out of or relating to any actions, transactions or facts occurring prior to the date of such merger or consolidation.

13. SAVINGS CLAUSE. If this Article or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the Corporation shall nevertheless indemnify each Indemnitee as to any expenses (including attorneys' fees) judgments, fines and amounts paid in settlement in connection with any action, suit, proceeding or investigation, whether civil, criminal or administrative, including an action by or in the right of the Corporation, to the fullest extent permitted by any applicable portion of this Article that shall not have been invalidated and to the fullest extent permitted by applicable law.

-10-

14. DEFINITIONS. Terms used herein and defined in Section 145(h) and Section 145(i) of the General Corporation Law of Delaware shall have the respective meanings assigned to such terms in such Section 145(h) and Section 145(i).

15. SUBSEQUENT LEGISLATION. If the General Corporation Law of Delaware is amended after adoption of this Article to expand further the indemnification permitted to Indemnitees, then the Corporation shall indemnify such persons to the fullest extent permitted by the General Corporation Law of Delaware, as so amended.

TENTH. The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Restated Certificate of Incorporation, in the manner now or hereafter prescribed by statute and this Restated Certificate of Incorporation, and all rights conferred upon stockholders herein are granted subject to this reservation.

ELEVENTH. This Article is inserted for the management of the business and for the conduct of the affairs of the Corporation and shall not become effective until the closing of the sale of shares of Common Stock in an underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, resulting in at least \$10,000,000 of gross proceeds to the Corporation (a "Public Offering").

1. NUMBER OF DIRECTORS. The number of directors of the Corporation shall not be less than three. The exact number of directors within the limitations specified in the preceding sentence shall be fixed from time to time by, or in the manner provided in, the Corporation's By-Laws.

2. CLASSES OF DIRECTORS. The Board of Directors shall be and is divided into three classes: Class I, Class II and Class III. No one class shall have more than one director more than any other class. If a fraction is contained in the quotient arrived at by dividing the designated number of directors by three, then, if such fraction is one-third, the extra director shall be a member of Class II, and if such fraction is two-thirds, one of the extra directors shall be a member of Class I and one of the extra directors shall be a member of Class II, unless otherwise provided from time to time by resolution adopted by the Board of Directors.

3. ELECTION OF DIRECTORS. Elections of directors need not be by written ballot except as and to the extent provided in the By-Laws of the Corporation.

-11-

4. TERMS OF OFFICE. Each director shall serve for a term ending on the date of the third annual meeting following the annual meeting at which such director was elected; PROVIDED, that each initial director in Class I shall serve for a term ending on the date of the annual meeting in 1996; each initial director in Class II shall serve for a term ending on the date of the annual meeting in 1997; and each initial director in Class III shall serve for a term ending on the date of the annual meeting in 1998; and PROVIDED FURTHER, that the term of each director shall be subject to the election and qualification of his successor and to his earlier death, resignation or removal.

5. ALLOCATION OF DIRECTORS AMONG CLASSES IN THE EVENT OF INCREASES OR DECREASES IN THE NUMBER OF DIRECTORS. In the event of any increase or decrease in the authorized number of directors, (i) each director then serving as such shall nevertheless continue as a director of the class of which he is a member and (ii) the newly created or eliminated directorships resulting from such increase or decrease shall be apportioned by the Board of Directors among the three classes of directors so as to ensure that no one class has more than one director more than any other class. To the extent possible, consistent with the foregoing rule, any newly created directorships shall be added to those classes whose terms of office are to expire at the latest dates following such allocation, and any newly eliminated

directorships shall be subtracted from those classes whose terms of offices are to expire at the earliest dates following such allocation, unless otherwise provided from time to time by resolution adopted by the Board of Directors.

6. QUORUM; ACTION AT MEETING. A majority of the directors at any time in office shall constitute a quorum for the transaction of business. In the event one or more of the directors shall be disqualified to vote at any meeting, then the required quorum shall be reduced by one for each director so disqualified, provided that in no case shall less than one-third of the number of directors fixed pursuant to Section 1 above constitute a quorum. If at any meeting of the Board of Directors there shall be less than such a quorum, a majority of those present may adjourn the meeting from time to time. Every act or decision done or made by a majority of the directors present at a meeting duly held at which a quorum is present shall be regarded as the act of the Board of Directors unless a greater number is required by law, by the By-Laws of the Corporation or by this Restated Certificate of Incorporation.

7. REMOVAL. Directors of the Corporation may be removed only for cause by the affirmative vote of the holders of at least two-thirds of the shares of the capital stock of the Corporation issued and outstanding and entitled to vote.

-12-

8. VACANCIES. Any vacancy in the Board of Directors, however occurring, including a vacancy resulting from an enlargement of the board, shall be filled only by a vote of a majority of the directors then in office, although less than a quorum, or by a sole remaining director. A director elected to fill a vacancy shall be elected to hold office until the next election of the class for which such director shall have been chosen, subject to the election and qualification of his successor and to his earlier death, resignation or removal.

9. STOCKHOLDER NOMINATIONS AND INTRODUCTION OF BUSINESS, ETC. Advance notice of stockholder nominations for election of directors and other business to be brought by stockholders before a meeting of stockholders shall be given in the manner provided by the By-Laws of the Corporation.

10. AMENDMENTS TO ARTICLE. Notwithstanding any other provisions of law, this Restated Certificate of Incorporation or the By-Laws of the Corporation, and notwithstanding the fact that a lesser percentage may be specified by law, the affirmative vote

of the holders of at least seventy-five percent (75%) of the shares of capital stock of the Corporation issued and outstanding and entitled to vote shall be required to amend or repeal, or to adopt any provision inconsistent with, this Article ELEVENTH.

TWELFTH. Until the closing of a Public Offering, any action which is required to be taken or which may be taken at any annual or special meeting of stockholders of the Corporation may be taken without a meeting, without prior notice and without a vote, if a consent in writing, setting forth the action so taken, is signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote on such action were present and voted. Effective upon the closing of a Public Offering, stockholders of the Corporation may not take any action by written consent in lieu of a meeting. Notwithstanding any other provisions of law, the Restated Certificate of Incorporation or the By-Laws of the Corporation, and notwithstanding the fact that a lesser percentage may be specified by law, the affirmative vote of the holders of at least seventy-five percent (75%) of the shares of capital stock of the Corporation issued and outstanding and entitled to vote shall be required to amend or repeal, or to adopt any provision inconsistent with, this Article TWELFTH.

THIRTEENTH. Effective upon the closing of a Public Offering, special meetings of stockholders may be called at any time by only the Chief Executive Officer (or if there is no Chief Executive Officer, the President) or the Board of Directors. Business transacted at any special meeting of stockholders shall be limited

-13-

to matters relating to the purpose or purposes stated in the notice of meeting. Notwithstanding any other provision of law, this Restated Certificate of Incorporation or the By-Laws of the Corporation, as amended, and notwithstanding the fact that a lesser percentage may be specified by law, the affirmative vote of the holders of at least seventy-five percent (75%) of the shares of capital stock of the Corporation issued and outstanding and entitled to vote shall be required to amend or repeal, or to adopt any provision inconsistent with this Article THIRTEENTH.

IN WITNESS WHEREOF, the Corporation has caused its corporate seal to be affixed hereto and this Restated Certificate of Incorporation to be signed by its Chairman this 28TH March, 1996.

HYBRIDON, INC.

By: /s/ E. Andrews Grinstead, III

Chairman

[Corporate Seal]

-14-

CERTIFICATE OF AMENDMENT
OF
RESTATED
CERTIFICATE OF INCORPORATION
OF HYBRIDON, INC.

Pursuant to Section 242 of the General
Corporation Law of the State of Delaware

HYBRIDON, INC. (the "Corporation"), organized and existing under and by virtue of the General Corporation Law of the State of Delaware, does hereby certify as follows:

By written action of the Board of Directors of the Corporation, dated October 20, 1997, the Board of Directors duly adopted resolutions pursuant to Sections 141(f) and 242 of the General Corporation Law of the State of Delaware

setting forth an amendment to the Restated Certificate of Incorporation of the Corporation, as amended, and declaring said amendment to be advisable. The stockholders of the Corporation duly approved, pursuant to said Section 242, said proposed amendment at a Special Meeting of Stockholders held on November 18, 1997. The resolution setting forth the amendment to the Restated Certificate of Incorporation is as follows:

RESOLVED: That, subject to stockholder approval, the following paragraph be inserted prior to the first paragraph of Article FOURTH of the Certificate of Incorporation:

"That upon the filing date of the Certificate of Amendment of Restated Certificate of Incorporation of the Corporation (the "Effective Date"), a one-for-five reverse split of the Corporation's Common Stock (as defined below) shall become effective, such that each five shares of Common Stock outstanding and held of record by each stockholder of the Corporation (including treasury shares)

immediately prior to the Effective Date shall represent one share of Common Stock from and after the Effective Date."

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be executed by its Chairman of the Board of Directors, President and Chief Executive Officer this 10th day of December, 1997.

HYBRIDON, INC.

By: /s/ E. Andrews Grinstead, III

E. Andrews Grinstead, III
Chairman of the Board of Directors,
President and Chief Executive Officer

-2-

CERTIFICATE OF DESIGNATION

for

SERIES A CONVERTIBLE PREFERRED STOCK

of

HYBRIDON, INC.

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

HYBRIDON INC., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), does hereby certify that pursuant to the authority conferred on the board of directors of the Corporation (the "Board of Directors") by the Restated Certificate of Incorporation, as amended (the "Certificate of Incorporation") of the Corporation and in accordance with Section 151 of the General Corporation Law of the State of Delaware, the Board of Directors adopted the following resolution establishing a series of 1,500,000 shares of preferred stock of the Corporation designated as "Series A Convertible Preferred Stock":

RESOLVED, that pursuant to the authority conferred on the Board of Directors by the Certificate of Incorporation, a series of preferred stock, par value \$.01 per share, of the Corporation is hereby

established and created, and that the designation and number of shares thereof and the voting and other powers, preferences and relative participating, optional or other special rights of, the shares of such series and the qualifications, limitations and restrictions thereof are as follows:

Series A Convertible Preferred Stock

1. Designation and Amount and Definitions. (a) There shall be a series of Preferred Stock designated as "Series A Convertible Preferred Stock" and the number of shares constituting such series shall be 1,500,000. Such series is referred to herein as the "Series A Preferred Stock". Notwithstanding any other provision in this Certificate of Designation of the Series A Preferred Stock (the "Certificate of Designation") to the contrary, such series shall be senior to the common stock, par value \$.001 per share of the Corporation (the "Common Stock") with respect to dividends and the distribution of assets upon liquidation, dissolution or winding up. Such number of shares may be increased or decreased by resolution of the Board of Directors, subject to the provisions of Section 7 hereof; provided, however, that no decrease shall reduce the number of shares of Series A Preferred Stock to fewer than the number of shares then issued and outstanding.

(b) As used in this Certificate of Designation, except as otherwise provided in Subsection 4(c), the following terms shall have the following meanings:

(i) The "Closing Bid Price" for any security for each trading day shall be the reported per share closing bid price of such security regular way on the Stock Market on such trading day, or, if there were no transactions on such trading day, the average of the reported closing bid and asked prices, regular way, of such security on the relevant Stock Market on such trading day.

(ii) "Fair Market Value" of any asset (including any security) means the fair market value thereof as mutually determined by the Corporation and the holders of a majority of the Series A Preferred Stock then outstanding. If the Corporation and the holders of a majority of the Series A Preferred Stock then outstanding are unable to reach agreement on any valuation matter, such valuation shall be submitted to and determined by a nationally recognized independent investment bank selected by the Board of Directors and the holders of a majority of the Series A Preferred Stock then outstanding (or, if such selection cannot be agreed upon promptly, or in any event within ten days, then such valuation shall be made by a nationally recognized independent investment banking firm selected by the American Arbitration Association in New York City in accordance with its rules), the costs of which valuation shall be paid for by the Corporation.

(iii) "Market Price" shall mean the average Closing Bid Price for twenty (20) consecutive trading days, ending with the trading day prior to the date as of which the Market Price is being determined (with appropriate adjustments for subdivisions or combinations of shares effected during such period), provided that if the prices referred to in the definition of Closing Bid Price cannot be determined on any trading day, the Closing Bid Price for such trading day will be deemed to equal Fair Market Value of such security on such trading day.

(iv) "Registered Holders" shall mean, at any time, the holders of record of the Series A Preferred Stock.

(v) The "Stock Market" shall mean, with respect to any security, the principal national securities exchange on

which such security is listed or admitted to trading or, if such security is not listed or admitted to trading on any national securities exchange, shall mean The Nasdaq National Market System ("NNM") or The Nasdaq SmallCap Market ("SCM" and, together with NNM, "Nasdaq") or, if such security is not quoted on Nasdaq, shall mean the OTC Bulletin Board or, if such security is not quoted on the OTC Bulletin Board, shall mean the over-the-counter market as furnished by any NASD member firm selected from time to time by the Corporation for that purpose.

(vi) A "trading day" shall mean a day on which the relevant Stock Market is open for the transaction of business.

2. Dividends and Distributions. (a) The holders, as of the Dividend Record Date (as defined below), of the Series A Preferred Stock shall be entitled to receive semi-annual dividends on their respective shares of Series A Preferred Stock (aggregating, for this purpose,

all shares of Series A Preferred Stock held of record or, to the Corporation's knowledge, beneficially by such holder), payable, at the option of the Corporation, in cash or additional shares of Series A Preferred Stock, at the rate of 6.5% per annum (computed on the basis of a 360-day year of twelve 30 day months) of the Dividend Base Amount (as defined below), payable semi-annually in arrears; provided that, to the extent the declaration or payment of such dividend is prohibited by applicable law, such dividend need not be paid but shall nevertheless accrue and shall be paid promptly when applicable law permits. Such dividends shall accrue from the date of issuance of such share and shall be paid semi-annually on April 1 and October 1 of each year or, if any such day is not a business day, on the next succeeding business day. Such dividends shall be paid, at the election of the Corporation, either in cash or additional duly authorized, fully paid and non assessable shares of Series A Preferred Stock. In calculating the number of shares of Series A Preferred Stock to be paid with respect to each dividend, the Series A Preferred Stock shall be valued at \$100.00 per share (subject to appropriate adjustment to reflect any stock split, combination, reclassification or reorganization of the Series A Preferred Stock). Notwithstanding the foregoing, the Corporation shall not be required to issue fractional shares of Series A Preferred Stock; the Corporation may elect, in its sole discretion, independently for each holder, whether such number of shares (on an aggregated basis) will be rounded to the nearest whole share (with .5 of a share rounded upward) or whether such holder will be given cash in lieu of any fractional shares. The "Dividend Base Amount" of a share of Series A Preferred Stock shall be \$100.00 plus all accrued but unpaid dividends (subject to appropriate adjustment to reflect any stock split, combination, reclassification or reorganization of the Series A Preferred Stock). The "Dividend Record Date" shall mean, for each semi-annual dividend, the March 15 or September 15, as the case may be, immediately preceding the dividend payment date.

(b) In addition to the foregoing, subject to the rights of the holders of any shares of any series or class of capital stock ranking prior, and superior to, or pari passu with, the shares of Series A Preferred Stock with respect to dividends, the holders of shares of Series A Preferred Stock shall be entitled to receive, as, when and if declared by the Board of Directors, out of assets legally available for that purpose, dividends or distributions in cash, stock or otherwise.

(c) The Corporation shall not declare any dividend or distribution on any Junior Stock (as defined below) of the Corporation unless all dividends required by Section 2(a) have been or contemporaneously are declared and paid, or declared and a sum sufficient for the payment thereof set apart for such payment, on the Series A Preferred Stock.

(d) [Reserved]

(e) All dividends or distributions declared upon the Series A Preferred Stock shall be declared pro rata per share.

(f) Any reference to "distribution" contained in this Section 2 shall not be deemed to include any distribution made in connection with or in lieu of any Liquidation Event (as defined below).

(g) No interest, or sum of money in lieu of interest, shall be payable in respect of any dividend payment or payments on the Series A Preferred Stock which may be in arrears (it being understood that this provision does not alter the Corporation's obligations under Section 2(a)).

(h) So long as any shares of the Series A Preferred Stock are outstanding, no dividends, except as described in the next succeeding sentence, shall be declared or paid or set apart for payment on any class or series of stock of the Corporation ranking, as to dividends, on a parity with the Series A Preferred Stock, for any period unless all dividends have been or contemporaneously are declared and paid, or declared and a sum sufficient for the payment thereof set apart for such payment, on the Series A Preferred Stock. When dividends are not paid in full or a sum sufficient for such payment is not set apart, as aforesaid, upon the shares of the Series A Preferred Stock and any other class or series of stock ranking on a parity as to dividends with the Series A Preferred Stock, all dividends declared upon such other stock shall be declared pro rata so that the amounts of dividends per share declared on the Series A Preferred Stock and such other stock shall in all cases bear to each other the same ratio that accrued dividends per share on the shares of the Series A Preferred Stock and on such other stock bear to each other.

(i) So long as any shares of the Series A Preferred Stock are outstanding, no other stock of the Corporation ranking on a parity with the Series A Preferred Stock as to dividends or upon liquidation, dissolution or winding up shall be redeemed, purchased or otherwise acquired for any consideration (or any moneys be paid to or made available for a sinking fund or otherwise for the purchase or redemption of any shares of any such stock) by the Corporation unless the dividends, if any, accrued on all outstanding shares of the Series A Preferred Stock shall have been paid or set apart for payment.

(j) "Junior Stock" shall mean the Common Stock and any shares of preferred stock of any series or class of the Corporation, whether presently outstanding or hereafter issued, which are junior to the shares of Series A Preferred Stock with respect to (i) the distribution of assets on any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, (ii) dividends or (iii) voting.

3. Liquidation Preference. (a) In the event of a (i) liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, (ii) a sale or other disposition of all or substantially all of the assets of the Corporation or (iii) any consolidation, merger, combination, reorganization or other transaction in which the Corporation is not the surviving entity or shares of Common Stock constituting in excess of 50% of the voting power of the Corporation are exchanged for or changed into stock or securities of another entity, cash and/or any other property (a "Merger Transaction") (items (i), (ii) and (iii) of this sentence being collectively referred to as a "Liquidation Event"), after payment or provision for payment of debts and other liabilities of the Corporation, the holders of the Series A Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders, whether such assets are capital, surplus, or earnings, before any payment or declaration and setting apart for payment of any amount shall be made in respect of any Junior Stock of the Corporation, an amount equal to the Dividend Base Amount at such time; provided, however, in the case of a Merger Transaction, such payment may be made in cash, property (valued as provided in Subsection 3(b)) and/or securities (valued as provided in Subsection 3(b)) of the entity surviving such Merger Transaction. In the case of property or in the event that any such securities are subject to an investment letter or other similar restriction on transferability, the value of such property or securities shall be determined by agreement between the Corporation and the holders of a majority of the Series A Preferred Stock then outstanding. If upon any Liquidation Event, whether voluntary or involuntary, the assets to be distributed to the holders of the Series A Preferred Stock shall be insufficient to permit the payment to such

shareholders of the full preferential amounts aforesaid, then all of the assets of the Corporation to be distributed shall be so distributed ratably to the holders of the Series A Preferred Stock on the basis of the number of shares of Series A Preferred Stock held. Notwithstanding item (iii) of the first sentence of this Subsection 3(a), any consolidation, merger, combination, reorganization or other transaction in which the Corporation is not the surviving entity but the stockholders of the Corporation immediately prior to such transaction own in excess of 50% of the voting power of the corporation surviving such transaction and own amongst themselves such interest in substantially the same proportions as prior to such transaction, shall not be considered a Liquidation Event provided that the surviving corporation shall make appropriate provisions to ensure that the terms of this Certificate of Designation survive any such transaction. All shares of Series A Preferred Stock shall rank as to payment upon the occurrence of any Liquidation Event senior to the Common Stock and, unless the terms of such series shall provide otherwise, senior to all other series of the Corporation's preferred stock.

(b) Any securities or other property to be delivered to the holders of the Series A Preferred Stock pursuant to Subsection 3(a) hereof shall be valued as follows:

(i) Securities not subject to an investment letter or other similar restriction on free marketability:

(A) If actively traded on a Stock Market, the per share value shall be deemed to be the Market Price of such securities as of the third day prior to the date of valuation.

(B) If not actively traded on a Stock Market, the value shall be the Fair Market Value of such securities.

(ii) For securities for which there is an active public market but which are subject to an investment letter or other restrictions on free marketability, the value shall be the Fair Market Value thereof, determined by discounting appropriately the per share Market Price thereof.

(iii) For all other securities, the value shall be the Fair Market Value thereof.

4. Conversion.

(a) Right of Conversion. Commencing after the expiration of 12 months following the Alternative Equity Closing Date (as hereinafter defined), but not prior thereto, the shares of Series A Preferred Stock shall be convertible, in whole or in part, at the option of the holder thereof and upon notice to the Corporation as set forth in Subsection 4(b), into fully paid and nonassessable shares of Common Stock and such other securities and property as hereinafter provided. The initial conversion price per share of Common Stock (the "Conversion Price"), shall be equal to the product of 2.125 multiplied by the per share price (the "Stated Common Price") of Common Stock sold by the Corporation in connection with the Alternative Equity Offering (as such term is defined in the Corporation's Offer to Exchange dated February 6, 1998 (the "Original Offer to Exchange"), as amended by the Amendment thereto (the "Amendment") dated March 30, 1998 (collectively, the "Offer to Exchange")) and shall be subject to adjustment as provided herein. The rate at which each share Series A Preferred Stock is convertible at any time into Common Stock (the "Conversion Rate") shall be determined by dividing the then existing Conversion Price (determined in accordance with this Section 4, including the last paragraph hereof) into the Dividend Base Amount.

The Corporation shall prepare a certificate signed by the Chairman or President, and by the Treasurer or an Assistant Treasurer or the Secretary or an Assistant Secretary, of the Corporation setting forth the Conversion Rate as of the date of the closing of the Alternative Equity Offering (the "Alternative Equity Closing Date"), showing in reasonable detail the facts

upon which such Conversion Rate is based, and such certificate shall forthwith be filed with the transfer agent of the Series A Preferred Stock.

(b) Conversion Procedures. Any holder of shares of Series A Preferred Stock desiring to convert such shares into Common Stock shall surrender the certificate or certificates evidencing such shares of Series A Preferred Stock at the office of the transfer agent for the Series A Preferred Stock, which certificate or certificates, if the Corporation shall so require, shall be duly endorsed to the Corporation or in blank, or accompanied by proper instruments of transfer to the Corporation or in blank, accompanied by irrevocable written notice to the Corporation that the holder elects so to convert such shares of Series A Preferred Stock and specifying the name or names (with address) in which a certificate or certificates evidencing shares of Common Stock are to be issued. The Corporation need not deem a notice of conversion to be received unless the holder complies with all the provisions hereof. The Corporation will instruct the transfer agent (which may be the Corporation) to make a notation of the date that a notice of conversion is received, which date of receipt shall be deemed to be the date of receipt for purposes hereof.

The Corporation shall, as soon as practicable after such deposit of certificates evidencing shares of Series A Preferred Stock accompanied by the written notice and compliance with any other conditions herein contained, deliver at such office of such transfer agent to the person for whose account such shares of Series A Preferred Stock were so surrendered, or to the nominee or nominees of such person, certificates evidencing the number of full shares of Common Stock to which such person shall be entitled as aforesaid, subject to Section 4(d). Subject to the following provisions of this paragraph, such conversion shall be deemed to have been made as of the date of such surrender of the shares of Series A Preferred Stock to be converted, and the person or persons entitled to receive the Common Stock deliverable upon

conversion of such Series A Preferred Stock shall be treated for all purposes as the record holder or holders of such Common Stock on such date; provided, however, that the Corporation shall not be required to convert any shares of Series A Preferred Stock while the stock transfer books of the Corporation are closed for any purpose, but the surrender of Series A Preferred Stock for conversion during any period while such books are so closed shall become effective for conversion immediately upon the reopening of such books as if the surrender had been made on the date of such reopening, and the conversion shall be at the conversion rate in effect on such date. No adjustments in respect of any dividends on shares surrendered for conversion or any dividend on the Common Stock issued upon conversion shall be made upon the conversion of any shares of Series A Preferred Stock.

The Corporation shall at all times, reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of Series A Preferred Stock, such number of shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of the Series A Preferred Stock.

All notices of conversion shall be irrevocable; provided, however, that if the Corporation has sent notice of an event pursuant to Subsection 4(g) hereof, a holder of Series A Preferred Stock may, at its election, provide in its notice of conversion that the conversion of its shares of Series A Preferred Stock shall be contingent upon the occurrence of the record date or effectiveness of such event (as specified by such holder), provided that such notice of conversion is received by the Corporation prior to such record date or effective date, as the case may be.

(c) Adjustment of Conversion Rate and Conversion Price.

(i) As used in this Subsection 4(c), the following terms shall have the following meanings:

"Capital Stock" of any Person means the Common Stock or Preferred Stock of such Person. Unless otherwise stated

herein or the context otherwise requires, "Capital Stock" means Capital Stock of the Corporation;

"Common Stock" of any Person other than the Corporation means the common equity (however designated), including, without limitation, common stock or partnership or membership interests of, or participation or interests in such Person (or equivalents thereof). "Common Stock" of the Corporation means the Common Stock, par value \$.001 per share, of the Corporation, any successor class or classes of common equity (however designated) of the Corporation into or for which such Common Stock may hereafter be converted, exchanged or reclassified and any class or classes of common equity (however designated) of the Corporation which may be distributed or issued with respect to such Common Stock or successor class or classes to holders thereof generally. Unless otherwise stated herein or the context requires otherwise, "Common Stock" means Common Stock of the Corporation;

"Current Market Price" means, when used with respect to any security as of any date, the last sale price, regular way, or, in case no such sale takes place on such date, the average of the closing bid and asked prices, regular way, of such security in either case as reported for consolidated transactions on the New York Stock Exchange or, if such security is not listed or admitted to trading on the New York Stock Exchange, as reported for consolidated transactions with respect to securities listed on the principal national securities exchange on which such security is listed or admitted to trading or, if such security is not listed or admitted to trading on any national securities exchange, as reported on the Nasdaq National Market, or, if such security is not listed or admitted to trading on the Nasdaq National Market, as reported on the Nasdaq SmallCap Market, or if such security is not listed or admitted to trading on any national securities exchange or the Nasdaq National Market or the Nasdaq SmallCap Market, the average of the high bid and low asked prices of such security in the over-the-counter market, as reported by the National Association of Securities Dealers, Inc. Automated Quotations System or such other system then in use or, if such security is not quoted by any such organization, the average of the closing bid and asked prices of such security furnished by an NASD member firm selected by the Corporation. If such security is not quoted by any such organization and no such NASD member firm is able to provide such prices, the Current Market Price of such security shall be the Fair Market Value thereof;

"Fair Market Value" means, at any date as to any asset, Property or right (including without limitation, Capital Stock of any Person, evidence of indebtedness or other securities, but excluding cash), the fair market value of such item as determined in good faith by the Board of Directors, whose determination shall be conclusive; provided, however, that such determination is described in an Officers' Certificate filed with the transfer agent and that, if there is a Current Market Price for such item on such date, "Fair Market Value" means such Current Market Price (without giving effect to the last sentence of the definition thereof);

"GAAP" means, as of any date, generally accepted accounting principles in the United States and does not include any interpretations or regulations that have been proposed but that have not become effective;

"Officer" means, with respect to any Person, the Chairman of the Board, the Chief Executive Officer, the

President, the Chief Operating Officer, the Chief Financial Officer, the Treasurer, any Assistant Treasurer, the Controller, the Secretary, any Assistant Secretary or any Vice President of such Person;

"Officers' Certificate" means a certificate signed on behalf of the Corporation by two Officers, one of whom must be the Chairman of the Board, the President, the Treasurer or a Vice-President of the Corporation;

"Person" means any individual, corporation, partnership, association, trust

or any other entity or organization, including a government or political subdivision or any agency or instrumentality thereof;

"Preferred Stock" of any Person means the class or classes of equity, ownership or participation interests (however designated) in such Person, including, without limitation, stock, share, partnership and membership interests, which are preferred as to the payment of dividends or distributions by, or as to the distribution of assets upon any voluntary or involuntary liquidation or dissolution of, such Person (or equivalent thereof) over interests of any other class of interests of such Person. Unless otherwise stated herein or the context otherwise requires, "Preferred Stock" means Preferred Stock of the Corporation;

"Property" of any Person means any and all types of real, personal, tangible, intangible or mixed property owned by such Person whether or not included on the most recent consolidated balance sheet of such Person in accordance with GAAP;

"Subsidiary" of a Person on any date means any other Person of whom such Person owns, directly or indirectly through a Subsidiary or Subsidiaries of such Person, Capital Stock with voting power, acting independently and under ordinary circumstances, entitling such person to elect a majority of the board of directors or other governing body of such other Person. Unless otherwise stated herein or the context otherwise requires, "Subsidiary" means a Subsidiary of the Corporation.

(ii) If the Corporation shall (i) pay a dividend or other distribution, in Common Stock, on any class of Capital Stock of the Corporation, (ii) subdivide the outstanding Common Stock into a greater number of shares by any means or (iii) combine the outstanding Common Stock into a smaller number of shares by any means including, without limitation, a reverse stock split), then in each such case the Conversion Price in effect immediately prior thereto shall be adjusted so that the Registered Holder of any shares of Series A Preferred Stock thereafter surrendered for conversion shall be entitled to receive the number of shares of Common Stock that such Registered Holder would have owned or have been entitled to receive upon the happening of such event had such Series A Preferred Stock been converted immediately prior to the relevant record date or, if there is no such record date, the effective date of such event. An adjustment made pursuant to this Paragraph 4(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 of such subdivision or combination, as the case may be.

(iii) If the Corporation shall (i) issue or

distribute (at a price per share less than the Current Market Price per share of such Capital Stock on the date of such issuance or distribution) Capital Stock generally to holders of Common Stock or to holders of any class or series of Capital Stock which is convertible

into or exchangeable or exercisable for Common Stock (excluding an issuance or distribution of Common Stock described in Paragraph 4(c)(ii)) or (ii) issue or distribute generally to such holders rights, warrants, options or convertible or exchangeable securities entitling the holder thereof to subscribe for, purchase, convert into or exchange for Capital Stock at a price per share less than the Current Market Price per share of such Capital Stock on the date of issuance or distribution, then, in each such case, at the earliest of (A) the date the Corporation enters into a firm contract for such issuance or distribution, (B) the record date for the determination of stockholders entitled to receive any such Capital Stock or any such rights, warrants, options or convertible or exchangeable securities or (C) the date of actual issuance or distribution of any such Capital Stock or any such rights, warrants, options or convertible or exchangeable securities, the Conversion Price shall be reduced by multiplying the Conversion Price in effect immediately prior to such earliest date by:

(A) if such Capital Stock is Common Stock, a fraction the numerator of which is the number of shares of Common Stock outstanding, on such earliest date plus the number of shares of Common Stock which could be purchased at the Current Market Price per share of Common Stock on the date of such issuance or distribution with the aggregate consideration (based on the Fair Market Value thereof) received or receivable by the Corporation either (A) in connection with such issuance or distribution or (B) upon the conversion, exchange, purchase or subscription of all such rights, warrants, options or convertible or exchangeable securities (the "Aggregate Consideration"), and the denominator of which is the number of shares of Common Stock outstanding on such earliest date plus the number of shares of Common Stock to be so issued or distributed or to be issued upon the conversion, exchange, purchase or subscription of all such rights, warrants, options or convertible or exchangeable securities; or

(B) if such Capital Stock is other than Common Stock, a fraction the numerator of which is the Current Market Price per share of Common Stock on such earliest date minus an amount equal to (A) the difference between (1) the Current Market Price per share of such Capital Stock multiplied by the number of shares of such Capital Stock to be so issued and (2) the Aggregate Consideration, divided by (B) the number of shares of Common Stock outstanding on such date, and the denominator of which is the Current Market Price per share of Common Stock on such earliest date.

Such adjustment shall be made successively whenever any such Capital Stock, rights, warrants, options or convertible or exchangeable securities are so issued or distributed. In determining whether any rights, warrants, options or convertible or exchangeable securities entitle the holders thereof to subscribe for, purchase, convert into or exchange for shares of such Capital Stock at less than such

Current Market Price, there

shall be taken into account the Fair Market Value of any consideration received or receivable by the Corporation for such rights, warrants, options or convertible or exchangeable securities. If any right, warrant, option or convertible or exchangeable security, the issuance of which resulted in an adjustment in the Conversion Price pursuant to this Paragraph 4(c)(iii), shall expire and shall not have been exercised, the Conversion Price shall immediately upon such expiration be recomputed to the Conversion Price which would have been in effect if such right, warrant, option or convertible or exchangeable securities had never been distributed or issued. Notwithstanding anything contained in this paragraph to the contrary, (i) the issuance of Capital Stock upon the exercise of such rights, warrants or options or the conversion or exchange of such convertible or exchangeable securities will not cause an adjustment in the Conversion Price if no such adjustment would have been required at the time such right, warrant, option or convertible or exchangeable security was issued or distributed; provided, however, that, if the consideration payable upon such exercise, conversion or exchange and/or the Capital Stock receivable thereupon are changed after the time of the issuance or distribution of such right, warrant, option or convertible or exchangeable security then such change shall be deemed to be the expiration thereof without having been exercised and the issuance or distribution of new options, rights, warrants or convertible or exchangeable securities and (ii) the issuance of convertible preferred stock of the Corporation as a dividend on convertible preferred stock of the Corporation will not cause an adjustment in the Conversion Price if no such adjustment would have been required at the time such underlying convertible preferred stock was issued (or as a result of any subsequent modification to the terms thereof) and the conversion provisions of such convertible stock so issued as a dividend are the same as in such underlying convertible preferred stock.

Notwithstanding any contained in this Certificate of Designation to the contrary, options, rights or warrants issued or distributed by the Corporation, including options, rights or warrants distributed prior to the date of filing of this Certificate of Designation, to holders of Common Stock generally which, until the occurrence of a specified event or events (a "Trigger Event"), (i) are deemed to be transferred with Common Stock, (ii) are not exercisable and (iii) are also issued on a pro rata basis with respect to future issuances of Common Stock, shall be deemed not to have been issued or distributed for purposes of this Subsection 4(c) (and no adjustment to the Conversion Price under this Subsection 4(c) will be required) until the occurrence of the earliest Trigger Event. Upon the occurrence of a Trigger Event, such options, rights or warrants shall continue to be deemed not to have been issued or distributed for purposes of this Subsection 4(c) (and no adjustment to the Conversion Price under this Subsection 4(c) will be required) if and for so long as each Registered Holder who thereafter converts such Registered Holder's Series A Preferred Stock shall be entitled to receive upon such conversion, in addition to the shares of Common Stock issuable upon such conversion, a number of such options, rights or warrants, as the case may be, equal to the number of options, rights or warrants to which a holder of the number of shares of

Common Stock equal to the number of shares of Common Stock issuable upon conversion of such Registered Holder's Series A Preferred Stock is entitled to receive at the time of such

conversion in accordance with the terms and provisions of, and applicable to, such options, rights or warrants. Upon the expiration of any such options, rights or warrants or at such time, if any, as a Registered Holder is not entitled to receive such options, rights or warrants upon conversion of such Registered Holder's Series A Preferred Stock, an adjustment (if any is required) to the Conversion Price shall be made in accordance with this Paragraph 4(c) (iii) with respect to the issuance of all such options, rights and warrants as of the date of issuance thereof, but subject to the provisions of the preceding paragraph, if any such option, right or warrant, including any such options right or warrants distributed prior to the date of filing of this Certificate of Designation, are subject to events, upon the occurrence of which such options, rights or warrants become exercisable to purchase different securities, evidence of indebtedness, cash, Properties or other assets or different amounts thereof, then, subject to the preceding provision of this paragraph, the date of the occurrence of any and each such event shall be deemed to be the date of distribution and record date with respect to new options, right or warrants with such new purchase rights (and a termination or expiration of the existing options, rights or warrants without exercise thereof). In addition, in the event of any distribution (or deemed distribution) of options, rights or warrants, or any Trigger Event or other event of the type described in the preceding sentence, that required (or would have required but for the provisions of Paragraph 4(c) (vi) or this paragraph) an adjustment to the Conversion Price under this Subsection 4(c) and such options, rights or warrants shall thereafter have been redeemed or repurchased without having been exercised, then the Conversion Price shall be adjusted upon such redemption or repurchase to give effect to such distribution, Trigger Event or other event, as the case may, as though it had instead been a cash distribution, equal on a per share basis to the result of the aggregate redemption or repurchase price received by holders of such options, rights or warrants divided by the number of shares of Common Stock outstanding as of the date of such repurchase or redemption, made to holders of Common Stock generally as of the date of such redemption or repurchase.

(iv) If the Corporation shall pay or distribute, as a dividend or otherwise, generally to holders of Common Stock or any class or series of Capital Stock which is convertible into or exercisable or exchangeable for Common Stock any assets, Properties or rights (including, without limitation, evidences of indebtedness of the Corporation, any Subsidiary or any other Person, cash or Capital Stock or other securities of the Corporation, any Subsidiary or any other Person, but excluding payments and distributions as described in Paragraphs 4(c) (ii) or (iii), dividends and distributions in connection with a Liquidation Event and distributions consisting solely of cash described in Paragraph 4(c) (v)), then in each such case the Conversion Price shall be reduced by multiplying the Conversion Price in effect immediately prior to the date of such payment or distribution by a fraction, the numerator of which is the Current Market Price per share of Common Stock on the record

date for the determination of stockholders entitled to receive such payment or distribution less the Fair Market Value per share of Common Stock on such record date of the assets, Properties or rights so paid or distributed, and the denominator of which is the Current Market Price per share of Common Stock on such record date. Such adjustment shall become effective immediately after such record date. For purposes of this Paragraph 4(c) (iv), such Fair Market Value per share shall equal the aggregate Fair Market Value on such record

date of the assets, Properties or rights so paid or distributed divided by the number of shares of Common Stock outstanding on such record date. For all purposes of this Certificate of Designation, adjustments to any security's conversion or exercise price pursuant to such security's original terms shall not be deemed a distribution or dividend to holders thereof.

(v) If the Corporation shall, by dividend or otherwise, make a distribution (other than in connection with the liquidation, dissolution or winding up of the Corporation in its entirety), generally to holders of Common Stock or any class or series of Capital Stock which is convertible into or exercisable or exchangeable for Common Stock, consisting solely of cash where (x) the sum of (i) the aggregate amount for such cash plus (ii) the aggregate amount of all cash so distributed (by dividend or otherwise) to such holders within the 12-month period ending on the record date for determining stockholder entitled to receive such distribution with respect to which no adjustment has been made to the Conversion Price pursuant to this Paragraph 4(c)(v) exceeds (y) 10% of the result of the multiplication of (1) the Current Market Price per share of Common Stock on such record date times (2) the number of shares of Common Stock outstanding on such record date, then the Conversion Price shall be reduced, effective immediately prior to the opening of business on the day following such record date, by multiplying the Conversion Price in effect immediately prior to the close of business on the day prior to such record date by a fraction, the numerator of which is the Current Market Price per share of Common Stock on such record date less the aggregate amount of cash per share so distributed and the denominator of which is such Current Market Price; provided, however, that, if the aggregate amount of cash per share is equal to or greater than such Current Market Price, then, in lieu of the foregoing adjustment, adequate provisions shall be made so that each Registered Holder shall have the right to receive upon conversion (with respect to each share of Common Stock issued upon such conversion and in addition to the Common Stock issuable upon conversion) the aggregate amount of cash per share such Registered Holder would have received had such Registered Holder's Series A Preferred Stock been converted immediately prior to such record date. In no event shall the Conversion Price be increased pursuant to this Paragraph 4(c)(v); provided, however, that if such distribution is not so made, the Conversion Price shall be adjusted to be the Conversion Price which would have been in effect if such distribution had not been declared. For purposes of this Paragraph 4(c)(v), such aggregate amount of cash per share shall equal such sum divided by the number of shares of Common Stock outstanding on such record date.

(vi) The provisions of this Subsection 4(c) shall similarly apply to all successive events of the type described in this Subsection 4(c). Notwithstanding anything contained herein to the contrary, no adjustment in the Conversion Price shall be required unless such adjustment would require an increase or decrease of at least 1% in the Conversion Price then in effect; provided, however, that any adjustments which by reason of this Paragraph 4(c)(vi) are not required to be made shall be carried forward and taken into account in any subsequent adjustment. All calculations under this Section 4 shall be made by the Corporation and shall be made to the nearest cent or to the nearest one hundredth of a share, as the case may be, and the transfer agent shall be entitled to rely conclusively thereon. Except as provided in this Section 4, no adjustment in the Conversion Price will be made for the issuance of Common Stock or any securities convertible into or

exchangeable for Common Stock or carrying the right to purchase Common Stock or any securities so convertible or exchangeable.

(vii) Whenever the Conversion Price is adjusted as provided herein, the Corporation shall promptly file with the transfer agent an Officers' Certificate setting forth the Conversion Price in effect after such adjustment and setting forth a brief statement of the facts requiring such adjustment. Promptly after delivery of such Officers' Certificate, the Corporation shall give or cause to be given to each Registered Holder a notice of such adjustment of the Conversion Price setting forth the adjusted Conversion Price and the date on which such adjustment becomes effective.

(viii) Notwithstanding anything contained herein to the contrary, in any case in which this Subsection 4(c) provides that an adjustment in the Conversion Price shall become effective immediately after a record date for an event, the Corporation may defer until the occurrence of such event (i) issuing to the Registered Holder of any Series A Preferred Stock converted after such record date and before the occurrence of such event the additional shares of Common Stock issuable upon such conversion by reason of the adjustment required by such event over and above the number of shares of Common Stock issuable upon such conversion before giving effect to such adjustment and (ii) paying to such Registered Holder any amount in cash in lieu of any fractional share of Common Stock pursuant to Subsection 4(d).

(ix) Notwithstanding any other provision hereof, no adjustment to the Conversion Price shall be made upon the issuance or exercise or conversion of (1) options or warrants to purchase, in the aggregate, up to 25% of the securities sold in the offerings of securities of the Corporation described in the Original Offer to Exchange or any options or warrants described in the Amendment in respect of the Alternative Equity Offering, in each case issued to (or to the designee of) any placement agent or financial advisor (such options or warrants, the "Offering Warrants"), (2) any equity securities or warrants of the Corporation (including, without limitation, the Series A Preferred Stock, warrants and equity securities underlying warrants) issued in exchange for 9% Convertible Subordinated

Notes due 2004 (the "9% Notes") of the Corporation or accrued interest thereon or pursuant to the conversion or exercise provisions thereof, (3) any warrants issued in connection with the offerings described in the Original Offer to Exchange or the Amendment (collectively, the "Offering"), (4) any warrants issued to Forum Capital Markets, LLC ("Forum") in exchange for or in addition to, or any amendment to, any warrants held by Forum, in each case, pursuant to a letter agreement dated January 5, 1998, between the Corporation and Forum, and any other warrants to purchase Common Stock or shares of Common Stock issued to Forum or its designee, (5) any Series A Preferred Stock issued in the Offering, (6) any Capital Stock issued or cash paid as dividends on the Series A Preferred Stock or (7) any Capital Stock issued or cash paid upon the mandatory conversion or redemption of any Series A Preferred Stock in accordance with Section 5 of this Certificate of Designation.

(d) No Fractional Shares. No fractional shares or scrip representing fractional shares of Common Stock shall be issued upon conversion of Series A Preferred Stock. If more than one certificate evidencing shares of Series A Preferred Stock shall be surrendered for conversion at one time by the same holder, the number of full shares issuable upon conversion thereof shall be

computed on the basis of the aggregate number of shares of Series A Preferred Stock so surrendered. Instead of any fractional share of Common Stock which would otherwise be issuable upon conversion of such aggregate number of shares of Series A Preferred Stock, the Corporation may elect, in its sole discretion, independently for each holder, whether such number of shares of Common Stock will be rounded to the nearest whole share (with a .5 of a share rounded upward) or whether such holder will be given cash, in lieu of any fractional share, in an amount equal to the same fraction of the Market Price of the Common Stock as of the close of business on the day of conversion.

(e) [Reserved]

(f) Reservation of Shares; Transfer Taxes, Etc. The Corporation shall at all times reserve and keep available, out of its authorized and unissued shares of Common Stock, solely for the purpose of effecting the conversion of the Series A Preferred Stock, such number of shares of its Common Stock free of preemptive rights as shall be sufficient to effect the conversion of all shares of Series A Preferred Stock from time to time outstanding. The Corporation shall use its best efforts from time to time, in accordance with the laws of the State of Delaware to increase the authorized number of shares of Common Stock if at any time the number of shares of authorized, unissued and unreserved Common Stock shall not be sufficient to permit the conversion of all the then-outstanding shares of Series A Preferred Stock.

The Corporation shall pay any and all issue or other taxes (excluding any income taxes) that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series A Preferred Stock. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issue or delivery of Common Stock (or other securities or assets) in a name other than that in which the shares of Series A Preferred Stock so converted were registered, and no such issue or delivery shall be made unless and until the person requesting such issue has paid to the Corporation the amount

of such tax or has established, to the satisfaction of the Corporation, that such tax has been paid or need not be paid.

(g) Prior Notice of Certain Events. In case:

(i) the Corporation shall declare any dividend (or any other distribution); or

(ii) the Corporation shall authorize the granting to the holders of Common Stock of rights or warrants to subscribe for or purchase any shares of stock of any class or of any other rights or warrants; or

(iii) of any reclassification of Common Stock (other than a subdivision or combination of the outstanding Common Stock, or a change in par value, or from par value to no par value, or from no par value to par value); or

(iv) of any consolidation or merger to which the Corporation is a party and for which approval of any stockholders of the Corporation shall be required, or of the sale or transfer of all or substantially all of the assets of the Corporation or of any compulsory share exchange whereby the Common Stock is converted into other securities, cash or other property; or

(v) of any Liquidation Event;

then the Corporation shall cause to be filed with the transfer agent for the Series A Preferred Stock, and shall cause to be mailed to the Registered Holders, at their last addresses as they shall appear upon the stock transfer books of the Corporation, at least 20 days prior to the applicable record date hereinafter specified, a notice stating (x) the date on which a record (if any) is to be taken for the purpose of such dividend. distribution or granting of

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, distribution, rights or warrants are to be determined and a description of the cash, securities or other property to be received by such holders upon such dividend, distribution or granting of rights or warrants or (y) the date on which such reclassification, consolidation, merger, sale, transfer, share exchange or Liquidation Event is expected to become effective, the date as of which it is expected that holders of Common Stock of record shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such exchange or Liquidation Event and the consideration, including securities or other property, to be received by such holders upon such exchange; provided, however, that no failure to mail such notice or any defect therein or in the mailing thereof shall affect the validity of the corporate action required to be specified in such notice.

(h) Other Changes in Conversion Rate. The Corporation from time to time may increase the Conversion Rate by any amount for any period of time if the period is at least 20 days and if the increase is irrevocable during the period. Whenever the Conversion Rate is so increased, the Corporation shall mail to the Registered Holders a notice of the increase at least 15 days before the date the increased Conversion Rate takes effect, and such notice shall

state the increased Conversion Rate and the period it will be in effect.

The Corporation may make such increases in the Conversion Rate, in addition to those required or allowed by this Section 4, as shall be determined by it, as evidenced by a resolution of the Board of Directors, to be advisable in order to avoid or diminish any income tax to holders of Common Stock resulting from any dividend or distribution of stock or issuance of rights or warrants to purchase or subscribe for stock or from any event treated as such for income tax purposes.

Notwithstanding anything to the contrary herein, in no case shall the Conversion Price be adjusted to an amount less than \$.001 per share, the current par value of the Common Stock into which the Series A Preferred Stock is convertible.

(i) Ambiguities/Errors. The Board of Directors of the Corporation shall have the power to resolve any ambiguity or correct any error in the provisions relating to the convertibility of the Series A Preferred Stock, and its actions in so doing shall be final and conclusive.

5. Mandatory Conversion and Redemption. (a) At any time after the expiration of 12 months after the Alternative Equity Closing Date, the Corporation at its option, may cause the Series A Preferred Stock to be converted in whole or in part, on a pro rata basis, into fully paid and nonassessable shares of Common Stock using a conversion price equal to 200% of the Stated Common Price if the Closing Bid Price (or, if the price referenced in the definition of Closing Bid Price cannot be determined, the Fair Market Value) of the Common Stock shall have equalled or exceeded 250% of the Conversion Price for at least 20 trading days in any 30 consecutive trading day period ending three days prior to the date of notice of conversion (such event, the "Market Trigger"). Any shares of Series A

Preferred Stock so converted shall be treated as having been surrendered by the holder thereof for conversion pursuant to Section 4 on the date of such mandatory conversion (unless previously converted at the option of the holder).

(b) At any time after April 1, 2000, the Corporation, at its option, may redeem the Series A Preferred Stock for cash equal to the Dividend Base Amount at such time, if the Market Trigger has occurred in the period ending three days prior to the date of notice of redemption (unless previously converted at the option of the holder).

(c) No greater than 60 nor fewer than 20 days prior to the date of any such mandatory conversion or redemption, notice by first class mail, postage prepaid, shall be given to the holders of record of the Series A Preferred Stock to be converted or redeemed, addressed to such holders at their

last addresses as shown on the stock transfer books of the Corporation. Each such notice shall specify the date fixed for conversion or redemption, the place or places for surrender of shares of Series A Preferred Stock and the then effective Conversion Rate pursuant to Section 4.

Any notice which is mailed as herein provided shall be conclusively presumed to have been duly given by the Corporation on the date deposited in the mail, whether or not

the holder of the Series A Preferred Stock receives such notice; and failure properly to give such notice by mail, or any defect in such notice, to the holders of the shares to be converted or redeemed shall not affect the validity of the proceedings for the conversion or redemption of any other shares of Series A Preferred Stock. On or after the date fixed for conversion or redemption (the "Take-Out Date") as stated in such notice, each holder of shares called to be converted or redeemed shall surrender the certificate evidencing such shares to the Corporation at the place designated in such notice for conversion or redemption. After the mailing of such notice, but before the Take-Out Date as stated therein, all rights whatsoever with respect to the shares so called for conversion or redemption (except the right of the holders to convert such shares pursuant to Section 4 and to have such shares converted or redeemed, as the case may be, upon surrender of their certificates therefor, pursuant to this Section 5) shall terminate. On or after the Take-Out Date, notwithstanding that the certificates evidencing any shares properly called for conversion or redemption shall not have been surrendered, such shares shall no longer be deemed outstanding and all rights whatsoever with respect to the shares so called for conversion or redemption (except the right of the holders to have such shares converted or redeemed, as the case may be, upon surrender of their certificates therefor, pursuant to this Section 5) shall terminate.

6. Outstanding Shares. For purposes of this Certificate of Designation, a share of Series A Preferred Stock, when issued, shall be deemed outstanding except (i) from the date, or the deemed date, of surrender of certificates evidencing shares of Series A Preferred Stock, all shares of Series A Preferred Stock converted into Common Stock or redeemed pursuant to Section 5 and (ii) from the date of registration of transfer, all shares of Series A Preferred Stock held of record by the Corporation or any subsidiary of the Corporation.

7. Class Voting Rights. The Corporation shall not, without the affirmative vote or consent of the holders of at least 50% of all outstanding Series A Preferred Stock, voting separately as a class, (i) amend, alter or repeal any provision of the Certificate of Incorporation or the Bylaws of the Corporation so as adversely to affect the relative rights, preferences, qualifications, limitations or restrictions of the Series A Preferred Stock (it being understood that the issuance of securities ranking prior to, or pari passu with, the Series A Preferred Stock (A) upon a Liquidation Event or (B) with respect to the payment of dividends or distributions shall not be considered adversely to affect such relative rights, preferences, qualifications, limitations or restrictions); or (ii) authorize or issue, or increase the authorized amount of, Series A Preferred Stock, other than Series A Preferred Stock issuable in connection with the

Offering, issuable in exchange for 9% Notes or accrued interest thereon or issuable as dividends on Series A Preferred Stock.

8. Status of Acquired Shares. Shares of Series A Preferred Stock received upon conversion or redemption pursuant to Section 4 or Section 5 or otherwise acquired by the Corporation will be restored to the status of authorized but unissued shares of Preferred Stock, without designation as to class, and may thereafter be issued, but not as shares of Series A Preferred Stock.

9. Preemptive Rights. The Series A Preferred Stock is not entitled to any preemptive or subscription rights in respect of any securities of the Corporation.

10. Severability of Provisions. Whenever possible, each

provision hereof shall be interpreted in a manner as to be effective and valid under applicable law, but if any provision hereof is held to be prohibited by or invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating or otherwise adversely affecting the remaining provisions hereof. If a court of competent jurisdiction should determine that a provision hereof would be valid or enforceable if a period of time were extended or shortened or a particular percentage were increased or decreased, then such court may make such changes as shall be necessary to render the provision in question effective and valid under applicable law.

11. Restrictions on Change of Control. Notwithstanding anything to the contrary contained in this Certificate of Designation, without the prior written consent of the Corporation, so long as any 9% Notes remain outstanding under that certain Indenture dated as of March 26, 1997 (as amended, the "Indenture") in respect of the 9% Notes, no holder of Series A Preferred Stock shall have voting rights granted hereunder, be entitled to receive any voting securities of the Corporation pursuant hereto or be entitled to exercise any of the conversion rights set forth herein (each, a "Restricted Event"), to the extent that any such Restricted Event could, in the Corporation's reasonable judgment, either alone or in conjunction with other issuances or holdings of capital stock, warrants or convertible securities of the Corporation, result in a Change of Control (as defined in the Indenture).

[Signature page follows]

IN WITNESS WHEREOF, E. Andrews Grinstead, III, President and Chief Executive Officer of the Corporation, acting for and on behalf of the Corporation, has hereunto subscribed his name this 5th day of May, 1998.

HYBRIDON, INC.

By: /s/ E. Andrews Grinstead, III

Name: E. Andrews Grinstead, III

Title: President and Chief Executive Officer

CERTIFICATE OF AMENDMENT OF RESTATED CERTIFICATE OF INCORPORATION

OF

HYBRIDON, INC.

It is hereby certified that:

1. The name of the corporation (hereinafter called the "Corporation") is Hybridon, Inc.

2. The Certificate of Incorporation of the Corporation is hereby amended by inserting a new sentence at the end of paragraph 4 of Subsection A of Articles FOURTH thereof so that said paragraph as so amended shall read as follows:

"4. LIQUIDATION. Upon the dissolution or liquidation of the Corporation, whether voluntary or involuntary, holders of Common Stock will be entitled to receive all assets of the Corporation available for distribution to its stockholders, subject to any preferential rights of any then outstanding Preferred Stock. Notwithstanding the foregoing, and notwithstanding any amendments to, or resolutions of the Board of Directors in connection with, this Certificate of Incorporation, the transaction between the Corporation and Boston Biosystems, Inc. pursuant to that certain Asset Purchase Agreement of June 29, 2000, shall not constitute a dissolution or liquidation of the Corporation such as would entitle any holder of the Series A Preferred Stock to a preferred distribution."

3. Paragraph 3 of the Certificate of Designation of the Corporation shall be amended by inserting a new sentence at the end of the paragraph such that said paragraph shall read as follows:

"3(c) Notwithstanding the foregoing, and notwithstanding any amendments to, or resolutions of the Board of Directors in connection with, this Certificate of Incorporation or Certificate of Designation, the transaction between the Corporation and Boston Biosystems, Inc. pursuant to that certain Asset Purchase Agreement dated as of June 29, 2000, shall not constitute a Liquidation Event of the Corporation such as would entitle any holder of any series of Series A Preferred Stock to any preferred distribution."

4. Every other Article and provision in the Certificate of Incorporation of the Corporation remains in full force and effect.
5. 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 Corporation has caused this Certificate of Amendment to be duly signed by its President this 19th day of September, 2000.

HYBRIDON, INC.

By: /s/ Robert G. Andersen

Robert G. Andersen, Vice President
and CFO

CERTIFICATE OF DESIGNATION
for
SERIES B CONVERTIBLE PREFERRED STOCK
of
HYBRIDON, INC.

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

HYBRIDON, INC., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), does hereby certify that pursuant to the authority conferred on the board of directors of the Corporation (the "Board of Directors") by the Restated Certificate of Incorporation, as amended (the "Certificate of Incorporation") of the Corporation and in accordance with Section 151 of the General Corporation Law of the State of Delaware, the Board of Directors adopted the following resolution establishing a series of 85,000 shares of preferred stock of the Corporation designated as "Series B Convertible Preferred Stock":

RESOLVED, that pursuant to the authority conferred on the Board of Directors by the Certificate of Incorporation, a series of preferred stock, par value \$.01 per share, of the Corporation is hereby established and created, and that the designation and number of shares thereof and the voting and other powers, preferences and relative participating, optional or other special rights of, the shares of such series and the qualifications, limitations and restrictions thereof are as follows:

Series B Convertible Preferred Stock

1. Designation and Amount and Definitions. (a) There shall be a series of Preferred Stock designated as "Series B Convertible Preferred Stock" and the number of shares constituting such series shall be 85,000. Such series is referred to herein as the "Series B Preferred Stock". Notwithstanding any other provision in this Certificate of Designation of the Series B Preferred Stock (the "Certificate of Designation") to the contrary, such series shall be senior to the common stock, par value \$.001 per share of the Corporation (the "Common Stock"), and the Series A Convertible Preferred Stock, \$.01 par value

per share, of the Corporation (the "Series A Preferred Stock"), with respect to dividends and the distribution of assets upon liquidation, dissolution or winding up. Such number of shares may be increased or decreased by resolution of the Board of Directors, subject to the provisions of Section 7 hereof; provided, however, that no decrease shall reduce the number of shares of Series B Preferred Stock to fewer than the number of shares then issued and outstanding.

(b) As used in this Certificate of Designation, except as otherwise provided in Subsection 4(c), the following terms shall have the following meanings:

(i) "Closing Bid Price" for any security for each trading day shall be the reported per share closing bid price of such security regular way on the Stock Market on such trading day, or, if there were no transactions on such trading day, the average of the reported closing bid and asked prices, regular way, of such security on the relevant Stock Market on such trading day.

(ii) "Fair Market Value" of any asset (including any security) means the fair market value thereof as mutually determined by the Corporation and the holders of a majority of the Series B Preferred Stock then outstanding. If the Corporation and the holders of a majority of the Series B Preferred Stock then outstanding are unable to reach agreement on any valuation matter, such valuation shall be submitted to and determined by a nationally recognized independent investment bank selected by the Board of Directors and the holders of a majority of the Series B Preferred Stock then outstanding (or, if such selection cannot be agreed upon promptly, or in any event within ten (10) days, then such valuation shall be made by a nationally recognized independent investment banking firm selected by the American Arbitration Association in New York City in accordance with its rules), the costs of which valuation shall be paid for by the Corporation.

(iii) "Market Price" shall mean the average Closing Bid Price for twenty (20) consecutive trading days, ending with the trading day prior to the date as of which the Market Price is being determined (with appropriate adjustments for subdivisions or combinations of shares effected during such period), provided that if the prices referred to in the definition of Closing Bid Price cannot be determined on any trading day, the Closing Bid Price for such trading day will be deemed to equal Fair Market Value of such security on such trading day.

(iv) "Registered Holders" shall mean, at any time, the holders of record of the Series B Preferred Stock.

(v) "Stock Market" shall mean, with respect to any security, the principal national securities exchange on which such security is listed or admitted to trading or, if such security is not listed or admitted to trading on any national securities exchange, shall mean The Nasdaq National Market System ("NNM") or The Nasdaq SmallCap Market ("SCM" and, together with NNM, "Nasdaq") or, if

such security is not quoted on Nasdaq, shall mean the OTC Bulletin Board or, if such security is not quoted on the OTC Bulletin Board, shall mean the over-the-counter market as furnished by any NASD member firm selected from time to time by the Corporation for that purpose.

(vi) "Trading Day" shall mean a day on which the relevant Stock Market is open for the transaction of business.

2. Dividends and Distributions. (a) The holders, as of the Dividend Record Date (as defined below), of the Series B Preferred Stock shall be entitled to receive semi-annual dividends on their respective shares of Series B Preferred Stock (aggregating, for this purpose, all shares of Series B Preferred Stock held of record or, to the Corporation's knowledge, beneficially by such holder), payable, at the option of the Corporation, in cash or additional shares of Series B Preferred Stock, at the rate of 8% per annum (computed on the basis of a 360-day year of twelve 30 day months) of the Dividend Base Amount (as defined below), payable semi-annually in arrears; provided that, to the extent the declaration or payment of such dividend is prohibited by applicable law, such dividend need not be paid but shall nevertheless accrue and shall be paid promptly when applicable law permits. Such dividends shall accrue (i) from March 6, 2001 for shares of Series B Preferred Stock issued within thirty days of the date of the filing of this Certificate of Designation, or (ii) from the date of issuance for shares of Series B Preferred Stock issued after thirty days from the date of filing of this Certificate of Designation, and shall be paid semi-annually on April 1 and October 1 of each year or, if any such day is not a business day, on the next succeeding business day. Such dividends shall be paid, at the election of the Corporation, either in cash or additional duly authorized, fully paid and non assessable shares of Series B Preferred Stock. In calculating the number of shares of Series B Preferred Stock to be paid with respect to each dividend, the Series B Preferred Stock shall be valued at \$100.00 per share (subject to appropriate adjustment to reflect any stock split, combination, reclassification or reorganization of the Series B Preferred Stock). Notwithstanding the foregoing, the Corporation shall not be required to issue fractional shares of Series B Preferred Stock; the Corporation may elect, in its sole discretion, independently for each holder, whether such number of shares (on an aggregated basis) will be rounded to the nearest whole share (with .5 of a share rounded upward) or whether such holder will be given cash in lieu of any fractional shares. The "Dividend Base Amount" of a share of Series B Preferred Stock shall be \$100.00 plus all accrued but unpaid dividends (subject to appropriate adjustment to reflect any stock split, combination, reclassification or reorganization of the Series B Preferred Stock). The "Dividend Record Date" shall mean, for each semi-annual dividend, the March 15 or September 15, as the case may be, immediately preceding the dividend payment date.

(b) In addition to the foregoing, subject to the rights of the holders of any shares of any series or class of capital stock ranking prior, and superior to, or pari passu with, the shares of Series B Preferred Stock with respect to dividends, and prior to the rights of the holders of Common Stock, Series A Preferred Stock and any other series or class of capital stock, the holders of shares of Series B Preferred Stock shall be entitled to receive, as, when and if declared by the Board of Directors, out of assets legally available for that purpose, dividends or distributions in cash, stock or otherwise.

(c) The Corporation shall not declare or pay any dividend or distribution on any Junior Stock (as defined below) of the Corporation unless all dividends required by Section 2(a) have been or contemporaneously are declared and paid, or declared and a sum sufficient for the payment thereof set apart for such payment, on the Series B Preferred Stock.

(d) [Reserved]

(e) All dividends or distributions declared upon the Series B Preferred Stock shall be declared pro rata per share.

(f) Any reference to "distribution" contained in this Section 2 shall not be deemed to include any distribution made in connection with or in lieu of any Liquidation Event (as defined below).

(g) No interest, or sum of money in lieu of interest, shall be payable in respect of any dividend payment or payments on the Series B Preferred Stock which may be in arrears (it being understood that this provision does not alter the Corporation's obligations under Section 2(a)).

(h) So long as any shares of the Series B Preferred Stock are outstanding, no dividends, except as described in the next succeeding sentence,

shall be declared or paid or set apart for payment on any class or series of stock of the Corporation ranking, as to dividends, on a parity with the Series B Preferred Stock, for any period unless all dividends have been or contemporaneously are declared and paid, or declared and a sum sufficient for the payment thereof set apart for such payment, on the Series B Preferred Stock. When dividends are not paid in full or a sum sufficient for such payment is not set apart, as aforesaid, upon the shares of the Series B Preferred Stock and any other class or series of stock ranking on a parity as to dividends with the Series B Preferred Stock, all dividends declared upon such other stock shall be declared pro rata so that the amounts of dividends per share declared on the Series B Preferred Stock and such other stock shall in all cases bear to each other the same ratio that accrued dividends per share

on the shares of the Series B Preferred Stock and on such other stock bear to each other.

(i) So long as any shares of the Series B Preferred Stock are outstanding, no other stock of the Corporation ranking on a parity with the Series B Preferred Stock as to dividends or upon liquidation, dissolution or winding up shall be redeemed, purchased or otherwise acquired for any consideration (or any moneys be paid to or made available for a sinking fund or otherwise for the purchase or redemption of any shares of any such stock) by the Corporation unless the dividends, if any, accrued on all outstanding shares of the Series B Preferred Stock shall have been paid or set apart for payment.

(j) "Junior Stock" shall mean the Common Stock, Series A Preferred Stock, and any shares of preferred stock of any series or class of the Corporation, whether presently outstanding or hereafter issued, which are junior to the shares of Series B Preferred Stock with respect to (i) the distribution of assets on any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, (ii) dividends or (iii) voting.

3. Liquidation Preference. (a) In the event of a (i) liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, (ii) a sale or other disposition of all or substantially all of the assets of the Corporation or (iii) any consolidation, merger, combination, reorganization or other transaction in which the Corporation is not the surviving entity or shares of Common Stock constituting in excess of 50% of the voting power of the Corporation are exchanged for or changed into stock or securities of another entity, cash and/or any other property (a "Merger Transaction") (items (i), (ii) and (iii) of this sentence being collectively referred to as a "Liquidation Event"), after payment or provision for payment of debts and other liabilities of the Corporation, the holders of the Series B Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders, whether such assets are capital, surplus, or earnings, before any payment or declaration and setting apart for payment of any amount shall be made in respect of any Junior Stock of the Corporation, an amount equal to the Dividend Base Amount at such time; provided, however, in the case of a Merger Transaction, such payment may be made in cash, property (valued as provided in Subsection 3(b)) and/or securities (valued as provided in Subsection 3(b)) of the entity surviving such Merger Transaction. In the case of property or in the event that any such securities are subject to an investment letter or other similar restriction on transferability, the value of such property or securities shall be determined by agreement between the Corporation and the holders of a majority of the Series B Preferred Stock then outstanding. If upon any Liquidation Event, whether voluntary or involuntary, the assets to be distributed to the holders of the Series B Preferred Stock shall be insufficient to

permit the payment to such shareholders of the full preferential amounts aforesaid, then all of the assets of the Corporation to be distributed shall be so distributed ratably to the holders of the Series B Preferred Stock on the basis of the number of shares of Series B Preferred Stock held. Notwithstanding item (iii) of the first sentence of this Subsection 3(a), any consolidation, merger, combination, reorganization or other transaction in which the Corporation is not the surviving entity but the stockholders of the Corporation immediately prior to such transaction own in excess of 50% of the voting power of the corporation surviving such transaction and own amongst themselves such

interest in substantially the same proportions as prior to such transaction, shall not be considered a Liquidation Event provided that the surviving corporation shall make appropriate provisions to ensure that the terms of this Certificate of Designation survive any such transaction. All shares of Series B Preferred Stock shall rank as to payment upon the occurrence of any Liquidation Event senior to the Common Stock, the Series A Preferred Stock, and, unless the terms of such series shall provide otherwise, senior to all other series of the Corporation's preferred stock.

(b) Any securities or other property to be delivered to the holders of the Series B Preferred Stock pursuant to Subsection 3(a) hereof shall be valued as follows:

(i) Securities not subject to an investment letter or other similar restriction on free marketability:

(A) If actively traded on a Stock Market, the per share value shall be deemed to be the Market Price of such securities as of the third day prior to the date of valuation.

(B) If not actively traded on a Stock Market, the value shall be the Fair Market Value of such securities.

(ii) For securities for which there is an active public market but which are subject to an investment letter or other restrictions on free marketability, the value shall be the Fair Market Value thereof, determined by discounting appropriately the per share Market Price thereof.

(iii) For all other securities, the value shall be the Fair Market Value thereof.

4. Conversion.

(a) Right of Conversion. The shares of Series B Preferred Stock are convertible, in whole or in part, at the option of the holder thereof and upon notice to the Corporation as set forth in Subsection 4(b), into fully paid and nonassessable shares of Common Stock and such other securities and property as hereinafter provided. The initial conversion price per share of Common Stock (the "Conversion Price"), shall be \$.50, subject to adjustment as provided herein. The rate at which each share of Series B Preferred Stock is convertible at any time into Common Stock (the "Conversion Rate") shall be determined by dividing the then existing Conversion Price (determined in accordance with this Section 4, including the last paragraph hereof) into the Dividend Base Amount.

(b) Conversion Procedures. Any holder of shares of Series B Preferred Stock desiring to convert such shares into Common Stock shall surrender the certificate or certificates evidencing such shares of Series B Preferred Stock at the office of the transfer agent for the Series B Preferred Stock, which certificate or certificates, if the Corporation shall so require, shall be duly endorsed to the Corporation or in blank, or accompanied by proper instruments of transfer to the Corporation or in blank, accompanied by irrevocable written notice to the Corporation that the holder elects so to convert such shares of Series B Preferred Stock and specifying the name or names (with address) in which a certificate or certificates evidencing shares of Common Stock are to be issued. The Corporation need not deem a notice of conversion to be received unless the holder complies with all the provisions hereof. The Corporation will instruct the transfer agent (which may be the Corporation) to make a notation of the date that a notice of conversion is received, which date of receipt shall be deemed to be the date of receipt for purposes hereof.

The Corporation shall, as soon as practicable after such deposit of certificates evidencing shares of Series B Preferred Stock accompanied by the written notice and compliance with any other conditions

herein contained, deliver at such office of such transfer agent to the person for whose account such shares of Series B Preferred Stock were so surrendered, or to the nominee or nominees of such person, certificates evidencing the number of full shares of Common Stock to which such person shall be entitled as aforesaid, subject to Section 4(d). Subject to the following provisions of this paragraph, such conversion shall be deemed to have been made as of the date of such surrender of the shares of Series B Preferred Stock to be converted, and the person or persons entitled to receive the Common Stock deliverable upon conversion of such Series B Preferred Stock shall be treated for all purposes as the record holder or holders of such Common Stock on such date; provided, however, that the Corporation shall not be required to convert any shares of Series B Preferred Stock while the stock transfer books of the Corporation are closed for any purpose, but the surrender of Series B Preferred Stock for conversion during any period while such books are so closed shall become effective for

conversion immediately upon the reopening of such books as if the surrender had been made on the date of such reopening, and the conversion shall be at the conversion rate in effect on such date. No adjustments in respect of any dividends on shares surrendered for conversion or any dividend on the Common Stock issued upon conversion shall be made upon the conversion of any shares of Series B Preferred Stock.

The Corporation shall at all times, reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of Series B Preferred Stock, such number of shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of the Series B Preferred Stock.

All notices of conversion shall be irrevocable; provided, however, that if the Corporation has sent notice of an event pursuant to Subsection 4(g) hereof, a holder of Series B Preferred Stock may, at its election, provide in its notice of conversion that the conversion of its shares of Series B Preferred Stock shall be contingent upon the occurrence of the record date or effectiveness of such event (as specified by such holder), provided that such notice of conversion is received by the Corporation prior to such record date or effective date, as the case may be.

(c) Adjustment of Conversion Rate and Conversion Price.

(i) As used in this Subsection 4(c), the following terms shall have the following meanings:

"Capital Stock" of any Person means the Common Stock or Preferred Stock of such Person. Unless otherwise stated herein or the context otherwise requires, "Capital Stock" means Capital Stock of the Corporation; "Common Stock" of any Person other than the Corporation means the common equity (however designated), including, without limitation, common stock or partnership or membership interests of, or participation or interests in such Person (or equivalents thereof).

"Common Stock" of the Corporation means the Common Stock, par value \$.001 per share, of the Corporation, any successor class or classes of common equity (however designated) of the Corporation into or for which such Common Stock may hereafter be converted, exchanged or reclassified and any class or classes of common equity (however designated) of the Corporation which may be distributed or issued with respect to such Common Stock or successor class of classes to holders thereof generally. Unless otherwise stated herein or the

context requires otherwise, "Common Stock" means Common Stock of the Corporation;

"Current Market Price" means, when used with respect to any security as of any date, the last sale price, regular way, or, in case no such sale takes place on such date, the average of the closing bid and asked prices, regular way, of such security in either case as reported for consolidated transactions on the New York Stock Exchange or, if such security is not listed or admitted to trading on the New York Stock Exchange, as reported for consolidated transactions with respect to securities listed on the principal national securities exchange on which such security is listed or admitted to trading or, if such security is not listed or admitted to trading on any national securities exchange, as reported on the Nasdaq National Market, or, if such security is not listed or admitted to trading on the Nasdaq National Market, as reported on the Nasdaq SmallCap Market, or if such security is not listed or admitted to trading on any national securities exchange or the Nasdaq National Market or the Nasdaq SmallCap Market, the average of the high bid and low asked prices of such security in the over-the-counter market, as reported by the National Association of Securities Dealers, Inc. Automated Quotations System or such other system then in use or, if such security is not quoted by any such organization, the average of the closing bid and asked prices of such security furnished by an NASD member firm selected by the Corporation. If such security is not quoted by any such organization and no such NASD member firm is able to provide such prices, the Current Market Price of such security shall be the Fair Market Value thereof;

"Fair Market Value" means, at any date as to any asset, Property or right (including without limitation, Capital Stock of any Person, evidence of indebtedness or other securities, but excluding cash), the fair market value of such item as determined in good faith by the Board of Directors, whose determination shall be conclusive; provided, however, that such determination is described in an Officers' Certificate filed with the transfer agent and that, if there is a Current Market Price for such item on such date, "Fair Market Value" means such Current Market Price (without giving effect to the last sentence of the definition thereof);

"GAAP" means, as of any date, generally accepted accounting principles in the United States and does not include any

interpretations or regulations that have been proposed but that have not become effective;

"Officer" means, with respect to any Person, the Chairman of the Board, the Chief Executive Officer, the President, the Chief Operating Officer, the Chief Financial Officer, the Treasurer, any Assistant Treasurer, the Controller, the Secretary, any Assistant Secretary or any Vice President of such Person;

"Officers' Certificate" means a certificate signed on behalf of the Corporation by two Officers, one of whom must be the Chairman of the Board, the President, the Treasurer or a Vice-President of the Corporation;

"Person" means any individual, corporation, partnership, association, trust or any other entity or organization, including a government or political subdivision or any agency or instrumentality thereof;

"Preferred Stock" of any Person means the class or classes of equity, ownership or participation interests (however designated) in such Person, including, without

limitation, stock, share, partnership and membership interests, which are preferred as to the payment of dividends or distributions by, or as to the distribution of assets upon any voluntary or involuntary liquidation or dissolution of, such Person (or equivalent thereof) over interests of any other class of interests of such Person. Unless otherwise stated herein or the context otherwise requires, "Preferred Stock" means Preferred Stock of the Corporation;

"Property" of any Person means any and all types of real, personal, tangible, intangible or mixed property owned by such Person whether or not included on the most recent consolidated balance sheet of such Person in accordance with GAAP;

"Subsidiary" of a Person on any date means any other Person of whom such Person owns, directly or indirectly through a Subsidiary or Subsidiaries of such Person, Capital Stock with voting power, acting independently and under ordinary circumstances, entitling such person to elect a majority of the board of directors or other governing body of such other Person. Unless otherwise stated herein or the context otherwise requires, "Subsidiary" means a Subsidiary of the Corporation.

(ii) If the Corporation shall (i) pay a dividend or other distribution, in Common Stock, on any class of Capital Stock of the Corporation, (ii) subdivide the outstanding Common Stock into a greater number of shares by any means or (iii) combine the outstanding Common Stock into a smaller number of shares by any means including, without limitation, a reverse stock split), then in each such case the Conversion Price in effect immediately prior thereto shall be adjusted so that the Registered Holder of any shares of Series B Preferred Stock thereafter surrendered for conversion shall be entitled to receive the number of shares of Common Stock that such Registered Holder would have owned or have been entitled to receive upon the happening of such event had such Series B Preferred Stock been converted immediately prior to the relevant record date or, if there is no such record date, the effective date of such event. An adjustment made pursuant to this Paragraph 4(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 of such subdivision or combination, as the case may be.

(iii) If the Corporation shall (i) issue or distribute (at a price per share less than the Current Market Price per share of such Capital Stock on the date of such issuance or distribution) Capital Stock generally to holders of Common Stock or to holders of any class or series of Capital Stock which is convertible into or exchangeable or exercisable for Common Stock (excluding an issuance or distribution of Common Stock described in Paragraph 4(c)(ii)) or (ii) issue or distribute generally to such holders rights, warrants, options or convertible or exchangeable securities entitling the holder thereof to subscribe for, purchase, convert into or exchange for Capital Stock at a price per share less than the Current Market Price per share of such Capital Stock on the date of issuance or distribution, then, in each such case, at the earliest of (A) the date the Corporation enters into a firm contract for such issuance or distribution, (B) the record date for the determination of stockholders entitled to receive any such Capital Stock or any such rights, warrants, options or convertible or exchangeable securities or (C) the date of actual issuance or distribution of any such Capital Stock or any such rights, warrants,

options or convertible or exchangeable securities, the Conversion Price shall be reduced by multiplying the Conversion Price in effect immediately prior to such earliest date by:

(A) if such Capital Stock is Common Stock, a fraction the numerator of which is the number of shares of Common Stock outstanding, on such earliest date plus the number of shares of Common Stock which could be purchased at the Current Market Price per share of Common Stock on the date of such issuance or distribution with the aggregate consideration (based on the Fair Market Value thereof) received or receivable by the Corporation either (A) in connection with such issuance or distribution or (B) upon the conversion, exchange, purchase or subscription of all such rights, warrants, options or convertible or exchangeable securities (the "Aggregate Consideration"), and the denominator of which is the number of shares of Common Stock outstanding on such earliest date plus the number of shares of Common Stock to be so issued or distributed or to be issued upon the conversion, exchange, purchase or subscription of all such rights, warrants, options or convertible or exchangeable securities; or

(B) if such Capital Stock is other than Common Stock, a fraction the numerator of which is the Current Market Price per share of Common Stock on such earliest date minus an amount equal to (A) the difference between (1) the Current Market Price per share of such Capital Stock multiplied by the number of shares of such Capital Stock to be so issued and (2) the Aggregate Consideration, divided by (B) the number of shares of Common Stock outstanding on such date, and the denominator of which is the Current Market Price per share of Common Stock on such earliest date.

Such adjustment shall be made successively whenever any such Capital Stock, rights, warrants, options or convertible or exchangeable securities are so issued or distributed. In determining whether any rights, warrants, options or convertible or exchangeable securities entitle the holders thereof to subscribe for, purchase, convert into or exchange for shares of such Capital Stock at less than such Current Market Price, there shall be taken into account the Fair Market Value of any consideration received or receivable by the Corporation for such rights, warrants, options or convertible or exchangeable securities. If any right, warrant, option or convertible or exchangeable security, the issuance of which resulted in an adjustment in the Conversion Price pursuant to this Paragraph 4(c)(iii), shall expire and shall not have been exercised, the Conversion Price shall immediately upon such expiration be recomputed to the Conversion Price which would have

been in effect if such right, warrant, option or convertible or exchangeable securities had never been distributed or issued. Notwithstanding anything contained in this paragraph to the contrary, (i) the issuance of Capital Stock upon the exercise of such rights, warrants or options or the conversion or exchange of such convertible or exchangeable securities will not cause an adjustment in the Conversion Price if no such adjustment would have been required at the time such right, warrant, option or convertible or exchangeable security was issued or distributed; provided, however, that, if the

consideration payable upon such exercise, conversion or exchange and/or the Capital Stock receivable thereupon are changed after the time of the issuance or distribution of such right, warrant, option or convertible or exchangeable security then such change shall be deemed to be the expiration thereof without having been exercised and the issuance or distribution of new options, rights, warrants or convertible or exchangeable securities and (ii) the issuance of convertible preferred stock of the Corporation as a dividend on convertible preferred stock of the Corporation will not cause an adjustment in the Conversion Price if no such adjustment would have been required at the time such underlying convertible preferred stock was issued (or as a result of any subsequent modification to the terms thereof) and the conversion provisions of such convertible stock so issued as a dividend are the same as in such underlying convertible preferred stock.

Notwithstanding any contained in this Certificate of Designation to the contrary, options, rights or warrants issued or distributed by the Corporation, including options, rights or warrants distributed prior to the date of filing of this Certificate of Designation, to holders of Common Stock generally which, until the occurrence of a specified event or events (a "Trigger Event"), (i) are deemed to be transferred with Common Stock, (ii) are not exercisable and (iii) are also issued on a pro rata basis with respect to future issuances of Common Stock, shall be deemed not to have been issued or distributed for purposes of this Subsection 4(c) (and no adjustment to the Conversion Price under this Subsection 4(c) will be required) until the occurrence of the earliest Trigger Event. Upon the occurrence of a Trigger Event, such options, rights or warrants shall continue to be deemed not to have been issued or distributed for purposes of this Subsection 4(c) (and no adjustment to the Conversion Price under this Subsection 4(c) will be required) if and for so long as each Registered Holder who thereafter converts such Registered Holder's Series B Preferred Stock shall be entitled to receive upon such conversion, in addition to the shares of Common Stock issuable upon such conversion,

a number of such options, rights or warrants, as the case may be, equal to the number of options, rights or warrants to which a holder of the number of shares of Common Stock equal to the number of shares of Common Stock issuable upon conversion of such Registered Holder's Series B Preferred Stock is entitled to receive at the time of such conversion in accordance with the terms and provisions of, and applicable to, such options, rights or warrants. Upon the expiration of any such options, rights or warrants or at such time, if any, as a Registered Holder is not entitled to receive such options, rights or warrants upon conversion of such Registered Holder's Series B Preferred Stock, an adjustment (if any is required) to the Conversion Price shall be made in accordance with this Paragraph 4(c) (iii) with respect to the issuance of all such options, rights and warrants as of the date of issuance thereof, but subject to the provisions of the preceding paragraph, if any such option, right or warrant, including any such options right or warrants distributed prior to the date of filing of this Certificate of Designation, are subject to events, upon the occurrence of which such options, rights or warrants become exercisable to purchase different securities, evidence of indebtedness, cash, Properties or other assets or different amounts thereof, then, subject to the preceding provision of this paragraph, the date of the occurrence of any and each such event shall be deemed to be the date of distribution and record date with respect to new options, right or warrants with such new purchase rights (and

a termination or expiration of the existing options, rights or warrants without exercise thereof). In addition, in the event of any distribution (or deemed distribution) of options, rights or warrants, or any Trigger Event or other event of the type described in the preceding sentence, that required (or would have required but for the provisions of Paragraph 4(c)(vi) or this paragraph) an adjustment to the Conversion Price under this Subsection 4(c) and such options, rights or warrants shall thereafter have been redeemed or repurchased without having been exercised, then the Conversion Price shall be adjusted upon such redemption or repurchase to give effect to such distribution, Trigger Event or other event, as the case may, as though it had instead been a cash distribution, equal on a per share basis to the result of the aggregate redemption or repurchase price received by holders of such options, rights or warrants divided by the number of shares of Common Stock outstanding as of the date of such repurchase or redemption, made to holders of Common Stock generally as of the date of such redemption or repurchase.

(iv) If the Corporation shall pay or distribute, as a dividend or otherwise, generally to holders of Common Stock or any class or series of Capital Stock which is convertible into or exercisable or exchangeable for Common Stock any assets, Properties or rights (including, without limitation, evidences of indebtedness of the Corporation, any Subsidiary or any other Person, cash or Capital Stock or other securities of the Corporation, any Subsidiary or any other Person, but excluding payments and distributions as described in Paragraphs 4(c)(ii) or (iii), dividends and distributions in connection with a Liquidation Event and distributions consisting solely of cash described in Paragraph 4(c)(v)), then in each such case the Conversion Price shall be reduced by multiplying the Conversion Price in effect immediately prior to the date of such payment or distribution by a fraction, the numerator of which is the Current Market Price per share of Common Stock on the record date for the determination of stockholders entitled to receive such payment or distribution less the Fair Market Value per share of Common Stock on such record date of the assets, Properties or rights so paid or distributed, and the denominator of which is the Current Market Price per share of Common Stock on such record date. Such adjustment shall become effective immediately after such record date. For purposes of this Paragraph 4(c)(iv), such Fair Market Value per share shall equal the aggregate Fair Market Value on such record date of the assets, Properties or rights so paid or distributed divided by the number of shares of Common Stock outstanding on such record date. For all purposes of this Certificate of Designation, adjustments to any security's conversion or exercise price pursuant to such security's original terms shall not be deemed a distribution or dividend to holders thereof.

(v) If the Corporation shall, by dividend or otherwise, make a distribution (other than in connection with the liquidation, dissolution or winding up of the Corporation in its entirety), generally to holders of Common Stock or any class or series of Capital Stock which is convertible into or exercisable or exchangeable for Common Stock, consisting solely of cash where (x) the sum of (i) the aggregate amount for such cash plus (ii) the aggregate amount of all cash so distributed (by dividend or otherwise) to such holders within the 12-month period ending on the record date for determining stockholder entitled to receive such distribution with respect to which no adjustment has been made to the Conversion Price pursuant to this Paragraph 4(c)(v) exceeds (y) 10% of the result of the multiplication of (1) the Current Market Price per share of Common Stock on such record date times (2)

the number of shares of Common Stock outstanding on such record date, then the Conversion Price shall be reduced, effective immediately prior to the opening of business on the day following such record date, by multiplying the Conversion Price in effect immediately prior to the close of business on the day prior to such record date by a fraction, the numerator of which is the Current Market Price per share of Common Stock on such record date less the aggregate amount of cash per share so distributed and the denominator of which is such Current Market Price; provided, however, that, if the aggregate amount of cash per share is equal to or greater than such Current Market Price, then, in lieu of the foregoing adjustment, adequate provisions shall be made so that each Registered Holder shall have the right to receive upon conversion (with respect to each share of Common Stock issued upon such conversion and in addition to the Common Stock issuable upon conversion) the aggregate amount of cash per share such Registered Holder would have received had such Registered Holder's Series B Preferred Stock been converted immediately prior to such record date. In no event shall the Conversion Price be increased pursuant to this Paragraph 4(c)(v); provided, however, that if such distribution is not so made, the Conversion Price shall be adjusted to be the Conversion Price which would have been in effect if such distribution had not been declared. For purposes of this Paragraph 4(c)(v), such aggregate amount of cash per share shall equal such sum divided by the number of shares of Common Stock outstanding on such record date.

(vi) The provisions of this Subsection 4(c) shall similarly apply to all successive events of the type described in this Subsection 4(c). Notwithstanding anything contained herein to the contrary, no adjustment in the Conversion Price shall be required unless such adjustment would require an increase or decrease of at least 1% in the Conversion Price then in effect; provided, however, that any adjustments which by reason of this Paragraph 4(c)(vi) are not required to be made shall be carried forward and taken into account in any subsequent adjustment. All calculations under this Section 4 shall be made by the Corporation and shall be made to the nearest cent or to the nearest one hundredth of a share, as the case may be, and the transfer agent shall be entitled to rely conclusively thereon. Except as provided in this Section 4, no adjustment in the Conversion Price will be made for the issuance of Common Stock or any securities convertible into or exchangeable for Common Stock or carrying the right to purchase Common Stock or any securities so convertible or exchangeable.

(vii) Whenever the Conversion Price is adjusted as provided herein, the Corporation shall promptly file with the transfer agent an Officers' Certificate setting forth the Conversion Price in effect after such adjustment and setting forth a brief statement of the facts requiring such adjustment. Promptly after delivery of such Officers' Certificate, the Corporation shall give or cause to be given to each Registered Holder a notice of such adjustment of the Conversion Price setting forth the adjusted Conversion Price and the date on which such adjustment becomes effective.

(viii) Notwithstanding anything contained herein to the contrary, in any case in which this Subsection 4(c) provides that an adjustment in the Conversion Price shall become effective immediately after a record date for an event, the Corporation may defer until the occurrence of such event (i) issuing to the Registered Holder of any Series B Preferred Stock converted after such record date and before the occurrence of such event the additional shares of Common Stock

issuable upon such conversion by reason of the adjustment required by such event over and above the number of shares of Common Stock issuable upon such conversion before giving effect to such adjustment and (ii) paying to such Registered Holder any amount in cash in lieu of any fractional share of Common Stock pursuant to Subsection 4(d).

(ix) Notwithstanding any other provision hereof, no adjustment to the Conversion Price shall be made upon the issuance or exercise or conversion of (1) any Capital Stock issued or cash paid as dividends on the Series B Preferred Stock, or (2) any Capital Stock issued or cash paid upon the mandatory conversion or redemption of any Series B Preferred Stock in accordance with Section 5 of this Certificate of Designation.

(d) No Fractional Shares. No fractional shares or scrip representing fractional shares of Common Stock shall be issued upon conversion of Series B Preferred Stock. If more than one certificate evidencing shares of Series B Preferred Stock shall be surrendered for conversion at one time by the same holder, the number of full shares issuable upon conversion thereof shall be computed on the basis of the aggregate number of shares of Series B Preferred Stock so surrendered. Instead of any fractional share of Common Stock which would otherwise be issuable upon conversion of such aggregate number of shares of Series B Preferred Stock, the Corporation may elect, in its sole discretion, independently for each holder, whether such number of shares of Common Stock will be rounded to the nearest whole share (with a .5 of a share rounded upward) or whether such holder will be given cash, in

lieu of any fractional share, in an amount equal to the same fraction of the Market Price of the Common Stock as of the close of business on the day of conversion.

(e) [Reserved]

(f) Reservation of Shares; Transfer Taxes, Etc. The Corporation shall at all times reserve and keep available, out of its authorized and unissued shares of Common Stock, solely for the purpose of effecting the conversion of the Series B Preferred Stock, such number of shares of its Common Stock free of preemptive rights as shall be sufficient to effect the conversion of all shares of Series B Preferred Stock from time to time outstanding. The Corporation shall use its best efforts from time to time, in accordance with the laws of the State of Delaware to increase the authorized number of shares of Common Stock if at any time the number of shares of authorized, unissued and unreserved Common Stock shall not be sufficient to permit the conversion of all the then-outstanding shares of Series B Preferred Stock.

The Corporation shall pay any and all issue or other taxes (excluding any income taxes) that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of the Series B Preferred Stock. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issue or delivery of Common Stock (or other securities or assets) in a name other than that in which the shares of Series B Preferred Stock so converted were registered, and no such issue or delivery shall be made unless and until the person requesting such issue has paid to the Corporation the amount of such tax or has established, to the satisfaction of the Corporation, that such tax has been paid or need not be paid.

(g) Prior Notice of Certain Events. In case:

(i) the Corporation shall declare any dividend (or any other distribution); or

(ii) the Corporation shall authorize the granting to the holders of Common Stock or the Series A Preferred Stock of rights or warrants to subscribe for or purchase any shares of stock of any class or of any other rights or warrants; or

(iii) of any reclassification of Common Stock (other than a subdivision or combination of the outstanding Common Stock, or a change in par value, or from par value to no par value, or from no par value to par value); or

19

(iv) of any consolidation or merger to which the Corporation is a party and for which approval of any stockholders of the Corporation shall be required, or of the sale or transfer of all or substantially all of the assets of the Corporation or of any compulsory share exchange whereby the Common Stock is converted into other securities, cash or other property; or

(v) of any Liquidation Event;

then the Corporation shall cause to be filed with the transfer agent for the Series B Preferred Stock, and shall cause to be mailed to the Registered Holders, at their last addresses as they shall appear upon the stock transfer books of the Corporation, at least twenty (20) days prior to the applicable record date hereinafter specified, a notice stating (x) the date on which a record (if any) is to be taken for the purpose of such dividend, distribution or granting of rights or warrants or, if a record is not to be taken, the date as of which the holders of Common Stock or Series A Preferred Stock of record to be entitled to such dividend, distribution, rights or warrants are to be determined and a description of the cash, securities or other property to be received by such holders upon such dividend, distribution or granting of rights or warrants or (y) the date on which such reclassification, consolidation, merger, sale, transfer, share exchange or Liquidation Event is expected to become effective, the date as of which it is expected that holders of Common Stock of record shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such exchange or Liquidation Event and the consideration, including securities or other property, to be received by such holders upon such exchange; provided, however, that no failure to mail such notice or any defect therein or in the mailing thereof shall affect the validity of the corporate action required to be specified in such notice.

(h) Other Changes in Conversion Rate. The Corporation from time to time may increase the Conversion Rate by any amount for any period of time if the period is at least 20 days and if the increase is irrevocable during the period. Whenever the Conversion Rate is so increased, the Corporation shall mail to the Registered Holders a notice of the increase at least 15 days before the date the increased Conversion Rate takes effect, and such notice shall state the increased Conversion Rate and the period it will be in effect.

The Corporation may make such increases in the Conversion Rate, in addition to those required or allowed by this Section 4, as shall be determined by it, as evidenced by a resolution of the Board of Directors, to be advisable in order to avoid or diminish any income tax to holders of Common Stock resulting from any dividend or distribution of stock or issuance of rights or warrants to purchase or subscribe for stock or from any event treated as such for income tax purposes.

Notwithstanding anything to the contrary herein, in no case shall the Conversion Price be adjusted to an amount less than \$.001 per share, the current par value of the Common Stock into which the Series B Preferred Stock is convertible.

(i) Ambiguities/Errors. The Board of Directors of the Corporation shall have the power to resolve any ambiguity or correct any error in the provisions relating to the convertibility of the Series B Preferred Stock, and its actions in so doing shall be final and conclusive.

5. Mandatory Conversion and Redemption. (a) In the event the Corporation causes the Series A Preferred Stock to be converted in whole or in part, into fully paid and nonassessable shares of Common Stock, then the

Corporation shall also convert the Series B Preferred Stock, in whole or in part, on a pro rata basis among holders of the Series B Preferred Stock, into fully paid and nonassessable shares of Common Stock using a conversion price of \$.50. Any shares of Series B Preferred Stock so converted shall be treated as having been surrendered by the holder thereof for conversion pursuant to Section 4 on the date of such mandatory conversion (unless previously converted at the option of the holder).

(b) If, at any time, the Corporation redeems the Series A Preferred Stock, the Corporation may, at its option, redeem the Series B Preferred Stock, in whole or in part, on a pro rata basis among holders of the Series B Preferred Stock.

(c) No greater than 60 nor fewer than 20 days prior to the date of any such mandatory conversion or redemption, notice by first class mail, postage prepaid, shall be given to the holders of record of the Series B Preferred Stock to be converted or redeemed, addressed to such holders at their last addresses as shown on the stock transfer books of the Corporation. Each such notice shall specify the date fixed for conversion or redemption, the place or places for surrender of shares of Series B Preferred Stock and the then effective Conversion Rate pursuant to Section 4.

Any notice which is mailed as herein provided shall be conclusively presumed to have been duly given by the Corporation on the date deposited in the mail, whether or not the holder of the Series B Preferred Stock receives such notice; and failure properly to give such notice by mail, or any defect in such notice, to the holders of the shares to be converted or redeemed shall not affect the validity of the proceedings for the conversion or redemption of any other shares of Series B Preferred Stock. On or after the date fixed for conversion or redemption (the "Take-Out Date") as stated in such notice, each holder of shares called to be converted or

redeemed shall surrender the certificate evidencing such shares to the Corporation at the place designated in such notice for conversion or redemption. After the mailing of such notice, but before the Take-Out Date as stated therein, all rights whatsoever with respect to the shares so called for conversion or redemption (except the right of the holders to convert such shares pursuant to Section 4 and to have such shares converted or redeemed, as the case may be, upon surrender of their certificates therefor, pursuant to this Section 5) shall terminate. On or after the Take-Out Date, notwithstanding that the certificates evidencing any shares properly called for conversion or redemption shall not have been surrendered, such shares shall no longer be deemed outstanding and all rights whatsoever with respect to the shares so called for conversion or redemption (except the right of the holders to have such shares converted or redeemed, as the case may be, upon surrender of their certificates therefor, pursuant to this Section 5) shall terminate.

6. Outstanding Shares. For purposes of this Certificate of Designation, a share of Series B Preferred Stock, when issued, shall be deemed outstanding except (i) from the date, or the deemed date, of surrender of certificates evidencing shares of Series B Preferred Stock, all shares of Series B Preferred Stock converted into Common Stock or redeemed pursuant to Section 5 and (ii) from the date of registration of transfer, all shares of Series B Preferred Stock held of record by the Corporation or any subsidiary of the Corporation.

7. Class Voting Rights. The Corporation shall not, without the affirmative vote or consent of the holders of at least 50% of all outstanding Series B Preferred Stock, voting separately as a class, (i) amend, alter or repeal any provision of the Certificate of Incorporation or the Bylaws of the Corporation so as to adversely affect the relative rights, preferences, qualifications, limitations or restrictions of the Series B Preferred Stock; (ii) authorize or issue, or increase the authorized amount of, Series B Preferred Stock, other than Series B Preferred Stock issuable in exchange for 8% Notes or accrued interest thereon or issuable as dividends on Series B Preferred Stock; or (iii) issue securities ranking prior to, or pari passu with the Series B Preferred Stock.

8. Status of Acquired Shares. Shares of Series B Preferred Stock received upon conversion or redemption pursuant to Section 4 or Section 5 or otherwise acquired by the Corporation will be restored to the status of authorized but unissued shares of Preferred Stock, without designation as to class, and may thereafter be issued, but not as shares of Series B Preferred Stock.

9. Preemptive Rights. The Series B Preferred Stock is not entitled to any preemptive or subscription rights in respect of any securities of the Corporation.

10. Severability of Provisions. Whenever possible, each provision hereof shall be interpreted in a manner as to be effective and valid under applicable law, but if any provision hereof is held to be prohibited by or invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating or otherwise adversely affecting the remaining provisions hereof. If a court of competent jurisdiction should determine that a provision hereof would be valid or enforceable if a period of time were extended or shortened or a particular percentage were increased or decreased, then such court may make such changes as shall be necessary to render the provision in question effective and valid under applicable law.

IN WITNESS WHEREOF, Sudhir Agrawal, President and Acting Chief Executive Officer of the Corporation, acting for and on behalf of the Corporation, has hereunto subscribed his name this 15 day of March, 2001.

HYBRIDON, INC.

By: //Sudhir Agrawal

Name: Sudhir Agrawal
Title: President and Acting Chief Executive Officer

HYBRIDON, INC.

CERTIFICATE OF ELIMINATION
OF NUMBER OF SHARES OF PREFERRED STOCK
DESIGNATED AS
SERIES B CONVERTIBLE PREFERRED STOCK

Hybridon, Inc., a Delaware corporation (the "Corporation"), pursuant to authority conferred upon the Board of Directors of the Corporation by the Corporation's Restated Certificate of Incorporation, as amended (the "Certificate of Incorporation"), and in accordance with the provisions of Section 151(g) of the General Corporation Law of the State of Delaware (the "Delaware Law"), certifies that the Board of Directors of the Corporation duly adopted the following resolution:

"RESOLVED: That no shares of the Corporation's Series B Convertible Preferred Stock (the "Series B Preferred Stock") are outstanding and no shares of Series B Preferred Stock will be issued subject to the Certificate of Designation dated March 28, 2001 with respect to such series (the "Series B Certificate of Designation"); and that the proper officers of the Corporation be and hereby are authorized and directed in the name and on behalf of the Corporation to execute and file a certificate with the Secretary of State of the State of Delaware pursuant to Section 151(g) of the Delaware Law setting forth the text of this resolution, upon the filing and effectiveness of which all matters are set forth in the Series B Certificate of Designation shall be deemed to have

been eliminated from the Certificate of Incorporation and the 85,000 shares of Preferred Stock previously designated as Series B Preferred Stock shall resume their status as undesignated shares of Preferred Stock available for future issuance in accordance with the Certificate of Incorporation."

IN WITNESS WHEREOF, the Corporation has caused its corporate seal to be affixed hereto and this Certificate to be signed by its Chief Executive Officer this 10th day of December, 2001.

HYBRIDON, INC.

By: /s/ Stephen R. Seiler
Stephen R. Seiler
Chief Executive Officer

CERTIFICATE OF DESIGNATIONS
OF
SERIES C JUNIOR PARTICIPATING PREFERRED STOCK
OF
HYBRIDON, INC.

Hybridon, Inc., a corporation organized and existing under the laws of the State of Delaware (hereinafter called the "Corporation"), hereby certifies that the following resolution was adopted by the Board of Directors of the Corporation at a meeting duly called and held on December 10, 2001:

RESOLVED: That pursuant to the authority granted to and vested in the Board of Directors of the Corporation (hereinafter called the "Board") in accordance with the provisions of the Certificate of Incorporation, as amended, the Board hereby creates a series of Preferred Stock, \$.01 par value per share (the "Preferred Stock"), of the Corporation and hereby states the designation and number of shares, and fixes the relative rights, preferences and limitations thereof as follows:

Series C Junior Participating Preferred Stock:

Section 1. Designation and Amount. The shares of such series shall be designated as "Series C Junior Participating Preferred Stock" (the "Series C Preferred Stock") and the number of shares constituting the Series C Preferred Stock shall be one hundred thousand (100,000). Such number of shares may be increased or decreased by resolution of the Board prior to issuance; provided, that no decrease shall reduce the number of shares of Series C 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 or warrants or upon the conversion of any outstanding securities issued by the Corporation convertible into Series C Preferred Stock.

Section 2. Dividends and Distributions.

(A) Subject to the rights of the holders of any shares of any series of Preferred Stock (or any similar stock) ranking prior and superior to the Series C Preferred Stock with respect to dividends, the holders of shares of Series C Preferred Stock, in preference to the holders of Common Stock, par value \$.001 per share (the "Common Stock"), of the Corporation, and of any other junior stock, shall be entitled to receive, when, as and if declared by the Board out of funds of the Corporation legally available for the payment of dividends, quarterly dividends payable in cash on the last day of each fiscal quarter of the Corporation 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 C Preferred Stock, in an amount per share (rounded to the nearest cent) equal to the greater of (a) \$10 or (b) subject to the

provision for adjustment hereinafter set forth, 1,000 times the aggregate per share amount of all cash dividends, and 1,000 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 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 C Preferred Stock. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the amount to which holders of shares of Series C Preferred Stock were entitled immediately prior to such event under clause (b) 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 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. In the event the Corporation shall at any time declare or pay any dividend on the Series C Preferred Stock payable in shares of Series C Preferred Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Series C Preferred Stock (by reclassification or otherwise than by payment of a dividend in shares of Series C Preferred Stock) into a greater or lesser number of shares of Series C Preferred Stock, then in each such case the amount to which holders of shares of Series C Preferred Stock were entitled immediately prior to such event under clause (b) of the first sentence of this Section 2(A) shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Series C Preferred Stock that were outstanding immediately prior to such event and the denominator of which is the number of shares of Series C Preferred Stock outstanding immediately after such event.

(B) The Corporation shall declare a dividend or distribution on the Series C Preferred Stock as provided in paragraph (A) of this Section immediately after it declares a dividend or distribution on the Common Stock (other than a dividend payable in shares of Common Stock) and the Corporation shall pay such dividend or distribution on the Series C Preferred Stock before the dividend or distribution declared on the Common Stock is paid or set apart; provided that, in the event no dividend or distribution shall have been declared on the Common Stock during the period between any Quarterly Dividend Payment Date and the next subsequent Quarterly Dividend Payment Date, a dividend of \$10 per share on the Series C Preferred Stock shall nevertheless be payable on such subsequent Quarterly Dividend Payment Date.

(C) Dividends shall begin to accrue and be cumulative on outstanding shares of Series C Preferred Stock from the Quarterly Dividend Payment Date next preceding the date of issue of such shares, 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 C Preferred Stock entitled to receive a quarterly dividend and before such Quarterly Dividend Payment

-2-

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 C 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 may fix a record date for the determination of holders of shares of Series C Preferred Stock entitled to receive payment of a dividend or distribution declared thereon, which record date shall be not more than 60 days prior to the date fixed for the payment thereof.

Section 3. Voting Rights. The holders of shares of Series C Preferred Stock

shall have the following voting rights:

(A) Subject to the provision for adjustment hereinafter set forth, each share of Series C Preferred Stock shall entitle the holder thereof to 1,000 votes on all matters submitted to a vote of the stockholders of the Corporation. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the number of votes per share to which holders of shares of Series C 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. In the event the Corporation shall at any time declare or pay any dividend on the Series C Preferred Stock payable in shares of Series C Preferred Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Series C Preferred Stock (by reclassification or otherwise than by payment of a dividend in shares of Series C Preferred Stock) into a greater or lesser number of shares of Series C Preferred Stock, then in each such case the number of votes per share to which holders of shares of Series C Preferred Stock were entitled immediately prior to such event shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Series C Preferred Stock that were outstanding immediately prior to such event and the denominator of which is the number of shares of Series C Preferred Stock outstanding immediately after such event.

(B) Except as otherwise provided herein, in the Certificate of Incorporation or by law, the holders of shares of Series C Preferred Stock and the holders of shares of Common Stock and any other capital stock of the Corporation having general voting rights shall vote together as one class on all matters submitted to a vote of stockholders of the Corporation.

(C) (i) If at any time dividends on any Series C Preferred Stock shall be in arrears in an amount equal to six quarterly dividends thereon, the holders of the Series C Preferred Stock, voting as a separate series from all other series of Preferred Stock and classes of capital stock, shall be entitled to elect two members of the Board in addition to any Directors elected by any other series, class or classes of securities and the authorized number of Directors

-3-

will automatically be increased by two. Promptly thereafter, the Board of the Corporation shall, as soon as may be practicable, call a special meeting of holders of Series C Preferred Stock for the purpose of electing such members of the Board. Such special meeting shall in any event be held within 45 days of the occurrence of such arrearage.

(ii) During any period when the holders of Series C Preferred Stock, voting as a separate series, shall be entitled and shall have exercised their right to elect two Directors, then, and during such time as such right continues, (a) the then authorized number of Directors shall be increased by two, and the holders of Series C Preferred Stock, voting as a separate series, shall be entitled to elect the additional Directors so provided for, and (b) each such additional Director shall not be a member of any existing class of the Board, but shall serve until the next annual meeting of stockholders for the election of Directors, or until his successor shall be elected and shall qualify, or until his right to hold such office terminates pursuant to the provisions of this Section 3(C).

(iii) A Director elected pursuant to the terms hereof may be removed with or without cause by the holders of Series C Preferred Stock entitled to vote in an election of such Director.

(iv) If, during any interval between annual meetings of stockholders for the election of Directors and while the holders of Series C Preferred Stock shall be entitled to elect two Directors, there is no such Director in office by reason

of resignation, death or removal, then, promptly thereafter, the Board shall call a special meeting of the holders of Series C Preferred Stock for the purpose of filling such vacancy and such vacancy shall be filled at such special meeting. Such special meeting shall in any event be held within 45 days of the occurrence of such vacancy.

(v) At such time as the arrearage is fully cured, and all dividends accumulated and unpaid on any shares of Series C Preferred Stock outstanding are paid, and, in addition thereto, at least one regular dividend has been paid subsequent to curing such arrearage, the term of office of any Director elected pursuant to this Section 3(C), or his successor, shall automatically terminate, and the authorized number of Directors shall automatically decrease by two, the rights of the holders of the shares of the Series C Preferred Stock to vote as provided in this Section 3(C) shall cease, subject to renewal from time to time upon the same terms and conditions, and the holders of shares of the Series C Preferred Stock shall have only the limited voting rights elsewhere herein set forth.

(D) Except as set forth herein, or as otherwise provided by law, holders of Series C 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.

-4-

(A) Whenever quarterly dividends or other dividends or distributions payable on the Series C 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 C Preferred Stock outstanding shall have been paid in full, the Corporation shall not:

(i) declare or pay dividends, or make any other distributions, on any shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series C Preferred Stock;

(ii) declare or pay dividends, or 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 the Series C Preferred Stock, except dividends paid ratably on the Series C 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 junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series C Preferred Stock, provided that the Corporation may at any time redeem, purchase or otherwise acquire shares of any such junior 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 C Preferred Stock; or

(iv) redeem or purchase or otherwise acquire for consideration any shares of Series C Preferred Stock, or any shares of stock ranking on a parity with the Series C Preferred Stock, except in accordance with a purchase offer made in writing or by publication (as determined by the Board) to all holders of such shares upon such terms as the Board, 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.

(B) 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 C 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 subject to the conditions and restrictions on issuance set forth herein, in the Certificate of Incorporation, or in any other Certificate of Designations creating a series of Preferred Stock or any similar stock or as otherwise required by law.

-5-

Section 6. Liquidation, Dissolution or Winding Up.

(A) Upon any liquidation, dissolution or winding up of the Corporation, no distribution shall be made (1) to the holders of shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series C Preferred Stock unless, prior thereto, the holders of shares of Series C Preferred Stock shall have received \$1,000 per share, plus an amount equal to accrued and unpaid dividends and distributions thereon, whether or not declared, to the date of such payment, provided that the holders of shares of Series C Preferred Stock shall be entitled to receive an aggregate amount per share, subject to the provision for adjustment hereinafter set forth, equal to 1,000 times the aggregate amount to be distributed per share to holders of shares of Common Stock, or (2) to the holders of shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series C Preferred Stock, except distributions made ratably on the Series C Preferred Stock and all such parity stock in proportion to the total amounts to which the holders of all such shares are entitled upon such liquidation, dissolution or winding up.

(B) Neither the consolidation, merger or other business combination of the Corporation with or into any other corporation nor the sale, lease, exchange or conveyance of all or any part of the property, assets or business of the Corporation shall be deemed to be a liquidation, dissolution or winding up of the Corporation for purposes of this Section 6.

(C) In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the aggregate amount to which holders of shares of Series C Preferred Stock were entitled immediately prior to such event under the proviso in clause (1) of paragraph (A) of this Section 6 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. In the event the Corporation shall at any time declare or pay any dividend on the Series C Preferred Stock payable in shares of Series C Preferred Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Series C Preferred Stock (by reclassification or otherwise than by payment of a dividend in shares of Series C Preferred Stock) into a greater or lesser number of shares of Series C Preferred Stock, then in each such case the aggregate amount to which holders of shares of Series C Preferred Stock were entitled immediately prior to such event under the proviso in clause (1) of paragraph (A) of this Section 6 shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Series C Preferred Stock that were outstanding immediately prior to such event and the denominator of which is the number of shares of Series C Preferred Stock outstanding immediately after such event.

Section 7. Consolidation, Merger, etc. Notwithstanding anything to the contrary contained herein, 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 each share

-6-

of Series C Preferred Stock shall at the same time be similarly exchanged or changed into an amount per share, subject to the provision for adjustment

hereinafter set forth, equal to 1,000 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 declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the amount set forth in the preceding sentence with respect to the exchange or change of shares of Series C 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. In the event the Corporation shall at any time declare or pay any dividend on the Series C Preferred Stock payable in shares of Series C Preferred Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Series C Preferred Stock (by reclassification or otherwise than by payment of a dividend in shares of Series C Preferred Stock) into a greater or lesser number of shares of Series C Preferred Stock, then in each such case the amount set forth in the first sentence of this Section 7 with respect to the exchange or change of shares of Series C Preferred Stock shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Series C Preferred Stock that were outstanding immediately prior to such event and the denominator of which is the number of shares of Series C Preferred Stock outstanding immediately after such event.

Section 8. No Redemption. The shares of Series C Preferred Stock shall not be redeemable.

Section 9. Rank. The Series C Preferred Stock shall rank, with respect to the payment of dividends and the distribution of assets, junior to all series of any other class of the Preferred Stock issued either before or after the issuance of the Series C Preferred Stock (including, without limitation, the Series A Convertible Preferred Stock \$.01 par value, of the Company established pursuant to the Certificate of Designation for Series A Convertible preferred Stock dated May 5, 1998), unless the terms of any such series shall provide otherwise.

Section 10. Amendment. At such time as any shares of Series C Preferred Stock are outstanding, the Certificate of Incorporation, as amended, of the Corporation shall not be amended in any manner which would materially alter or change the powers, preferences or special rights of the Series C Preferred Stock so as to affect them adversely without the affirmative vote of the holders of at least two-thirds of the outstanding shares of Series C Preferred Stock, voting together as a single class.

Section 11. Fractional Shares. Series C 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 have the benefit of all other rights of holders of Series C Preferred Stock.

-7-

IN WITNESS WHEREOF, this Certificate of Designations is executed on behalf of the Corporation by its Chief Executive Officer this 10th day of December, 2001.

HYBRIDON, INC.

By: /s/ Stephen R. Seiler
Name: Stephen R. Seiler
Title: Chief Executive Officer

-8-

CERTIFICATE OF CORRECTION
OF
CERTIFICATE OF DESIGNATION FOR
SERIES A CONVERTIBLE PREFERRED STOCK
OF
HYBRIDON, INC.

Hybridon, Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, DOES HEREBY CERTIFY:

1. The name of the corporation is Hybridon, Inc.

2. A Certificate of Designation for Series A Convertible Preferred Stock of Hybridon, Inc. (the "Certificate of Designation") was filed with the Secretary of State of the State of Delaware on May 5, 1998, and the Certificate of Designation requires correction as permitted by Section 103(f) of the General Corporation Law of the State of Delaware.

3. The Certificate of Designation was an inaccurate record of the corporate action taken in that Section 7 thereof incorrectly provided as follows:

"7. Class Voting Rights. The Corporation shall not, without the affirmative vote or consent of the holders of at least 50% of all outstanding Series A Preferred Stock, voting separately as a class, (i) amend, alter or repeal any provision of the Certificate of Incorporation or the Bylaws of the Corporation so as adversely to affect the relative rights, preferences, qualifications, limitations or restrictions of the Series A Preferred Stock (it being understood that the issuance of securities ranking prior to, or pari passu with, the Series A Preferred Stock (A) upon a Liquidation Event or (B) with respect to the payment of dividends or distributions shall not be considered adversely to affect such relative rights, preferences, qualifications, limitations or restrictions); or (ii) authorize or issue, or increase the authorized amount of, Series A Preferred Stock, other than Series A Preferred Stock issuable in connection with the Offering, issuable in exchange for 9% Notes or accrued interest thereon or issuable as dividends on Series A Preferred Stock."

4. As corrected hereby, Section 7 of the Certificate of Designation shall provide as follows:

"7. Voting Rights. Except as provided herein or required by law or by the Certificate of Incorporation of the Corporation, the holders of shares of Series A Preferred Stock shall not be entitled to vote on any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written action of stockholders in lieu of a meeting). The Corporation shall not, without the affirmative vote or consent of the holders of at least 50% of all outstanding Series A Preferred Stock, voting separately as a class, (i) amend, alter or repeal any provision of the Certificate of Incorporation or the Bylaws of the Corporation so as adversely to affect the relative rights, preferences, qualifications, limitations or restrictions of the Series A Preferred Stock (it being understood that the issuance of securities ranking prior to, or pari passu with, the Series A Preferred Stock (A)

upon a Liquidation Event or (B) with respect to the payment of dividends or distributions shall not be considered adversely to affect such relative rights, preferences, qualifications, limitations or restrictions); or (ii) authorize or issue, or increase the authorized amount of, Series A Preferred Stock, other than Series A Preferred Stock issuable in connection with the Offering, issuable in exchange for 9% Notes or accrued interest thereon or issuable as dividends on Series A Preferred Stock."

IN WITNESS WHEREOF, Hybridon, Inc. has caused this Certificate of Designation to be signed by its Chief Financial Officer this 13th day of May

HYBRIDON, INC.

By: /s/ Robert G. Andersen

Robert G. Andersen
Chief Financial Officer

-2-

CERTIFICATE OF AMENDMENT
TO THE
RESTATED CERTIFICATE OF INCORPORATION
OF
HYBRIDON, INC.

Hybridon, Inc. (hereinafter called the "Corporation"), organized and existing under and by virtue of the General Corporation Law of the State of Delaware, does hereby certify as follows:

At a meeting of the Board of Directors of the Corporation a resolution was duly adopted, pursuant to Section 242 of the General Corporation Law of the State of Delaware, setting forth an amendment to the Restated Certificate of Incorporation of the Corporation, as amended to date (the "Certificate of Incorporation"), and declaring said amendment to be advisable. The stockholders of the Corporation duly approved said proposed amendment in accordance with Section 242 of the General Corporation Law of the State of Delaware at a meeting of stockholders held on June 19, 2002. The resolution setting forth the amendment is as follows:

RESOLVED: That the first paragraph of Article FOURTH of the Certificate of Incorporation be and hereby is amended and restated in its entirety so that the same shall read as follows:

"FOURTH. The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) One Hundred Fifty Million (150,000,000) shares of Common Stock, \$.001 par value per share ("Common Stock"), and (ii) Five Million (5,000,000) shares of Preferred Stock, \$.01 par value per share ("Preferred Stock"), which may be issued from time to time in one or more series as set forth in Part B of this Article FOURTH."

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its Chief Executive Officer on this 10th day of July, 2002.

HYBRIDON, INC.

/s/ Stephen R. Seiler

Name: Stephen R. Seiler
Title: Chief Executive Officer

HYBRIDON, INC.

NON-STATUTORY STOCK OPTION AGREEMENT
(FOR 3,150,000 SHARES OF COMMON STOCK)

This Non-Statutory Stock Option Agreement ("Agreement") between Hybridon, Inc., a Delaware corporation, and the Executive, Stephen R. Seiler, is effective as of July 25, 2001 ("Effective Date"). This Agreement evidences the grant of a nonqualified stock option to the Executive effective as of the Effective Date, subject to the terms and conditions herein.

1. DEFINITIONS. All capitalized terms that are not otherwise defined in this Agreement shall have the meanings set forth below:

(a) BOARD means the Board of Directors of Hybridon, Inc.

(b) CAUSE means the Executive's (i) material breach of any material terms of the Employment Agreement, (ii) plea of guilty or nolo contendere to, or conviction of, the commission of a felony offense, (iii) repeated unexplained or unjustified absence, or refusals to carry out the lawful directions of the Board, or (iv) material breach of a fiduciary duty owed to the Company under the Employment Agreement, provided that any action or inaction described by (i), (iii), or (iv), above, shall not be the basis of a termination of the Executive's employment with the Company for "Cause" unless the Company provided the Executive with at least twenty days advance written notice specifying in reasonable detail the conduct in need of being cured and such conduct was not cured within the notice period.

(c) CHANGE OF CONTROL means the occurrence of any of the following events:

(i) a change in ownership or control of the Company effected through either of the following transactions:

(A) any "person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act), other than a current stockholder of the Company or a trustee or other fiduciary holding securities of the Company under an employee benefit plan maintained by the Company or any corporation owned, directly or indirectly, by the Company's stockholders in substantially the same proportions as their ownership of the Company's stock, becomes the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of the Company representing 50% or more of the total combined voting power of the Company's then-outstanding securities pursuant to a tender or exchange offer made directly to the Company's stockholders and which the Board does not recommend such stockholders to accept; or

(B) a change in the composition of the Board over a period of thirty-six consecutive months or less such that a majority of the members of the Board ceases to be comprised of individuals who are Continuing Members; for such purpose, a "Continuing Member" means an individual who is a member of the Board on the date of the Employment Agreement and any successor of a Continuing Member who is elected to the Board or nominated for election by action of a majority of Continuing Members then serving on the Board; or

(ii) either of the following stockholder-approved transactions to which the Company is a party:

(A) a merger or consolidation of the Company with any other corporation other than a merger or consolidation that would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving or acquiring

entity) at least 60% of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation; or

(B) the sale, transfer or complete liquidation or dissolution of the Company of all or substantially all of the Company's assets.

(iii) an event not otherwise described in subparagraph (i) or (ii), above, that is a merger or consolidation of the Company with any other corporation (other than a corporation controlled by, under common control with or controlling the Company), a sale or licensing by the Company of all or substantially all of the assets (including patents, patent applications and know-how) comprising either the Company's antisense technology or its immuno-modulatory technology, or a material acquisition by the Company, if, in connection with any of the events described in this subparagraph (iii), the Executive either (A) ceases to be employed as the Chief Executive Officer of the Company or the surviving entity by reason of a termination of employment by the Company or (B) terminates employment for Good Reason, in either case within six months of such event.

(d) CODE means the Internal Revenue Code of 1986, as amended.

(e) COMMON STOCK means common stock of the Company, having \$0.001 par value.

(f) COMPANY means Hybridon, Inc., a Delaware corporation.

(g) DISABILITY means the inability of the Executive to perform all the material duties of the Executive's position for a continuous period of at least 90 days due to a permanent physical or mental impairment, as determined and certified by a physician selected by the Executive and with the concurrence of a physician selected by the Company, provided that if the physician selected by the Executive and the physician selected by the Company do not agree regarding the determination and certification, a determination and certification rendered by an independent physician mutually agreed upon by the Executive and the Company shall be final and binding on the parties with respect to this Agreement.

(h) EMPLOYMENT AGREEMENT means the employment agreement by and between Stephen R. Seiler and Hybridon, Inc., effective as of July 25, 2001, including any subsequent amendments.

(i) EMPLOYMENT PERIOD means the period during which the Employment Agreement is in effect, as determined under Section 3 of the Employment Agreement.

(j) EXCHANGE ACT means the Securities Exchange Act of 1934, as amended.

(k) EXECUTIVE, solely for purposes of this Agreement, includes a Permitted Transferee.

(l) FAIR MARKET VALUE means, with respect to any property (including, without limitation, any shares of Common Stock or other securities of the Company), the fair market value of such property determined in good faith by such methods or procedures as shall be established from time to time by the Board. Notwithstanding the preceding sentence, where there exists a public market for the Common Stock, the Fair Market Value of a share of Common Stock shall be the closing price for a share of Common Stock for the last market trading date prior to the time of the determination (or, if no closing price was reported on that date, on the last trading date on which a closing price was reported) on the stock exchange determined by the Board to be the primary market for the Common Stock, as reported in The Wall Street Journal or such other source as the Board deems reliable.

(m) GOOD REASON means the occurrence of one or more of the following:

(i) any action by the Company which results in a material diminution of Executive's position, title, annual base salary, authority, duties or responsibilities or reporting structure; (ii) any material breach of the Employment Agreement by the Company which is not remedied by the Company within 30 days after receipt by the Company of notice thereof given by the Executive specifying in reasonable detail the alleged breach;

(iii) failure to elect the Executive to serve on the Board during the Employment Period; or

(iv) relocation of the Company's headquarters outside Cambridge, Massachusetts (or within 30 miles therefrom) or 10 miles east of the Worcester area, except in the event of a change in the location of the headquarters of the Company to a site within the continental United States following a Change of Control.

(n) OPTION PRICE means the purchase price paid by the Executive for each share of Common Stock purchased under this Agreement.

(o) PARENT means a parent corporation, as such term is defined under Section 424(e) and (g) of the Code, with respect to the Company.

(p) PERMITTED TRANSFEREE means the spouse, mother, father, sister, brother, or lineal descendant(s) of the Executive named in this Agreement or a trust established exclusively for the benefit of one or more such individuals.

(q) SUBSIDIARY means a subsidiary corporation, as such term is defined under Section 424(f) and (g) of the Code, with respect to the Company.

2. GRANT. The Company hereby grants to the Executive the right (the "Option") to purchase all or any part of an aggregate of 3,150,000 shares of Common Stock, subject to adjustment pursuant to Section 9, below. The Option is in all respects limited and conditioned as provided in this Agreement. This Option shall be a nonqualified stock option and is not intended to satisfy the requirements of Section 422 of the Code.

3. VESTING. The Executive may exercise the Option in accordance with the terms of this Agreement, in whole or in part, to the extent that the Executive's rights under the Option have vested.

(a) The Option shall vest as follows, subject to earlier vesting as described in paragraph (b), below.

NUMBER OF ADDITIONAL SHARES OF COMMON STOCK THAT VEST ON THIS DATE -----	DATE ----
157,500	December 1, 2001
157,500	March 1, 2002
157,500	June 1, 2002
157,500	September 1, 2002
157,500	December 1, 2002
157,500	March 1, 2003
157,500	June 1, 2003
157,500	September 1, 2003

157,500	December 1, 2003
157,500	March 1, 2004

157,500	June 1, 2004
157,500	September 1, 2004
157,500	December 1, 2004
157,500	March 1, 2005
157,500	June 1, 2005
157,500	September 1, 2005
157,500	December 1, 2005
157,500	March 1, 2006
157,500	June 1, 2006
157,500	September 1, 2006

(b) Notwithstanding the vesting schedule in paragraph (a), above, vesting of the Option shall be accelerated as described in this paragraph (b) upon the occurrence of the following events:

(i) CHANGE OF CONTROL. In the event of a Change of Control, the unvested portion of the Option shall become fully vested and nonforfeitable as of the date that is ten business days before the effective date of a Change of Control.

(ii) TERMINATION OF EMPLOYMENT.

(A) OTHER THAN FOR DEATH, DISABILITY, OR CAUSE. If the Executive's employment with the Company is terminated by the Company other than on account of the Executive's death, Disability, or for Cause, the Option shall vest as of the date of such termination of employment to the extent the Option would have vested during the following thirty-six months (or portion thereof) remaining in the Employment Period had the Executive's employment not been terminated.

(B) DEATH. If the Executive's employment with the Company is terminated by reason of the Executive's death, the Option shall vest as of the date of such termination of employment to the extent the Option would have vested during the following twelve months (or portion thereof) remaining in the Employment Period had the Executive's employment not been terminated.

(C) DISABILITY. If the Executive's employment with the Company is terminated by the Company for Disability pursuant to Section 7(a)(ii) of the Employment Agreement, the Option shall vest as of the date of such termination of employment to the extent the Option would have vested during the following twelve months (or portion thereof) remaining in the Employment Period had the Executive's employment not been terminated.

(D) TERMINATION BY THE EXECUTIVE FOR GOOD REASON. If the Executive terminates his employment with the Company for Good Reason, the Option shall vest as of the date of such termination of employment to the extent the Option would have vested during the following thirty-six months (or portion thereof) remaining in the Employment Period had the Executive's employment not been terminated.

(E) TERMINATION FOR CAUSE OR VOLUNTARY RESIGNATION (OTHER THAN FOR GOOD REASON). If the Executive's employment with the Company is terminated by the Company for Cause or by the Executive through his voluntary resignation (other than for Good Reason), the portion of the Option that has not vested shall terminate as of such termination of employment.

-4-

(iii) BOARD'S DISCRETION. Except as prescribed in subparagraphs (i) and (ii) above, the Board may, at any time, provide that the Option shall become immediately vested in full or in part.

4. OPTION PRICE. The Option Price of each share of Common Stock covered by the Option shall be \$ 0.84, subject to adjustment pursuant to Section 9, below.

5. TERM. The Option shall expire on July 25, 2011 ("Expiration Date"), to

the extent the Executive has not exercised the Option in full before the Expiration Date.

6. EXERCISE.

(a) The Executive may exercise the vested portion of this Option, in full or in part, before the Expiration Date, provided that if the Executive's employment or service with the Company or a Parent or Subsidiary is terminated:

(i) by the Company, a Parent or a Subsidiary for any reason other than death, Disability, or for Cause or by the Executive for Good Reason, the Option shall be exercisable for a period beginning on the termination date and ending on the earlier to occur of (A) twenty-four months after the effective date of a termination of Executive's employment or service with the Company or a Parent or a Subsidiary or (B) the Expiration Date;

(ii) as a result of the Executive's death or Disability, the Option shall be exercisable, by the Executive or the person or persons to whom the Executive's rights under the Option pass by will or applicable law, or if no such person has such right, the Executive's executors or administrators, for a period beginning on the termination date and ending on the earlier to occur of (A) twenty-four months after the effective date of his termination of employment or service with the Company or a Parent or Subsidiary or (B) the Expiration Date; or

(iii) as a result of Executive's voluntary resignation (other than for Good Reason) or as a result of termination by the Company for Cause, the Option shall be exercisable for a period beginning on the termination date and ending on the earlier to occur of (A) twelve months after the effective date of a termination of Executive's employment or service with the Company or a Parent or Subsidiary or (B) the Expiration Date.

(b) If the Executive wants to exercise the Option, the Executive shall give written notice, in such form as the Company may from time to time require, to the Company at its principal office by personal delivery, by registered or certified mail, or by such other method as the Company may permit. At minimum, the written notice shall identify the Option being exercised, shall state the number of shares of Common Stock with respect to which the Option is being exercised, and shall include payment for the shares of Common Stock with respect to which the Option is being exercised. The payment for shares of Common Stock acquired pursuant to the exercise of the Option shall be made at the principal office of the Company, as described in Section 7, below.

(c) Upon the exercise of the Option and upon the receipt by the Company of the payment for the shares of Common Stock pursuant to the exercise of the Option, the Company shall deliver or cause to be delivered, within a reasonable time, to the Executive exercising the Option a certificate or certificates for the number of shares of Common Stock with respect to which the Option is exercised. The shares of Common Stock shall be registered in the name of the exercising Executive or in such name jointly with the Executive as the Executive may direct in the written notice of exercise.

-5-

7. PAYMENT.

(a) The Option Price of shares of Common Stock subject to the Option and any tax withholding obligations arising as a result of the exercise of any portion of the Option may be paid in any combination of the following permitted forms of payment.

(i) in United States dollars in cash or by check made payable to the Company;

(ii) delivery of an irrevocable and unconditional undertaking by a creditworthy broker to deliver promptly to the Company sufficient funds to pay the Option Price or the amount of any applicable withholding taxes, or delivery

by the Executive to the Company of a copy of irrevocable and unconditional instructions to a creditworthy broker to delivery promptly to the Company cash or a check sufficient to pay the Option Price or the amount of any applicable withholding taxes;

(iii) by surrender of shares of Common Stock having an aggregate Fair Market Value, as of the date of payment, equal to all or a portion of the Option Price or the amount of any applicable withholding taxes;

(iv) by delivery of a promissory note of the Executive to the Company on terms determined by the Board; or

(v) by payment of such other lawful consideration as the Board may determine.

(b) Shares of Common Stock which may be surrendered in satisfaction of all or any portion of the Option Price or any tax withholding obligation that results from the exercise of any portion of this Option include shares of Common Stock covered by the portion of the Option that is being exercised and other shares of Common Stock held by the Executive; provided that shares of Common Stock surrendered to pay the Option Price shall be held by the Executive for at least six months as of the date of payment.

8. NONTRANSFERABILITY. The Option shall not be assignable or transferable by the Executive except by will or by the laws of descent and distribution and during the lifetime of the Executive shall be exercisable only by the Executive, except as provided in this Section 8. The Executive may, during his lifetime, transfer the Option, in whole or in part, to a Permitted Transferee. The transferred portion of the Option may be exercised only by the person or persons who acquire a proprietary interest in the Option pursuant to the transfer. The terms applicable to the transferred portion of the Option shall be the same as those in effect for the Option under this Agreement immediately prior to the transfer.

9. CAPITAL ADJUSTMENTS.

(a) ADJUSTMENTS TO COMMON STOCK. In connection with the occurrence of any stock split, stock dividend, recapitalization, reorganization, merger consolidation, combination, exchange of shares, liquidation, spin-off or other similar change in capitalization or event of the Company, or any distribution to holders of shares of Common Stock other than a normal cash dividend, the number and kind of shares of Common Stock issuable under this Option and the Option Price of the portion of the Option outstanding as of such event shall be adjusted (or substituted stock options may be made), to the extent the Board shall determine, in good faith, that such adjustment (or substitution) is necessary and appropriate, to reflect such event. On the occurrence of a Change of Control described in Section 1(c)(ii)(A) hereof (and limited to such event), the Board may provide for the following: (i) that the unexercised portion of the Option outstanding on the occurrence of a Change of Control described in

-6-

Section 1(c)(ii)(A) hereof shall be assumed or an equivalent Option be substituted by the acquiring or succeeding corporation (or an affiliate thereof), or (ii) that, upon written notice delivered to the Executive, the unexercised portion of the Option outstanding on the occurrence of a Change of Control described in Section 1(c)(ii)(A) shall terminate effective as of such date or as of such earlier date as may be specified by the Board in a written notice delivered to the Executive, provided that if the Board issues a notice regarding the termination of the unexercised portion of the Option pursuant to this clause (ii), the effective date of such termination shall not precede any vesting acceleration date described in Section 3(b)(i) hereof.

(b) BOARD DETERMINATIONS. To the extent that the foregoing adjustments relate to shares of Common Stock or other securities, such adjustments shall be made by the Board, whose determination in that respect shall be final, binding and conclusive; provided that if stock options granted under the Hybridon, Inc. Amended and Restated 1997 Stock Option Plan ("Plan")

are adjusted in connection with one or more of the events described in this Section 9, the Option shall be adjusted in a manner that is not less favorable than adjustments to stock options granted under the Plan.

10. AMENDMENT. The Board may amend this Agreement, provided that no amendment to this Agreement shall become effective before the Board obtains the Executive's consent to such amendment. In order to fully protect the interests of the Executive, the Board may correct any defect, supply any omission or reconcile any inconsistency between the terms of this Agreement and the terms of the Employment Agreement.

11. RIGHTS AS A SHAREHOLDER. Except as otherwise provided by the Board, the Executive shall have no rights as a shareholder with respect to any shares of Common Stock covered by this Agreement until becoming the record holder of such shares.

12. NO FRACTIONAL SHARES. No fractional shares of Common Stock shall be issued or delivered under this Agreement. Any fractional shares shall be settled in cash, property, or other securities, as determined by the Board.

13. REGISTRATION OF SHARES. The Company shall take all such actions as are necessary to ensure the unrestricted transferability of the shares of Common Stock issuable upon the exercise, in whole or in part, of the Option, including as may be required (i) the registration or qualification of the shares for sale under the federal securities laws and applicable state securities laws, (ii) listing of the shares on any stock exchange on which the Common Stock is listed and (iii) securing any other necessary governmental approvals.

14. WITHHOLDING. The Executive shall pay to the Company, or make provision satisfactory to the Board for payment of, any taxes required by law to be withheld in connection with the exercise of the Option not later than the date of the event creating the tax liability. The Company may, to the extent permitted by law, deduct any tax obligations not provided for in the preceding sentence, from any payment of any kind otherwise due to the Executive.

15. NO RIGHT TO CONTINUED EMPLOYMENT OR SERVICE. Nothing in this Agreement shall be deemed to give the Executive any right to be retained in employment by, or to continue to provide service to, the Company for any period of time, and no provision of this Agreement shall be deemed to interfere with the right of the Company to terminate the employment or service of the Executive pursuant to the terms of the Employment Agreement or any subsequent agreement between the Executive and the Company.

16. SEVERABILITY. If any provision of this Agreement is, becomes, or is deemed to be invalid, illegal, or unenforceable in any jurisdiction or as to the Executive, such provision shall be construed or deemed amended to conform with applicable laws, or if the provision cannot be so construed or deemed amended without, in the discretion of the Board, materially altering

-7-

the intent of the Agreement, such provision shall be severed as to the jurisdiction or the Executive and the remainder of this Agreement shall remain in full force and effect.

17. NOTICES AND PAYMENTS. Any notice required or permitted to be given to the Executive under this Agreement shall be in writing and shall be deemed effective upon personal delivery or upon deposit in the United States mail with postage and fees prepaid. Any notice or communication required or permitted to be given to the Company under this Agreement shall be in writing, addressed to the Secretary of the Company at the Company's principal office and shall be deemed effective upon personal delivery or upon deposit in the United States mail with postage and fees prepaid.

18. HEADINGS. The headings in this Agreement are for convenience of reference only and shall not be deemed a part of this Agreement for purposes of the interpretation or construction of this Agreement.

19. GOVERNING LAW. The validity and construction of this Agreement shall be governed by the laws of the State of Delaware without giving effect to any conflict of law rules that would require the application of the laws of any jurisdiction other than the internal laws of the State of Delaware to the rights and duties of the parties, except to the extent the laws of the State of Delaware are preempted by federal law.

IN WITNESS WHEREOF, the Company has caused this Agreement to be duly executed by an officer of the Company, and the Executive has accepted and signed this Agreement.

HYBRIDON, INC.

BY: /s/ YOUSSEF EL ZEIN

TITLE: VICE CHAIRMAN

DATE: 6/7/02

ACCEPTED:

/s/ STEPHEN R. SEILER

STEPHEN R. SEILER

DATE: 6/7/02

HYBRIDON, INC.

NON-STATUTORY STOCK OPTION AGREEMENT
(FOR 490,000 SHARES OF COMMON STOCK)

This Non-Statutory Stock Option Agreement ("Agreement") between Hybridon, Inc., a Delaware corporation, and the Executive, Stephen R. Seiler, is effective as of July 25, 2001 ("Effective Date"). This Agreement evidences the grant of a nonqualified stock option to the Executive effective as of the Effective Date, subject to the terms and conditions herein.

1. DEFINITIONS. All capitalized terms that are not otherwise defined in this Agreement shall have the meanings set forth below:

(a) BOARD means the Board of Directors of Hybridon, Inc.

(b) CAUSE means the Executive's (i) material breach of any material terms of the Employment Agreement, (ii) plea of guilty or nolo contendere to, or conviction of, the commission of a felony offense, (iii) repeated unexplained or unjustified absence, or refusals to carry out the lawful directions of the Board, or (iv) material breach of a fiduciary duty owed to the Company under the Employment Agreement, provided that any action or inaction described by (i), (iii), or (iv), above, shall not be the basis of a termination of the Executive's employment with the Company for "Cause" unless the Company provided the Executive with at least twenty days advance written notice specifying in reasonable detail the conduct in need of being cured and such conduct was not cured within the notice period.

(c) CHANGE OF CONTROL means the occurrence of any of the following events:

(i) a change in ownership or control of the Company effected through either of the following transactions:

(A) any "person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act), other than a current stockholder of the Company or a trustee or other fiduciary holding securities of the Company under an employee benefit plan maintained by the Company or any corporation owned, directly or indirectly, by the Company's stockholders in substantially the same proportions as their ownership of the Company's stock, becomes the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of the Company representing 50% or more of the total combined voting power of the Company's then-outstanding securities pursuant to a tender or exchange offer made directly to the Company's stockholders and which the Board does not recommend such stockholders to accept; or

(B) a change in the composition of the Board over a period of thirty-six consecutive months or less such that a majority of the members of the Board ceases to be comprised of individuals who are Continuing Members; for such purpose, a "Continuing Member" means an individual who is a member of the Board on the date of the Employment Agreement and any successor of a Continuing Member who is elected to the Board or nominated for election by action of a majority of Continuing Members then serving on the Board; or

(ii) either of the following stockholder-approved transactions to which the Company is a party:

(A) a merger or consolidation of the Company with any other corporation other than a merger or consolidation that would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving or acquiring

entity) at least 60% of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation; or

(B) the sale, transfer or complete liquidation or dissolution of the Company of all or substantially all of the Company's assets.

(iii) an event not otherwise described in subparagraph (i) or (ii), above, that is a merger or consolidation of the Company with any other corporation (other than a corporation controlled by, under common control with or controlling the Company), a sale or licensing by the Company of all or substantially all of the assets (including patents, patent applications and know-how) comprising either the Company's antisense technology or its immuno-modulatory technology, or a material acquisition by the Company, if, in connection with any of the events described in this subparagraph (iii), the Executive either (A) ceases to be employed as the Chief Executive Officer of the Company or the surviving entity by reason of a termination of employment by the Company or (B) terminates employment for Good Reason, in either case within six months of such event.

(d) CODE means the Internal Revenue Code of 1986, as amended.

(e) COMMON STOCK means common stock of the Company, having \$0.001 par value.

(f) COMPANY means Hybridon, Inc., a Delaware corporation.

(g) DISABILITY means the inability of the Executive to perform all the material duties of the Executive's position for a continuous period of at least 90 days due to a permanent physical or mental impairment, as determined and certified by a physician selected by the Executive and with the concurrence of a physician selected by the Company, provided that if the physician selected by the Executive and the physician selected by the Company do not agree regarding the determination and certification, a determination and certification rendered by an independent physician mutually agreed upon by the Executive and the Company shall be final and binding on the parties with respect to this Agreement.

(h) EMPLOYMENT AGREEMENT means the employment agreement by and between Stephen R. Seiler and Hybridon, Inc., effective as of July 25, 2001, including any subsequent amendments.

(i) EMPLOYMENT PERIOD means the period during which the Employment Agreement is in effect, as determined under Section 3 of the Employment Agreement.

(j) EXCHANGE ACT means the Securities Exchange Act of 1934, as amended.

(k) EXECUTIVE, solely for purposes of this Agreement, includes a Permitted Transferee.

(l) FAIR MARKET VALUE means, with respect to any property (including, without limitation, any shares of Common Stock or other securities of the Company), the fair market value of such property determined in good faith by such methods or procedures as shall be established from time to time by the Board. Notwithstanding the preceding sentence, where there exists a public market for the Common Stock, the Fair Market Value of a share of Common Stock shall be the closing price for a share of Common Stock for the last market trading date prior to the time of the determination (or, if no closing price was reported on that date, on the last trading date on which a closing price was reported) on the stock exchange determined by the Board to be the primary market for the Common Stock, as reported in The Wall Street Journal or such other source as the Board deems reliable.

(m) GOOD REASON means the occurrence of one or more of the following:

(i) any action by the Company which results in a material diminution of Executive's position, title, annual base salary, authority, duties or responsibilities or reporting structure; (ii) any material breach of the Employment Agreement by the Company which is not remedied by the Company within 30 days after receipt by the Company of notice thereof given by the Executive specifying in reasonable detail the alleged breach;

(iii) failure to elect the Executive to serve on the Board during the Employment Period; or

(iv) relocation of the Company's headquarters outside Cambridge, Massachusetts (or within 30 miles therefrom) or 10 miles east of the Worcester area, except in the event of a change in the location of the headquarters of the Company to a site within the continental United States following a Change of Control.

(n) OPTION PRICE means the purchase price paid by the Executive for each share of Common Stock purchased under this Agreement.

(o) PARENT means a parent corporation, as such term is defined under Section 424(e) and (g) of the Code, with respect to the Company.

(p) PERMITTED TRANSFEREE means the spouse, mother, father, sister, brother, or lineal descendant(s) of the Executive named in this Agreement or a trust established exclusively for the benefit of one or more such individuals.

(q) SUBSIDIARY means a subsidiary corporation, as such term is defined under Section 424(f) and (g) of the Code, with respect to the Company.

2. GRANT. The Company hereby grants to the Executive the right (the "Option") to purchase all or any part of an aggregate of 490,000 shares of Common Stock, subject to adjustment pursuant to Section 9, below. The Option is in all respects limited and conditioned as provided in this Agreement. This Option shall be a nonqualified stock option and is not intended to satisfy the requirements of Section 422 of the Code.

3. VESTING. The Executive may exercise the Option in accordance with the terms of this Agreement, in whole or in part, to the extent that the Executive's rights under the Option have vested.

(a) The Option shall vest as follows, subject to earlier vesting as described in paragraph (b), below.

NUMBER OF ADDITIONAL SHARES OF COMMON STOCK THAT VEST ON THIS DATE -----	DATE ----
122,500	December 1, 2001
122,500	March 1, 2002
122,500	June 1, 2002
122,500	September 1, 2002

(b) Notwithstanding the vesting schedule in paragraph (a), above, vesting of the Option shall be accelerated as described in this paragraph (b) upon the occurrence of the following events:

(i) CHANGE OF CONTROL. In the event of a Change of Control, the unvested portion of the Option shall become fully vested and nonforfeitable as of the date that is ten business days before the effective date of a Change of Control.

(ii) TERMINATION OF EMPLOYMENT.

(A) OTHER THAN FOR DEATH, DISABILITY, OR CAUSE. If the Executive's employment with the Company is terminated by the Company other than on account of the Executive's death, Disability, or for Cause, the Option shall vest as of the date of such termination of employment to the extent the Option would have vested during the following thirty-six months (or portion thereof) remaining in the Employment Period had the Executive's employment not been terminated.

(B) DEATH. If the Executive's employment with the Company is terminated by reason of the Executive's death, the Option shall vest as of the date of such termination of employment to the extent the Option would have vested during the following twelve months (or portion thereof) remaining in the Employment Period had the Executive's employment not been terminated.

(C) DISABILITY. If the Executive's employment with the Company is terminated by the Company for Disability pursuant to Section 7(a)(ii) of the Employment Agreement, the Option shall vest as of the date of such termination of employment to the extent the Option would have vested during the following twelve months (or portion thereof) remaining in the Employment Period had the Executive's employment not been terminated.

(D) TERMINATION BY THE EXECUTIVE FOR GOOD REASON. If the Executive terminates his employment with the Company for Good Reason, the Option shall vest as of the date of such termination of employment to the extent the Option would have vested during the following thirty-six months (or portion thereof) remaining in the Employment Period had the Executive's employment not been terminated.

(E) TERMINATION FOR CAUSE OR VOLUNTARY RESIGNATION (OTHER THAN FOR GOOD REASON). If the Executive's employment with the Company is terminated by the Company for Cause or by the Executive through his voluntary resignation (other than for Good Reason), the portion of the Option that has not vested shall terminate as of such termination of employment.

(iii) BOARD'S DISCRETION. Except as prescribed in subparagraphs (i) and (ii) above, the Board may, at any time, provide that the Option shall become immediately vested in full or in part.

4. OPTION PRICE. The Option Price of each share of Common Stock covered by the Option shall be \$ 0.71, subject to adjustment pursuant to Section 9, below.

5. TERM. The Option shall expire on July 25, 2011 ("Expiration Date"), to the extent the Executive has not exercised the Option in full before the Expiration Date.

6. EXERCISE.

(a) The Executive may exercise the vested portion of this Option, in full or in part, before the Expiration Date, provided that if the Executive's employment or service with the Company or a Parent or Subsidiary is terminated:

-4-

(i) by the Company, a Parent or a Subsidiary for any reason other than death, Disability, or for Cause or by the Executive for Good Reason, the Option shall be exercisable for a period beginning on the termination date and ending on the earlier to occur of (A) twenty-four months after the effective date of a termination of Executive's employment or service with the Company or a Parent or a Subsidiary or (B) the Expiration Date;

(ii) as a result of the Executive's death or Disability, the Option shall be exercisable, by the Executive or the person or persons to whom the Executive's rights under the Option pass by will or applicable law, or if no such person has such right, the Executive's executors or administrators, for a

period beginning on the termination date and ending on the earlier to occur of (A) twenty-four months after the effective date of his termination of employment or service with the Company or a Parent or Subsidiary or (B) the Expiration Date; or

(iii) as a result of Executive's voluntary resignation (other than for Good Reason) or as a result of termination by the Company for Cause, the Option shall be exercisable for a period beginning on the termination date and ending on the earlier to occur of (A) twelve months after the effective date of a termination of Executive's employment or service with the Company or a Parent or Subsidiary or (B) the Expiration Date.

(b) If the Executive wants to exercise the Option, the Executive shall give written notice, in such form as the Company may from time to time require, to the Company at its principal office by personal delivery, by registered or certified mail, or by such other method as the Company may permit. At minimum, the written notice shall identify the Option being exercised, shall state the number of shares of Common Stock with respect to which the Option is being exercised, and shall include payment for the shares of Common Stock with respect to which the Option is being exercised. The payment for shares of Common Stock acquired pursuant to the exercise of the Option shall be made at the principal office of the Company, as described in Section 7, below.

(c) Upon the exercise of the Option and upon the receipt by the Company of the payment for the shares of Common Stock pursuant to the exercise of the Option, the Company shall deliver or cause to be delivered, within a reasonable time, to the Executive exercising the Option a certificate or certificates for the number of shares of Common Stock with respect to which the Option is exercised. The shares of Common Stock shall be registered in the name of the exercising Executive or in such name jointly with the Executive as the Executive may direct in the written notice of exercise.

7. PAYMENT.

(a) The Option Price of shares of Common Stock subject to the Option and any tax withholding obligations arising as a result of the exercise of any portion of the Option may be paid in any combination of the following permitted forms of payment.

(i) in United States dollars in cash or by check made payable to the Company;

(ii) delivery of an irrevocable and unconditional undertaking by a creditworthy broker to deliver promptly to the Company sufficient funds to pay the Option Price or the amount of any applicable withholding taxes, or delivery by the Executive to the Company of a copy of irrevocable and unconditional instructions to a creditworthy broker to delivery promptly to the Company cash or a check sufficient to pay the Option Price or the amount of any applicable withholding taxes;

-5-

(iii) by surrender of shares of Common Stock having an aggregate Fair Market Value, as of the date of payment, equal to all or a portion of the Option Price or the amount of any applicable withholding taxes;

(iv) by delivery of a promissory note of the Executive to the Company on terms determined by the Board; or

(v) by payment of such other lawful consideration as the Board may determine.

(b) Shares of Common Stock which may be surrendered in satisfaction of all or any portion of the Option Price or any tax withholding obligation that results from the exercise of any portion of this Option include shares of Common Stock covered by the portion of the Option that is being exercised and other

shares of Common Stock held by the Executive; provided that shares of Common Stock surrendered to pay the Option Price shall be held by the Executive for at least six months as of the date of payment.

8. NONTRANSFERABILITY. The Option shall not be assignable or transferable by the Executive except by will or by the laws of descent and distribution and during the lifetime of the Executive shall be exercisable only by the Executive, except as provided in this Section 8. The Executive may, during his lifetime, transfer the Option, in whole or in part, to a Permitted Transferee. The transferred portion of the Option may be exercised only by the person or persons who acquire a proprietary interest in the Option pursuant to the transfer. The terms applicable to the transferred portion of the Option shall be the same as those in effect for the Option under this Agreement immediately prior to the transfer.

9. CAPITAL ADJUSTMENTS.

(a) ADJUSTMENTS TO COMMON STOCK. In connection with the occurrence of any stock split, stock dividend, recapitalization, reorganization, merger consolidation, combination, exchange of shares, liquidation, spin-off or other similar change in capitalization or event of the Company, or any distribution to holders of shares of Common Stock other than a normal cash dividend, the number and kind of shares of Common Stock issuable under this Option and the Option Price of the portion of the Option outstanding as of such event shall be adjusted (or substituted stock options may be made), to the extent the Board shall determine, in good faith, that such adjustment (or substitution) is necessary and appropriate, to reflect such event. On the occurrence of a Change of Control described in Section 1(c)(ii)(A) hereof (and limited to such event), the Board may provide for the following: (i) that the unexercised portion of the Option outstanding on the occurrence of a Change of Control described in Section 1(c)(ii)(A) hereof shall be assumed or an equivalent Option be substituted by the acquiring or succeeding corporation (or an affiliate thereof), or (ii) that, upon written notice delivered to the Executive, the unexercised portion of the Option outstanding on the occurrence of a Change of Control described in Section 1(c)(ii)(A) shall terminate effective as of such date or as of such earlier date as may be specified by the Board in a written notice delivered to the Executive, provided that if the Board issues a notice regarding the termination of the unexercised portion of the Option pursuant to this clause (ii), the effective date of such termination shall not precede any vesting acceleration date described in Section 3(b)(i) hereof.

(b) BOARD DETERMINATIONS. To the extent that the foregoing adjustments relate to shares of Common Stock or other securities, such adjustments shall be made by the Board, whose determination in that respect shall be final, binding and conclusive; provided that if stock options granted under the Hybridon, Inc. Amended and Restated 1997 Stock Option Plan ("Plan") are adjusted in connection with one or more of the events described in this Section 9, the Option shall be adjusted in a manner that is not less favorable than adjustments to stock options granted under the Plan.

-6-

10. AMENDMENT. The Board may amend this Agreement, provided that no amendment to this Agreement shall become effective before the Board obtains the Executive's consent to such amendment. In order to fully protect the interests of the Executive, the Board may correct any defect, supply any omission or reconcile any inconsistency between the terms of this Agreement and the terms of the Employment Agreement.

11. RIGHTS AS A SHAREHOLDER. Except as otherwise provided by the Board, the Executive shall have no rights as a shareholder with respect to any shares of Common Stock covered by this Agreement until becoming the record holder of such shares.

12. NO FRACTIONAL SHARES. No fractional shares of Common Stock shall be issued or delivered under this Agreement. Any fractional shares shall be settled

in cash, property, or other securities, as determined by the Board.

13. REGISTRATION OF SHARES. The Company shall take all such actions as are necessary to ensure the unrestricted transferability of the shares of Common Stock issuable upon the exercise, in whole or in part, of the Option, including as may be required (i) the registration or qualification of the shares for sale under the federal securities laws and applicable state securities laws, (ii) listing of the shares on any stock exchange on which the Common Stock is listed and (iii) securing any other necessary governmental approvals.

14. WITHHOLDING. The Executive shall pay to the Company, or make provision satisfactory to the Board for payment of, any taxes required by law to be withheld in connection with the exercise of the Option not later than the date of the event creating the tax liability. The Company may, to the extent permitted by law, deduct any tax obligations not provided for in the preceding sentence, from any payment of any kind otherwise due to the Executive.

15. NO RIGHT TO CONTINUED EMPLOYMENT OR SERVICE. Nothing in this Agreement shall be deemed to give the Executive any right to be retained in employment by, or to continue to provide service to, the Company for any period of time, and no provision of this Agreement shall be deemed to interfere with the right of the Company to terminate the employment or service of the Executive pursuant to the terms of the Employment Agreement or any subsequent agreement between the Executive and the Company.

16. SEVERABILITY. If any provision of this Agreement is, becomes, or is deemed to be invalid, illegal, or unenforceable in any jurisdiction or as to the Executive, such provision shall be construed or deemed amended to conform with applicable laws, or if the provision cannot be so construed or deemed amended without, in the discretion of the Board, materially altering the intent of the Agreement, such provision shall be severed as to the jurisdiction or the Executive and the remainder of this Agreement shall remain in full force and effect.

17. NOTICES AND PAYMENTS. Any notice required or permitted to be given to the Executive under this Agreement shall be in writing and shall be deemed effective upon personal delivery or upon deposit in the United States mail with postage and fees prepaid. Any notice or communication required or permitted to be given to the Company under this Agreement shall be in writing, addressed to the Secretary of the Company at the Company's principal office and shall be deemed effective upon personal delivery or upon deposit in the United States mail with postage and fees prepaid.

18. HEADINGS. The headings in this Agreement are for convenience of reference only and shall not be deemed a part of this Agreement for purposes of the interpretation or construction of this Agreement.

-7-

19. GOVERNING LAW. The validity and construction of this Agreement shall be governed by the laws of the State of Delaware without giving effect to any conflict of law rules that would require the application of the laws of any jurisdiction other than the internal laws of the State of Delaware to the rights and duties of the parties, except to the extent the laws of the State of Delaware are preempted by federal law.

IN WITNESS WHEREOF, the Company has caused this Agreement to be duly executed by an officer of the Company, and the Executive has accepted and signed this Agreement.

HYBRIDON, INC.

BY: /s/ YOUSSEF EL ZEIN

TITLE: VICE CHAIRMAN

DATE: 6/7/02

ACCEPTED:

/s/ STEPHEN R. SEILER

STEPHEN R. SEILER

DATE: 6/7/02

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Hybridon, Inc. (the "Company") for the period ended June 30, 2002 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Stephen R. Seiler, Chief Executive Officer of the Company, and Robert G. Andersen, Chief Financial Officer of the Company, each hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: August 14, 2002

/s/ Stephen R. Seiler

Stephen R. Seiler
Chief Executive Officer

Dated: August 14, 2002

/s/ Robert G. Andersen

Robert G. Andersen
Chief Financial Officer