As filed with the Securities and Exchange Commission on December 23, 1998
Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

HYBRIDON, INC.
(Exact name of registrant as specified in its charter)

Delaware	2836	04-3072298
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

155 Fortune Blvd., Milford, Massachusetts 01757
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

E. ANDREWS GRINSTEAD III
Chairman of the Board, President and Chief Executive Officer
HYBRIDON, INC.
155 Fortune Blvd.
Milford, Massachusetts 01757
(508) 482-7500
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:

MONICA C. LORD, ESQ.
Kramer Levin Naftalis & Frankel LLP
919 Third Avenue
New York, New York 10022

Approximate date of commencement of proposed sale to the public: From time to time after this registration statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. |X|

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. |_|

If this Form is a post-effective amendment filed pursuant to Rule 462(c)

under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.
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If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. |_|

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered (1)	Amount to be Registered	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Series A Convertible Preferred Stock, $.01 par value	641,259	$ 100 (3)	$64,125,900	$19,430.15
Common Stock, $.001 par value	10,195,175	1.15625(4)	11,788,171	3,571.82
Common Stock, $.001 par value, issuable upon conversion of Series A Convertible Preferred Stock	15,088,200(2)	-- (5)	--	--
Common Stock, $.001 par value, issuable upon exercise of Class A Warrants	3,002,958(2)	4.25 (2)(6)	12,762,571	3,867.05
Common Stock, $.001 par value, issuable upon exercise at Class B Warrants	1,752,945(2)	2.40 (2)(6)	4,207,068	1,274.74
Common Stock, $.001 par value, issuable upon exercise of Class C Warrants	904,274(2)	2.40 (2)(6)	2,170,257	657.88
Common Stock, $.001 par value, issuable upon exercise of Class D Warrants	672,267(2)	2.40 (2)(6)	1,613,441	488.87
Common Stock, $.0001 par value, issuable upon exercise of Forum Warrants	1,197,429	2.40 (2)(6)	1,462,065	443.01
Common Stock, $.0001 par value, issuable upon exercise of Forum Warrants	588,235	4.25 (2)(6)	2,499,999	757.50
Common Stock, $.0001 par value, issuable upon exercise of Pillar Investments Warrants	1,111,630	2.40 (2)(6)	2,667,912	808.38

(1) This Registration Statement is deemed to cover the registration of (i) up to 641,259 shares (the "Convertible Preferred Shares") of Series A Convertible Preferred Stock, $.001 per share par value (the "Convertible Preferred Stock") and 23,729,701 shares (the "Common Shares" and, together with the Convertible Preferred Shares, the "Securities") of Common Stock, $.01 per share par value (the "Common Stock") of Hybridon, Inc., a Delaware corporation (the "Company"), for sale by the holders thereof (the "Selling Securityholders"), subject to certain contractual restrictions applicable to certain of the Selling Securityholders that limit the time periods during which such Selling Securityholders may sell Securities. Such restrictions are described more fully in the Prospectus that forms a part of this Registration Statement.

(2) Pursuant to Rule 416 there are also being registered such additional shares of Common Stock as may become issuable pursuant to applicable anti-dilution provisions.

(3) Estimated solely for purposes of calculating the registration fee using the proposed offering price of the Series A Convertible Preferred Stock as

required by Rule 457(i).

Does not include any shares of Series A Preferred that may be issued in the future as a dividend, which shares are expressly excluded from this Registration Statement pursuant to Rule 416(b) under the Securities Act.

(4) Estimated solely for purposes of calculating the Registration Fee using the average of the bid and ask price for the Common Stock on December 17, 1998 as required by Rule 457(c).

(5) Pursuant to Rule 457(i) no additional registration fee required.

(6) Estimated solely for purposes of calculating the Registration Fee using the exercise price of the Warrants, as required by Rule 457(g)(1).

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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Subject to Completion; Dated December 23, 1998

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

HYBRIDON, INC.
155 Fortune Boulevard
Milford, Massachusetts 01757

Secondary Offering Prospectus

641,259 SHARES OF SERIES A CONVERTIBLE PREFERRED STOCK

AND

33,924,878 SHARES OF COMMON STOCK

Hybridon, Inc. ("Hybridon" or the"Company"), established in 1989, is engaged in the discovery and development of novel genetic medicines based primarily on antisense technology. This Registration Statement is being filed on behalf of certain securityholders of Hybridon who previously purchased Hybridon's shares in private offerings. The selling price of the shares to the public will be determined independently by the securityholders who seek to sell their shares. No underwriter has been employed to assist in the distribution. Hybridon will not receive any of the offering proceeds (other than proceeds upon exercise of certain Hybridon Warrants).

Common* Stock Trading Symbol:
NASDAQ Over-the-Counter-Bulletin-Board: HYBN
(*Prior to this offering there has been no public market for the Series A Convertible Preferred Stock.)

Investment in the securities being offered involves a high degree of risk. You should purchase the securities only if you can afford a complete loss. See "Risk Factors" beginning on page 10.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities, or determined if this Prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The selling securityholders have contractual limitations on their ability to sell their securities. See "Certain Restrictions on Transfer" beginning on page 96.

The date of this Prospectus is _____ ___, 1998.

SPECIAL NOTE REGARDING FORWARD-LOOKING INFORMATION

Certain statements in this Prospectus and in the documents incorporated herein constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). For this purpose, any statements contained herein or incorporated herein that are not statements of historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, the words "believes," "plans," "expects" and similar expressions are intended to identify forward-looking statements. There are a number of important factors that could cause the results of the Company to differ materially from those indicated by such forward-looking statements. These factors include those set forth in "Risk Factors" herein.

PROSPECTUS SUMMARY

This summary highlights selected information from this Prospectus. It does not contain all of the information you need to consider in making your investment decision. To understand all of the terms of the offering of the Series A Convertible Preferred Stock and the Common Stock, you should read this entire Prospectus carefully.

Overview of the Company

General

The Company, established in 1989, is a leader in the discovery and development of novel genetic medicines. These novel medicines use antisense technology to selectively inhibit the production of disease-causing proteins at the genetic level. The Company's leadership position is based on its development and therapeutic application of proprietary advanced antisense chemistries and the establishment of a manufacturing business for the large-scale synthesis of RNA and DNA (oligonucleotides) under good manufacturing practices ("GMP") prescribed by the U.S. Food and Drug Administration. See "The Company".

The Company believes it is the only company with systemically-administered advanced chemistry antisense compounds in clinical development. To date, the Company has initiated clinical development of three compounds based on its proprietary advanced chemistries and has several additional compounds in preclinical development.

In addition, the Company believes it is the only large-scale GMP manufacturer of oligonucleotides, with approximately 50 customers representing three distinct and diverse business areas: therapeutics, diagnostics and genomics. Finally, the Company has significant scale-up ability (with a relatively low additional capital investment) in its manufacturing facility, thereby providing the capability to respond to the Company's, its collaborators'

and its clients' potential needs for large-scale production of oligonucleotides for use in these diverse business areas.

The Company's efforts in the antisense field are based on an integrated antisense technology platform combining patented and proprietary medicinal chemistries, synthetic DNA manufacturing technology and analytical processes. The Company's strategy is to leverage this technology platform by applying its antisense oligonucleotides against a range of genetic targets associated with major diseases, by manufacturing oligonucleotides for its own internal use and on a custom contract basis for sale to third parties and by entering into collaborations with large pharmaceutical company partners for the development and commercialization of antisense oligonucleotide drugs directed against these genetic targets.

The Company is focusing its efforts on drug development programs involving advanced chemistry antisense compounds based on the Company's proprietary advanced mixed backbone chemistries. The Company believes that antisense compounds based on advanced chemistries may demonstrate favorable pharmaceutical attributes and may provide flexibility in addressing many biological targets.

An important part of the Company's business strategy is to enter into research and development collaborations, licensing agreements and other strategic alliances with third parties, primarily biotechnology and pharmaceutical corporations, for the development and commercialization of its products, and to engage in spin-outs of certain technology of the Company to minority-owned subsidiaries in order to obtain alternative financing for such technology. The Company is a party to a corporate collaboration with G.D. Searle & Co. ("Searle"), a subsidiary of Monsanto Company, in the fields of cancer, cardiovascular disease and inflammation/immunomodulation. In addition, the Company has licensed certain advanced chemistry compounds based on proprietary genetic targets with respect to DNA methyltransferase to a Quebec company, MethylGene, Inc. ("MethylGene") in exchange for a minority equity interest in MethylGene, and is currently in the process of licensing certain advanced chemistry compounds based on proprietary genetic targets with respect to the human papilloma virus and hepatitis B virus

genomes to another Quebec company, OriGenix Technologies Inc. ("OriGenix"), in exchange for a minority equity interest in OriGenix. The licensing of these programs will require the prior approval of the Lender under the Bank Credit Facility. See "Description of Capital Stock and Indebtedness -- Indebtedness -- Bank Credit Facility."

The Company's plan is to seek corporate collaborations with respect to each of its compounds in development. The Company intends to proceed with its GEM 231 clinical program through Phase II clinical trials, at which time it may seek a corporate collaborator. The Company generally does not anticipate proceeding with any of its other programs beyond their current stages of development without a collaborative arrangement with a corporate partner. There can be no assurance that the Company will enter into any collaborative arrangements with third parties with respect to these or any ofthe Company's future programs, nor can there be any assurance as to what the terms of such collaborative arrangements will be. See "Risk Factors -- Need to Establish Collaborative Commercial Relationships; Dependence on Partners."

Overview of the Securities

This prospectus (the "Prospectus") relates to the offer and sale of 641,259 shares (the "Convertible Preferred Shares") of Series A convertible preferred stock, $.01 par value per share (the "Convertible Preferred Stock"), and 33,924,878 shares (the "Common Shares" and, together with the Convertible Preferred Shares, the "Securities") of the common stock, $.001 par value per share (the "Common Stock"), of Hybridon, Inc., a Delaware corporation (the "Company"), by certain securityholders of the Company (the "Selling Securityholders").

Of the 641,259 Convertible Preferred Shares offered hereby,

- an aggregate of 510,505 Convertible Preferred Shares were issued, together with the Company's Class A warrants to purchase Common Stock

(the "Class A Warrants"), on May 5, 1998, in a registered exchange offer (the "Exchange Offer") for certain 9% convertible subordinated notes of the Company (the "9% Notes");

- an aggregate of 114,285 Convertible Preferred Shares were issued and sold, together with the Company's Class D warrants to purchase Common Stock (the "Class D Warrants") to certain investors in a private placement (the "Regulation D Preferred Offering") under Regulation D ("Regulation D") promulgated under the Securities Act, the final closing of which occurred on May 5, 1998; and

- an aggregate of 16,472 Convertible Preferred Shares were issued as a dividend to holders of Convertible Preferred Shares on September 30, 1998.

Of the 33,924,878 Common Shares offered hereby,

- an aggregate of 6,380,322 shares were issued and sold, together with the Company's Class B warrants to purchase Common Stock (the "Class B Warrants"), in offshore transactions (the "Regulation S Offerings") under Regulation S ("Regulation S") promulgated under the Securities Act, the final closing of which occurred on May 5, 1998;

- an aggregate of 3,217,154 shares were issued, together with the Company's Class C warrants to purchase Common Stock (the "Class C Warrants"), to certain investors in a private placement (the "Regulation D Offering");

- an aggregate of 1,111,630 shares are issuable upon exercise of warrants granted to Pillar Investments Ltd. ("Pillar Investments") as compensation for advisory and placement agent services rendered in connection with the Regulation S Offering;

- an aggregate of 3,002,958 shares are issuable upon exercise of the Class A Warrants, 1,752,945 shares are issuable upon exercise of the Class B Warrants, 904,274 shares are issuable upon exercise of the Class C Warrants and 672,267 shares are issuable upon exercise of the Class D Warrants;

- an aggregate of 597,699 shares were issued and an additional 1,197,429 shares are issuable upon exercise of certain warrants (the "Forum Warrants") granted to Forum Capital Markets LLC ("Forum"); and

- 15,088,200 shares are issuable upon conversion of the Convertible Preferred Stock.

In this Prospectus, the Class A Warrants, the Class B Warrants, the Class C Warrants, the Class D Warrants, the Forum Warrants and the Pillar Warrants are collectively referred to as the "Warrants." The shares of Common Stock that will be issued upon exercise of the Warrants are referred to as the "Warrant Shares." The shares of Common Stock that will be issued upon conversion of the Convertible Preferred Stock are referred to as the "Conversion Shares." The shares of Common Stock that were issued in the Regulation S Offering are referred to as the "Regulation S Shares." The shares of Common Stock that were issued in the Regulation D Offering are referred to as the "Regulation D Shares." The Preferred Shares, Warrant Shares, Conversion Shares, Regulation S Shares and Regulation D Shares are collectively referred to as the "Securities."

This Prospectus is intended for use by the Selling Securityholders of the Securities in resale transactions registered under the Securities Act. The Company will not receive any proceeds from the sale of the Securities (other than proceeds upon exercise of the Warrants). See "Selling Securityholders" and "Use of Proceeds."

NO PERSON HAS BEEN AUTHORIZED TO GIVE ANY INFORMATION OR TO MAKE ANY REPRESENTATIONS IN CONNECTION WITH THIS OFFERING OTHER THAN THOSE CONTAINED IN THIS PROSPECTUS AND, IF GIVEN OR MADE, SUCH OTHER INFORMATION AND REPRESENTATIONS MUST NOT BE RELIED UPON AS HAVING BEEN AUTHORIZED BY THE COMPANY. NEITHER THE DELIVERY OF THIS PROSPECTUS NOR ANY SALE MADE HEREUNDER

SHALL, UNDER ANY CIRCUMSTANCES, CREATE ANY IMPLICATION THAT THERE HAS BEEN NO CHANGE IN THE AFFAIRS OF THE COMPANY SINCE THE DATE HEREOF OR THAT THE INFORMATION CONTAINED HEREIN IS CORRECT AS OF ANY TIME SUBSEQUENT TO ITS DATE. THIS PROSPECTUS DOES NOT CONSTITUTE AN OFFER TO SELL OR A SOLICITATION OF AN OFFER TO BUY ANY SECURITIES OTHER THAN THE REGISTERED SECURITIES TO WHICH IT RELATES. THIS PROSPECTUS DOES NOT CONSTITUTE AN OFFER TO SELL OR A SOLICITATION OF AN OFFER TO BUY SUCH SECURITIES IN ANY CIRCUMSTANCES IN WHICH SUCH OFFER OR SOLICITATION IS UNLAWFUL.

The Offering

Common Stock.....	33,924,878 shares of Common Stock (plus an indeterminate number of additional shares of Common Stock that may be issued by the Company upon conversion of the Convertible Preferred Stock, including any Convertible Preferred Stock issued as dividends on the Convertible Preferred Stock, and exercise of the Warrants pursuant to antidilution provisions). See "Description of Securities."
Common Stock to be outstanding after the offering.....	Approximately 33,924,878 shares (assuming exercise of all Warrants and further assuming that the Convertible Preferred

	Stock and any Convertible Preferred Stock issued as of the date hereof as dividends on the Convertible Preferred Stock thereon, are converted into Common Stock at the maximum rate allowable by the terms of the agreements relating to the issuance of the Convertible Preferred Stock).
NASD OTC BULLETIN BOARD SYMBOL For Common Stock.....	HYBN
Convertible Preferred Stock.....	641,259 shares of Convertible Preferred Stock (plus an indeterminate number of additional shares that may be issued as dividends on the Convertible Preferred Stock).
Terms of Convertible Preferred:	
Dividend.....	6.5% per annum, payable on April 1 and October 1. The dividend may be paid with either cash or additional shares of Convertible Preferred Stock, at the option of Hybridon.
Liquidation Preference.....	$100.00 per share plus accrued but unpaid dividends.
Ranking.....	The Convertible Preferred Stock ranks, as to dividends and liquidation preference, senior to the Hybridon Common Stock.
Conversion.....	The Convertible Preferred Stock is convertible into Hybridon Common Stock beginning on May 5, 1999.
	The initial conversion price of the Convertible Preferred Stock (the "Conversion Price") is $4.25 (subject to

	antidilution adjustments set forth in the Certificate of Designation for the Convertible Preferred Stock).
Mandatory Conversion or Redemption.....	At any time after May 4, 1999 (but only after April 1, 2000 in the case of clause (ii) below), if the closing bid price of the Hybridon Common Stock is at least 250% of the then applicable conversion price of the Convertible Preferred Stock for 20 trading days in any 30 consecutive trading day period ending three days prior to the date of notice of conversion or redemption, as the

	case may be, Hybridon may (i) cause the Convertible Preferred Stock to be converted, in whole or in part, into Hybridon Common Stock at $4.00 per share or (ii) redeem the Convertible Preferred Stock for cash in an amount equal to $100.00 per share (subject to appropriate adjustment to reflect any stock split, reclassification or reorganization of the Convertible Preferred Stock) plus any accrued but unpaid dividends (provided that holders will have the right to convert into Hybridon Common Stock, at the Conversion Price, any shares so called for mandatory conversion or redemption).
Class Voting Rights.....	Hybridon shall not, without the affirmative vote or consent of the holders of at least 50% of all outstanding Convertible Preferred Stock, voting separately as a class, (i) amend, alter or repeal any provision of the Certificate of Incorporation or the By-Laws of Hybridon so as adversely to affect the relative rights, preferences, qualifications, limitations or restrictions of the Convertible Preferred Stock (with the issuance of securities ranking prior to, or pari passu with, the Convertible Preferred Stock (A) upon a Liquidation Event (as defined in the Certificate of Designation for Series A Preferred Stock) or (B) with respect to the payment of dividends or distributions, not being considered to so adversely affect), or (ii) authorize or issue, or increase the authorized amount of, the Convertible Preferred Stock, subject to certain exceptions.
Use of Proceeds.....	The Company will receive no proceeds from the sale of the Securities by the Selling Shareholders (other than proceeds upon exercise of certain Hybridon warrants).
Restrictions on Transfer.....	Most of the Securities offered hereby are subject to certain restrictions on transfer. These restrictions differ depending on the type of security and the transaction pursuant to which the

	Securities were purchased. See "Certain Restrictions on Transfer."
Risk Factors.....	Investment in the Securities involves a high degree of risk. See "Risk Factors."

SUMMARY FINANCIAL DATA

	Years Ended December 31,			Nine Months Ended September 30,	
	1995	1996	1997	1997	1998
	(In thousands, except per share data)			(Unaudited)	
Statement of Operations Data:					
Revenues					
Research and development.....	$ 1,186	$ 1,419	$ 945	$ 980	$ 950
Product and service revenue.....	--	1,080	1,877	1,232	2,353
Royalty income.....	--	62	48	33	--
Interest income.....	219	1,447	1,079	898	106
	1,405	4,008	3,949	3,143	3,409
Operating Expenses					
Research and development.....	29,685	39,390	46,828	37,785	17,181
General and administrative.....	6,094	11,347	11,026	9,012	5,218
Interest.....	173	124	4,536	3,223	2,880
Restructuring.....	--	--	11,020	3,100	--
Total operating expenses.....	35,952	50,861	73,410	53,120	25,279
Loss from operations.....	(34,547)	(46,853)	(69,461)	(49,977)	(21,870)
Extraordinary item:					
Gain on conversion of 9% convertible subordinated notes payable.....	--	--	--	--	8,877
Net Loss.....	(34,547)	(46,853)	(69,461)	(49,977)	(12,993)
Accretion of preferred stock dividend...	--	--	--	--	1,647
Net loss to common stockholders.....	$(34,547)	$(46,853)	$(69,461)	$(49,977)	$(14,640)
Basic and diluted net loss per per common share from:					
Operations.....	$ (94.70)	$(10.24)	$(13.76)	$ (9.90)	$ (2.21)
Extraordinary gain.....	--	--	--	--	0.83
Net loss.....	$ (94.70)	$(10.24)	$(13.76)	$ (9.90)	$ (1.37)
Shares Used in Computing Basic and Diluted Net Loss per Common Share(1)..	365	4,576	5,050	5,047	10,648
Other Financial Data:					
Ratio of earnings to fixed charges(2)	---	---	---	---	---

	December 31,		September 30,
	1996	1997	1998
Balance Sheet Data:			(Unaudited)
Cash, cash equivalents and short-term investments(3).....	$ 16,419	$ 2,202	$ 883
Working capital (deficit).....	8,888	(24,100)	(2,815)
Total assets.....	41,537	35,072	18,399

Long-term debt and capital lease obligations, net of current portion.	9,032	3,282	573
9% Convertible Subordinated Notes Payable.....	--	50,000	1,306

	December 31,		September 30,
	1996	1997	1998
			(Unaudited)
Deficit accumulated in the development stage.....	(149,194)	(218,655)	(233,295)
Total stockholders' equity (deficit)....	22,855	(46,048)	6,097

(1) Computed on the basis described in Notes 2(b) and 19(c) of Notes to Consolidated Financial Statements appearing elsewhere in this Prospectus.

(2) For the purpose of calculating the ratio of earnings to fixed charges, earnings represent the Company's loss from continuing operations before income taxes plus fixed charges. Fixed charges consist of interest expense on all indebtedness plus the interest portion of rental expense on non-cancelable leases and amortization of debt issuance costs and debt discount. The Company's earnings have been inadequate to meet its fixed charges in 1995, 1996 and 1997 and for the nine months ended September 30, 1997 and 1998 by $33.9 million, $46.4 million, $64.7 million, $46.6 million and $8.4 million, respectively.

(3) Short-term investments consisted of U.S. government securities with maturities greater than three months but less than one year from the purchase date.

RISK FACTORS

This Prospectus contains forward-looking statements that involve risks and uncertainties. The Company's actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those set forth in the following risk factors and elsewhere in this Prospectus. In addition to the other information contained in this Prospectus, the following risk factors should be considered carefully in evaluating the Company and its business before purchasing the Securities offered by this Prospectus.

Early Stage of Development; Technological Uncertainty. The Company's potential pharmaceutical products are at various stages of research, preclinical testing or clinical development. There are a number of technological challenges that the Company must successfully address to complete any of its development efforts. To date, most of the Company's resources have been dedicated to applying oligonucleotide chemistry and cell biology to the research and development of potential pharmaceutical products based upon antisense technology. As in most drug discovery programs, the results of in vitro, tissue culture and preclinical studies by the Company may be inconclusive and may not be indicative of results that will be obtained in human clinical trials. In addition, results obtained in early human clinical trials by the Company may not be indicative of results that will be obtained in later clinical trials. The Company has not successfully completed human clinical trials of a product based on antisense technology, and there can be no assurance that any of the Company's products will be successfully developed.

The success of any of the Company's potential pharmaceutical products depends in part on the molecular target on the genetic material chosen as the site of action of the oligonucleotide. There can be no assurance that the

Company's choice will be appropriate for the treatment of the targeted disease indication in humans or that mutations in the genetic material will not result in a reduction in or loss of the efficacy or utility of a Company product.

Uncertainty Associated with Clinical Trials. Before obtaining regulatory approvals for the commercial sale of any of its pharmaceutical products under development, the Company must undertake extensive and costly preclinical studies and clinical trials to demonstrate that such products are safe and efficacious. The results from preclinical studies and early clinical trials are not necessarily predictive of results that will be obtained in later stages of testing or development, and there can be no assurance that the Company's clinical trials will demonstrate the safety and efficacy of any pharmaceutical products or will result in pharmaceutical products capable of being produced in commercial quantities at reasonable cost or in a marketable form.

In July 1997, the Company discontinued the development of GEM 91, its first generation antisense drug for the treatment of AIDS and HIV infection based on a review of data from an open label Phase II clinical trial of patients with advanced HIV infection. In the Phase II trial, three of the nine subjects tested experienced decreases in platelet counts that required dose interruption. In addition, a review of the data showed inconsistent responses to the treatment and failed to confirm the decrease in cellular viremia observed in an earlier clinical trial.

Although the Company is conducting clinical trials of certain advanced chemistry oligonucleotide compounds and is developing several oligonucleotide compounds on which it plans to file IND applications with the U.S. Food and Drug Administration (the "FDA") and equivalent filings outside of the United States, there can be no assurance that necessary preclinical studies on these compounds will be completed satisfactorily or that the Company otherwise will be able to make its intended filings. Further, there can be no assurance that the Company will be permitted to undertake and complete human clinical trials of any of the Company's potential products, either in the United States or elsewhere, or, if permitted, that such products will not have undesirable side effects or other characteristics that may prevent or limit their commercial use.

The rate of completion of the Company's human clinical trials, if permitted, will be dependent upon, among other factors, the rate of patient enrollment. Patient enrollment is a function of many factors, including the size of the patient population, the nature of the protocol, the availability of alternative treatments, the proximity to clinical sites and the eligibility criteria for the study. Delays in planned patient enrollment might result in increased costs and delays, which could have a material adverse effect on the Company. The Company or the FDA or other regulatory agencies may suspend clinical trials at any time if the subjects or patients participating in such trials are being exposed to unacceptable health risks.

Future Capital Needs; Uncertainty of Additional Funding; Risk of Insolvency. The Company has extremely limited cash resources and substantial obligations to lenders, real estate landlords and trade creditors. The Company will be required to raise substantial additional funds through external sources, including through collaborative relationships and public or private financings. See "Management's Discussion and Analysis of Financial Condition and Results of Operations." Except for research and development funding from G.D. Searle & Co. ("Searle"), a subsidiary of Monsanto Company (which is subject to early termination in certain circumstances), certain research and development funding expected to be received from MethylGene, Inc. ("MethylGene") and sales of DNA and products and reagents manufactured on a custom contract basis by the Hybridon Specialty Products Division ("HSP Division"), Hybridon has no current external sources of capital, and expects no revenues from therapeutic products that it is developing for at least several years. No assurance can be given that additional financing will be available, or, if available, that it will be available on acceptable terms. If additional funds are raised by issuing equity securities, further dilution to then existing stockholders will result. Additionally, the terms of any such additional financing may adversely affect the holdings or rights of then existing stockholders. If adequate funds are not available, the Company may be required to (i) further curtail significantly one or more of its research, drug recovery or development programs, (ii) obtain funds through arrangements with collaborative partners or others that may require the Company to relinquish rights to certain of its technologies, product

candidates or products which the Company would otherwise pursue on its own or (iii) terminate operations.

The Company's future capital requirements will depend on many factors, including continued scientific progress in its research, drug discovery and development programs, the magnitude of these programs, progress with preclinical and clinical trials, sales of DNA products and reagents to third parties manufactured on a custom contract basis by the HSP Division and the margins on such sales, the time and costs involved in obtaining regulatory approvals, the costs involved in filing, prosecuting and enforcing patent claims, competing technological and market developments, the ability of the Company to establish and maintain collaborative academic and commercial research, development and marketing relationships, the ability of the Company to obtain third-party financing for leasehold improvements and other capital expenditures and the costs of manufacturing scale-up and commercialization activities and arrangements.

The Company has been informed by Arthur Andersen LLP, its independent public accountants, that their reports on the Company's December 31, 1998 financial statements will contain an explanatory fourth paragraph addressing the significant uncertainty regarding the Company's ability to continue operating as a going concern unless the Company is able to raise sufficient capital to fund operations for 1999 prior to the release of the audit report.

Bank Facility. The Company is a party to a credit facility (the "Bank Credit Facility") incurred to finance the leasehold improvements of its Milford manufacturing facility. The Bank Credit Facility contains certain financial covenants, including minimum liquidity and net worth requirements, and prohibits issuance of additional indebtedness and the payment of dividends. The indebtedness due under the Bank Credit Facility is subject to acceleration upon the occurrence of certain Events of Default set forth in Section 8 of the Loan and Security Agreement governing the Bank Credit Facility, which has been filed as an exhibit to the Registration Statement. The Company has secured its obligations under the Bank Credit Facility with a lien on all of its assets (including cash, deposit accounts and other cash equivalents, copyrights, patents and trademarks). There can be no assurance that the Company will not be required to prepay the Bank Credit Facility as a result of the occurrence of any Events of Default. See "Description of Capital Stock and Indebtedness -- Indebtedness -- Bank Credit Facility."

History of Operating Losses. The Company has incurred net losses since its inception. At September 30, 1998, the Company had incurred cumulative losses of approximately $231.6 million. Such losses have resulted principally from costs incurred in the Company's research and development programs and from general and administrative costs associated with the Company's development. No revenues have been generated from sales of pharmaceutical products developed by the Company and no revenues from the sale of such products are anticipated for a number of years, if ever. The Company expects to incur additional operating losses over the next several years and expects cumulative losses to increase as the Company's research and development and clinical trial efforts continue. The Company expects that losses will fluctuate from quarter to quarter and that such fluctuations may be substantial. Although the Company's HSP Division has begun to generate revenues from the sale of synthetic DNA products and reagents manufactured by it on a custom contract basis, there can be no assurance that demand for and margins on these products will not be lower than anticipated. The Company's ability to achieve profitability is dependent in part on obtaining regulatory approvals for its pharmaceutical products and entering into agreements for drug discovery, development and commercialization. There can be no assurance that the Company will obtain

required regulatory approvals, enter into any additional agreements for drug discovery, development and commercialization or ever achieve drug sales or profitability.

Risks of Low-Priced Stock; Possible Effect of "Penny Stock" Rules on Liquidity for the Company's Securities. Since neither the Convertible Preferred

Stock nor the Common Stock is listed on a national securities exchange or on a qualified automated quotation system, they are subject to Rule 15g-9 under the Exchange Act, which imposes additional sales practice requirements on broker-dealers that sell such securities. Rule 15g-9 defines a "penny stock" to be any equity security that has a market price (as therein defined) of less than $5.00 per share or with an exercise price of less than $5.00 per share, subject to certain exceptions including those described below. For transactions covered by this rule, a broker-dealer must make a special suitability determination for the purchaser and have received the purchaser's written consent to the transaction prior to sale.

The foregoing required penny stock restrictions would not apply to the Company's securities if those securities were listed on the Nasdaq National Market or SmallCap Market or on another national securities exchange or if the Company met certain minimum net tangible assets or average revenue criteria. The Company's securities do not currently qualify for exemption from the penny stock restrictions. There can be no assurance that either the Convertible Preferred Stock or the Common Stock will qualify for listing on the Nasdaq or on another national securities exchange in the foreseeable future, if at all. In any event, even if the Company's securities were exempt from such restrictions, the Company would remain subject to Section 15(b)(6) of the Exchange Act, which gives the Securities and Exchange Commission (the "Commission") the authority to restrict any person from participating in a distribution of penny stock, if the Commission finds that such a restriction would be in the public interest.

The market liquidity for the Company's securities is likely to be materially adversely affected by these requirements. In addition, such rules are likely to adversely affect the Company's ability to raise funds in the future, the ability of broker-dealers to sell the Company's securities and the ability of purchasers to sell any of the securities in the secondary market.

Patents and Proprietary Rights. The Company's success will depend in part on its ability to develop patentable products and obtain and enforce patent protection for its products both in the United States and in other countries. The Company has filed and intends to file applications as appropriate for patents covering both its products and processes. However, the patent positions of pharmaceutical and biotechnology firms, including Hybridon, are generally uncertain and involve complex legal and factual questions. No assurance can be given that patents will issue from any pending or future patent applications owned by or licensed to Hybridon. Since patent applications in the United States are maintained in secrecy until patents issue, and since publication of discoveries in the scientific or patent literature tend to lag behind actual discoveries by several months, the Company cannot be certain that it was the first creator of inventions covered by pending patent applications or that it was the first to file patent applications for such inventions. Further, there can be no assurance that the claims allowed under any issued patents will be sufficiently broad to protect the Company's technology. In addition, no assurance can be given that any issued patents owned by or licensed to the Company will not be challenged, invalidated or circumvented, or that the rights granted thereunder will provide competitive advantages to the Company.

The commercial success of the Company will also depend in part on its neither infringing patents issued to competitors or others nor breaching the technology licenses upon which the Company's products might be based. The Company's licenses of patents and patent applications impose various commercialization, sublicensing, insurance and other obligations on the Company. Failure of the Company to comply with these requirements could result in termination of the applicable license. The Company is aware of patents and patent applications belonging to competitors and others and it is uncertain whether these patents and patent applications will require the Company to alter its products or processes, pay licensing fees or cease certain activities. In particular, competitors of the Company and other third parties hold issued patents and pending patent applications relating to antisense and other gene expression modulation technologies which may result in claims of infringement against the Company or other patent litigation. There can be no assurance that the Company will be able successfully to obtain a license to any technology that it may require or that, if obtainable, such technology can be licensed at a reasonable cost or on an exclusive basis.

The pharmaceutical and biotechnology industries have been characterized by extensive litigation regarding patents and other intellectual property rights. Litigation, which could result in substantial cost to the Company, may be necessary to enforce any patents issued or licensed to the Company and/or to determine the scope and validity of others' proprietary rights. The Company also may have to participate in interference proceedings declared by the U.S. Patent

and Trademark Office, which could result in substantial cost to the Company, to determine the

priority of inventions. Furthermore, the Company may have to participate at substantial cost in International Trade Commission proceedings to abate importation of products which would compete unfairly with products of the Company.

Hybridon engages in collaborations, sponsored research agreements and other agreements with academic researchers and institutions and government agencies. Under the terms of such agreements, third parties may have rights in certain inventions developed during the course of the performance of such collaborations and agreements.

The Company relies on trade secrets and proprietary know-how which it seeks to protect, in part, by confidentiality agreements with its collaborators, employees and consultants. There can be no assurance that these agreements will not be breached, that the Company would have adequate remedies for any breach or that the Company's trade secrets will not otherwise become known or be independently developed by competitors.

Attraction and Retention of Key Employees and Scientific Collaborators; Employment Agreements. The Company is highly dependent on the principal members of its management and scientific staff, including E. Andrews Grinstead III, the Company's Chairman of the Board, President and Chief Executive Officer, and Sudhir Agrawal, the Company's Senior Vice President of Discovery and Chief Scientific Officer, the loss of whose services could have a material adverse effect on the Company. The Company has executed Employment Agreements with Messrs. Grinstead and Agrawal. Mr. Grinstead's agreement provides for an employment term ending on June 30, 2001 (unless sooner terminated in accordance with the provisions of the agreement), and Mr. Agrawal's agreement provides for an employment term ending on June 30, 2000 (unless sooner terminated in accordance with the agreement). Among other provisions, the agreements provide for severance payments in certain circumstances. See "Executive Compensation." From June 30, 1997 to December 1, 1998, the number of employees of the Company has decreased from 213 to 50. As a result, the Company has lost significant expertise and will be required to recruit and retain new personnel in order to perform its operations. In addition, any growth or expansion of the Company will require recruiting and retaining qualified scientific personnel to perform research and development work. There can be no assurance that under either circumstance the Company will be able to attract and retain such personnel on acceptable terms given the competition for experienced scientists among numerous pharmaceutical, biotechnology and health care companies, universities and non-profit research institutions. In addition, the Company's anticipated growth and expansion into areas and activities requiring additional expertise, such as clinical testing, governmental approvals, production and marketing, are expected to require the addition of new management personnel and the development of additional expertise by existing management personnel. The failure to acquire such services or to develop such expertise could have a material adverse effect on the Company.

The Company's success will depend in part on its continued ability to develop and maintain relationships with independent researchers and leading academic and research institutions. The competition for such relationships is intense, and there can be no assurance that the Company will be able to develop and maintain such relationships on acceptable terms. The Company has entered into a number of such collaborative relationships relating to specific disease targets and other research activities in order to augment its internal research capabilities and to obtain access to the specialized knowledge or expertise of its collaborative partners. The loss of any such collaborative relationship could have an adverse effect on the Company's ability to conduct research and development in the area targeted by such collaboration.

Risks Associated with the HSP Division. Through its HSP Division, the Company manufactures oligonucleotide compounds on a custom contract basis for third parties. The results of operations of the HSP Division will be dependent

upon the demand for and margins on these products, which may be lower than anticipated by the Company. The results of operations of the HSP Division also may be affected by the price and availability of raw materials. It is possible that Hybridon's manufacturing capacity may not be sufficient for production of oligonucleotides both for the Company's internal needs and for sale to third parties. The Company's manufacturing facility must comply with current good manufacturing practices ("GMP") and other FDA regulations.
See "Risk Factors -- Limited Manufacturing Capability."

The Company believes that it is currently manufacturing oligonucleotides in substantial compliance with FDA requirements for manufacturing in compliance with GMP, although its facility and procedures have not been formally inspected by the FDA and the procedures and documentation followed may have to be enhanced in the future as the Company expands its oligonucleotide production activities. Failure to establish to the FDA's satisfaction compliance with GMP can result in the FDA denying authorization to initiate or continue clinical trials, to receive approval of a product or to begin or to continue commercial marketing.

The Company will be competing against a number of third parties, as well as the possibility of internal production by the Company's customers, in connection with the operations of the HSP Division. Many of these third parties are likely to have greater financial, technical and human resources than the Company. Key competitive factors will include the price and quality of the products as well as manufacturing capacity and ability to comply with specifications and to fulfill orders on a timely basis. The Company may be required to reduce the cost of its product offerings to meet competition. See "Risk Factors -- Competition." Failure to manufacture oligonucleotide compounds in accordance with the purchaser's specifications could expose the Company to breach of contract and/or product liability claims from the purchaser or the purchaser's customers. The Company has limited experience in sales, marketing and distribution and is relying in part upon the efforts of a third party, Perkin-Elmer, in connection with the marketing and sale of products by the HSP Division. See "Risk Factors -- Absence of Sales and Marketing Experience."

Need to Establish Collaborative Commercial Relationships; Dependence on Partners. Hybridon's business strategy includes entering into strategic alliances or licensing arrangements with corporate partners, primarily pharmaceutical and biotechnology companies, relating to the development and commercialization of certain of its potential products. Although the Company is a party to a corporate collaboration with Searle, a subsidiary of Monsanto Company, in the fields of cancer, cardiovascular disease and inflammation/immunomodulation and Medtronic relating to Alzheimers, there can be no assurance that these collaborations will be scientifically or commercially successful, that the Company will be able to negotiate additional collaborations, that such collaborations will be available to the Company on acceptable terms or that any such relationships, if established, will be scientifically or commercially successful. The Company expects that under certain of these arrangements, the collaborative partner will have the responsibility for conducting human clinical trials and the submission for regulatory approval of the product candidate with the FDA and certain other regulatory agencies. Should the collaborative partner fail to develop a marketable product, the Company's business may be materially adversely affected. There can be no assurance that the Company's collaborative partners will not be pursuing alternative technologies or developing alternative compounds either on their own or in collaboration with others, including the Company's competitors, as a means for developing treatments for the diseases targeted by these collaborative programs. The Company's business will also be affected by the performance of its corporate partners in marketing any successfully developed products within the geographic areas in which such partners are granted marketing rights. The Company's plan is to retain manufacturing rights for many of the products it may license pursuant to arrangements with corporate partners. However, there can be no assurance that the Company will be able to retain such rights on acceptable terms, if at all, or that the Company will have the ability to produce the quantities of product required under the terms of such arrangements.

No Assurance of Regulatory Approval; Government Regulation. The Company's preclinical studies and clinical trials, as well as the manufacturing and marketing of the potential products being developed by it and the products sold by the HSP Division, are subject to extensive regulation by numerous federal, state and local governmental authorities in the United States. Similar regulatory requirements exist in other countries where the Company intends to test and market its drug candidates. Satisfaction of these requirements, which include demonstrating to the satisfaction of the FDA and foreign regulatory agencies that the product is both safe and effective, typically takes several years or more and can vary substantially based upon the type, complexity and novelty of the product. There can be no assurance that such testing will show any product to be safe or efficacious. Preclinical studies of the Company's product development candidates are subject to Good Laboratory Practices ("GLP") requirements and the manufacture of any products by the Company, including products developed by the Company and products manufactured for third parties on a custom contract basis by the HSP Division, will be subject to GMP requirements prescribed by the FDA. See "The Company -- Government Regulation."

The regulatory process, which includes preclinical studies, clinical trials and post-clinical testing of each compound to establish its safety and effectiveness, takes many years and requires the expenditure of substantial resources. Delays may also be encountered and substantial costs incurred in foreign countries. There can be no assurance that, even after the passage of such time and the expenditure of such resources, regulatory approval will be obtained for any drugs developed by the Company. Data obtained from preclinical and clinical activities are subject to varying interpretations which could delay, limit or prevent regulatory approval by the FDA or other regulatory agencies. The Company, an independent Institutional Review Board (an "IRB"), the FDA or other regulatory agencies may suspend clinical trials at any time if the participants in such trials are being exposed to unacceptable health risks. Moreover, if regulatory approval of a drug is granted, such approval may entail limitations on the indicated uses for which it may be marketed. Failure to comply with applicable regulatory requirements can, among other things, result in fines, suspension of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecutions. FDA policy may change and additional government

regulations may be established that could prevent or delay regulatory approval of the Company's potential products. Even if initial regulatory approvals for the Company's product candidates are obtained, the Company, its products and its manufacturing facilities would be subject to continual review and periodic inspection. Moreover, additional government regulation from future legislation or administrative action may be established which could prevent or delay regulatory approval of the Company's products or further regulate the prices at which the Company's proposed products may be sold. The regulatory standards for manufacturing are applied stringently by the FDA. In addition, a marketed drug and its manufacturer are subject to continual review and any subsequent discovery of previously unknown problems with a product or manufacturer may result in restrictions on such product or manufacturer, including withdrawal of the product from the market and withdrawal of the right to manufacture the product. All of the foregoing regulatory matters also will be applicable to development, manufacturing and marketing undertaken by any strategic partners or licensees of the Company.

Competition. There are many companies, both private and publicly traded, that are conducting research and development activities on technologies and products similar to or competitive with the Company's antisense technologies and proposed products. For example, many other companies are actively seeking to develop products, including antisense oligonucleotides, with disease targets similar to those being pursued by the Company. Some of these competitive products are in clinical trials and one antisense product for the treatment of cytomegalovirus has received FDA approval and is being commercialized. The Company believes that the industry-wide interest in investigating the potential of gene expression modulation technologies will continue and will accelerate as the techniques which permit the design and development of drugs based on such technologies become more widely understood. There can be no assurance that the

Company's competitors will not succeed in developing products based on oligonucleotides or other technologies, existing or new, which are more effective than any that are being developed by the Company, or which would render Hybridon's antisense technologies obsolete and noncompetitive. Moreover, there currently are commercially available products for the treatment of many of the disease targets being pursued by the Company.

Competitors of the Company engaged in all areas of biotechnology and drug discovery in the United States and other countries are numerous and include, among others, pharmaceutical and chemical companies, biotechnology firms, universities and other research institutions. Many of the Company's competitors have substantially greater financial, technical and human resources than the Company. In addition, many of these competitors have significantly greater experience than the Company in undertaking preclinical studies and human clinical trials of new pharmaceutical products and obtaining FDA and other regulatory approvals of products for use in health care. Furthermore, if the Company is permitted to commence commercial sales of products, it will also be competing with respect to manufacturing efficiency and marketing capabilities, areas in which it has limited or no experience. Accordingly, the Company's competitors may succeed in obtaining FDA or other regulatory approvals for products or in commercializing such products more rapidly than the Company.

Limited Manufacturing Capability. While the Company believes that its existing production capacity will be sufficient to enable it to satisfy its current research needs and to support the Company's preclinical and clinical requirements for oligonucleotide compounds, the Company will need to purchase additional equipment to expand its manufacturing capacity in order to satisfy its future requirements, subject to obtaining regulatory approvals, for commercial production of its product candidates. In addition, the HSP Division is using the Company's existing production capacity to custom contract manufacture synthetic DNA products for commercial sale. As a result, depending on the level of sales by the HSP Division, and the success of the Company's product development programs, Hybridon's manufacturing capacity may not be sufficient for production for both its internal needs and sales to third parties. In addition, in order successfully to commercialize its product candidates or achieve satisfactory margins on sales, the Company may be required to reduce further the cost of production of its oligonucleotide compounds, and there can be no assurance that the Company will be able to do so.

The manufacture of the Company's products is subject to GMP requirements prescribed by the FDA or other standards prescribed by the appropriate regulatory agency in the country of use. There can be no assurance that the Company will be able to manufacture products in a timely fashion and at acceptable quality and price levels, that it or its suppliers can manufacture in compliance with GMP or other regulatory requirements or that it or its suppliers will be able to manufacture an adequate supply of product. The Company has in the past relied in part, and may in the future rely, upon third party contractors in connection with the manufacture of some compounds. Reliance on such third parties entails a number of risks, including the possibility that such third parties may fail to perform on an effective or timely basis or fail to abide by regulatory or contractual restrictions applicable to the Company.

There are extremely limited sources of supply for the nucleotide building blocks used by the Company in its current oligonucleotide manufacturing process. This process is covered by issued patents either held by or licensed to these suppliers. Therefore, these suppliers are likely the sole suppliers to Hybridon of these nucleotide building blocks. There can be no assurance that nucleotide building blocks will be obtainable at acceptable costs, if at all. The inability of Hybridon to obtain these nucleotide building blocks from one of these suppliers, or to obtain them at an acceptable cost, could have a material adverse effect on Hybridon.

Absence of Sales and Marketing Experience. The Company may eventually market and sell certain of its prospective therapeutic products directly and certain of its prospective therapeutic products through co-marketing or other licensing arrangements with third parties. The Company has limited experience in

sales, marketing or distribution, and would not expect to establish a sales and marketing plan or direct sales capability with respect to the therapeutic products being developed by it until such time as one or more of such products approaches marketing approval, if at all. In addition, although the Company does have a limited direct sales capability with respect to the sales of custom contract manufactured DNA products to third parties by the HSP Division, the Company has entered into a sales and marketing arrangement with Perkin-Elmer Corporation ("Perkin-Elmer") with respect to such products and is reliant in part on the efforts of Perkin-Elmer to promote these products. In order to market the therapeutic products being developed by it directly, the Company would be required to develop a substantial marketing staff and sales force with technical expertise and with supporting distribution capability. There can be no assurance that the Company would be able to build such a marketing staff or sales force, that the cost of establishing such a marketing staff or sales force would be justifiable in light of any product revenues or that the Company's direct sales and marketing efforts would be successful. In addition, if the Company succeeds in bringing one or more therapeutic products to market, it may compete with other companies that currently have extensive and well-funded marketing and sales operations. There can be no assurance that the Company's marketing and sales efforts would enable it to compete successfully against such other companies. To the extent the Company enters into co-marketing or other licensing arrangements, any revenues received by the Company for its therapeutic products will be dependent in part on the efforts of third parties and there can be no assurance that such efforts will be successful.

No Assurance of Market Acceptance. Pharmaceutical products, if any, resulting from the Company's research and development programs are not expected to be commercially available for a number of years. There can be no assurance that, if approved for marketing, such products will achieve market acceptance. The degree of market acceptance will depend upon a number of factors, including the receipt of regulatory approvals, the establishment and demonstration in the medical community of the clinical efficacy and safety of the Company's products and their potential advantages over existing treatment methods and reimbursement policies of government and third-party payors. There is no assurance that physicians, patients, payors or the medical community in general will accept or utilize any products that may be developed by the Company.

Product Liability Exposure and Insurance. The use of any of the Company's potential products in clinical trials and the commercial sale of any products, including the products being developed by it and the DNA products and reagents manufactured and sold on a custom contract basis by the HSP Division, may expose the Company to liability claims. These claims might be made directly by consumers, health care providers or by pharmaceutical and biotechnology companies or others selling such products. Hybridon has product liability insurance coverage, and such coverage is subject to various deductibles. Such coverage is becoming increasingly expensive, and no assurance can be given that the Company will be able to maintain or obtain such insurance at reasonable cost or in sufficient amounts to protect the Company against losses due to liability claims that could have a material adverse effect on the Company.

Hazardous Materials. The Company's research and development and manufacturing activities involves the controlled use of hazardous materials, chemicals, viruses and various radioactive compounds. Although the Company believes that its safety procedures for handling and disposing of such materials comply with the standards prescribed by federal, state and local regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, the Company could be held liable for any damages that result and any such liability could have a material adverse effect on the Company.

Uncertainty of Pharmaceutical Pricing and Adequate Reimbursement. The Company's ability to commercialize its pharmaceutical products successfully will depend in part on the extent to which appropriate reimbursement levels for the cost of such products and related treatment are obtained from government authorities, private health insurers and other organizations, such as health maintenance organizations ("HMOs"). Third-party payors are increasingly challenging the prices charged for medical products and services. There can be no assurance

that any of the Company's potential products will be considered cost-effective or that adequate third-party reimbursement will be available to enable the Company to maintain price levels sufficient to realize an appropriate return on its investments. Also the trend towards managed health care in the United States and the concurrent growth of organizations such as HMOs, which could control or significantly influence the purchase of health care services and products, as well as legislative proposals to reduce government insurance programs, may all result in lower prices for the Company's products. The cost containment measures that health care providers are instituting could affect the Company's ability to sell its products and may have a material adverse effect on the Company.

Uncertainty of Health Care Reform Measures. Federal, state and local officials and legislators (and certain foreign government officials and legislators) have proposed or are reportedly considering proposing a variety of reforms to the health care systems in the United States and abroad. The Company cannot predict what health care reform legislation, if any, will be enacted in the United States or elsewhere. Significant changes in the health care system in the United States or elsewhere are likely to have a substantial impact over time on the manner in which the Company conducts its business. Such changes could have a material adverse effect on the Company. The existence of pending health care reform proposals could have a material adverse effect on the Company's ability to raise capital. Furthermore, the Company's ability to commercialize its potential products may be adversely affected to the extent that such proposals have a material adverse effect on the business, financial condition and profitability of other companies that are prospective corporate partners with respect to certain of the Company's proposed products.

Possible Volatility of Share Price. Investors should be aware that market prices for securities of companies such as Hybridon are highly volatile. Factors such as the results of preclinical studies and clinical trials by the Company or its competitors, fluctuations in the Company's operating results, announcements of technological innovations or new commercial therapeutic products by the Company or its competitors, governmental regulation, developments in patent or other proprietary rights, of the Company or its competitors, including litigation, public concern as to the safety of drugs developed by the Company and general market conditions may have a significant effect on the market price of the Company's Common Stock.

Antitakeover Provisions. The Company is subject to the provisions of Section 203 of the Delaware General Corporation Law. Section 203 prohibits a publicly-held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. A "business combination" includes mergers, asset sales and other transactions resulting in a financial benefit to the interested stockholder. Subject to certain exceptions, an "interested stockholder" is a person who, together with affiliates and associates, owns, or within three years did own, 15% or more of the corporation's voting stock. The existence of this provision can be expected to deter certain business combinations, including transactions that might otherwise result in holders of voting stock being paid a premium over the market price for their shares.

The Restated Certificate of Incorporation of the Company (the "Restated Certificate of Incorporation") provides for the division of the Board of Directors into three classes as nearly equal in size as possible with staggered three-year terms. In addition, the Restated Certificate of Incorporation provides that directors may be removed only for cause by the affirmative vote of the holders of at least two-thirds of the shares of capital stock of the corporation entitled to vote. Under the Restated Certificate of Incorporation, any vacancy on the Board of Directors, however occurring, including a vacancy resulting from an enlargement of the Board, may be filled only by vote of a majority of the directors then in office. The classification of the Board of Directors and the limitations on the removal of directors and filling of vacancies could have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from acquiring, control of the Company.

The Restated Certificate of Incorporation also requires that any action required or permitted to be taken by the stockholders of the Company at an annual meeting or special meeting of stockholders may only be taken if it is properly brought before such meeting and may not be taken by written action in

lieu of a meeting and will require reasonable advance notice by a stockholder of a proposal or director nomination which such stockholder desires to present at any annual or special meeting of stockholders. The Restated Certificate of Incorporation further provides that special meetings of the stockholders may be called only by the Chief Executive Officer or, if none, the President of the Company or by the Board of Directors. Under the Company's Amended and Restated By-Laws (the "By-Laws"), in order for any matter to be considered "properly brought" before a meeting, a stockholder must comply with certain requirements regarding advance notice to the Company. The foregoing provisions could have the effect of delaying until the next stockholders meeting stockholder actions which are favored by the holders of a majority of the outstanding voting securities of the Company. These provisions may also discourage another

person or entity from making a tender offer for the Company's Common Stock, because such person or entity, even if it acquired a majority of the outstanding voting securities of the Company, would be able to take action as a stockholder (such as electing new directors or approving a merger) only at a duly called stockholders meeting, and not by written consent.

The Delaware General Corporation Law provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's certificate of incorporation or by-laws, unless a corporation's certificate of incorporation or by-laws, as the case may be, requires a greater percentage. The Restated Certificate of Incorporation and the By-Laws require the affirmative vote of the holders of at least 75% of the shares of capital stock of the Company issued and outstanding and entitled to vote to amend or repeal any of the provisions described in the prior two paragraphs. Moreover, the Board of Directors has the authority, without further action by the stockholders, to fix the rights and preferences of, and to issue shares of, Preferred Stock. In addition to these provisions of Delaware law, the Restated Certificate of Incorporation and the Company's By-Laws, the terms of the Company's outstanding 9% Notes, which were issued in the aggregate original principal amount of $50.0 million and of which approximately $1.3 million in principal amount remains outstanding, require the Company, upon a Change of Control of the Company (as defined in the indenture for the 9% Notes (the "Indenture"), to offer to repurchase the 9% Notes at a repurchase price equal to 150% of the principal amount thereof, plus accrued and unpaid interest to the date of repurchase. Pursuant to the terms of the Convertible Preferred Stock the Company may, at its election, pay dividends either in cash or in additional shares of the Convertible Preferred Stock. The Company does not anticipate paying any dividends on the Convertible Preferred Stock in the future. This provision, together with the provisions of the Restated Certificate of Incorporation described above and other provisions of the Restated Certificate of Incorporation, may have the effect of deterring hostile takeovers or delaying or preventing changes in control or management of the Company, including transactions in which stockholders might otherwise receive a premium for their shares over then current market prices. In addition, these provisions may limit the ability of stockholders to approve transactions that they may deem to be in their best interests.

No Dividends On Common Stock or Cash Dividends on Preferred Stock Anticipated in the Foreseeable Future. The Company has not paid any cash dividends on the Common Stock since its inception and does not anticipate paying any cash dividends on its Common Stock in the future. Pursuant to the terms of the Convertible Preferred Stock the Company may, at its election, pay dividends either in cash or in additional shares of the Convertible Preferred Stock. The Company does not anticipate paying any cash dividends on the Convertible Preferred Stock in the future. Declaration of dividends on the Common Stock, or payment of cash dividends on this Convertible Preferred Stock, will depend upon, among other things, future earnings, the operating and financial condition of the Company, its capital requirements and general business conditions. However, the Indenture pursuant to which the 9% Notes were issued limits the Company's ability to pay dividends or make other distributions on its Common Stock or to pay cash dividends on the Convertible Preferred Stock, and the Company is currently prohibited from paying cash dividends under the Bank Credit Facility.

Liquidation Put Right. The initial purchasers (the "Liquidation Put Holders") of certain of the shares (the "Put Shares") of Common Stock sold in the Regulation S and the Regulation D Offerings have the right to put (the "Liquidation Put") those shares back to the Company upon the liquidation of the Company, but only after all other indebtedness and obligations of the Company and all rights of any holders of any capital stock ranking prior and senior to the Common Stock with respect to liquidation have been satisfied in full. The Liquidation Put is not transferrable, however. Purchasers of Common Stock pursuant to this Prospectus will therefore not be able to exercise the Liquidation Put with respect to those shares. Any Liquidation Put Holders that have not sold or otherwise transferred any Put Shares will, however, be able to exercise the Liquidation Put with respect to those Put Shares upon a liquidation of the Company. In such circumstances, holders of shares of the Company's Common Stock that are not subject to the Liquidation Put right may receive smaller liquidation distributions per share than they would have had no Liquidation Put Holders exercised the Liquidation Put. As of December 1, 1998, there were 9,597,476 Put Shares outstanding.

Certain Federal Income Tax Consequences to the Company. For Federal income tax purposes, net operating loss and tax credit carryforwards as of December 31, 1997 are approximately $205,997,000 and $3,436,000, respectively. These carryforwards will expire beginning on December 31, 2005. The Tax Reform Act of 1986 provided for a limitation on the annual use of net operating loss and tax credit carryforwards following certain ownership changes. The Company believes that the securities offerings conducted by the Company are likely to restrict severely the Company's ability to utilize its net operating losses and tax credits in any particular year. Additionally, because the U.S. tax laws limit the time during which net operating loss and tax credit carryforwards

may be applied against future taxable income and tax liabilities, respectively, the Company may never be fully able to use its net operating loss and tax credits for federal income tax purposes.

Year 2000 Compliance. As has been widely publicized, many computer systems and microprocessors are not programmed to accommodate dates beyond the year 1999. The Company's exposure to this year 2000 ("Y2K") problem comes not only from its own internal computer systems and microprocessors, but also from the systems and microprocessors of its key suppliers, including utility companies and payroll services.

The Company is currently evaluating all of its internal computer systems and microprocessors in light of the Y2K problem. Testing of all its internal computer systems and microprocessors should be completed by the end of the first quarter of 1999. The Company does not expect the cost of bringing all the Company's systems and microprocessors into Y2K compliance will be material. The Company currently believes that all of its internal systems will be Y2K compliant by the end of the third quarter of 1999.

The Company is not currently able to assess the Y2K readiness of its research partners, or the potential impact, if any, of a research partner's failure to be Y2K compliant. With regard to potential supplier Y2K problems, the Company has compiled a list of its critical suppliers, and has sent a Y2K questionnaire to each of them in order to permit the Company to ascertain the Y2K compliance status of each. The Company is awaiting the return of these questionnaires. The Company does not currently know of any key supplier Y2K problems that could have a material effect on the Company's business. If through a Y2K questionnaire or otherwise the Company becomes aware of any such problems and is not satisfied that those problems are being adequately addressed, it will take appropriate steps to find alternative suppliers.

It has been acknowledged by governmental authorities that Y2K problems have the potential to disrupt global economies, that no business is immune from the potentially far-reaching effects of Y2K problems, and that it is difficult to predict with certainty what will happen after December 31, 1999. Consequently, it is possible that Y2K problems will have a material effect on the Company's business even if the Company takes all appropriate measures to

ensure that it and its key suppliers are Y2K compliant.

It is possible that the conclusions reached by the Company from its analysis to date will change, which could cause the Company's Y2K cost estimates and target completion dates to change.

Concentration of Ownership by Directors and Executive Officers. The Company's directors and executive officers and their affiliates beneficially own a significant percentage of the Company's outstanding Common Stock and Convertible Preferred Stock. See "Security Ownership of Certain Beneficial Owners and Management." As a result, these stockholders, if acting together, may have the ability to influence the outcome of corporate actions requiring stockholder approval. This concentration of ownership may have the effect of delaying or preventing a change in control of the Company.

THE COMPANY

Available Information About The Company

The Company is subject to the informational requirements of the Exchange Act, and in accordance therewith files reports, proxy statements and other information with the Commission. Such reports, proxy statements and other information may be inspected and copied at the public reference facilities maintained by the Commission at 450 Fifth Street, N.W., Room 1024, Washington, D.C. 20549 and at the Commission's regional offices located at Seven World Trade Center, Suite 1300, New York, New York 10048, and at Citicorp Center, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661. Copies of such materials also may be obtained from the Public Reference Section of the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549 at prescribed rates. In addition, the Company is required to file electronic versions of these documents through the Commission's Electronic Data Gathering, Analysis and Retrieval system (EDGAR). The Commission maintains a World Wide Web site at http://www.sec.gov that contains reports, proxy and information statements and other information regarding registrants that file electronically with the Commission.

The Company has filed with the Commission a Registration Statement on Form S-1 (together with all amendments, supplements, exhibits and schedules thereto, the "Registration Statement") under the Securities Act, with respect to the Securities offered hereby. This Prospectus does not contain all of the information set forth in the Registration Statement, as certain items are omitted in accordance with the rules and regulations of the Commission. For further information pertaining to the Company and the Securities, reference is made to such Registration Statement. Statements contained in this Prospectus regarding the contents of any agreement or other document are not necessarily complete, and in each instance reference is made to the copy of such agreement or document filed as an exhibit to the Registration Statement, each such statement being qualified in all respects by such reference. The Registration Statement may be inspected without charge at the office of the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549, and copies of all or any part thereof may be obtained from the Commission at prescribed rates.

General

The Company, established in 1989, is a leader in the discovery and development of novel genetic medicines. These novel medicines use antisense technology (see "Technology Overview") to selectively inhibit the production of disease-causing proteins at the genetic level. The Company's leadership position is based on its development and therapeutic application of proprietary advanced antisense chemistries and the establishment of a manufacturing business for the large-scale synthesis of RNA and DNA (oligonucleotides) under GMP.

The Company believes it is the only company with systemically-administered advanced chemistry antisense compounds in clinical development. To date, the Company has initiated clinical development of three compounds based on its proprietary advanced chemistries and has several additional compounds in preclinical development.

The Company believes it is the only large-scale GMP manufacturer of oligonucleotides, with approximately 50 customers representing three distinct and diverse business areas: therapeutics, diagnostics and genomics. In addition,

the Company has significant scale-up ability (with a relatively low additional capital investment) in its manufacturing facility, thereby providing the capability to respond to the Company's, its collaborators' and its clients' potential needs for large-scale production of oligonucleotides for use in these diverse business areas.

The Company's efforts in the antisense field are based on an integrated antisense technology platform combining patented and proprietary medicinal chemistries, synthetic DNA manufacturing technology and analytical processes. The Company's strategy is to leverage this technology platform by applying its antisense oligonucleotides against a range of genetic targets associated with major diseases, by manufacturing oligonucleotides for its own internal use and on a custom contract basis for sale to third parties and by entering into collaborations with large pharmaceutical company partners for the development and commercialization of antisense oligonucleotide drugs directed against these genetic targets.

In particular, the Company believes that these advanced chemistries provide the potential for reduced side effects and enhanced metabolic stability, which may result in less frequent dosing and therefore lower costs per treatment, as well as the potential for oral administration. The Company has three compounds in clinical development (one with two formulations using different routes of administration) and several other compounds in advanced preclinical development. The compounds in the clinical phase of drug development are:

- - GEM 231 for the treatment of a variety of cancers (gene target is protein kinase A), which is currently in Phase II clinical trials in patients with solid tumors who are no longer benefited by other treatments;

- - GEM 92 for the treatment of HIV infection and AIDS, which has completed a pilot Phase I clinical study in Europe. The Company believes this was the first oral administration of antisense molecules to humans; and

- - GEM 132 for the treatment of systemic cytomegalovirus ("CMV") infections and retinitis, which is now in Phase I/II clinical trials in the United States and Canada. The Company believes these clinical trials are the first clinical trials involving administration of a second-generation chemistry oligonucleotide into humans.

The Company's compounds in preclinical development include a series of antisense oligonucleotides with potential to reduce the production of vascular endothelial growth factor ("VEGF"), which has been implicated in diseases of the retina (e.g., diabetic retinopathy; age-related macular degeneration) related to the abnormal formation of new blood vessels in the eye. These antisense compounds targeting VEGF are also potential therapies for solid tumors. The Company has completed some work on the use of VEGF antisense compounds in psoriasis. Using antisense technology, the Company has also developed lead compounds for the treatment of hepatitis C, and research compounds targeting amyloid proteins for the treatment of Alzheimer's disease. See "Risk Factors -- Early Stage of Development; Technological Uncertainty" and "Risk Factors -- Uncertainty Associated with Clinical Trials."

An important part of the Company's business strategy is to enter into research and development collaborations, licensing agreements and other strategic alliances with third parties, primarily biotechnology and pharmaceutical corporations, for the development and commercialization of its products, and to engage in spin-outs of certain technology of the Company to minority-owned subsidiaries in order to obtain alternative financing for such technology. The Company is a party to a corporate collaboration with Searle, a subsidiary of Monsanto Company, in the fields of cancer, cardiovascular disease and inflammation/immunomodulation. Research compounds targeting the MDM-2 protein for the treatment of cancer have been developed by the Company; further development of these compounds falls under the Searle collaboration. In addition, the Company has out-licensed certain advanced chemistry compounds

based on proprietary genetic targets with respect to DNA methyltransferase to a Quebec company, MethylGene, in exchange for a minority equity interest in MethylGene, and is currently in the process of out-licensing certain advanced chemistry compounds based on proprietary genetic targets with respect to the human papilloma virus and hepatitis B virus genomes to another Quebec company, OriGenix Technologies Inc. ("OriGenix"), in exchange for a minority equity interest in OriGenix. The licensing of these programs will require the prior approval of the Lender under the Bank Credit Facility. See "Description of Capital Stock and Indebtedness -- Indebtedness -- Bank Credit Facility."

The Company's plan is to seek corporate collaborations with respect to each of its compounds in development. The Company intends to proceed with its GEM 231 clinical program through Phase II clinical trials, at which time it may seek a corporate collaborator. The Company generally does not anticipate proceeding with any of its other programs beyond their current stages of development without a collaborative arrangement with a corporate partner. There can be no assurance that the Company will enter into any collaborative arrangements with third parties with respect to these or any of the Company's future programs, nor can there be any assurance as to what the terms of such collaborative arrangements will be. See "Risk Factors -- Need to Establish Collaborative Commercial Relationships; Dependence on Partners."

In 1996, the Company formed its HSP Division to manufacture highly purified oligonucleotide compounds both for the Company's internal use and on a custom contract basis for sale to third parties, including the Company's collaborative partners. The Company is manufacturing oligonucleotides in compliance with GMP at its 36,000 square foot leased facility in Milford, Massachusetts. The HSP Division first began production of oligonucleotide compounds for sale to third parties in June 1996 and had revenues of approximately $1.1 million in 1996, approximately $1.9 million in 1997 and approximately $2.1 million through the third quarter of 1998. The HSP Division also has received orders to provide analytical services and plans to expand its product offerings to include proprietary intermediates used in the manufacture of oligonucleotides. The Company has entered into a sales and supply agreement with Applied Biosystems Division of Perkin-Elmer under which Perkin-Elmer refers potential customers to the Company. See "Risk Factors -- Limited Manufacturing Capability," "Risk Factors --Risks Associated with the HSP Division," and "Risk Factors -- Patents and Proprietary Rights."

Restructuring and Certain Other Developments

In July 1997, the Company terminated the development of GEM 91, its first generation antisense drug for the treatment of AIDS and HIV infection, based on a review of new data from an open label Phase II clinical trial of patients with advanced HIV infection.

During the second half of 1997, following termination of the GEM 91 program, the Company implemented a restructuring plan to reduce expenditures on a phased basis over the balance of 1997 and into 1998 in an effort to conserve its cash resources. As part of this restructuring plan, in addition to terminating the clinical development of GEM 91, the Company reduced or suspended programs unrelated to its core advanced chemistry antisense drug development programs. In addition, the Company substantially reduced the number of its employees and substantially reduced operations at its Paris, France office. As part of this restructuring, the Company reviewed all outside testing, public relations, travel and entertainment and consulting arrangements and terminated or renegotiated various of these arrangements.

In December 1997, because of the Company's failure to satisfy the minimum net tangible assets criteria of the Nasdaq National Market, the Company's Common Stock was delisted from the Nasdaq National Market and began being quoted on the NASD OTC Bulletin Board. In addition, in December 1997, the Company effected a one-for-five reverse stock split of its Common Stock. All per share Common Stock information contained in the Registration Statement of which this Prospectus is a part (other than in the Exhibit Index) has been adjusted to

reflect this reverse split.

On February 6, 1998, the Company commenced the Exchange Offer to the holders of the 9% Notes to exchange the 9% Notes for Convertible Preferred Stock and certain warrants of the Company. On May 5, 1998, noteholders holding $48.7 million of principal and $2,361,850 of accrued interest tendered such principal and accrued interest to the Company for 510,505 shares of Convertible Preferred Stock and Class A Warrants to purchase 3,002,956 shares of Common Stock with an exercise price of $4.25 per share.

On May 5, 1998, the Company completed a private offering of equity securities raising total gross proceeds of approximately $27.3 million from the issuance of 9,597,476 shares of Common Stock, 114,285 shares of Convertible Preferred Stock and Warrants to purchase 3,329,486 shares of Common Stock at $2.40 per share. The gross proceeds included the conversion of approximately $6.2 million of accounts payable, capital lease obligations and other obligations into Common Stock. The Company incurred approximately $2.6 million of cash expenses related to the private offering and issued 597,699 shares of Common Stock and Warrants to purchase 1,720,825 shares of common stock at $2.40 per share, subject to adjustment, to the placement agents, as more fully described below. See also "Certain Relationships and Related Transactions" for information concerning compensation paid to the placement agents.

This restructuring of the Company, together with employee attrition, resulted in a reduction in (a) the number of the Company's employees from 213 at June 30, 1997 to 102 at December 31, 1997 and 50 at December 1, 1998, (b) the subleasing of an aggregate of approximately 61,000 square feet of space, (c) the relocation of its headquarters from Cambridge, Massachusetts (the "Cambridge Facility") to its manufacturing facility in Milford, Massachusetts, (d) the termination of its lease for the Cambridge Facility, (e) the sale of its limited partner interest in Charles River Limited Partnership, the former owner of the Cambridge Facility, and (f) the termination of its office lease in Paris, France. As a result, the Company has significantly scaled back the level and scope of its operations since mid-1997. The restructuring has now been completed. The Company is continuing to explore opportunities to reduce operating expenses in an effort to conserve its cash resources.

TECHNOLOGY OVERVIEW

Introduction

Antisense technology involves the use of synthetic segments of DNA to interact at the genetic level with target messenger RNA, which codes for the production of proteins. In contrast to traditional drugs, which are designed to interact with protein molecules associated with diseases, antisense drugs work at the genetic level to interrupt the process by which disease-causing proteins are produced. The Company believes that drugs based on antisense technology may have broader applicability, greater efficacy and fewer side effects than conventional drugs

because antisense compounds are designed to intervene early in the disease process at the genetic level and in a highly specific fashion.

Proteins play a central role in virtually every aspect of human metabolism. Almost all human diseases are the result of inappropriate protein production or performance. Traditional drugs are designed to interact with protein molecules that support or create diseases. Antisense drugs work at the genetic level to interrupt the process by which disease-causing proteins are produced.

The information necessary to produce a specific protein is encoded in a specific gene. The information required to produce all human proteins is contained in the human genome and its collection of more than 100,000 genes. Each gene is made up of DNA, which is a duplex of entwined strands -- a "double helix." In each duplex, the building blocks of DNA, called nucleotides, are

bound or "paired" with complementary nucleotides on the other strand. The precise sequence of a nucleotide chain that is the blueprint for the information that is used during protein production is called the "sense" sequence. The sequence of a nucleotide chain that is precisely complementary to a given sense sequence is called its "antisense" sequence.

Protein production, also called synthesis or expression, typically involves a two-phase process. First, the information contained in the gene is transcribed from the sense strand of DNA into one or more molecules of messenger RNA. Second, the information encoded in the messenger RNA is translated into the sequence of amino acids that comprise the protein. The information contained in a single gene is often repeatedly transcribed into multiple copies of messenger RNA, which in turn are repeatedly translated, giving rise to multiple copies of the same protein.

Conventional Drugs

Most drugs are chemicals designed to induce or inhibit the function of a target molecule, typically a protein, with as few unwanted side effects as possible. However, conventional drugs are not available for the treatment of many diseases because of their relatively low level of selectivity. The selectivity of conventional drugs is usually determined by only a few, generally two or three, points of interaction at the binding site of the target molecule. Frequently, sites on other non-target molecules resemble the target binding site sufficiently to permit the conventional drug to bind to some degree. This lack of selectivity may result in decreased efficacy, unwanted side effects or a need to administer the drug in less than optimal dosages due to toxicity concerns. In addition, the development of conventional drugs is generally time consuming and expensive, as thousands of compounds must be synthesized to find one with the right efficacy and side effect profile.

Gene Expression Modulation

In contrast to conventional drugs, which usually interact with disease-associated proteins after they have been produced, gene expression modulation technology is intended to regulate the production of disease-associated proteins, thus targeting an earlier biochemical process. Advances in genomic science have identified many targets for gene expression modulation products. Once a gene that codes for a disease-associated protein is identified, an oligonucleotide based on the complementary sequence for the selected site can be synthesized and its pharmaceutical properties optimized by chemical modification. These chemically-modified oligonucleotides may be composed of DNA, RNA or a combination of the two.

Chemically-modified oligonucleotides can be designed to attack a disease at the genetic level by binding to messenger RNA or DNA to prevent production of disease-associated proteins. Binding to messenger RNA generally is used in the "antisense" approach to gene expression modulation.

In the antisense approach to gene expression modulation, chemically-modified oligonucleotides, which consist of the antisense sequence to a selected region on a target messenger RNA, are used to inhibit the synthesis of a particular protein. Because the sequence of nucleic acid bases of a chemically-modified antisense oligonucleotide is complementary to its target sequence on a messenger RNA, the antisense oligonucleotide forms a large number of bonds at the target site, typically between 15 and 30, greatly increasing the probability that the oligonucleotide will hybridize (bind) tightly to the selected type of messenger RNA. Since a single messenger RNA may be translated repeatedly into a protein, a single chemically-modified antisense oligonucleotide may inhibit the synthesis of many copies of a protein. Moreover, in vitro tests have shown that chemically-modified antisense oligonucleotides form complexes with their target messenger RNAs. These complexes, which contain certain chemically-modified antisense oligonucleotides activate RNase H, a cellular enzyme, in a manner that destroys the

messenger RNA to which the oligonucleotide is bound, without destroying the

oligonucleotide itself, thus freeing the oligonucleotide to bind with another identical messenger RNA.

HYBRIDON ANTISENSE TECHNOLOGY

Hybridon has developed an integrated antisense technology platform based on proprietary medicinal chemistries, analytical chemistry and manufacturing technology. The development of Hybridon's antisense chemistry has been directed by Dr. Sudhir Agrawal, the Company's Chief Scientific Officer, and builds on the pioneering work in the antisense field begun in the 1970s by Dr. Paul C. Zamecnik, a founder and director of the Company, at the Massachusetts General Hospital ("MGH") and continued by Dr. Zamecnik at the Worcester Foundation for Biomedical Research, Inc., which has since merged into the University of Massachusetts (the "Worcester Foundation"). Currently, Dr. Zamecnik is affliated with MGH. He continues to serve as a Director of, and consultant to, Hybridon.

Medicinal Chemistries. Hybridon's scientists have designed and synthesized over 20 proprietary families of synthetic antisense oligonucleotide chemistries including DNA/RNA hybrids, also called mixed backbone chemistries. The Company believes that antisense compounds based on these chemistries may demonstrate a range of favorable pharmaceutical attributes, including: reduced side effects, increased duration of action, increased potency and susceptibility to lower dosing, less frequent dosing, controlled release formulation and alternative routes of administration, including oral administration. Hybridon designed its first generation phosphorothioate oligonucleotides to increase their resistance to enzymatic degradation and their biological activity and to act catalytically by triggering RNase H. GEM 91 was such a phosphorothioate-modified oligonucleotide. Hybridon has used the insights gained by it in the human clinical trials of GEM 91 in the design of its more advanced oligonucleotide chemistries.

Manufacturing Technology. The Company's expertise in chemically-modified oligonucleotides has served as the foundation of its manufacturing technology and know-how. The Company has developed proprietary technology to increase the purity of oligonucleotide products, enhance the efficiency of the production process and increase the scale of production. In 1996, the Company completed development of two separate commercial scale oligonucleotide synthesizers, one in an internal program and one in a collaboration with Pharmacia Biotech, Inc. The synthesizer developed by Hybridon is capable of producing advanced chemistry antisense oligonucleotides. In addition, the Company has implemented proprietary purification processes, which use water in place of organic solvents, simplifying environmental compliance and permitting purification of kilogram batches of oligonucleotides. The Company has also developed proprietary chemical synthesis processes and novel reagents used in the synthesis process, which the Company believes may further decrease the cost of production of its modified oligonucleotides.

Proprietary Analytical Tools and Processes. The Company has established proprietary analytical tools and processes that enable it to analyze oligonucleotide compounds with greater speed and accuracy when compared to traditional methods. Hybridon has developed a novel method of determining antisense purity that is sensitive to a single DNA base difference; this method is significantly more accurate than traditional chromatography methods. The Company uses the information that it obtains with its proprietary analytical tools and processes to improve production quality control, to comply with regulatory requirements and to monitor the pharmacokinetic behavior of its oligonucleotide compounds in preclinical studies and clinical trials.

HYBRIDON DRUG DEVELOPMENT AND DISCOVERY PROGRAMS

The Company is focusing its efforts on drug development and discovery programs involving antisense compounds based on the Company's proprietary mixed backbone advanced chemistries. These compounds are directed towards diseases in the three major therapeutic areas of oncology, virology and opthalmology. In the table set forth below, the compounds are grouped according to their stage of development.

The Company's plan is to seek corporate collaborations with respect to each of its compounds in development. The Company intends to proceed with its GEM 231 clinical program through Phase II clinical trials, at which time it may seek a corporate collaborator. The Company generally does not anticipate proceeding with any of its other programs described below beyond their current

stages of development without a collaborative arrangement with a corporate partner.

Target	Primary Therapeutic Indication(s)	Status(1)
CLINICAL PROGRAMS		
Protein Kinase A	Cancer	GEM 231 - (Intravenous Formulation) - Phase II/Seeking Partner
HIV-1	HIV-1 Infection and AIDS	GEM 92 - (Intravenous and Oral Formulations) - Pilot Phase I/Seeking Partner
Cytomeglavirus	CMV Retinitis	GEM 132 for Intravitreal Injection - Phase I/II/Seeking Partner
	CMV (Systemic)	GEM 132 for Systemic Injection - Phase I/II/Seeking Partner
PRECLINICAL PROGRAMS		
MDM-2	Cancer	Research Compounds/Searle Collaboration
Vascular Endothelial Growth Factor	Cancer Angiogenesis	Preclinical/Seeking Partner
	Retinopathies (e.g. macular degeneration and diabetic retinopathy)	GEM 220 - Preclinical/Seeking Partner
	Psoriasis	Preclinical/Seeking Partner
Hepatitis C Virus	Hepatitis; Liver Cancer	Lead Compounds/Seeking Partner (2)
Amyloid Proteins	Alzheimer's	Research Compounds/Seeking Partner
DRUG DEVELOPMENT PROGRAMS IN HYBRIDON SPINOUTS		
DNA Methyltransferase	Cancer	Phase I/MethylGene Inc. (4)
Human Papilloma Viruses	Genital Warts	Preclinical (2)(3)
Hepatitis B Virus	Hepatitis; Liver Cancer	Research Compounds (2)(3)

(1) Phase II clinical trials: The product is administered to a limited patient population to (i) evaluate the effectiveness for specific indications and (ii) identify possible short-term adverse effects and safety risks.

Phase I clinical trials: The product is administered to a limited number of healthy human subjects or patients and tested for pharmacokinetics (absorption, metabolism, distribution and excretion), pharmacologic action, dose response, safety and, if possible, early evidence of effectiveness.

Pilot Phase I Study: The product is administered to a small number of patients to assess safety, pharmacokinetics and other data on a preliminary basis.

Preclinical: Compounds are undergoing additional testing and alternative chemistries are being evaluated in biological assays and/or appropriate animal models in order to assess efficacy, toxicology and pharmacokinetics

and to select particular chemistries with optimal pharmaceutical attributes. If these procedures are completed satisfactorily and other scientific and financial criteria are met, the Company may initiate IND-enabling Good Laboratory Practices ("GLP") studies and begin preparation of an IND application.

Lead Compounds: One or more antisense compounds have demonstrated biological activity for a particular gene target in a specific and relevant biological assay.

Research Compounds: Appropriate target gene(s) and sequence(s) are being determined; antisense compounds are being synthesized and screened for biological activity.

(2) Developed as part of the Company's collaboration with Roche, which was terminated by Roche as of February 28, 1998. All rights relating to the hepatitis B program have reverted to the Company. Roche has agreed to assign all rights to the hepatitis C and human papilloma virus programs to the Company in connection with such termination.

(3) The Company is in the process of licensing its hepatitis B and HPV programs to OriGenix, a Quebec corporation, in exchange for a minority equity interest in OriGenix. The licensing of these programs will require the prior approval of the Lender under the Bank Credit Facility. See "Description of Capital Stock and Indebtedness -- Indebtedness -- Bank Credit Facility."

(4) Technology relating to target has been licensed to and is being developed by MethylGene, a Canadian company co-founded by the Company and in which the Company owns a minority interest. Two IND applications were filed in December 1998 in Canada (and one is expected to be filed in the United States in late December 1998). Phase I trials are expected to commence after the mandatory waiting periods have expired.

CLINICAL PROGRAMS

Protein Kinase A

An increased propensity for cell proliferation is a critical feature of cancer cells. This increased proliferation can result from changes in signal-transduction pathways or alterations in components controlling the cell cycle. The signal transduction molecule Protein Kinase A ("PKA") has been implicated in the formation and proliferation of various solid tumors (including colon, breast, ovarian and lung). In addition, a number of tissue culture and animal studies have shown a correlation between PKA inhibition and anti-cancer activity.

Specifically, expression of the RI[alpha] subunit of PKA has been shown to play a role in the transformation and maintenance of cancerous cells. The RI[alpha] subunit is found in type I PKA. Variations in the ratio of type I and type II PKA isoforms have been linked with cell growth and differentiation. Specifically, increased expression of type I has been associated with cell growth and cell de-differentiation, or transformation, while type II is associated with cessation of growth and cell differentiation.

The Company has identified an antisense inhibitor of the PKA RI[alpha] subunit, GEM 231, based on its proprietary advanced chemistry. Administration of GEM 231 orally or by injection has been shown to inhibit tumor growth in multiple mouse xenograft models of human solid tumors. In addition, in certain mouse xenograft models, the efficacy of GEM 231 has been shown to be effective alone and in combination with several chemotherapy agents commonly used in the treatment of solid tumors. Clinical studies with GEM 231 have shown significantly improved safety over first generation antisense drugs.

GEM 231 is proposed for use in breast cancer, colon cancer and non-small cell lung cancer ("NSCLC"), among others. Of these, the Company believes that the highest unmet need is for first-line therapy for Stage III and IV NSCLC. Lung cancer is the number one cause of cancer death in the United States. This is due to many factors, including high incidence, poor screening

and limited effectiveness of current chemotherapeutic agents. Surgery is an effective treatment for NSCLC at stages I and II, but is much less effective for Stage III and beyond. Unfortunately, only 10-30% of the 133,000 new cases of NSCLC in the United States in 1996 were diagnosed at an early stage of the disease. For the remaining 70-90% of new cases, surgery in combination with adjuvant chemotherapy, or chemotherapy alone, will result in a statistical 5-year survival rate of only 15-25% in stage III and 3% in stage IV NSCLC patients.

Current chemotherapy agents have several dose-limiting toxicities, including effects on bone marrow, renal, neural and gastrointestinal function, and therefore require 3 to 4 week treatment holidays. Due to the specificity of the GEM 231 target, it is anticipated that GEM 231 will be better tolerated in human patients than traditional chemotherapeutic agents. In preclinical toxicity studies as well as the Company's recently completed Phase I clinical trial, GEM 231 did not exhibit any of the dose-limiting toxicities found in current chemotherapeutic agents. GEM 231, an advanced chemistry antisense molecule, has also been shown to have a significantly improved safety profile relative to first generation oligonucleotides.

In January 1998, the Company initiated a Phase I dose-escalation trial of GEM 231 in patients with solid tumors which had not been cured by prior therapy ("refractory solid tumors"). The objective of this trial was to determine the maximum tolerated dose of GEM 231 when administered as a twice-weekly, two-hour continuous infusion. Single doses of 360 mg/m2 have been established as safe; the maximum tolerated dose for repeated administration is 240 mg/m2. After continuous dosing on this schedule, GEM 231 demonstrated a significantly improved safety compared to the Company's first generation antisense drug, GEM 91. In this trial, thirteen patients received escalating doses of 20, 40, 80, 160, 240 and 360 mg/m2. Tumor histologies included NSCLC (4), renal cell carcinoma (3), sarcoma (2) and others (4). Of the 13 patients, one with colorectal cancer whose serum concentration of carcinoembryonic antigen (CEA) was rapidly increasing had a slight decrease in CEA at the end of 8 weeks of GEM 231 treatment at 360 mg/m2. There were no other examples of possible clinical benefit among this group of heavily pre-treated patients with diverse tumor types.

GEM 231 was well tolerated in this study. In particular, there was no drug-related decrease in platelet counts and complement activation did not occur, although high plasma concentrations of GEM 231 (up to72 ug/mL) were achieved at the end of the two-hour infusion. Two patients complained of fatigue and were found to have low-grade fever during and shortly after the initial infusion. One of these patients had bacterial infection related to catheter sepsis, which the Company believes was the probable cause of fever and symptoms. The most common abnormality related to GEM 231 administration was mild to moderate elevation of certain liver enzymes in the blood, usually after 4 to 7 weeks of continuous twice-weekly dosing. When GEM 231 was discontinued, in all cases, these findings rapidly reverted toward or to normal. This is the only example of an expected oligonucleotide-related adverse effect, but it occured at a higher dose, and after a larger systemic exposure to drug, than was the experience with a first-generation molecule, GEM 91.

In December 1998, the Company initiated a Phase II dose-escalation trial of GEM 231 in patients with refractory solid tumors. The objectives of this trial are to determine the safety of GEM 231 when administered as a once-weekly, twenty-four hour continuous infusion. It is anticipated that the 24-hour infusion will result in lower steady-state GEM 231 plasma concentrations than those achieved in plasma following two-hour infusion delivering the same daily dose. Consequently, concentration-related safety issues are not expected with this revised infusion schedule. The safety focus involves possible effects associated with effectively down regulating the genetic target (PKA RI[alpha]) or the effects of unanticipated cumulative toxicities from repeated administration of the drug.

The Company also plans to initiate Pilot Phase II studies of 15-to-20 patients each in at least two relevant tumor types and Phase I/II studies using GEM 231 in combination with other antitumor agents in 1999.

HIV-1 and AIDS

AIDS is caused by infection with HIV and leads to severe, life-threatening impairment of the immune system. HIV causes immunosuppression by attacking and destroying T-cells, which coordinate much of the network of normal immune responses. HIV infection usually leads to AIDS, although progression to symptomatic disease may take many years. The process of HIV

replication involves the integration of a DNA copy of the viral RNA

into the human genome, the transcription of the DNA copy into messenger RNA ("reverse transcription") and the synthesis of viral proteins and copies of viral RNA for packaging into new virus particles that may infect other cells.

By the end of 1998, according to new estimates from the Joint United Nations Programme on HIV/AIDS ("UNAIDS") and the World Health Organization ("WHO"), the number of people living with HIV will have grown to 33.4 million, 10% more than just one year ago. Altogether, since the start of the epidemic about two decades ago, HIV has infected more than 47 million people. Although it is a slow-acting virus that can take a decade or more to cause severe illness and death, HIV has already cost the lives of nearly 14 million adults and children. An estimated 2.5 million of these deaths occurred during 1998, more than ever before in a single year.

Many drugs for the treatment of HIV infection and AIDS have received marketing approval from the FDA and from other regulatory authorities. The use of two to four of these agents in combination, Highly Active Anti-Retroviral Therapy ("HAART therapy"), has demonstrated prolonged benefit on surrogate markers (viral RNA and CD4+ lymphocyte counts) and on sustained clinical remission. The standard HAART therapy involves treatment with a protease inhibitor in conjunction with two inhibitors of reverse transcriptase. While use of these regimens has been associated with decreased mortality rates and important improvements in the quality of life for patients with AIDS, there are increasing reports of failure of HAART therapy to sustain the initially-achieved viral suppression and clinical benefit. The Company believes that these reports underscore the need for new antiretroviral therapies, preferably active against targets other than protease or reverse transcriptase.

The Company has completed a pilot Phase I clinical study in Europe of GEM 92, the Company's advanced chemistry compound for the treatment of HIV-1 infection and AIDS. This study was designed to explore the safety and to provide information on the pharmacokinetics of GEM 92 after oral and intravenous dosing. All doses administered in the pilot study were well tolerated and GEM 92 was detected in the blood after both oral and intravenous dosing. The Company believes this was the first oral administration of antisense molecules to humans.

The Company developed GEM 92 using insights gained in the development and the clinical trials of GEM 91, which was discontinued based on preliminary data from a Phase II clinical trial in which three of the nine subjects treated had experienced decreases in platelet counts that required dose interruption. GEM 92 differs from GEM 91 in that GEM 92 is based on the Company's advanced chemistries, which the Company believes provide the potential for enhanced safety and metabolic stability compared to the first-generation GEM 91. The Company believes that this improved safety and stability may make it possible to achieve clinical efficacy without dose-limiting side effects and may make oral dosing feasible.

Cytomegalovirus

Cytomegalovirus ("CMV") is a member of the herpes virus family which exists latently in approximately 60% of the general population in the United States and in approximately 90% of the HIV/AIDS population. Because of their immunocompromised state, AIDS patients often suffer from active CMV infection. In this patient population, CMV may be manifested as retinal, gastrointestinal, hepatic, pulmonary and/or neurological disease. The most frequent manifestation of CMV infection in AIDS patients is CMV retinitis, in which lesions in the eye progress rapidly and can result in blindness if left untreated. CMV infection is also a medical problem in other immunocompromised patients, such as those who have undergone organ transplantation The Company does not anticipate proceeding further with the development of GEM 92 until a collaborative arrangement is established with a corporate partner.

Although the market for CMV drugs is currently relatively small, the

Company expects the market to grow due to (i) possible failures of HAART therapy and (ii) CMV breakthrough during HAART therapy at CD4+ lymphocyte counts above 100/mm3. Failures of HAART therapy may occur as a result of development of resistance, intolerance and lack of compliance due to complex dosing regimens involving multiple products.

GEM 132, the Company's advanced chemistry antisense oligonucleotide for the treatment of CMV infection, has demonstrated significant inhibition of the replication of CMV in tissue culture assays. GEM 132 has demonstrated activity in cell culture against both clinical isolates and laboratory stains which have become resistant to current therapies, such as ganciclovir. In cell culture studies, GEM 132 has demonstrated significantly more potent anti-viral activity than the two existing therapies against which it has been tested, ganciclovir and foscarnet.

The Company has conducted Phase I and Phase I/II clinical trials of GEM 132. In these trials, the Company studied two different routes of administration. In an escalating dose, Phase I/II multicenter trial in the

United States and Canada, in which GEM 132 was administered by injection into the vitreous of the eye, the Company studied the safety and activity of GEM 132 in patients with CMV retinitis who are no longer able to benefit from marketed therapies. In Phase I trials in normal volunteers, the Company has administered a series of single and multiple dose regimens, employing two-hour intravenous infusions of up to 150 mg/dose at weekly intervals over four weeks. In Phase I/II studies involving patients infected both with HIV and CMV, the Company evaluated the effects of multiple two-hour intravenous infusions, given at weekly or biweekly intervals, on the quantities of CMV cultured from the semen as a measure of antiviral activity. All doses studied to date in these clinical trials were well tolerated. No clinical studies with GEM 132 are on-going and no additional clinical studies of GEM 132 are currently planned.

A competitor of the Company has recently received FDA approval to market an antisense therapeutic for the treatment of CMV. See "Risk Factors -- Competition."

PRECLINICAL PROGRAMS

Angiogenesis

Under normal conditions, angiogenesis (formation of new blood vessels) is tightly regulated and occurs only during physiological conditions such as wound healing, embryonic development and the menstrual cycle. There are currently no effective treatments for the aberrant angiogenesis associated with certain pathological conditions, such as tumor growth, ocular neovascularization, psoriasis and rheumatoid arthritis.

Vascular Endothelial Growth Factor ("VEGF") is a protein which has been shown to contribute to new blood vessel growth. VEGF has been shown to be a tumor angiogenesis factor, contributing to new vessel growth. The clinical relevance of VEGF is suggested by its angiogenesis-associated expression in glioblastoma multiforme, a form of malignant brain tumor, in vivo. Several studies in experimental animal model systems have shown that inhibition of VEGF will inhibit tumor vascularization. In addition, VEGF has been shown to provide an autocrine growth stimulus for some tumor cell lines, including multiple colon carcinoma, melanoma and glioblastoma multiforme cell lines.

Hybridon has identified specific sequences on the VEGF messenger RNA as targets for antisense oligonucleotides. Several advanced chemistry compounds have been synthesized, including GEM 220, that inhibit the expression of the VEGF gene in tissue culture assays.

Ophthalmology. Overexpression of VEGF has also been implicated in four major causes of blindness: late stage, age-related macular degeneration, which afflicts approximately 5,000,000 people in the United States; proliferative

diabetic retinopathy, the major cause of blindness in diabetics which affects approximately 500,000 people in the United States; central retinal vein occlusion, which afflicts approximately 200,000 people in the United States; and retinopathy of prematurity, which affects approximately 10,000 premature newborns annually in the United States Hybridon has identified specific sequences on the VEGF messenger RNA as targets for chemically-modified antisense oligonucleotides and is synthesizing chemically-modified antisense oligonucleotides designed to inhibit the expression of the VEGF gene in retinal cells. These oligonucleotides have been shown in an animal model of retinopathy to inhibit vascular proliferation and prevent aberrant angiogenesis in the retinas of mice in a model for retinopathy of prematurity.

Oncology. Angiogenesis is a key prerequisite for solid tumor growth and may also constitute an early event in tumorigenesis. In order for tumor cell masses to grow beyond a few millimeters in size, additional vascularization is needed. In fact, tumor growth has been shown to slow or stop in direct proportion to blood supply. GEM 220 has been shown to inhibit tumor vascularization in animal tumor models. The Company hopes to identify antisense inhibitors of VEGF that inhibit tumor growth as well.

A VEGF inhibitor would have application in all solid tumors. In particular, the Company hopes its VEGF product will be an effective treatment for advanced and metastatic prostate cancer. 15% of new patients, or 46,500 new cases in 1996, are first diagnosed with metastatic prostate cancer. The prognosis at this stage is poor, with a statistical 5-year survival rate of only 30%.

Dermatology. VEGF, in association with its role in angiogenesis, has recently been implicated in psoriasis, which currently afflicts more than 6,000,000 people in the United States with between 150,000 and 260,000 new

cases in the United States each year. Hybridon has identified specific sequences on the VEGF messenger RNA as targets for chemically-modified antisense oligonucleotides and has synthesized advanced chemistry antisense oligonucleotides that have inhibited the expression of the VEGF gene in tissue culture assays. The Company has explored optimal forms of topical delivery of oligonucleotides to the basal layers of the epidermis, where VEGF has been found to be overexpressed in psoriasis.

Hepatitis C Virus

There are approximately 3,900,000 people in the United States carrying the hepatitis C virus, and approximately 28,000 individuals in the United States become infected with hepatitis C each year. Approximately 60% of those who contract the virus each year develop chronic hepatitis C infections which is correlated with liver failure, cirrhosis and liver cancer. Chronic infection due to hepatitis C is a significant disease in Japan and other Pacific Rim countries, and has been linked to the development of primary liver cancer. Pursuant to its collaboration with Roche, the Company identified through joint research with Roche specific sequences on the messenger RNA as targets for chemically modified antisense oligonucleotides and synthesized a lead compound that inhibited hepatitis C viral gene expression in tissue culture assays. In September 1997, the Company received notification from F. Hoffman-La Roche Ltd. ("Roche") that Roche had decided not to pursue further its antisense collaboration with the Company and was terminating the collaboration effective February 28, 1998. As part of this termination, Roche has agreed to assign its patent rights in this program to the Company.

Murine Double Minute-2

MDM-2 is a human oncogene which has been shown in vitro studies to encode a protein that binds to and inactivates tumor suppressor genes p53 and Rb. Recent studies by a number of academic institutions have suggested that overexpression of the MDM-2 gene is present in approximately 70% of all breast cancers and correlates with increased malignancy as well as drug resistance. The Company, in collaboration with two academic institutions, has identified

specific sequences on the messenger RNA as targets for chemically-modified antisense oligonucleotides and have synthesized chemically-modified antisense oligonucleotides that inhibit MDM-2 production in tissue culture assays. The Company has an exclusive license to these sequences. Preliminary studies are being conducted in animal models. The MDM-2 program is being further developed in collaboration with Searle.

Amyloid Proteins

Alzheimer's disease is a neurodegenerative disease which is the most common cause of dementia in the elderly. It is estimated to affect approximately 4,000,000 individuals in the United States. The presence of amyloid precursor protein ("APP") in the brain at abnormal sites and in abnormal amounts has been reported to be associated with Alzheimer's disease. Hybridon has identified a specific sequence on the messenger RNA as a target for chemically-modified antisense oligonucleotides and has synthesized chemically-modified antisense oligonucleotides that inhibit APP production in tissue culture assays.

Other Cancer Targets

The Company believes there are significant addtional opportunities for the use of antisense for the treatment of cancer. Antisense provides (1) genetically-directed therapy for contemporary cancer treatments; (2) rapid development of anti-cancer agents targetting newly discovered genetic defects; and (3) potentially low toxicity, supporting long term therapy for single agent or combination use. For these reasons, the Company is exploring new antisense targets relevant to the treatment of cancer.

DRUG DEVELOPMENT PROGRAMS IN HYBRIDON SPINOUTS

MethylGene, Inc.

DNA Methyltransferase. DNA methyltransferase is a regulatory protein that has been implicated in the processes of cell growth and differentiation and has been shown to be overexpressed in some tumors, such as small cell lung cancer, colon cancer and breast cancer. The Company has identified specific sequences on the messenger RNA as targets for chemically-modified antisense oligonucleotides and has synthesized chemically-modified antisense oligonucleotides that alter DNA methylation of cultured human cancer cells. These compounds inhibit the ability of such cells to grow in cell culture and their ability to form tumors in mice. The Company has licensed the

technology relating to the development of this compound to MethylGene, which is currently developing this technology.

OriGenix Technologies, Inc.

Human Papilloma Viruses. Human papilloma viruses are associated with a variety of warts, including benign genital warts which, if untreated, can lead to cervical cancer. Each year, condyloma acuminata (genital warts) are diagnosed in approximately 750,000 patients in the United States and accounts for more than 2,000,000 visits to health care providers in the United States. HPV infections are the most common sexually transmitted diseases in the world today, with an estimated 11 to 46 percent of sexually active women having DNA evidence of HPV infection. Traditional therapies include wart removal through cryotherapy, laser therapy or excisional surgery; topical application of formulations of podophyllotoxin, trichloroacetic acid and salicylic acid or 5-fluorouracil, or alternatively, direct injections of interferon into the wart. While existing therapies may help eliminate the warts, none of them eradicates the virus. Consequently, recurrence of genital warts, as well as transmission of the virus, remains a significant problem.

Pursuant to its collaboration with Roche, the Company identified through joint research with Roche specific sequences on the messenger RNA of the papilloma virus as targets for chemically-modified antisense oligonucleotides

and synthesized an advanced chemistry lead compound that inhibited human papilloma virus gene expression in an animal model of wart-like tissue proliferation. In connection with Roche's termination of its collaboration with the Company, Roche has agreed to assign all of its rights to the lead compound to the Company. The Company is currently in the process of licensing this technology to OriGenix in exchange for a minority equity interest in OriGenix. The licensing of this technology to OriGenix will require the prior approval of the Lender under the Bank Credit Facility. See "Description of Capital Stock and Indebtedness -- Indebtedness -- Bank Credit Facility."

Hepatitis B Virus. Hepatitis B is a major health problem throughout the world, with endemic infection in some less developed countries. Hepatitis B infections can lead to liver cirrhosis and cancer of the liver. The WHO estimates there are more than 1,000,000 new cases of hepatitis B infection annually in developed countries and 350 million chronically infected carriers worldwide. Based on data from the Center for Disease Control, an estimated 30 percent of these will progress to symptomatic acute infections while a total of 10 to 15 percent will become chronic hepatitis B carriers at risk of chronic liver disease and progression to cirrhosis or liver cancer.

Approximately 1,200,000 individuals in the United States carry the hepatitis B virus. There are an estimated 200,000 to 300,000 new hepatitis B infections in the United States each year. Pursuant to its collaboration with Roche, Hybridon identified through joint research with Roche specific sequences on the messenger RNA as targets for chemically-modified antisense oligonucleotides and synthesized chemically-modified antisense oligonucleotides that inhibit the expression of hepatitis B virus in cell cultures. Although Roche determined not to pursue this program, the Company is continuing its development efforts. All rights relating to the Roche-sponsored research with respect to hepatitis B reverted to the Company when Roche determined not to pursue the program. The Company is currently in the process of licensing this technology to OriGenix in exchange for a minority equity interest in OriGenix. The licensing of this technology to OriGenix will require the prior approval of the Lender under the Bank Credit Facility. See "Description of Capital Stock and Indebtedness -- Indebtedness -- Bank Credit Facility."

CORPORATE COLLABORATIONS

An important part of Hybridon's business strategy is to enter into research and development collaborations, licensing agreements or other strategic alliances with third parties, primarily biotechnology and pharmaceutical corporations, for the development and commercialization of certain products. As of the date hereof, the Company is a party to corporate collaborations with Searle and Medtronic, all as summarized below. The Company intends to retain manufacturing rights for many of the products, if any, it may license pursuant to these collaborations.

G.D. Searle & Co.

In January 1996, the Company and Searle entered into a collaboration relating to research and development of therapeutic antisense compounds directed at up to eight molecular targets in the fields of cancer, cardiovascular disease and inflammation/immunomodulation (the "Searle Field").

Pursuant to the collaboration, the parties are currently conducting research and development relating to a compound directed at MDM-2. In this project, Searle is funding certain research and development efforts by the Company, and each of Searle and the Company have committed certain of its own personnel to the collaboration. The initial phase of research and development activities relating to the initial target will be conducted through the earlier of (i) the achievement of certain product candidate milestones and (ii) January 31, 2000, subject to early termination by Searle. The parties may extend the initial collaboration by mutual agreement, including agreement as to additional research funding by Searle.

In addition, under the collaboration Searle has the right, at its option, to designate up to six additional molecular targets in the Searle Field (the "Additional Targets") for collaborative research and development with Hybridon on terms substantially consistent with the terms of the collaboration

applicable to the initial molecular target. This right is exercisable by Searle with respect to each of the Additional Targets upon the payment by Searle of certain specified cash amounts (beyond the project specific research payments relating to the particular Additional Target) and the purchase of additional Common Stock from the Company by Searle (at the then fair market value), totalling $10,000,000 per Additional Target. In the event that Searle designates all of the Additional Targets, the aggregate amount to be paid by Searle in cash payments will be $24,000,000 and the aggregate amount to be paid by Searle in equity investment will be $36,000,000. If Searle has not designated all of the Additional Targets by the time it advances the product candidate for the initial molecular target to certain stages of preclinical development, Searle will be required to purchase up to an additional $10,000,000 of Common Stock (at the then fair market value) upon completion of certain milestones in order to maintain its right to designate any of the Additional Targets that it has not yet designated. The payment for any such Common Stock will be creditable against the equity investment portion of the payments to be made by Searle with respect to the designation of any of the Additional Targets that Searle has not yet designated.

Searle has exclusive rights to commercialize any products resulting from the collaboration. If Searle determines, in its sole discretion, to commercialize a product, Searle will fund and perform preclinical tests and clinical trials of the product candidate and will be responsible for regulatory approvals for and marketing of the product. In certain instances and for specified periods of time, the Company has agreed to perform research and development work in the Searle Field relating to inflamation or immunomodulation exclusively with Searle. In addition, as to each product candidate, the Company will be entitled to milestone payments from Searle totalling up to an aggregate of $10,000,000 upon the achievement of certain development benchmarks. The Company also will be entitled to royalties from net sales of products resulting from the collaboration. Subject to satisfying certain conditions relating to its manufacturing capacities and capabilities, the Company will retain manufacturing rights, and Searle will be required to purchase its requirements of products from the Company on an exclusive basis at specified transfer prices. Upon a change in control of the Company, Searle would have the right to terminate the Company's manufacturing rights, although the royalty payable in respect of net sales would be increased in such event.

Under the collaboration, in the event that Searle designates (and makes the required payments and equity investments for) all of the Additional Targets or in certain other instances relating to the Company's failure to satisfy certain requirements relating to its manufacturing capacities and capabilities, Searle will have the right, exercisable in its sole discretion, to require the Company to form a joint venture with Searle for the development of products in the Searle Field (other than products relating to molecular targets that have already been designated by Searle) to which each party will contribute $50,000,000 in cash, although the Company's cash contribution would be reduced by the value of the technology and other rights contributed by Hybridon to the joint venture. The Company and Searle would each own 50% of the joint venture, although Searle's ownership interest in the joint venture would increase based upon a formula to up to a maximum of 75% if the joint venture is established in certain instances relating to the Company's failure to satisfy certain requirements relating to its manufacturing capacities and capabilities.

Under the collaboration, Searle also purchased 200,000 shares of Common Stock in the Company's initial public offering.

Medtronic, Inc.

In May 1994, the Company and Medtronic entered into a collaboration involving the testing of a drug delivery device for use in delivering Hybridon's antisense oligonucleotides for the treatment of Alzheimer's disease. Hybridon will be responsible for the development of, and hold all rights to, any drug developed pursuant to this collaboration, and Medtronic will be responsible for the development of, and hold all rights to, any delivery system

developed pursuant to this collaboration. The parties may extend this collaboration by mutual agreement to other neurodegenerative disease targets. The research and development to be conducted is determined and supervised by a committee comprised of an equal number of designees of the Company and

Medtronic.

As part of the collaboration, Medtronic purchased an aggregate of 131,667 shares of the Company's Common Stock.

FINANCIAL COLLABORATIONS

In order to maintain financial flexibility, Hybridon considers innovative arrangements to finance certain applications of its proprietary antisense technology, particularly applications that it would not develop in the near term without external funding. The Company has entered into one such arrangement with MethylGene, Inc., which is summarized below. The Company is in the process of completing a transaction similar in structure to the MethylGene arrangement with Origenix for its hepatitis B and HPV programs.

In 1996, the Company and certain Canadian institutional investors formed MethylGene to develop and market (i) antisense compounds to inhibit DNA methyltransferase for the treatment of cancers, (ii) other methods of inhibiting DNA methyltransferase for the treatment of any indications and (iii) antisense compounds to inhibit a second molecular target other than DNA methyltransferase for the treatment of cancers, to be agreed upon by Hybridon and MethylGene (such three product areas being referred to herein as the "MethylGene Fields"). In December 1997, Hybridon and MethylGene expanded the MethylGene Fields to include (a) antisense compounds to inhibit DNA methyltransferase for any indication and (b) antisense compounds to inhibit a second and third molecular target for any indications, as may be selected by MethylGene, so long as such molecular targets are not bona fide targets under investigation by the Company on or prior to the date that MethylGene notifies the Company of the identity of such second or third molecular target.

Hybridon initially acquired a 49% minority interest in MethylGene for approximately CDN$1,000,000, and the Canadian investors acquired a majority interest in MethylGene for a total of approximately CDN$7,500,000. On March 4, 1998, MethylGene raised an additional CDN$15,800,000 from the private placement of securities. As a result of such financing, Hybridon now owns an approximately 30% interest in MethylGene.

The Canadian investors who initially invested in the Company continue to have the right to exchange all (but not less than all) of the shares of stock in MethylGene that they initially purchased for shares of Common Stock of Hybridon on the basis of 37.5 MethylGene shares (for which they paid approximately US $56.25) for one share of Hybridon Common Stock (subject to adjustment for stock splits, stock dividends and the like). This option is exercisable only during a 90-day period commencing on the earlier of the date five years after the closing of the Canadian investors' investment in MethylGene or the date on which MethylGene ceases operations, and terminates sooner if MethylGene satisfies certain conditions.

Hybridon has granted to MethylGene exclusive worldwide licenses and sublicenses in respect of certain technology relating to the MethylGene Fields. In addition, Hybridon and MethylGene have entered into a supply agreement pursuant to which MethylGene is obligated to purchase from Hybridon all required formulated bulk oligonucleotides at specified transfer prices. The Company is also performing drug development advisory and other services in connection with MethylGene's preparation of an IND for its first compound.

THE HYBRIDON SPECIALTY PRODUCTS DIVISION

In 1996, Hybridon formed the HSP Division to manufacture highly purified oligonucleotide compounds both for Hybridon's internal use and for sale to third parties. The Company believes that the industry-wide interest in investigating the potential of gene expression modulation technologies will continue and will accelerate as the techniques which permit the design and development of drugs based on such technologies become more widely understood. The Company's strategy is to position its HSP Division to take advantage of the potential growth in the demand for large-scale, GMP oligonucliotide synthesis resulting from present and future applications of these gene expression modulation technologies. There can be no assurance that such strategy will be successful or that industry growth will be as anticipated. See "Risk Factors -- Risks Associated with the HSP Division" and "Risk Factors -- Competition." However, the Company is attempting to minimize this risk by manufacturing oligonucleotides for diverse applications at different stages of commercialization. The HSP Division currently is

manufacturing DNA-probes for diagnostic applications, and the genomics field, as well as for antisense and non-antisense oligonucleotide therapeutics. The HSP Division's customers are supporting the preclinical and clinical development of over 20 oligonucleotide therapeutic agents.

The Company is manufacturing oligonucleotides at its 36,000 square foot leased facility, which the Company believes is the first and only commercial-scale synthetic DNA production facility with a fully integrated manufacturing technology platform, including large-scale synthesis, purification and proprietary analytical support. The Company first began production of oligonucleotide compounds for sale to third parties in June 1996 and had revenues of approximately $1.1 million in 1996, approximately $1.9 million in 1997 and approximately $2.1 million through September 30, 1998. The Company's principal customers include Genta/JBL Scientific, La Jolla Pharmaceuticals, Inc. and MethylGene.

The Company has developed a manufacturing technology platform which integrates key elements of the manufacturing process to increase the purity of oligonucleotide products, enhance the efficiency of the production process and increase the scale of production. The Company has developed two separate commercial scale oligonucleotide synthesizers. One of these machines was developed in an internal program and the other in a collaboration with Pharmacia Biotech. Both machines are designed with a capacity of up to 100 millimoles (approximately 300 grams per batch), although the Company believes that these machines may be able to exceed such capacity. Pharmacia has retained the right to sell the machine developed under the collaboration to third parties, subject to an obligation to pay Hybridon royalties on such third party sales. The Company believes that its machines are the first commercial scale oligonucleotide synthesizers designed for more advanced chemistries. In addition, the Company has implemented proprietary purification processes, which use water in place of chemical solvents, simplifying environmental compliance and permitting purification of kilogram batches of oligonucleotides. The Company has also developed proprietary chemical synthesis processes and novel reagents used in the synthesis process, which the Company believes may further decrease the cost of production of advanced oligonucleotides.

In order to strengthen the marketing of the HSP Division's products, in 1996 the Company entered into a four-year sales and supply agreement with the Applied Biosystems Division of Perkin-Elmer. Under the agreement, Perkin-Elmer agreed to refer potential customers for the custom contract manufacture of oligonucleotides to Hybridon, and Hybridon agreed to purchase amidites from Perkin-Elmer for the manufacture of oligonucleotides sold to such customers and to pay Perkin-Elmer a percentage of the sales price paid by such customers. In addition, Perkin-Elmer licensed to Hybridon its oligonucleotide synthesis patents.

The HSP Division is targeting three market areas: therapeutics, diagnostics and genomics. Within these areas there is substantial product diversification and the HSP Division is currently manufacturing oligonucleotides for antisense, toleragens, aptamers, and immunomodulators within the therapeutic segment. In the diagnostic market, the HSP Division is manufacturing oligonucleotides for viral and bacterial detection and branched DNA tests.

The production of antisense compounds is similar to the chemical synthesis used in the production of conventional pharmaceuticals, but in contrast with typical biopharmaceuticals, it does not involve any fermentation processes or living cells. Moreover, unlike many conventional drugs, antisense compounds targeted at different diseases can be manufactured with the same nucleotide building blocks and using the same manufacturing processes and equipment with minimal adjustments. As a result, the knowledge and experience that the Company obtains in the manufacture of one compound is substantially applicable to the manufacture of other oligonucleotide compounds for the treatment of other diseases and results in other manufacturing efficiencies. This also allows multiple compounds to be manufactured in one facility, potentially reducing capital expenditures required in the future.

The Company may need to further increase its manufacturing capacity through the purchase or construction of additional large-scale oligonucleotide synthesizers in order to satisfy its anticipated future requirements for its product candidates and in order to manufacture oligonucleotides on a custom

contract basis for sale to third parties on a large scale. In addition, in order to successfully commercialize its product candidates or achieve satisfactory margins on sales, the Company may be required to reduce further the cost of production of its oligonucleotide compounds. See "Management's Discussion and Analysis of Financial Condition and Results of Operations."

The Company believes that it is currently manufacturing oligonucleotides in substantial compliance with FDA requirements for manufacturing in compliance with GMP, although its facility and procedures have not been formally inspected by the FDA and the procedures and documentation followed may have to be enhanced in the future as the Company expands its oligonucleotide production activities. In 1997, the HSP Division was one of

two biotechnology companies chosen to participate in the FDA's Biotechnology PAI Pilot Initiative. This is a pilot program that allows regulatory officials to provide critical feedback on GMP compliance before companies submit drug approval filings, facilitating the exchange of information prior to a formal FDA site inspection. Failure to establish to the FDA's satisfaction compliance with GMP can result in the FDA denying authorization to initiate or continue clinical trials, to receive approval of a product or to begin or to continue commercial marketing.

In addition, the Company's manufacturing processes are subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of certain materials and waste products.

MARKETING STRATEGY

Hybridon plans to market the pharmaceutical products it is developing either directly or through co-marketing, licensing, distribution or other arrangements with pharmaceutical and biotechnology companies. One potential strategy with respect to these products in development is to build a hospital-targeted direct sales group for products for market areas that can be accessed with a small to medium size sales force. Implementation of this strategy would depend on many factors, including the market potential of any such products the Company develops as well as on the Company's financial resources. The Company does not expect to establish a direct sales capability with respect to such products until such time as one or more of such products approach marketing approval. To market those products that will serve a large, geographically diverse patient population, the Company expects to enter into licensing, distribution or partnering agreements with pharmaceutical and biotechnology companies that have large, established sales organizations. To the extent the Company enters into marketing arrangements with third parties, any revenues received by the Company will be dependent on the efforts of such third parties, and there can be no assurance that such efforts will be successful. While the Company has developed general marketing strategies, it has not begun the implementation of any of these strategies with respect to any of these potential therapeutic products.

ACADEMIC AND RESEARCH COLLABORATIONS

Hybridon enters into collaborative research agreements relating to specific disease targets and other research activities in order to augment its internal research capabilities and to obtain access to the specialized knowledge or expertise of its collaborative partners. With respect to certain of the Company's drug development programs, the Company relies primarily upon outside collaborators. Accordingly, termination of the Company's collaborative research agreements with any of these collaborators could result in the termination of the related research program.

In general, the Company's collaborative research agreements require the payment by Hybridon of various amounts in support of the research to be conducted. The Company usually provides the collaborator with selected oligonucleotides, which the collaborator then tests in his or her assay systems. If the collaborator creates any invention during the course of his or her efforts, solely or jointly with the Company, Hybridon generally has an option to negotiate an exclusive, worldwide, royalty-bearing license of the collaborator's rights in the invention for the purpose of commercializing any product

incorporating such invention. Inventions developed solely by Hybridon's scientists as part of the collaboration generally are owned exclusively by Hybridon. Most of these collaborative agreements are non-exclusive and can be cancelled on relatively short notice.

Since July 1997, the Company has allowed a number of its collaborative research agreements to expire and has terminated certain others. The Company has, however, maintained the research agreements which it has determined are appropriate to support its current drug development programs. For example, the Company is a party to a Cooperative Research and Development Agreement with the National Cancer Institute with respect to its PKA program.

DRUG DEVELOPMENT SERVICES

The Drug Development Department of the Company has had experience in the design and conduct of preclinical studies and in the preparation and submission of reports and other regulatory documents for the Company's three advanced chemistry antisense compounds which have successfully entered Phase I studies in humans. This development expertise is being leveraged through a contract with MethylGene under which the Company's Drug Development Department has designed and monitored the preclinical studies for the MethylGene

antisense compound, MG98, leading to the submission of an Investigational New Drug ("IND") application in Canada. The Company anticipates submitting an IND application in the United States in late December 1998. MethylGene compensated the Company for these services. The Company expects to enter into a similar contract with OriGenix upon completion of the proposed spin-out transaction.

PATENTS, TRADE SECRETS AND LICENSES

Proprietary protection for the Company's product candidates, processes and know-how is important to Hybridon's business. Thus, the Company plans to prosecute and enforce aggressively its patents and proprietary technology. The Company's policy is to file patent applications to protect technology, inventions and improvements that are considered important to the development of its business. Hybridon seeks to establish a comprehensive proprietary position through a "layered" patent strategy covering the Company's families of oligonucleotide chemistries, the antisense sequences of the Company's oligonucleotide compounds and the overall chemical compositions of these oligonucleotide compounds. The Company believes that this approach may provide it with at least three independent levels of protection. Hybridon also seeks to protect its proprietary analytical and manufacturing processes. The patents and patent applications owned or exclusively licensed by the Company also are directed to many aspects of the Company's proprietary oligonucleotide production and analysis technology and ribozyme technology. The Company also relies upon trade secrets, know-how, continuing technological innovation and licensing opportunities to develop and maintain its competitive position.

As of December 1, 1998, Hybridon owned or exclusively licensed 60 issued U.S. patents, 8 issued foreign patents, 8 allowed U.S. patent applications, 2 allowed foreign applications and 55 other U.S. and 80 other non-U.S. patent applications. The patents and applications owned or exclusively licensed by the Company cover various chemically advanced oligonucleotides, proprietary target sequences, specific preferred oligonucleotide products, methods for making and purifying oligonucleotides, analytical methods and methods for oligonucleotide-based therapeutic treatment of various diseases. The U.S. patents owned or exclusively licensed by Hybridon expire at various dates ranging from 2006 to 2015.

Under the terms of a license agreement with the Worcester Foundation (the "Foundation License"), Hybridon is the worldwide, exclusive licensee under several U.S. issued or allowed patents and various patent applications owned by the Worcester Foundation relating to oligonucleotides and their production and use. Many of these patents and patent applications have corresponding

applications on file or corresponding patents in other major industrial countries.

One of the issued U.S. patents (the "HIV Patent") and one of the issued European patents licensed from the Worcester Foundation broadly claim antisense oligonucleotides as new compositions of matter for inhibiting the replication of HIV. The other issued U.S. patents include claims covering composition and uses of oligonucleotides based on the Company's advanced chemistries, methods of oligonucleotide synthesis that are potentially applicable to large-scale commercial production, compositions of certain modified oligonucleotides that are useful for diagnostic tests or assays and methods of purifying full-length oligonucleotides after synthesis. The earliest expiration of the patents licensed to the Company by the Worcester Foundation is 2006, when the HIV Patent expires.

The Company also is the exclusive licensee under various other U.S. and foreign patents and patent applications, including two U.S. patent applications owned by McGill University relating to oligonucleotides and DNA methyltransferase. The Company and MGH jointly own one issued U.S. patent directed to compositions of antisense oligonucleotides applicable to Alzheimer's disease. The Company holds an exclusive license to MGH's interests under such patent.

The Company is a non-exclusive licensee of certain patents held by the NIH relating to oligonucleotide phosphorothioates and a non-exclusive licensee of an NIH patent covering the phosphorothiolation of oligonucleotides. The field of each of these licenses extends to a wide variety of genetic targets. If certain of the claims of the NIH patents non-exclusively licensed to Hybridon are valid, certain of the Company's products in development would infringe these patents in the absence of the license.

The U.S. Patent and Trademark Office (the "U.S. PTO") has informed Hybridon that certain otherwise allowable patent applications exclusively licensed by the Company from the Worcester Foundation have been submitted to the Board of Patent Appeals and Interferences to determine whether an interference should be declared with issued U.S. patents held by the NIH relating to oligonucleotide phosphorothioates. An interference proceeding

is an inter-parties proceeding in the U.S. PTO to determine who is the first to invent a claimed invention, and thus who is entitled to a patent for the claimed invention. McDonnell Boehnen Hulbert & Berghoff, the Company's U.S. patent counsel, is of the opinion that the Worcester Foundation patent application has a prima-facie case for priority against the NIH for an invention that includes phosphorothioate-modified oligonucleotides. However, there can be no assurance an interference can be declared, or if declared, as to the outcome thereof. An adverse outcome in the interference would not affect the non-exclusive license from the NIH to Hybridon of the NIH phosphorothioate patents. The U.S. PTO has also declared a four-way interference involving two additional U.S. patents relating to the Company's chimeric oligonucleotides which Hybridon exclusively licenses from the Worcester Foundation. There can be no assurance as to the outcome of this interference.

Under the licenses to which it is a party, the Company is obligated to pay royalties on net sales by the Company of products or processes covered by a valid claim of a patent or patent application licensed to it. The Company also is required in some cases to pay a specified percentage of any sublicense income that the Company may receive. These licenses impose various commercialization, sublicensing, insurance and other obligations on the Company. Failure of the Company to comply with these requirements could result in termination of the license. The Foundation License also grants the Company a right of first refusal to certain technology developed by the Worcester Foundation.

The patent positions of pharmaceutical and biotechnology firms, including Hybridon, are generally uncertain and involve complex legal and factual questions. Consequently, even though Hybridon and its licensors are currently prosecuting their respective patent applications with the U.S. Patent and Trademark Office and certain foreign patent authorities, the Company does not know whether any of its applications or those of third parties under which the Company has or may obtain a license will result in the issuance of any

patents or, if any patents are issued, whether they will provide significant proprietary protection or will be circumvented or invalidated. Since patent applications in the United States are maintained in secrecy until patents issue, and since publication of discoveries in the scientific or patent literature tend to lag behind actual discoveries by several months, Hybridon cannot be certain that it, or any licensor of patents to it, as the case may be, was the first creator of inventions claimed by pending patent applications or that Hybridon or any licensor, as the case may be, was the first to file patent applications for such inventions. See "Risk Factors -- Patents and Proprietary Rights."

Competitors of the Company and other third parties hold issued patents and pending patent applications relating to antisense and other gene expression modulation technologies, and it is uncertain whether these patents and patent applications will require the Company to alter its products or processes, pay licensing fees or cease certain activities. See "Risk Factors -- Patents and Proprietary Rights." In particular, the Company is aware of a European patent granted to a third party relating to certain types of stabilized synthetic oligonucleotides for use as therapeutic agents for selectively blocking the translation of a messenger RNA into a targeted protein by binding with a portion of the messenger RNA to which the stabilized synthetic oligonucleotide is substantially complementary. This European patent was revoked in entirety in an opposition proceeding before the European Patent Office in September 1995. The holder of this patent has appealed such decision.

Hybridon's practice is to require its employees, consultants, outside scientific collaborators and sponsored researchers and other advisors to execute confidentiality agreements upon the commencement of employment or consulting relationships with the Company. These agreements provide that all confidential information developed or made known to the individual during the course of the individual's relationship with Hybridon is to be kept confidential and not disclosed to third parties, subject to a right to publish certain information in the scientific literature in certain circumstances and subject to other specific exceptions. In the case of employees, the agreements provide that all inventions conceived by the individual shall be the exclusive property of the Company. There can be no assurance, however, that these agreements will provide meaningful protection for the Company's trade secrets or adequate remedies in the event of unauthorized use or disclosure of such information.

Hybridon engages in collaborations and sponsored research agreements and enters into preclinical and clinical testing agreements with academic and research institutions and U.S. government agencies, such as the NIH, to take advantage of their technical expertise and staff and to gain access to clinical evaluation models, patients, and related technology. Consistent with pharmaceutical industry and academic standards, and the rules and regulations under the Federal Technology Transfer Act of 1986, these agreements may provide that developments and results will be freely published, that information or materials supplied by Hybridon will not be treated as confidential and that Hybridon may be required to negotiate a license to any such developments and results in order to commercialize products incorporating them. There can be no assurance that the Company will be able successfully to obtain any

such license at a reasonable cost or that such developments and results will not be made available to competitors of the Company on an exclusive or nonexclusive basis. See "Business -- Academic and Research Collaborations."

GOVERNMENT REGULATION

The production and marketing of the Company's products and its research and development activities are subject to regulation for safety, effectiveness and quality by numerous governmental authorities in the United States and other countries. The Company believes that it is in material compliance with all federal, state and foreign legal and regulatory requirements under which it operates. However, there can be no assurance that such legal or regulatory requirements will not be amended or that new legal or regulatory requirements will not be adopted, any one of which could have a material adverse effect on the Company's business or results of operations.

FDA Approval

In the United States, pharmaceutical products intended for therapeutic or diagnostic use in humans are subject to rigorous FDA regulation. The process of completing clinical trials and obtaining FDA approvals for a new drug is likely to take a number of years and requires the expenditure of substantial resources. There can be no assurance that any product will receive such approval on a timely basis, if at all. See "Risk Factors -- No Assurance of Regulatory Approval; Government Regulation."

The steps required before a new oligonucleotide-based pharmaceutical product for use in humans may be marketed in the United States include (i) preclinical tests, (ii) submission to the FDA of an IND application, which must become effective before human clinical trials commence, (iii) adequate and well-controlled human clinical trials to establish the safety and effectiveness of the product, (iv) submission of a New Drug Application ("NDA") to the FDA, and (v) FDA approval of the NDA prior to any commercial sale or shipment of the product.

Preclinical tests include laboratory evaluation of product chemistry and formulation, as well as animal studies, to assess the potential safety and effectiveness of the product. Compounds must be manufactured according to GMP and preclinical safety tests must be conducted by laboratories that comply with FDA regulations regarding GLP. The results of the preclinical tests are submitted to the FDA as part of an IND and are reviewed by the FDA prior to the commencement of human clinical trials. Unless the FDA objects to, or makes comments or raises questions concerning, an IND, the IND will become effective 30 days following its receipt by the FDA. There can be no assurance that submission of an IND will result in FDA authorization to commence clinical trials.

Clinical trials involve the administration of the investigational new drug to healthy volunteers and to patients, under the supervision of a qualified principal investigator. Clinical trials are conducted in accordance with FDA regulations regarding Good Clinical Practices under protocols that detail the objectives of the study, the parameters to be used to monitor safety and the effectiveness criteria to be evaluated. Each protocol must be submitted to the FDA as part of the IND. Further, each clinical study must be conducted under the auspices of an independent Institutional Review Board (an "IRB"). The IRB will consider, among other things, ethical factors, the safety of human subjects and the possible liability of the institution.

Clinical trials are typically conducted in three sequential phases, although the phases may overlap. In Phase I, the investigational new drug usually is administered to healthy human subjects and is tested for safety (adverse effects), dosage, tolerance, metabolism, distribution, excretion and pharmacodynamics (clinical pharmacology). Phase II involves studies in a limited patient population to (i) determine the effectiveness of the investigational new drug for specific indications, (ii) determine dosage tolerance and optimal dosage, and (iii) identify possible adverse effects and safety risks. When an investigational new drug is found to be effective and to have an acceptable safety profile in Phase II evaluation, Phase III trials are undertaken to further evaluate clinical effectiveness and to further test for safety within an expanded patient population at geographically dispersed clinical study sites. There can be no assurance that Phase I, Phase II or Phase III testing will be completed successfully within any specified time period, if at all, with respect to any of the Company's products subject to such testing. Furthermore, the Company, an IRB or the FDA may suspend clinical trials at any time if it is felt that the participants are being exposed to an unacceptable health risk.

The results of the pharmaceutical development, preclinical studies and clinical studies are submitted to the FDA in the form of an NDA for approval of the marketing and commercial shipment of the product. The FDA may require additional testing or information before approving the NDA. In any event, the FDA may deny an NDA

if applicable regulatory criteria are not satisfied. Moreover, if regulatory approval of a product is granted, such approval may require postmarketing testing and surveillance to monitor the safety of the product or may entail limitations on the indicated uses for which it may be marketed. Finally, product approvals may be withdrawn if compliance with regulatory standards is not maintained or if problems occur following initial marketing.

In addition to product approval, the Company may be required to obtain a satisfactory inspection by the FDA covering the Company's manufacturing facilities before a product manufactured by the Company can be marketed in the United States. The FDA will review the Company's manufacturing procedures and inspect its facilities and equipment for compliance with GMP and other applicable rules and regulations. Any material change by the Company in its manufacturing process, equipment or location would necessitate additional FDA review and approval.

Foreign Regulatory Approval

Whether or not FDA approval has been obtained, approval of a pharmaceutical product by comparable governmental regulatory authorities in foreign countries must be obtained prior to the commencement of clinical trials and subsequent marketing of such product in such countries. The approval procedure varies from country to country, and the time required may be longer or shorter than that required for FDA approval.

Under European Union ("EU") law, either of two approval procedures may apply to the Company's products: a centralized procedure, administered by the EMEA (the European Medicines Evaluation Agency); or a decentralized procedure, which requires approval by the medicines agency in each EU Member State where the Company's products will be marketed. The centralized procedure is mandatory for certain biotechnology products and available at the applicant's option for certain other products. Whichever procedure is used, the safety, efficacy and quality of the Company's products must be demonstrated according to demanding criteria under EU law and extensive nonclinical tests and clinical trials are likely to be required. In addition to premarket approval requirements, national laws in EU Member States will govern clinical trials of the Company's products, adherence to good manufacturing practice, advertising and promotion and other matters. In certain EU Member States, pricing or reimbursement approval may be a legal or practical precondition to marketing.

Other Regulation

In addition to regulations enforced by the FDA, the Company also is subject to regulation under the Occupational Safety and Health Act and other present and potential future federal, state or local regulations. Furthermore, because the Company's research and development involves the controlled use of hazardous materials, chemicals, viruses and various radioactive compounds, the Company's operations are subject to U.S. Department of Transportation and Environmental Protection Agency requirements and other federal, state and foreign laws and regulations regarding hazardous waste disposal, air emissions and wastewater discharge, including without limitation the Environmental Protection Act, the Toxic Substances Control Act and the Resource Conservation and Recovery Act. Although the Company believes that its procedures for handling and disposing of such materials comply with the standards prescribed by applicable regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, the Company could be held liable for any damages that result and any such liability could have a material adverse effect on the Company.

COMPETITION

The Company's products under development are expected to address several different markets defined by the potential indications for which such products are developed and ultimately approved by regulatory authorities. For several of these indications, the Company's proposed products will be competing with products and therapies either currently existing or expected to be developed, including antisense oligonucleotides developed by third parties. Competition among these products will be based, among other things, on product efficacy, safety, reliability, availability, price and patent position. An important factor will be the timing of market introduction of the Company's or competitive products. Accordingly, the relative speed with which Hybridon can develop products, complete the clinical trials and approval processes and supply commercial quantities of the products to the market is expected to be an important competitive factor. The Company's competitive position will also depend upon its ability to attract and retain qualified personnel, to obtain patent protection or otherwise develop proprietary products or processes, and to secure sufficient capital resources for the often substantial period between technological conception and commercial sales.

There are a number of companies, both privately and publicly held, that are conducting research and development activities on technologies and products aimed at therapeutic modulation of gene expression. The Company believes that the industry-wide interest in these technologies and products will continue and will accelerate as the techniques which permit their application to drug development become more widely understood. There can be no assurance that the Company's competitors will not succeed in developing products based on oligonucleotides or other technologies that are more effective than any which are being developed by the Company or which would render the Company's technology and products obsolete and noncompetitive prior to recovery by the Company of the research, development and commercialization expenses incurred with respect to those products. One competitor of the Company has recently received FDA approval to market on antisense therapeutic product for the treatment of CMV. Furthermore, because of the fundamental differences between gene expression modulation and other technologies, there may be indications for which such other technologies are superior to gene expression modulation. The development by others of new treatment methods not based on gene expression modulation technology for those indications for which the Company is developing compounds could render the Company's compounds noncompetitive or obsolete.

Competitors of the Company engaged in all areas of drug discovery in the United States and other countries are numerous and include, among others, major pharmaceutical and chemical companies, biotechnology firms, universities and other research institutions. Many of these competitors have substantially greater financial, technical and human resources than the Company. In addition, many of these competitors have significantly greater experience than the Company in undertaking preclinical studies and human clinical trials of new pharmaceutical products and obtaining FDA and other regulatory approvals of products for use in health care. Accordingly, the Company's competitors may succeed in obtaining FDA or other regulatory approvals for products more rapidly than the Company. One competitor of the Company has recently received FDA approval to market an antisense therapeutic product for the treatment of CMV. Furthermore, if the Company is permitted to commence commercial sales of products, it will also be competing with respect to manufacturing efficiency and marketing capabilities, areas in which it has limited or no experience.

In its HSP Division operations, the Company competes against a number of third parties, and there is the possibility of internal production by the Company's customers. Many of these third parties and customers have greater financial, technical and human resources than the Company. Key competitive factors will include the price and quality of the products as well as manufacturing capacity and ability to comply with specifications and to fulfill orders on a timely basis. The Company may be required to reduce the cost of its product offerings to meet competition. See "Risk Factors -- Competition."

EMPLOYEES

As of December 1, 1998, Hybridon employed 50 individuals full-time, of whom 21 held advanced degrees. Sixteen of these employees are engaged in research and development activities and nine are employed in finance, corporate development and legal and general administrative activities. In addition, twenty-four of these employees are employees of the HSP Division, of whom five are employed in quality control. Many of the Company's management and professional employees have had prior experience with pharmaceutical, biotechnology or medical products companies. None of the Company's employees is covered by collective bargaining agreements, and management considers relations with its employees to be good.

PROPERTIES

The Company leases its 36,000 square foot facility in Milford, Massachusetts under a lease which expires in 2004. The term of the lease may be extended at Hybridon's option for two additional five-year terms.

In addition, the Company leases supplemental laboratory space in Cambridge, Massachusetts comprising approximately 26,000 square feet for a term expiring April 30, 2007 at an annual rent of approximately $23 per square foot. The Company is currently subleasing approximately 20,000 square feet of this facility to a third party under a sublease expiring September 30, 2000.

LEGAL PROCEEDINGS

The Company is not a party to any litigation that it believes could have a material adverse effect on the Company or its business.

RECENT DEVELOPMENTS

The Company has been informed by Arthur Andersen LLP, its independent public accountants, that their report on the Company's December 31, 1998 financial statements will contain an explanatory fourth paragraph addressing the significant uncertainty regarding the Company's ability to continue operating as a going concern unless the Company is able to raise sufficient capital to fund operations for 1999 prior to the release of the audit report.

MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

From January 24, 1996 until December 2, 1997, the Company's Common Stock was traded on the Nasdaq National Market under the symbol "HYBN." Prior to January 24, 1996, there was no established public trading market for the Company's Common Stock.

On December 2, 1997, the Company's Common Stock was delisted from the Nasdaq National Market and began being quoted on the NASD OTC Bulletin Board. Prices reflected on the NASD OTC Bulletin Board may reflect inter-dealer prices, without retail mark-up, mark-downs or commissions and may not necessarily represent actual transactions.

On December 10, 1997 the Company effected a one-for-five reverse stock split of its Common Stock. As a result of the reverse stock split, each five shares of Common Stock was automatically converted into one share of Common Stock, with cash paid in lieu of any fractional shares.

The following table sets forth for the periods indicated the high and low sales prices per share of the Common Stock during each of the quarters set forth below as reported on the Nasdaq National Market and the NASD OTC Bulletin Board since January 24, 1996 and as adjusted to reflect the December 1997 reverse stock split.

	HIGH	LOW
1996		
First Quarter (from January 24, 1996).....	$71.250	$43.750
Second Quarter.....	59.375	25.625
Third Quarter.....	59.375	33.125
Fourth Quarter.....	43.125	26.250
1997		
First Quarter.....	$43.125	$28.125
Second Quarter.....	35.625	25.000
Third Quarter.....	28.125	7.500
Fourth Quarter.....	4.859	2.609
1998		
First Quarter.....	3.359	1.000
Second Quarter.....	2.75	1.609
Third Quarter.....	2.516	1.125

The reported closing bid price of the Common Stock on the NASD OTC Bulletin Board on December 17, 1998 was $1.0625 per share. The number of Common Stockholders of record on November 13, 1998 was 360.

DIVIDEND POLICY

The Convertible Preferred Stock dividend rate is 6.5% per annum, payable semi-annually in arrears. These dividends may be paid either in cash or in additional shares of Convertible Preferred Stock, at the discretion of the Company.

The Company has never declared or paid cash dividends on its capital stock, and the Company does not expect to pay any dividends on its Common Stock or any cash dividends on the Convertible Preferred Stock in the foreseeable future. The Indenture under which the Company issued the 9% Notes on April 2, 1997 limits the Company's ability to pay dividends or make other distributions on its Common Stock or to pay cash dividends on the Convertible Preferred Stock. As of September 30, 1998, $1.3 million in aggregate principal amount of the 9% Notes remained outstanding.

In addition, the Company is currently prohibited from paying cash dividends under the Bank Credit Facility, which has been purchased by affiliates of two members of the Company's Board of Directors.

USE OF PROCEEDS

The Company will not receive any proceeds from the sale of the Securities by the Selling Securityholders or their transferees (other than proceeds upon exercise of certain Hybridon warrants).

The funds that may be received by the Company upon the exercise in full of the outstanding Warrants will be added to the Company's general working capital.

CAPITALIZATION

The following table sets forth as of September 30, 1998 the actual capitalization of the Company. See the Company's unaudited Consolidated Financial Statements as of September 30, 1998, included elsewhere in this Registration Statement (in thousands, except share data.)

Current portion of long-term debt and capital lease obligations	$ 3,031
Long-term debt and capital lease obligations, net of current portion	$ 573
9% Convertible Subordinated Notes due 2004	1,306
Stockholders' Equity:	
Preferred Stock, $.01 par value, 5,000,000 shares authorized; no shares issued and outstanding.....	----------
Series A Convertible Preferred Stock, $.01 par value, 5,000,000 shares authorized; 624,790 shares issued and outstanding.....	6
Common Stock, $.001 par value, 100,000,000 shares authorized; 15,254,825 shares issued and outstanding (1).....	15
Additional Paid-In-Capital	240,301
Deficit accumulated during the development stage	(233,294)
Deferred Compensation	(931)
Total Stockholders' Equity	6,097
Total Capitalization	$ 7,976

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(1) Excludes an aggregate of 12,568,143 shares of Common Stock issuable upon exercise of options and warrants outstanding as of September 30, 1998, at a wieghted average exercise price of $5.45 per share.

SELECTED FINANCIAL DATA

The selected consolidated balance sheet data set forth below, as of December 31, 1996 and 1997, and the consolidated statements of operations data for each of the three years in the period December 31, 1997, are derived from the Company's Consolidated Financial Statements which have been audited by Arthur Andersen LLP, independent public accountants, and which are included elsewhere in this Prospectus. The selected consolidated financial data as of December 31, 1993, 1994 and 1995 and for the years ended December 31, 1993 and 1994 are derived from the Company's Consolidated Financial Statements not included in this Prospectus, all of which have been audited by Arthur Andersen LLP, independent public accountants. The selected financial data as of September 30, 1998 and for the nine months ended September 30, 1997 and 1998 and for the period from inception (May 25, 1989) to September 30, 1998 are derived from the Company's unaudited Consolidated Financial Statements which are included elsewhere in this Prospectus and which include, in the opinion of the Company, all adjustments (consisting only of normal recurring adjustments) that are necessary for a fair presentation of its financial position and the results of its operations for those periods. Operating results for the nine months ended September 30, 1998 are not necessarily indicative of the results that may be expected for the fiscal year ending December 31, 1998. The selected consolidated financial data should be read in conjunction with, and are qualified by reference to "Management's Discussion and Analysis of Financial Condition and Results of Operations," the Company's Consolidated Financial Statements and notes thereto and the Report of Independence Public Accountants included elsewhere in this Prospectus.

	Years Ended December 31,					Nine Months Ended September 30,		May 25, 1989 (inception) through September 30,
	1993	1994	1995	1996	1997	1997	1998	1998
	(In thousands, except per share data)					(Unaudited)		
Statement of Operations Data:								
Revenues								
Research and development	$ 917	$ 1,032	$ 1,186	$ 1,419	$ 945	$ 980	$ 950	$6,449
Product and service revenue	--	--	--	1,080	1,877	1,232	2,353	5,311
Royalty income	--	--	--	62	48	33	--	110
Interest income	267	135	219	1,447	1,079	898	106	3,327
	1,184	1,167	1,405	4,008	3,949	3,143	3,409	15,197
Operating Expenses								
Research and development	16,168	20,024	29,685	39,390	46,828	37,785	17,181	182,641
General and administrative	4,372	6,678	6,094	11,347	11,026	9,012	5,218	53,034
Interest	380	69	173	124	4,536	3,223	2,880	9,026
Restructuring	--	--	--	--	11,020	3,100	--	11,020
Total operating expenses	20,920	26,771	35,952	50,861	73,410	53,120	25,279	255,721
Loss from operations	(19,736)	(25,604)	(34,547)	(46,853)	(69,461)	(49,977)	(21,870)	(240,524)
Extraordinary item:								
Gain on conversion of 9% convertible subordinated notes payable	--	--	--	--	--	--	8,877	8,877
Net Loss	(19,736)	(25,604)	(34,547)	(46,853)	(69,461)	(49,977)	(12,993)	(231,647)
Accretion of preferred stock dividend	--	--	--	--	--	--	1,647	1,647
Net loss to common stockholders	$(19,736)	$(25,604)	$(34,547)	$(46,853)	$(69,461)	$(49,977)	$(14,640)	$233,294
Basic and diluted net loss per per common share from:								
Operations	$ (55.80)	$ (70.77)	$ (94.70)	$ (10.24)	$ (13.76)	$ (9.90)	$ (2.21)	
Extraordinary gain	--	--	--	--	--	--	0.83	
Net loss	$ (55.80)	$ (70.77)	$ (94.70)	$ (10.24)	$ (13.76)	$ (9.90)	$ (1.37)	
Shares Used in Computing Basic and Diluted Net Loss per Common Share(1)	354	362	365	4,576	5,050	5,047	10,648	

Other Financial Data:							
Ratio of earning to fixed charges(3)	--	--	--	--	--	--	--

	December 31,					September 30,
	1993	1994	1995	1996	1997	1998
						(Unaudited)
Balance Sheet Data:						
Cash, cash equivalents and short-term investments(2)	$ 8,767	$ 3,396	$ 5,284	$ 16,419	$ 2,202	$ 883
Working capital (deficit)	8,357	(1,713)	210	8,888	(24,100)	(2,815)
Total assets	15,243	11,989	19,618	41,537	35,072	18,399
Long-term debt and capital lease obligations, net of current portion.	79	1,522	1,145	9,032	3,282	573
9% Convertible Subordinated Notes Payable	--	--	--	--	50,000	1,306
Deficit accumulated in the development stage	(42,190)	(67,794)	(102,341)	(149,194)	(218,655)	(233,295)
Total stockholders' equity (deficit)	12,178	4,774	12,447	22,855	(46,048)	6,097

(1) Computed on the basis described in Notes 2(B) and 19(C) of Notes to Consolidated Financial Statements attached as APPENDIX A hereto.

(2) Short-term investments consisted of U.S. government securities with maturities greater than three months but less than one year from the purchase date.

(3) For the purpose of calculating the ratio of earnings to fixed charges, earnings represent the Company's loss from continuing operations before income taxes plus fixed charges. Fixed charges consist of interest expense on all indebtedness plus the interest portion of rental expense on non-cancelable leases and amortization of debt issuance costs and debt discount. The Company's earnings have been inadequate to meet its fixed changes in 1993, 1994, 1995, 1996 and 1997 and for the nine months ended September 30, 1997 and 1998 by $19.1 million, $25.2 million, $33.9 million, $46.4 million, $64.7 million, $46.6 million and $8.4 million, respectively.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read in conjunction with the Selected Consolidated Financial Data and Consolidated Financial Statements of the Company and related notes thereto appearing elsewhere in this Prospectus.

General

The Company is engaged in the discovery and development of genetic medicines based on antisense technology. The Company commenced operations in February 1990 and since that time has been engaged primarily in research and development efforts, development of its manufacturing capabilities and organizational efforts, including recruitment of scientific and management personnel, and raising capital. To date, the Company has not received revenue from the sale of therapeutic products developed by it. In order to commercialize its own therapeutic products, the Company will need to address a number of technological challenges and comply with comprehensive regulatory requirements. Accordingly, it is not possible to predict the amount of funds that will be required or the length of time that will pass before the Company receives revenues from sales of any of these products. All revenues received by the Company to date have been derived from collaborative agreements, interest on invested funds and revenues from the custom contract manufacturing of synthetic DNA and reagent products by the HSP Division.

In the Report of Independent Public Accountants set forth in the Consolidated Financial Statements of the Company, Arthur Andersen LLP, the Company's independent public accountants, state that there is substantial doubt about the Company's ability to continue as a going concern.

The Company has been informed by Arthur Andersen LLP, its independent public accountants, that their reports on the Company's December 31, 1998 financial statements will contain an explanatory fourth paragraph addressing the significant uncertainty regarding the Company's ability to continue operating as a going concern unless the Company is able to raise sufficient capital to fund operations for 1999 prior to the release of the audit report.

The Company has incurred cumulative losses from inception through September 30, 1998 of approximately $231.6 million. In the second half of 1997, the Company commenced a restructuring program that has significantly reduced the Company's operating expenses and cost requirements in 1998 from 1997 levels. However, the Company expects that its research and development expenses will continue to be significant in the fourth quarter of 1998 and in future years as it pursues its core drug development programs and expects to continue to incur operating losses and have significant capital requirements that it will not be able to satisfy with internally generated funds. The Company continues to explore opportunities to reduce operating expenses in an effort to conserve its cash resources. The number of employees has continued to decline through attrition; as of December 1, 1998, the Company had 50 full-time employees. In connection with the ongoing restructuring, the Company completed the relocation of its corporate headquarters to Milford, Massachusetts, the site of the HSP Division.

This Registration Statement on Form S-1 contains forward-looking statements. For this purpose, any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Without limiting, the foregoing, the words "believes," "anticipates," "plans," "expects" and similar expressions are intended to identify forward-looking statements. There are a number of important factors that could cause the Company's actual results to differ materially from those indicated by such forward-looking statements. These factors include, without limitation, those set forth herein under the caption "Risk Factors."

Restructuring Plan

During the second half of 1997, the Company implemented a restructuring plan to reduce expenditures on a phased basis over the balance of 1997 and into the first half of 1998 in an effort to conserve its cash resources. The restructuring plan was completed in 1998. As part of this restructuring plan, in addition to terminating the clinical development of GEM 91, the Company reduced or suspended selected programs unrelated to its core

advanced chemistry antisense drug development programs, substantially reduced the number of its employees in 1997 and substantially reduced operations at its Paris, France office. As part of the restructuring, the Company reviewed all outside testing, public relations, travel and entertainment and consulting arrangements and terminated or renegotiated various of these arrangements.

As part of the restructuring, the Company subleased one facility in Cambridge, Massachusetts and a substantial portion of its corporate headquarters located at 620 Memorial Drive, Cambridge, Massachusetts. The Company incurred expenses relating to these subleases for broker fees and renovation expenses incurred in preparing the Memorial Drive space for the new tenant. In addition, the Company accrued the estimated lease loss of subleasing the remaining space at its corporate headquarters. The Company has accrued the remaining lease costs prior to terminating the lease for its offices in Paris, France effective March 31, 1998. The Company subsequently terminated its leasehold interest in the Cambridge Facility and consolidated its operations in its Milford, Massachusetts facility during the third quarter of 1998.

Because of the significant costs involved in terminating employees, subleasing its facilities, terminating research contracts, suspending or cancelling research programs and substantially reducing operations, the Company did not begin to experience a material decrease in its expenditure rate until

the fourth quarter of 1997. The Company recorded a restructuring charge of $11.0 million for the actions that occurred in 1997.

Results of Operations

Nine Months Ended September 30, 1998 and 1997

The Company had total revenues of $3,410,000 and $3,143,000 in the nine months ended September 30, 1998 and 1997, respectively. Revenues from research and development collaborations were $950,000 and $980,000 for the nine months ended September 30, 1998 and 1997, respectively.

Product and service revenue from the HSP Division was $2,353,000 and $1,231,000 for the nine months ended September 30, 1998 and 1997, respectively. Included in the nine months ended September 30, 1998 was $250,000 of revenue received under its License Agreement with MethylGene for certain services provided. The increase in product and service revenue in 1998 was a result of an expansion in the customer base and increasing sales to existing customers and revenue earned under the License Agreement with MethylGene.

Interest income was $106,000 and $898,000 for the nine months ended September 30, 1998 and 1997, respectively. The decrease in interest income is attributable to the decrease in cash and investments held by the Company in 1998 as compared to 1997.

The Company had research and development expenses of $17,181,000 and $37,785,000 for the nine months ended September 30, 1998 and 1997, respectively. The decrease in research and development expenses in 1998 reflects the restructuring program that was commenced during the second half of 1997 and completed in the third quarter of 1998. The restructuring included the discontinuation of operations at the Company's facilities in Europe, termination of the clinical development of GEM 91 and the reduction or suspension of selected programs unrelated to the Company's core advanced chemistry antisense drug development program, including the termination of its ribozyme program. The restructuring resulted in significant reductions in employee-related expenses, clinical and outside testing, consulting, materials and lab expenses. The Company's facility costs in 1998 were also reduced by the income received from subleasing its underutilized facilities. The Company has now relocated its headquarters to its manufacturing facility, which is located in Milford, Massachusetts, and has terminated the lease to the Cambridge Facility, which should significantly reduce facilities costs in future periods.

The Company had general and administrative expenses of $5,218,000 and $9,012,000 for the nine months ended September 30, 1998 and 1997, respectively. The decrease in general and administrative expenses in 1998 resulted primarily from the Company's restructuring program initiated during the second half of 1997 and its effect on employee-related expenses, consulting and net facilities costs.

The Company had interest expense of $2,880,000 and $3,223,000 for the nine months ended September 30, 1998 and 1997, respectively. The decrease in interest expense in 1998 is mainly attributable to the conversion of approximately $48.7 million of the 9% Notes, issued in the second quarter of 1997, to Series A Convertible Preferred Stock on May 5, 1998.

As a result of the above factors, the Company incurred losses from operations of $21,869,000 and $49,977,000 for the nine months ended September 30, 1998 and 1997, respectively.

The Company had extraordinary income of $8,877,000 for the nine months ended September 30, 1998 resulting from the conversion of the 9% Notes to Series A Convertible Preferred Stock in the second quarter of 1998. See "Financial Statements -- Notes to Consolidated Condensed Financial Statements" for a discussion of the Company's extraordinary income. As a result of this transaction, the Company reduced its net loss to $12,993,000 for the nine months

ended September 30, 1998.

Years ended December 31, 1997, 1996 and 1995

Revenues

The Company had total revenues of $3.9 million in 1997, $4.0 million in 1996 and $1.4 million in 1995. During 1997, 1996 and 1995, the Company received revenues from research and development collaborations of $945,000, $1.4 million and $1.2 million, respectively. Research and development collaboration revenues decreased in 1997 from 1996 because the research funding, which the Company had been receiving under the Company's collaboration with Roche in 1996 and 1995, was terminated by Roche as of March 31, 1997. Research and development collaboration revenues increased in 1996 from 1995 because collaboration revenues in 1996 included revenues earned under a collaborative agreement with Searle, which the Company entered into in January 1996.

Revenues from the custom contract manufacturing of synthetic DNA and reagent products by the HSP Division were $1.9 million in 1997 and $1.1 million in 1996. The HSP Division had no revenues in 1995. The increase in revenues in 1997 resulted from a full year of operations for the HSP Division, which commenced operations in the third quarter of 1996. This increase in revenues in 1997 was significantly lower than the Company had anticipated.

Revenues from interest income were $1.1 million in 1997, $1.4 million in 1996 and $219,000 in 1995. The decrease in interest income in 1997 from 1996 was the result of lower cash balances available for investment in 1997 than in 1996. The increase in interest income in 1996 from 1995 was the result of substantially higher cash balances available for investment as a result of the Company's initial public offering, which was completed on February 2, 1996.

Research and Development Expenses

During 1997, 1996 and 1995, the Company expended $46.8 million, $39.4 million and $29.7 million, respectively, on research and development activities The increases in research and development expenses in 1997 and 1996 reflected increasing expenses related primarily to ongoing clinical trials of the Company's product candidates, including clinical trials of two different formulations of GEM 132, which were first initiated during the third quarter of 1996 and the first quarter of 1997, clinical trials of GEM 92, which were initiated in the third quarter of 1997 and clinical trials of GEM 91, which were initiated in France in October 1993 and in the United States in May 1994 and terminated in July 1997. Clinical expenses related to GEM 91 decreased significantly during the second half of 1997 after the Company elected to terminate development of this compound.

Research and development expenses also increased in 1997 and 1996 due to significant increases in preclinical expenses incurred to meet the filing requirements to initiate the domestic clinical trials of the Company's product candidates.

The facilities expense related to the research and development area increased significantly in 1997 as a result of the relocation of the corporate offices to Cambridge, Massachusetts.

Research and development salaries and related costs remained at approximately the same level in 1997 as 1996 because of the costs involved in terminating employees in 1997. Research and development salaries and related costs increased significantly in 1996 over 1995 as the number of employees engaged in research and development increased to 206 at December 31, 1996 from 124 at December 31, 1995.

Patent expenses also remained at approximately the same level in 1997 as

1996 as the Company limited the scope of patent protection that it sought as part of its effort to conserve its cash resources. Patent expenses increased in 1996 as compared to 1995, as the Company continued to develop a patent portfolio both domestically and internationally.

General and Administrative Expenses

The Company incurred general and administrative expenses of $11.0 million in 1997, $11.3 million in 1996, and $6.1 million in 1995, respectively.

The facilities expense related to the general and administrative area increased significantly in 1997 as a result of the relocation of the corporate offices to Cambridge, Massachusetts. However, as a result of the implementation of the restructuring plan in the second half of 1997, such increase was offset by decreases in general and administrative salaries and related costs and in consulting expenses in the second half of 1997. As part of the restructuring, approximately 11 general and administrative positions were eliminated. General and administrative expenses related to business development, public relations and legal expenses remained at approximately the same level in 1997 as 1996.

The increase in general and administrative expenses in 1996 from 1995 was primarily attributable to an increase in expenses for business development activity, public relations and legal expenses incurred primarily as a result of being a public company and salaries and related costs.

Interest Expense

Interest expense was $4.5 million in 1997, $124,000 in 1996 and $173,000 in 1995. The increase in interest expense in 1997 from 1996 reflected an increase in the Company's debt outstanding associated with the Company's issuance of $50,000,000 of 9% Notes in 1997 and interest incurred on borrowings to finance the purchase of property and equipment. The decrease in interest expense in 1996 from 1995 reflected a decrease in the outstanding balance of borrowings to finance the purchase of property and equipment.

Restructuring Charge

In connection with the implementation of the restructuring plan in the second half of 1997, the Company recorded a restructuring charge of $11.0 million for the actions that occurred in 1997. The Company made cash payments of approximately $1.5 million in 1997 and expects to make additional cash payments of approximately $3.7 million in 1998 in connection with the restructuring.

Net Loss

As a result of the above factors, the Company incurred net losses of $69.5 million in 1997, $46.9 million in 1996 and $34.5 million in 1995.

LIQUIDITY AND CAPITAL RESOURCES

General

From inception through September 30, 1998, the Company financed its operations, including capital expenditures, through a public offering of common stock, private placements of equity securities and the 9% Notes in 1997 and the exercise of stock options and warrants with aggregate gross proceeds totalling $230.5 million, as well as through bank and other borrowings of $10.1 million, capital leases of $5.6 million, research and development and milestone payments and license fees from corporate collaborators totalling $6.4 million and sales of synthetic DNA and reagent products by the HSP Division totalling $5.1 million. Through September 30, 1998, the Company utilized approximately $196.4 million to fund operating activities and $29.7 million to finance capital

expenditures, including leasehold improvements at the Company's former Cambridge Facility at its facility in Milford, Massachusetts.

During the nine months ended September 30, 1998, the Company's net cash used in operating activities amounted to $17,444,000. The Company's operating cash requirements were funded primarily through the utilization of existing cash and proceeds raised in private equity offerings conducted in the first half of 1998, the collection of its accounts receivable from sales and services provided by the Company, collaborative payments received, the rental payments from its underutilized facilities, and the sale of equipment. The primary use of cash for operating activities was to fund the Company's cash operating loss (before the extraordinary gain) of $21.9 million. The Company expects to purchase a minimal amount of capital equipment in the remainder of 1998 as part of its effort to conserve cash resources.

The Company's existing capital resources include the following amounts received in the fourth quarter of 1998. First, $6,163,000 was received in connection with relocation of the Company's corporate headquarters to Milford, Massachusetts, and the sale of the Company's interest in the Charles River Building Limited Partnership, which owned the Company's former headquarters facility; this amount includes a portion of the security deposit relating to the Company's lease to its former headquarters facility and the release of $660,000 in restricted cash. Second, $254,000 was received in connection with the sale in October 1998 of certain equipment and furniture. Third, approximately $3.2 million was received in December 1998 as an additional advance under the Bank Credit Facility (as described below).

The Company had cash and cash equivalents of $883,000 at September 30, 1998 and approximately $6.0 million as of December 15, 1998, which the Company estimates will last into the first quarter of 1999. The working capital deficit at December 15, 1998 was $ .8 million.

The Company's expected capital resources include committed collaborative research and development payments from Searle, research and development funding expected from MethylGene and the profit margins on anticipated sales by the HSP Division.

In June 1998, the Company relocated its headquarters from Cambridge, Massachusetts to its manufacturing facility in Milford, Massachusetts. The Cambridge Facility was re-leased in September 1998 to a third party, subject to a sublease of a portion of the facility. As a result, the Company was relieved of its substantial lease obligations for the Cambridge Facility, subject to a contingent continuing liability for any defaults which may arise under the sublease.

The Company is currently undergoing a sales and use tax audit by the Massachusetts Department of Revenue. The amount of the final assessment, while currently unknown, may be material.

Forum and Pecks Management Partners Ltd. ("Pecks" and, together with Forum, the "Lender"), affiliates of two members of the Company's Board of Directors, have purchased the Bank Credit Facility, the outstanding principal amount of which, as of November 15, 1998, was approximately $2.8 million. In connection with the purchase of the Bank Credit Facility, in December 1998, the Lender lent an additional amount to the Company, increasing the outstanding principal amount of the Loan to $6.0 million. See "Description of Common Stock and Indebtedness -- Indebtedness -- Bank Credit Facility."

The Company will be required to raise substantial additional funds through external sources, including through collaborative relationships and public or private financings, to support its operations. Except for research and development funding from Searle (which is subject to early termination in certain circumstances), revenue expected to be received from MethylGene and sale of DNA products and reagents manufactured on a custom

contract basis by the HSP Division, the Company has no current external sources

of capital, and, as discussed above, expects no product revenues for at least several years from sales of therapeutic products that it is developing.

No assurance can be given that such additional funds will be available to fund the Company's operations or, if available, that such funds will be available on acceptable terms. If additional funds are raised by issuing equity securities, further dilution to then existing stockholders will result. Additionally, the terms of any such additional financing may adversely affect the holdings or rights of then existing stockholders.

If adequate funds are not available, the Company may be required to further curtail significantly one or more of its core drug development programs, obtain funds through arrangements with collaborative partners or others that may require the Company to relinquish rights to certain of its technologies, product candidates or products which the Company would otherwise pursue on its own or terminate operations.

The Company's future capital requirements will depend on many factors, including continued scientific progress in its research, drug discovery and development programs, the magnitude of these programs, progress with preclinical and clinical trials, sales of DNA products and reagents to third parties by the HSP Division and the margins on such sales, the time and costs involved in obtaining regulatory approvals, the costs involved in filing, prosecuting and enforcing patent claims, competing technological and market developments, the ability of the Company to establish and maintain collaborative academic and commercial research, development and marketing relationships, the ability of the Company to obtain third-party financing for leasehold improvements and other capital expenditures and the costs of manufacturing scale-up and commercialization activities and arrangements.

9% Notes

On April 2, 1997, the Company issued $50.0 million of the 9% Note with a maturity date of April 1, 2004, Under the terms of the 9% Notes the Company is required to make semiannual interest payments on the outstanding principal balance of the9% Notes on April 1 and October 1 of each year during which the 9% Notes are outstanding. The outstanding principal balance of the 9% Notes will become due on the maturity date. The Company made the first interest payment of $2.3 million at the beginning of October 1997. On February 6, 1998, the Company commenced an exchange offer to the holders of the 9% Notes offering to issue to such holders shares of Series A Convertible Preferred Stock and Class A Warrants to purchase shares of Common Stock in exchange for such 9% Notes, as described below under the caption "1998 Financing Activities." As of September 30, 1998, approximately $48.7 million in aggregate principal amount of 9% Notes had been tendered to the Company in the Exchange Offer.

Bank Credit Facility

In December 1996, the Company entered into a five-year $7.5 million credit facility to finance the leasehold improvements of the Company's manufacturing facility. See "Description of Capital Stock and Indebtedness -- Indebtedness -- Bank Credit Facility."

Facility Leases

The Company entered into a lease for its corporate headquarters and primary research and development laboratories in Cambridge, Massachusetts and moved its operations to this facility in the first quarter of 1997. The Company's facilities costs increased significantly upon occupying the Cambridge Facility. As part of the lease agreement, the Company elected to treat $5.5 million of payments to the landlord (primarily related to tenant improvements) as contributions to the capital of the Cambridge landlord in exchange for a limited partnership interest in the Cambridge landlord. All other expenses incurred to equip and build-out the facility in excess of $5.5

million were included in leasehold improvements and were not exchangeable for a partnership interest under the lease. The Cambridge landlord is an affiliate of three directors of the Company. During July 1998, the Company's operations were relocated to its facility in Milford, Massachusetts. In September 1998, the Company terminated the lease for its Cambridge Facility and the facility was

re-leased to a third party, subject to a sublease of a portion of the facility. As a result, the Company was relieved of its substantial lease obligations for the Cambridge Facility, subject to a contingent continuing liability for any defaults which may arise under the sublease.

The Company is a party to leases for its facility in Milford, Massachusetts and the ancillary facility in Cambridge, Massachusetts, under which it has significant payment obligations. Effective March 31, 1998, the Company has terminated the lease for its office space in Paris, France. Effective September 16, 1998 the Company terminated the lease for its office space in Cambridge, Massachusetts, as described above. At November 30, 1998 the Company had facility lease commitments amounting to approximately $6.3 million, which last until April 2007.

As of December 31, 1997, the Company had approximately $206 million and $3.4 million of net operating loss and tax credit carryforwards, respectively. The Tax Reform Act of 1986 (the "Tax Act") contains certain provisions that may limit the Company's ability to utilize net operating loss and tax credit carryforwards in any given year if certain events occur, including cumulative changes in ownership interests in excess of 50% over a three-year period. The Company has completed several financings since the effective date of the Tax Act, which, as of December 31, 1997, have resulted in ownership changes in excess of 50%, as defined under the Tax Act.

Year 2000 Compliance

As has been widely publicized, many computer systems and microprocessors are not programmed to accommodate dates beyond the year 1999. The Company's exposure to Y2K problem comes not only from its own internal computer systems and microprocessors, but also from the systems and microprocessors of its key suppliers, including utility companies and payroll services.

The Company currently believes that all of its internal systems will be Y2K compliant by the end of the third quarter of 1999. The Company is currently evaluating all of its internal computer systems and microprocessors in light of the Y2K problem. As part of this process, the Company is conducting an inventory of its automated instruments and other computerized equipment and will be contacting applicable vendors for information regarding Y2K compliance. The Company will then upgrade or otherwise modify its internal computer systems and microprocessors, to the extent necessary. Testing of all its internal computer systems and microprocessors should be completed by the end of the first quarter of 1999. The Company does not expect the cost of bringing all the Company's systems and microprocessors into Y2K compliance will be material.

The Company's Y2K compliance efforts are in addition to other planned information technology ("IT") projects. While these efforts have caused and may continue to cause delays in other IT projects, the Company does not expect that any of these delays will have a significant effect on the Company's business or that any of the Company's other IT projects will be canceled or postponed to pay for the Y2K upgrades.

The Company is not currently able to asses the Y2K readiness of its research partners, or the potential impact, if any, of a research partners failure to be Y2K compliant. With regard to potential supplier Y2K problems, the Company has compiled a list of its critical suppliers, and has sent a Y2K questionnaire to each of them in order to permit the Company to ascertain the Y2K compliance status of each. The Company is awaiting the return of these questionnaires. The Company does not know of any key supplier Y2K problems that could have a material effect on the Company's business. If through a Y2K questionnaire or otherwise the Company becomes aware of any such problems and is not satisfied that those problems are being adequately addressed, it will take appropriate steps to find alternative suppliers.

It has been acknowledged by governmental authorities that Y2K problems have the potential to disrupt global economies, that no business is immune from the potentially far-reaching effects of Y2K problems, and that it is difficult to predict with certainty what will happen after December 31, 1999. Consequently, it is possible that Y2K problems will have a material effect on the Company's business even if the Company takes all appropriate measures to ensure that it and its key suppliers are Y2K compliant.

It is possible that the conclusions reached by the Company from its analysis to date will change, which could cause the Company's Y2K cost estimates and target completion dates to change.

DIRECTORS, EXECUTIVE OFFICERS AND CERTAIN SIGNIFICANT EMPLOYEES OF THE COMPANY

Set forth below is certain information regarding all of the persons currently serving as members of the Board of Directors or as Executive Officers of the Company, including his principal occupation and business experience for the past five years, the name of other publicly held companies of which he serves as a director and his age and length of service as a director of the Company. No director or executive officer is related by blood, marriage or adoption to any other director or executive officer.

DIRECTORS OF THE COMPANY

NAME	AGE	DIRECTOR SINCE	PRINCIPAL OCCUPATION, OTHER BUSINESS EXPERIENCE DURING PAST FIVE YEARS AND OTHER DIRECTORSHIPS
DIRECTORS WHOSE TERMS EXPIRE IN 1999 (CLASS I DIRECTORS)			
Nasser Menhall.....	42	1992	Member of the Board of Directors and Chief Executive Officer of the WorldCare Group, a teleradiology company, since 1993; President of Pillar Limited, a private investment and management consulting firm, since 1990; President of Biomedical Associates, a private investment firm, since 1990.
Arthur W. Berry.....	56	1998	Chairman and Managing Partner of Pecks Management Partners, since 1990; Vice President and Co-Manager of the Alliance Convertible Securities Group and President of the Alliance Convertible Fund from 1985 to 1990; prior to joining Alliance, Vice President and Head of Special Funds Section and Manager of the Harris Convertible Fund at Harris Bank and Senior Portfolio Manager in the bank's Individual Investment Management Group. Member of the Board of Directors of Intellicorp, Inc.
Harold L. Purkey.....	54	1998	President of Forum Capital Markets LLC; Senior Managing Director of Convertible Securities at Smith Barney Shearson from 1990 to 1994; Senior Executive Vice President of Drexel Burnham Lambert from 1982 to 1989. Member of the Board of Directors of Richardson Electronics.
DIRECTORS WHOSE TERMS EXPIRE IN 2000 (CLASS II DIRECTORS)			
Mohamed A. El-Khereiji.....	44	1993	Chairman of the International Centre for Commerce and Contracting, a contracting and trading company, since 1979; Chairman of Faisal Investment E.C., a leasing company, since 1989.

James B. Wyngaarden, M.D.....	73	1990	Vice Chairman of the Board of Directors of the

			Company since February 1997; Foreign Secretary of the National Academy of Sciences and the Institute of Medicine of the National Academy of Sciences from 1990 to 1994; Council member of the Human Genome Organization from 1990 to 1993 and Director from 1990 to 1991; Director of the National Institutes of Health from 1982 to 1989; Member of the Board of Directors of Human Genome Sciences, Inc. and Magainin Pharmaceuticals, Inc.
Paul C. Zamecnik, M.D.....	85	1990	Principal Scientist at the Worcester Foundation for Biomedical Research, Inc. (the "Worcester Foundation") from 1979 to 1996; Collis P. Huntington Professor of Oncologic Medicine Emeritus at the Harvard Medical School since 1979; Senior Scientist and Honorary Physician at MGH.
DIRECTORS WHOSE TERMS EXPIRE IN 2001 (CLASS III DIRECTORS)			
Sudhir Agrawal, D. Phil.....	45	1993	Senior Vice President of the Company since March 1994; Chief Scientific Officer of the Company since January 1993; Vice President of Discovery of the Company from December 1991 to January 1993; Principal Research Scientist of the Company from February 1990 to January 1993.
Youssef El-Zein.....	49	1992	Vice Chairman of the Board of Directors of the Company since February 1997; Executive Officer of Pillar S.A., a private investment and management consulting firm, since 1991; Chairman of the WorldCare Group since 1993; Member of the Board of Directors of Pillar Investment Limited, a private investment and management consulting firm, since 1991.
E. Andrews Grinstead III	53	1991	Chairman of the Board and Chief Executive Officer of the Company since 1991; President of the Company since 1993; Member of the Board of Directors of EcoScience Corporation, Pharmos Corporation and Meridian Medical Technologies.

Effective February 17, 1997, Dr. Andre L. Lamotte, a Class I Director of the Company, resigned from the Board of Directors of the Company. Effective July 29, 1997, Jerry A. Weisbach, a Class II Director of the Company, resigned from the Board of Directors of the Company. Effective August 11, 1997, J. Robert Buchanan, A Class I Director of the Company, resigned from the Board of Directors of the Company.

EXECUTIVE OFFICERS

NAME	AGE	POSITION
E. Andrews Grinstead III.....	53	Chairman of Board of Directors, President and Chief Executive Officer
Sudhir Agrawal, D. Phil.....	45	Senior Vice President of Discovery, Chief Scientific Officer and Director

Mr. Grinstead joined the Company in June 1991 and was appointed Chairman of the Board and Chief Executive Officer in August 1991 and President in January 1993. He has served on the Board of Directors since June 1991. Prior to joining the Company, Mr. Grinstead served as Managing Director and Group Head of the life sciences group at PaineWebber, Incorporated, an investment banking firm, from 1987 to October 1990; Managing Director and Group Head of the life sciences group at Drexel Burnham Lambert, Inc., an investment banking firm, from

1986 to 1987; and Vice President at Kidder, Peabody & Co. Incorporated, an investment banking firm, from 1984 to 1986, where he developed the life sciences corporate finance specialty group. Mr. Grinstead served in a variety of operational and executive positions with Eli Lilly and Company ("Eli Lilly"), an international pharmaceutical company, from 1976 to 1984, most recently as General Manager of Venezuelan Pharmaceutical, Animal Health and Agricultural Chemical Operations and at Lilly Corporate Staff as Administrator, Strategic Planning and Acquisitions. Since 1991, Mr. Grinstead has served as a director of EcoScience Corporation, a development stage company engaged in the development of biopesticides, and as a director of Pharmos Corporation, a development stage company engaged in the development of novel pharmaceutical compounds and drug delivery systems. Mr. Grinstead also serves as a director of Meridian Medical Technologies, Inc., a pharmaceutical and medical device company. Mr. Grinstead was appointed to The President's Council of the National Academy of Sciences and the Institute of Medicine in January 1992 and the Board of the Massachusetts Biotech Council in 1997. Since 1994, Mr. Grinstead has served as a member of the Board of Trustees of the Albert B. Sabin Vaccine Foundation, a charitable foundation dedicated to disease prevention. Mr. Grinstead received an A.B. from Harvard College in 1967, a J.D. from the University of Virginia School of Law in 1974 and an M.B.A. from the Harvard Graduate School of Business Administration in 1976.

Dr. Agrawal joined the Company in February 1990 and served as Principal Research Scientist from February 1990 to January 1993 and as Vice President of Discovery from December 1991 to January 1993 prior to being appointed Chief Scientific Officer in January 1993 and Senior Vice President of Discovery in March 1994. He has served on the Board of Directors since March 1993. Prior to joining the Company, Dr. Agrawal served as a Foundation Scholar at the Worcester Foundation from 1987 through 1991. Dr. Agrawal served as a Research Associate at Research Council Laboratory of Molecular Biology in Cambridge, England, from 1985 to 1986, studying synthetic oligonucleotides. Dr. Agrawal received a B.Sc. in chemistry, botany and zoology in 1973, an M.Sc. in organic chemistry in 1975 and a D. Phil. in chemistry in 1980 from Allahabad University in India.

For information relating to shares of Common Stock owned by each of the directors and executive officers of the Company, see "Security Ownership of Certain Beneficial Owners and Management."

EXECUTIVE COMPENSATION

Compensation of Executive Officers

Summary Compensation Table.

The following table sets forth the compensation for services in all capacities to the Company for the fiscal years ended December 31, 1997 ("fiscal 1997"), December 31, 1996 and December 31, 1995 for the Company's Chief Executive Officer and up to four of the other most highly compensated executive officers who were serving as executive officers at December 31, 1997 whose total annual salary and bonus exceeded $100,000 in fiscal 1997 and up to two additional individuals who would have been among such other four most highly compensated executive officers if such individuals had been serving as executive officers at December 31, 1997 (the Chief Executive Officer and such other executive officers are hereinafter referred to as the "Named Executive Officers"):

Summary Compensation Table

		ANNUAL COMPENSATION			LONG-TERM COMPENSATION AWARDS	
NAME AND PRINCIPAL POSITION		SALARY	BONUS	OTHER ANNUAL COMPENSATION	SECURITIES UNDERLYING OPTIONS	ALL OTHER COMPENSATION
E. Andrews Grinstead III	1997	$375,000	0	$72,486(1)	66,806	$75,048(2)(3)
Chairman of the Board, President and Chief Executive Officer	1996	$375,000	$225,000	$82,386(6)	50,000	$43,527(7)(8)
	1995	$270,000	$235,000	$19,655(9)	119,846	$118,332(10)(11)
Anthony J. Payne	1997	$172,656	0	$47,778(1)	31,316	$158,628(2)(3)(4)
Former Senior Vice President	1996	$243,750	$107,000	$45,616(6)	25,000	$ 14,853(7)(8)

of Finance and Administration, Chief Financial Officer, Treasurer and Secretary(12)	1995	$175,000	$137,500	$30,469(9)	43,162	$ 45,250(10)(11)
Sudhir Agrawal, D. Phil.....	1997	$250,000	0	0	32,263	$ 22,757(3)(6)
Senior Vice President of Discovery, Chief Scientific Officer and Director	1996	$250,000	$100,000	0	25,000	$ 28,676(5)(8)
	1995	$178,250	$114,125	0	32,263	$ 38,523(5)(11)

(1) Includes $51,386 and $33,817 paid by the Company to Messrs. Grinstead and Payne, respectively, in lieu of employee benefits in 1998.

(2) Includes $37,748 and $972 paid by the Company to Messrs. Grinstead and Payne, respectively, during 1997 with respect to life insurance for the benefit of the Named Executive Officer.

(3) Includes $37,300, $15,468 and $18,269 paid by the Company to Mr. Grinstead, Mr. Payne and Dr. Agrawal, respectively, in connection with the surrender of accrued but unused vacation days during 1997.

(4) Includes $142,188 paid by the Company to Mr. Payne in connection with the termination of his employment during 1997.

(5) Includes $4,500, $4,277 and $4,488 contributed by the Company on behalf of Dr. Agrawal pursuant to the Company's 401(k) Plan in 1995, 1996 and 1997 respectively.

(6) Includes $76,017 and $36,938 paid by the Company to Messrs. Grinstead and Payne, respectively, in lieu of employee benefits in 1997.

(7) Includes $11,364 and $3,134 paid by the Company to Messrs. Grinstead and Payne, respectively, during 1996 with respect to life insurance for the benefit of the Named Executive Officer.

(8) Includes $32,163, $11,719 and $24,399 paid to Mr. Grinstead, Mr. Payne, and Dr. Agrawal, respectively, in consideration of the surrender of accrued but unused vacation days during 1996.

(9) Includes $12,510 and $23,594 paid by the Company to Messrs. Grinstead and Payne, respectively, in lieu of employee benefits in 1996.

(10) Includes $34,345 and $4,531 paid by the Company to Messrs. Grinstead and Payne, respectively, during 1995 with respect to life insurance for the benefit of the Named Executive Officer.

(11) Includes $83,987, $40,719 and $34,023 paid to Mr. Grinstead, Mr. Payne, and Dr. Agrawal in consideration of the surrender of accrued but unused vacation days during the period from the commencement of such Named Executive Officer's employment with the Company through December 31, 1995.

(12) Mr. Payne's employment with the Company terminated as of September 15, 1997.

Option Grants Table

The following table sets forth certain information concerning grants of stock options made during fiscal 1997 to each of the executive officers named in the Summary Compensation Table:

Option Grants In Last Fiscal Year

OPTION GRANTS IN LAST FISCAL YEAR					POTENTIAL REALIZABLE VALUE AT ASSUMED ANNUAL RATES OF STOCK PRICE APPRECIATION FOR

	INDIVIDUAL GRANTS				OPTION TERMS(2)	
	NUMBER OF SECURITIES UNDERLYING OPTIONS GRANTED	PERCENTAGE OF TOTAL OPTIONS GRANTED TO EMPLOYEES IN FISCAL YEAR	EXERCISE PRICE PER SHARE	EXPIRATION DATE(1)	5%	10%
E. Andrews Grinstead	16,806(3)	5.32%	$31.25	2/19/07	$330,246	$ 839,959
	38,000(4)	12.04	30.00	4/09/07	716,300	1,818,400
	12,000(5)	3.80	31.88	5/21/07	240,300	609,900
Sudhir Agrawal.....	7,323(3)	2.30	31.25	2/19/07	142,722	361,707
	19,000(4)	6.02	30.00	4/09/07	358,150	908,200
	6,000(5)	1.90	31.88	5/21/07	120.150	304,950
Anthony J. Payne.....	6,316(3)	2.00	31.25	2/19/07	124,113	314,547
	19,000(4)	6.02	30.00	4/09/07	358,150	908,200
	6,000(5)	1.90	31.88	5/21/07	120,150	304,950

(1) The expiration date of an option is the tenth anniversary of the date on which the option was originally granted.

(2) The amounts shown on this table represent hypothetical gains that could be achieved for the respective options if exercised at the end of the option term. these gains are based on assumed rates of stock appreciation of 5% and 10%, compounded annually from the date the respective options were granted to their expiration date. The gains shown are net of the option exercise price, but do not include deductions for taxes or other expenses associated with the exercise. Actual gains, if any, on stock option exercises will depend on the future performance of the Common Stock, the optionholders' continued employment through the option period, and the date on which the options are exercised. As of December 1, 1998, the last sale price of the Common Stock of the Company was significantly lower that the exercise price of the options reflected in this table.

(3) These stock options are immediately exercisable with respect to 40% of the shares covered thereby and will become exercisable with respect to the remaining 60% of the shares covered thereby in three equal installments in arrears commencing on February 19, 1999.

(4) These stock options are immediately exercisable with respect to 40% of the shares covered thereby and will become exercisable with respect to the remaining 60% of the shares covered thereby in four equal annual installments in arrears commencing on April 9, 1999.

(5) These stock options are immediately exercisable with respect to 20% of the shares covered thereby and will become exercisable with respect to the remaining 80% of the shares covered thereby in four equal annual installments in arrears commencing on May 21, 1998.

Aggregated Option Exercises and Fiscal Year-End Option Value Table.

The following table sets forth certain information concerning each exercise of a stock option during fiscal 1997 by each of the Named Executive Officers and the number and value of unexercised options held by each of the Named Executive Officers on December 31, 1997:

AGGREGATED OPTION EXERCISES IN LAST
FISCAL YEAR AND FISCAL YEAR-END OPTION VALUE

	NUMBER OF SHARES UNDERLYING OPTIONS AT FISCAL YEAR-END	VALUE OF UNEXERCISED IN THE MONEY OPTIONS AT FISCAL YEAR-END(1)

	EXERCISABLE/ UNEXERCISABLE	EXERCISABLE/ UNEXERCISABLE
E. Andrews Grinstead III.....	191,874/71,445	$ -- / --
Anthony J. Payne(2).....	70,592/40,053	-- / --
Sudhir Agrawal.....	80,453/37,811	17,500

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(1) The closing price for the Common Stock as reported by the Nasdaq OTC Bulletin Board on December 31, 1997 (the last day of trading) in 1997 was $3.00. Value is calculated on the basis of the difference between the option exercise price and $3.00, multiplied by the number of shares of Common Stock underlying the option.

(2) Mr. Payne's employment with the Company terminated as of September 15, 1997.

Compensation of Directors

Each non-employee director is paid $1,500 for personal or telephonic attendance at a Boardof Directors or committee meeting. Other directors are not entitled to compensation in their capacities as directors. All of the directors are reimbursed for their expenses incurred in connection with their attendance at Board of Directors and committee meetings. In addition, Drs. Wyngaarden and Zamecnik received compensation in the amounts of $49,250 and $58,000, respectively, in 1997 in connection with the provision of certain consulting services to the Company and for serving on the Company's Scientific and/or Clinical Advisory Boards. The Company also is a party to various consulting, advisory and other arrangements with affiliates of Messrs. El-Khereiji, El-Zein and Menhall. For a description of the foregoing arrangements with the Company and certain other transactions between the Company and affiliates of certain directors, see "Certain Relationships and Related Transactions."

In October 1995, the Company adopted the 1995 Director Stock Option Plan (the "Director Plan"). Under the terms of the Director Plan, options to purchase 1,000 shares of Common Stock were granted to each director of the Company other than Mr. Grinstead and Dr. Agrawal as of January 30, 1996 at an exercise price of $65.625 per share, and options to purchase 1,000 shares of Common Stock were granted to each director other than Mr. Grinstead and Dr. Agrawal as of May 1, 1997 at an exercise price of $27.50 per share. The Director Plan also provides that options to purchase 1,000 shares of Common Stock will be granted to each new director upon his or her initial election to the Board of Directors. Annual options to purchase 1,000 shares of Common Stock will be granted to each eligible director on May 1 of each year. All options will vest on the first anniversary of the date of grant (or, in the case of annual options, on April 30 of each year with respect to options granted in the previous year); provided, that the exercisability of these options will be accelerated upon the occurrence of a change in control (as defined in the Director Plan). A total of 50,000 shares of Common Stock may be issued upon the exercise of stock options granted under the Director Plan. The exercise price of options granted under the Director Plan will equal the closing price of the Common Stock on the date of grant. As of November 30, 1998, options to purchase an aggregate of 21,000 shares of Common Stock were outstanding under the Director Plan.

Non-employee directors also have received options to purchase Common Stock of the Company under the Company's 1997 Stock Option Plan (the "1997 Plan") and the Company's 1995 Stock Option Plan (the "1995 Plan"). In particular, in 1998, the Board of Directors voted to grant an option to purchase 50,000 shares of Common Stock at $2.00 per share to Dr. Wyngaarden and Mr. El-Zein, in recognition of their services as Vice Chairmen of the Board of Directors during the previous twelve months. Mr. El-Zein declined this grant.

In addition, in 1998, the Board of Directors voted to grant 50,000 shares of Common Stock of the Company to Dr. Zamecnik in recognition of his outstanding contributions to the Company.

Employment Contracts, Termination of Employment and Change in Control Arrangements

The Company is party to an employment agreement with Mr. Grinstead for the period commencing July 1, 1996 and ending June 30, 2001. Under this agreement, Mr. Grinstead is currently entitled to receive an annual base salary of $375,000. Mr. Grinstead also is eligible to receive (i) a cash bonus each year related to the attainment of management objectives specified by the Board of Directors and (ii) additional payments of $16,000 in 1997 and 1998. In the event Mr. Grinstead's employment is terminated by the Company without cause (as defined) or by him for good cause (as defined), the Company will pay Mr. Grinstead during the 24-month period following his termination a monthly amount equal to one-twelfth of the sum of Mr. Grinstead's annual base salary as of the date of termination and the average bonus paid to him during the three years preceding his termination (the "Average Bonus Amount"). The Company also will continue Mr. Grinstead's benefits for such period, subject to earlier termination under certain circumstances. If his employment is terminated by the Company for failure to perform his assigned duties, he will continue to receive his annual base salary and benefits during the six-month period following such termination. Notwithstanding the foregoing, in the event that Mr. Grinstead's employment is terminated for any of the above reasons within 12 months following a Change in Control (as defined) of the Company, Mr. Grinstead will be entitled to receive, in lieu of the payments described above, a lump sum payment equal to 300% of the sum of his annual base salary and his Average Bonus Amount.

In accordance with the terms of Mr. Grinstead's previous employment agreement, the Company loaned $190,000 to Mr. Grinstead in December 1992 pursuant to the terms of a promissory note bearing simple interest at a rate of 6% per year, which originally provided for the payment of principal and all accrued interest on the earlier of December 23, 1995 or the expiration or termination of Mr. Grinstead's employment by the Company, but is currently payable on demand. Such loan remained outstanding as of September 30, 1998, at which date the total unpaid balance of principal and interest was $255,800.

The Company is party to an employment agreement with Dr. Agrawal for the period commencing July 1, 1996 and ending June 30, 2000. Under this agreement, Dr. Agrawal serves as Senior Vice President of Discovery and Chief Scientific Officer of the Company and is currently entitled to receive an annual base salary of $250,000. Dr. Agrawal is eligible to receive a cash bonus each year related to the attainment of management objectives specified by the Chief Executive Officer and the Board of Directors. In the event Dr. Agrawal's employment is terminated by the Company without cause (as defined) or by him for good cause (as defined), the Company will pay Dr. Agrawal during the 24-month period following his termination a monthly amount equal to one-twelfth of the sum of Dr. Agrawal's annual base salary as of the date of termination and the average bonus paid to him during the three years preceding his termination (the "Average Bonus Amount"). The Company will also continue Dr. Agrawal's benefits for such period, subject to earlier termination under certain circumstances. If his employment is terminated by the Company for failure to perform his assigned duties, he will continue to receive his annual base salary and benefits during the six-month period following such termination. Notwithstanding the foregoing, in the event that Dr. Agrawal's employment is terminated for any of the above reasons within 12 months following a Change in Control (as defined) of the Company, Dr. Agrawal will be entitled to receive, in lieu of the payments described above, a lump sum payment equal to 300% of the sum of his annual base salary and his Average Bonus Amount.

The employment agreements entered into between the Company and each of Mr. Grinstead and Dr. Agrawal also provide that all stock options held by any of the Named Executive Officers (including existing options and options to be granted in the future) shall include terms providing (i) that in the event that such Named Executive

Officer's employment is terminated by the Company without cause or by him for good cause the exercisability of such stock options will be accelerated by two years and such stock options will be exercisable for a two-year period following termination and (ii) that in the event of certain changes in control of the Company, its liquidation or the sale of all or substantially all of its assets, all such stock options not then exercisable will vest and become immediately exercisable. The Company is also a party to registration rights agreements with Mr. Grinstead that provide that in the event the Company proposes to register

any of its securities under the Securities Act, at any time, with certain exceptions, Mr. Grinstead shall be entitled to include the shares of Common Stock held by him in such registration, subject to the right of the managing underwriter of any underwritten offering to exclude from such registration for marketing reasons some or all of such shares. The Company also is a party to indemnification agreements with Mr. Grinstead pursuant to which the Company has agreed to indemnify him for certain liabilities, including liabilities arising under the Securities Act.

Mr. Payne's employment with the Company terminated as of September 15, 1997. The Company is party to an agreement with Mr. Payne regarding the termination of his employment. Pursuant to this agreement, options to purchase an aggregate of 62,493 shares of Common Stock were amended to provide for the acceleration by two years of the exercisability of such options and to extend the period during which such options may be exercised until the second anniversary of the termination of Mr. Payne's employment. In addition, under this agreement, the Company agreed to pay Mr. Payne during the 12-month period following his termination a monthly amount equal to one-sixth of the sum of Mr. Payne's annual base salary as of September 15, 1997. Under this agreement, Mr. Payne agreed to repay a personal loan form the Company in the amount of $221,521.25 upon his acceptance of employment by a third party, at which time the remaining severance payments would be applied to the loan balance. As of March 31, 1998, such loan had been repaid in full and the Company's obligation to continue making severance payments to Mr. Payne had terminated. The Company has also agreed to continue Mr. Payne's benefits for a two-year period, subject to earlier termination under certain circumstances.

Stock options to purchase an aggregate of 261,841 shares of Common Stock granted to the Named Executive Officers pursuant to the 1990 Plan provide that, upon a change in control (as defined in the 1990 Plan), all options granted thereunder will become fully exercisable. In addition, pursuant to the terms of the employment agreements entered into between the Company and each of the Named Executive Officers described above (i) in April 1997, stock options to purchase an aggregate of 130,386 shares of Common Stock granted to the Named Executive Officers under the Company's 1995 Plan were amended to provide that such options will become fully exercisable upon a change in control of the Company, and (ii) all stock options granted to the Named Executive Officers after March 1, 1997 will provide that such options will become fully exercisable upon a change of control of the Company.

Compensation Committee Interlocks and Insider Participation

The Board of Directors did not have a compensation committee during its fiscal year ended December 31, 1997. The Board of Directors as a whole, including Mr. Grinstead and Dr. Agrawal, who are employees of the Company, performed equivalent functions. None of the directors or executive officers of the Company had any "interlock" relationships to report during the Company's fiscal year ended December 31, 1997.

On June 16, 1998 the Board of Directors established a Compensation Committee consisting of Mr. El-Zein, Mr. Berry and Dr. Wyngaarden.

Since January 1, 1997, the Company has entered into or engaged in certain transactions with Pillar S.A., Pillar Investment, Pillar Limited and Charles River Building Limited Partnership (the "Cambridge Landlord"), entities of which Messrs. El-Zein and Menhall are affiliates and with Pecks, an entity of which Mr. Berry is an affiliate. See "Certain Relationships and Related Transactions."

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information as of December 31, 1998 with respect to the beneficial ownership of shares of Common Stock by each person known to the Company to own beneficially more than 5% of the outstanding shares of Common Stock.

	AMOUNT AND NATURE OF BENEFICIAL OWNERSHIP(1)	
NAME AND ADDRESS OF BENEFICIAL OWNER	NUMBER OF SHARES	PERCENT OF CLASS

-		
5% STOCKHOLDERS		
Intercity Holdings Ltd. ..... c/o Cuson Milner House 18 Parliament Street Hamilton, Bermuda	2, 216,666 (2)	13.88%
Abdelah Bin Mahfouz c/o SEDCO P.O. Box 4384 Jeddah 21491 Saudi Arabia	2,216,666 (3)	13.88%
Forum Capital Markets LLC..... 53 Forest Ave. Old Greenwich, CT 06870	1,206,893 (4)	9.38%
Yahia M. Bin Laden..... 2 rue Charles Bonnet 1206 Geneva, Switzerland	1,373,977 (5)	8.87%
Nicris Limited..... c/o Magnin Dunand & Associes 2 rue Charles Bonnet 1206 Geneva, Switzerland	1,360,644 (6)	8.78%
Youssef El-Zein..... 28 Avenue de Messine 75008 Paris, France	1,439,722 (7)	8.71%
Nasser Menhall..... 28 Avenue de Messine 75008 Paris, France	1,417,734 (8)	8.59%
Pillar Investment Limited..... 28 Avenue de Messine 75008 Paris, France	1,317,173 (9)	8.03%
Faisal Finance Switzerland SA..... 84 Ave Louis Casi 1216 Geneva, Switzerland	1,043,113 (10)	6.73%
Finova Technology Finance Inc. ..... 10 Waterside Drive Farmington, CT 06032	896,875 (11)	5.79%

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(1) The number of shares beneficially owned by each director and executive officer is determined under rules promulgated by the Securities and Exchange Commission, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership includes any shares as to which the individual has sole or shared voting power or investment power and also any shares which the individual has the right to acquire within 60 days after March 31, 1998 through the exercise of any stock option or other right. The inclusion herein of such shares, however, does not constitute an admission that the named stockholder is a direct or indirect beneficial owner of such shares. Unless otherwise indicated, each person or entity named in the table has sole voting power and investment power (or shares such power with his or her spouse) with respect to all shares of capital stock listed as owned by such person or entity.

(2) Includes 375,000 shares issuable upon the exercise of Class B warrants held by Intercity Holdings Ltd.

(3) Includes 1,841,666 shares held by Intercity Holdings Ltd. and 375,000 shares issuable upon exercise of Class B Warrants held by Intercity Holdings. Mr. Mahfouz, a controlling stockholder of Interncity Holdings Ltd., may be considered a beneficial owner of the shares beneficially owned by such entity.

(4) Includes (a) 328,677 shares issuable upon exercise of Class B warrants and

(b) 280,517 shares issuable upon the exercise of Class C warrants held by Forum Capital Markets LLC. Mr. Harold Purkey, a Director of Hybridon, is an affiliate of Forum Capital Markets LLC.

(5) Includes 1,125,880 shares held by Nicris Limited and 234,764 shares issuable upon the exercise of Class B warrants held by Nicris Limited. Mr. Bin Laden, a controlling stockholder of Nicris, may be considered a beneficial owner of the shares beneficially owned by such entity.

(6) Includes 234,764 shares issuable upon the exercise of Class B warrants held by Nicris Limited.

(7) Includes (a) 82,183 shares issuable upon the exercise of warrants held by Mr. El-Zein, (b) 366 shares issuable upon the exercise of warrants held by Pillar Associated, (c) 20,000 shares issuable upon the exercise of warrants held by Pillar S.A., (d) 20,000 shares issuable upon the exercise of warrants held by Pillar S.A.R.L., (e) 37,500 shares issuable upon the exercise of Class C warrants held by Pillar Investment Limited, (f) 473,598 issuable upon the exercise of advisory warrants held by Pillar Investment Limited, (g) 638,032 shares issuable upon the exercise of placement warrants held by Pillar Investment Limited, (h) 5,243 shares issuable upon the exercise of other warrants held by Pillar Investment Limited, and (i) 162,800 shares held by Pillar Investment Limited. Mr. El-Zein, an affiliate of Pillar Associated, Pillar S.A., Pillar S.A.R.L., and Pillar Investment Limited, may be considered a beneficial owner of the shares beneficially owned by such entities.

(8) Includes (a) 60,195 shares issuable upon the exercise of warrants held by Mr. Menhall, (b) 366 shares issuable upon the exercise of warrants held by Pillar Associated, (c) 20,000 shares issuable upon the exercise of warrants held by Pillar S.A., (d) 20,000 shares issuable upon the exercise of warrants held by Pillar S.A.R.L., (e) 37,500 shares issuable upon the exercise of Class C warrants held by Pillar Investment Limited, (f) 473,598 issuable upon the exercise of advisory warrants held by Pillar Investment Limited, (g) 638,032 shares issuable upon the exercise of placement warrants held by Pillar Investment Limited, (h) 5,243 shares issuable upon the exercise of other warrants held by Pillar Investment Limited, and (i) 162,800 shares held by Pillar Investment Limited. Mr. Menhall, an affiliate of Pillar Associated, Pillar S.A., Pillar S.A.R.L., and Pillar Investment Limited, may be considered a beneficial owner of the shares beneficially owned by such entities.

(9) Includes (a) 37,500 shares issuable upon the exercise of Class C warrants held by Pillar Investment Limited, (c) 473,598 issuable upon the exercise of advisory warrants held by Pillar Investment Limited, (c) 638,032 shares issuable upon the exercise of placement warrants held by Pillar Investment Limited, and (d) 5,243 shares issuable upon the exercise of other warrants held by Pillar Investment Limited.

(10) Includes 233,026 shares issuable upon the exercise of Class B warrants held by Faisal Finance Switzerland SA.

(11) Includes 259,375 shares issuable upon the exercise of Class C warrants held by Finova Technology Finance Inc.

The following table sets forth certain information as of December 1, 1998 with respect to the beneficial ownership of shares of Common Stock and Series A Preferred Stock by (i) the directors of the Company and (ii) the Chief Executive Officer and other Named Executive Officers, and (iii) the directors and executive officers of the Company as a group.

	COMMON STOCK		SERIES A PREFERRED STOCK	
NAME OF BENEFICIAL OWNER	Amount and Nature Beneficial Ownership	Percent of Class	Amount and Nature of Beneficial Ownership	Percent of Class

Directors				
Youssef El-Zein	1,439,722 (2)	8.71%	0	0
Nasser Menhall	1,417,734 (3)	8.59%	0	0
E. Andrews Grinstead III	558,815 (4)	3.54%	0	0
Sudhir Agrawal	408,663 (5)	2.61%	0	0
Mohamed A. El-Khereiji	362,414 (6)	2.35%	0	0
Paul Z. Zamecnik	284,670 (7)	1.86%	0	0
James B. Wyngaarden	65,100 (8)	*	0	0
Arthur W. Berry	0	0	184,784 (9)	30.37%
Harold L. Purkey	1,206,893(10)	9.38%	82,025(11)	12.79%
Other Executive Officers				
Anthony Payne	92,250(12)	*	0	0
All directors and executive officer as a group (10 persons)	4,478,712(13)	24.29%	266,809	41.61%

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(1) The number of shares beneficially owned by each director and executive officer is determined under rules promulgated by the Securities and Exchange Commission, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership includes any shares as to which the individual has sole or shared voting power or investment power and also any shares which the individual has the right to acquire within 60 days after March 31, 1998 through the exercise of any stock option or other right. The inclusion herein of such shares, however, does not constitute an admission that the named stockholder is a direct or indirect beneficial owner of such shares. Unless otherwise indicated, each person or entity named in the table has sole voting power and

investment power (or shares such power with his or her spouse) with respect to all shares of capital stock listed as owned by such person or entity.

(2) Includes (a) 82,183 shares issuable upon the exercise of warrants held by Mr. El-Zein, (b) 366 shares issuable upon the exercise of warrants held by Pillar Associated, (c) 20,000 shares issuable upon the exercise of warrants held by Pillar S.A., (d) 20,000 shares issuable upon the exercise of warrants held by Pillar S.A.R.L., (e) 37,500 shares issuable upon the exercise of Class C warrants held by Pillar Investment Limited, (f) 473,598 issuable upon the exercise of advisory warrants held by Pillar Investment Limited, (g) 638,032 shares issuable upon the exercise of placement warrants held by Pillar Investment Limited, (h) 5,243 shares issuable upon the exercise of other warrants held by Pillar Investment Limited, and (i) 162,800 shares held by Pillar Investment Limited. Mr. El-Zein, an affiliate of Pillar Associated, Pillar S.A., Pillar S.A.R.L., and Pillar Investment Limited, may be considered a beneficial owner of the shares beneficially owned by such entities.

(3) Includes (a) 60,195 shares issuable upon the exercise of warrants held by Mr. Menhall, (b) 366 shares issuable upon the exercise of warrants held by Pillar Associated, (c) 20,000 shares issuable upon the exercise of warrants held by Pillar S.A., (d) 20,000 shares issuable upon the exercise of warrants held by Pillar S.A.R.L., (e) 37,500 shares issuable upon the exercise of Class C warrants held by Pillar Investment Limited, (f) 473,598 issuable upon the exercise of advisory warrants held by Pillar Investment Limited, (g) 638,032 shares issuable upon the exercise of placement warrants held by Pillar Investment Limited, (h) 5,243 shares issuable upon the exercise of other warrants held by Pillar Investment Limited, and (i) 162,800 shares hold by Pillar Investment Limited. Mr. Menhall, an affiliate of Pillar Associated, Pillar S.A., Pillar S.A.R.L., and Pillar Investment Limited, may be considered a beneficial owner of the shares beneficially owned by such entities.

(4) Includes 511,235 shares subject to outstanding stock options which are

exercisable within the 60-day period following December 1, 1998.

(5) Includes 390,903 shares subject to outstanding stock options which are exercisable within the 60-day period following December 1, 1998.

(6) Includes (a) 88,414 shares issuable upon the exercise of warrants held by Mr. El-Khereiji, (b) 228,345 shares held by Solter Corporation and (c) 45,242 shares issuable upon the exercise of Class B warrants held by Solter Corporation. Mr. El-Khereiji, an affiliate of Solter Corporation, may be considered a beneficial owner of the shares beneficially owned by such entity.

(7) Includes (a) 26,000 shares subject to outstanding stock options which are exercisable within the 60-day period following December 1, 1998 and (b) 31,250 shares issuable upon the exercise of Class C warrants.

(8) Includes (a) 60,000 shares subject to outstanding stock options which are exercisable within the 60-day period following December 1, 1998 and (b) 700 shares held by Mr. Wyngaarden's children.

(9) Includes (a) 20,313 shares held by Declaration of Trust for the Defined Benefit Plan of ICI America Holdings, Inc., (b) 9,372 shares held by J.W. McConnell Family Foundation, (c) 71,221 shares held by Delaware State Employees Retirement Fund, (d) 2,164 held by Hillside Capital Corporation, (e) 5,732 shares held by Thermo Electron Balanced Investment Fund, and (f) 85,982 shares held by General Motors Employees Domestic Group Trust. Mr. Berry, a principal of Pecks Management Partners Ltd., and investment advisor of which the foregoing entities are clients, may be considered a beneficial owner of the shares beneficially owned by such entities.

(10) Includes (a) 328,677 shares issuable upon the exercise of Class B warrants held by Forum (b) 280,517 shares issuable upon the exercise of Class C warrants held by Forum and (c) 597,699 shares held by Forum. Mr. Purkey, an affiliate of Forum, may be considered a beneficial owner of the shares beneficially owned by such entity.

(11) Includes (a) 865 shares held by Forest Alternative Strategies Fund II, L.P. Series A51, (b) 433 shares held by Forest Alternative Strategies Fund II, L.P. Series A5M, (c) 131 shares held by Forest Alternative Strategies Fund II, L.P. Series B3, (d) 3,515 shares held by Forest Fulcrum Ltd., (e) 4,326 shares held by Forest Global Convertible Fund Series A5, (f) 1,082 shares held by Forest Global Convertible Fund Series B 1, (g) 1,082 shares held by Forest Greyhound, (h) 682 shares held by Forest Performance Fund, (i) 865 shares held by LLT, Ltd., and (j) 69,044 shares held by Forum. Mr. Purkey, an affiliate of such entities, may be considered a beneficial owner of the shares beneficially owned by such entities.

(12) Includes 82,355 shares subject to outstanding stock options which are exercisable within the 60-day period following December 31, 1998. Mr. Payne's employment with the Company terminated on September 15, 1997.

(13) Includes (a) 1,070,483 shares subject to outstanding stock options which are exercisable within the 60-day period following December 1, 1998 and (b) 2,111,217 shares issuable upon the exercise of warrants within the 60-day period following December 1, 1998.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Since January 1, 1997, the Company has entered into or engaged in the following transactions with the following directors, officers, stockholders who beneficially own more than 5% of the outstanding Common Stock of the Company ("5% Stockholders") and affiliates or immediate family members of such directors, officers and 5% Stockholders.

Transactions with Pillar S.A. and Certain of its Affiliates

Since January 1, 1997, the Company has entered into or engaged in certain transactions with Pillar S.A., Pillar Investments and the Cambridge Landlord. Pillar S.A. and Pillar Investments are affiliates of Messrs. El-Zein and Menhall, two directors of the Company. The Cambridge Landlord is an affiliate of Messrs. El-Zein and Menhall and Mr. El-Khereiji, a third director

of the Company. The following is a summary of these transactions.

In 1997, the Company was a party to a consulting agreement (the "1994 Pillar Consulting Agreement") with Pillar S.A., dated as of March 1, 1994, pursuant to which Pillar S.A. provided the Company with financial advisory and managerial services in connection with the Company's overseas operations, including support services in connection with contracts and agreements. Under the terms of the 1994 Pillar Consulting Agreement, the Company paid Pillar S.A. continuing consulting fees of $60,000 per month and $23,000 per month for overhead costs, and reimbursement of certain authorized out-of-pocket expenses. The 1994 Pillar Consulting Agreement expired on February 28, 1998.

Pursuant to the 1994 Pillar Consulting Agreement, the Company issued to Pillar S.A. two five-year warrants to purchase an aggregate of 40,000 shares of Common Stock of the Company.

On July 8, 1995, the Company entered into an additional agreement (the "Pillar Europe Agreement") with Pillar S.A. pursuant to which Pillar S.A. agreed to provide to the Company certain consulting, advisory and related services (in addition to the services to be provided pursuant to the 1994 Pillar Consulting Agreement) and serve as the Company's exclusive agent in connection with potential corporate partnerships in Europe and as a non-exclusive placement agent of the Company in connection with private placements of securities of the Company for a period of two years. On November 1, 1995, the Pillar Europe Agreement was amended to provide that (i) Pillar S.A. would cease to serve as the Company's executive agent in connection with potential corporate partnerships in Europe, but would continue to serve as a non-exclusive agent in such respect, (ii) Pillar S.A. would receive a retainer of $26,470 per month for the balance of the term of the Pillar Europe Agreement (April 1, 1997) (iii) the fees set forth in the Pillar Europe Agreement would only be payable to Pillar S.A. in connection with potential collaborations with any French pharmaceutical company with which the Company engaged in discussions during the 12-month period ended November 1, 1995 as a result of introductions by Pillar S.A. and (iv) any compensation payable to Pillar S.A. in connection with its services with respect to other corporate collaborations or any placements of securities would be negotiated on a case-by-case basis and would be subject to the approval of the independent members of the Board of Directors of the Company. The Pillar Europe Agreement expired on April 1, 1997.

During the year ended December 31, 1997, the Company paid Pillar S.A. an aggregate of $998,000 under the 1994 Pillar Consulting Agreement and the Pillar Europe Agreement, as amended. In 1998, the Company paid Pillar Investments an aggregate of $300,000 under such agreements, which was paid by the issuance of 150,000 shares of Common Stock and warrants to purchase 37,500 shares of Common Stock, at an exercise price of $2.40 per share, subject to adjustment, in lieu of cash.

The Company has retained Pillar Investments, as a placement agent of the Company in connection with the private placements of securities of the Company in offshore transactions in reliance upon an exemption from registration under Regulation S promulgated under the Securities Act (the "Regulation S Offerings"). Pillar Investments received fees consisting of (i) 9% of the gross proceeds of each Regulation S Offering, (ii) a non-accountable expense allowance equal to 4% of such gross proceeds, (iii) the right to purchase, for nominal

consideration, warrants (the "Pillar Warrants") to purchase 473,598 shares of Common Stock, at an exercise price of $2.40 per share, subject to adjustment, (iv) the right to purchase, for nominal consideration, warrants to purchase such number of shares of the Common Stock of the Company equal to 10% of the aggregate number of shares of Common Stock sold by the Company for which Pillar Investments acted as placement agent, exercisable at 120% of the relevant Common Stock offering price, for a period of five years (resulting, as of the date hereof, in the right to receive warrants to purchase 638,032 shares at $2.40 per share, subject to adjustment), and (v) a consulting/restructuring fee of $960,000 payable in Common Stock of the Company valued at the market price and payable in three equal installments as net proceeds of $25,000,000, $30,000,000 and $35,000,000 are received in the aggregate from private placements effected by the Company in 1998 to the extent contemplated by the Consent and Waiver (the "Consent") dated as of January 12, 1998 given by certain beneficial holders of the 9% Notes of the Company, or otherwise to the extent contemplated by the Placement Agency Agreement between the Company and Pillar Investments, subject

to the Company's receipt of a fairness opinion with regard thereto, provided, however, that in no event shall Pillar Investments be permitted to receive compensation in excess of the level which was approved by the holders of the 9% Notes. Through the date of this Prospectus, Pillar Investments has received $1,635,400 in cash pursuant to these arrangements and Pillar Warrants to purchase 1,111,630 shares of Common Stock.

In addition, in connection with the Regulation S Offerings, the Company and Pillar Investments have entered into an advisory agreement dated May 5, 1998 (the "Financial Advisory Agreement") pursuant to which Pillar Investments acts as the Company's non-exclusive financial advisor, which agreement provides that an affiliate of Pillar Investments receive a monthly retainer of $5,000 (with a minimum engagement of 24 months beginning on May 5, 1998), and further provides that Pillar Investments is entitled to receive (i) out-of-pocket expenses, (ii) subject to the Company's receipt of a fairness opinion with respect thereto, 300,000 shares of Common Stock in connection with Pillar Investments' efforts in assisting the Company in restructuring its balance sheet, and (iii) certain cash and equity success fees in the event Pillar Investments assists the Company in connection with certain financial and strategic transactions.

Transactions with the Cambridge Landlord

From February 4, 1997 to September 16, 1998, the Company was a party to a lease (the "Cambridge Lease") with the Cambridge Landlord. The Cambridge Lease originally provided for an annual rent equal to $30 per square foot on a triple net basis for the first five years, $33 per square foot on a triple net basis for the next five years and the greater of $30 per square foot on a triple net basis or the then market value of leased property for each of the five-year renewal terms. In connection with the Company's election to acquire an interest in the Cambridge Landlord described below, the annual rent due under the Cambridge Lease was increased for the first five years of the lease term to $38 per square foot on a triple net basis and for the second five years to $42 per square foot on a triple net basis and for the third five years to $47 per square foot on a triple net basis.

On July 1, 1996, the Company elected to fund approximately $5.5 million of the costs (primarily relating to tenant improvements) of the construction of the leased premises through contributions to the capital of the Cambridge Landlord in exchange for a limited partnership interest in the Cambridge Landlord (the "Partnership Interest"). The Partnership Interest entitled the Company to an approximately 32% interest in the Cambridge Landlord. The Company had the right, for a period of three years ending February 2000, to sell the Partnership Interest back to certain limited partners of the Cambridge Landlord for a price equal to the greater of (i) the aggregate cash contribution made by Hybridon to the Cambridge Landlord or (ii) the fair market value of the Partnership Interest at the time.

In 1997, the Company had on deposit with Bank Fur Vermogensanlagen Und Handel ("BVH") the amount of $1,034,618. In November, 1997, German banking authorities imposed a moratorium on BVH and closed BVH for business. Pursuant to an agreement dated November 28, 1997, the Cambridge Landlord agreed to assume the risk for the BVH deposit and to pay to the Company the amount of $75,000 a month after each rent payment under the Cambridge Lease was made until such time as $1,000,000 had been paid to the Company or the BVH deposit was released.

In June 1998, the Company relocated its headquarters from the Cambridge Facility to its facility in Milford, Massachusetts. The Cambridge Facility was re-leased in September 1998 to a third party, subject to a sublease of a portion of the facility. As a result, the Company terminated the Cambridge Lease and was relieved of its substantial lease obligations under the Cambridge Lease, subject to a contingent continuing liability for any defaults which may arise under the sublease. Further, in November 1998 the Company completed the sale of its Partnership Interest. As a result of these transactions, the Company received $6,163,000 from the Cambridge Landlord, which included payment for the Partnership Interest, the return of a portion of the security deposit required under the Cambridge Lease, and payment in full of the BVH deposit.

Transactions with Forum Capital Markets LLC and Pecks Management Partners Ltd.

In 1998, the Company entered into certain transactions with Forum, an affiliate of Mr. Purkey, a director of the Company.

The Company retained Forum as a placement agent of the Company in connection with the Company's 1998 Regulation D Offering of Series A Preferred Stock and Class D Warrants (the "Regulation D Offering") in the United States. As of the date of this prospectus, Forum has received as compensation for its services as placement agent with regard to the Regulation D Offering and its assistance with the Exchange Offer, 597,699 shares of Common Stock and warrants (the "1998 Forum Warrants") to purchase an aggregate of 609,194 shares of Common Stock exercisable at $2.40 per share, in each case subject to adjustment, until May 4, 2003. In addition, in consideration of the agreements made by Forum consenting to the Company's 1998 Regulation D Offerings and waiving certain obligations of the Company to Forum, the Company agreed to amend Forum's warrant (the "1997 Forum Warrant", and together with the 1998 Forum Warrants, the "Forum Warrants") dated as of April 2, 1997, to purchase up to 71,301 shares of Common Stock of the Company so that the exercise price will be equal to $4.25 per share, subject to adjustment, and the number of shares of Common Stock purchasable upon exercise thereof will be increased to 588,235, in each case subject to adjustment; provided, however, that the 1997 Forum Warrant will also be amended to provide that such 1997 Forum Warrant may not be exercised until May 5, 1999 and the transactions contemplated by such private placements and by the Exchange Offer will not trigger any anti-dilution adjustments to the exercise price thereof or the number of shares of Common Stock subject thereto.

In November 1998, Forum and Pecks, an affiliate of Mr. Berry, a director of the Company purchased the loan made by the Bank. In connection with the purchase of the Bank Credit Facility, the purchasing entitites advanced an additional amount to the Company so as to increase the outstanding principal amount of the Loan to $6,000,000. In addition, the purchasing entities agreed to amend the terms of the Loan. See "Description of Capital Stock and Indebtedness - -- Indebtedness -- Bank Credit Facility."

In connection with the purchase of the Loan, Forum will receive a fee of $400,000, which will be reinvested by Forum by purchasing from the Company either (i) shares of Common Stock or shares of Preferred Stock of the Company and accompanying warrants on the same terms as they are sold to investors in the Company's next equity offering to occur after November 13, 1998 (the "Placement Price"), or (ii) if no equity offering is consummated prior to May 1, 1999, 160,000 shares of Common Stock at $3.00 per share and warrants to purchase an additional 40,000 shares of Common Stock at $3.00 per share. In addition, Forum will receive warrants exercisable until maturity of the Loan to purchase $400,000 of shares of Common Stock priced at the Placement Price or, if no equity offering is consummated prior to May 1, 1999, at $3.00 per share. These shares and warrants will be issued as soon as practicable following satisfaction of Section 4.10 of the Indenture dated as of March 26, 1997, governing the 9% Notes.

The Company maintains an investment account at Forum.

Other Transactions

Certain persons and entities (the "Rightsholders"), including Dr. Zamecnik, Pillar S.A., Pillar Limited, Intercity Holdings, Mr. Bin Laden and Nicris, are entitled to certain rights with respect to the registration under the Securities Act of certain shares of the Company's Common Stock (the "Registrable Shares"), including shares of Common Stock that may be acquired pursuant to the exercise of options or warrants, under the terms of agreements among the Company and the Rightsholders (the "Registration Agreements"). The Registration Agreements generally provide that in the event the Company proposes to register any of its securities under the Securities Act at any time, with certain exceptions, the Rightsholders, including Pillar S.A., Pillar Limited, Intercity Holdings, Mr. Bin Laden and Nicris, but excluding, among others, Dr. Zamecnik, have the additional right under certain Registration Agreements to require the Company to prepare and file registration statements under the Securities Act, if such Rightsholders holding specified percentages of the Registrable Shares so request, and the Company is required to use its best efforts to effect such registration, subject to certain conditions and limitations.

For a description of certain employment and other arrangements between the Company and its executive officers, see "Compensation of Executive Officers"

above. For a description of stock options granted to certain directors of the Company, see "Director Compensation" above.

The Company believes that the terms of the transactions described above were no less favorable than the Company could have obtained from unaffiliated third parties.

PRINCIPAL AND SELLING STOCKHOLDERS

The table below sets forth, to the knowledge of the Company, certain information as of December 1, 1998 with respect to the Selling Securityholders for whom the Company is registering the Securities for resale to the public. The Company will not receive any of the proceeds from the sale of the Securities (other than proceeds upon exercise of the Warrants).

To the Company's knowledge, except as described below, none of the Selling Securityholders holds any position or office with, has been employed by, or has otherwise had a material relationship with the Company or any of its subsidiaries within the past three years.

Name of Selling Securityholder	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Number of Shares of Common Stock Offered Hereby	Number of Shares of Common Stock Beneficially Owned After Offering	Percentage of Shares of Common Stock Beneficially Owned After Offering	Number of Shares of Series A Convertible Preferred Beneficially Owned Prior to Offering	Number of Shares of Series A Convertible Preferred Offered Hereby	Number of Shares of Series A Convertible Preferred Beneficially Owned After Offering	Percentage of Shares of Series A Convertible Preferred Beneficially Owned After Offering
Fouad M.O. Tawfig and Hanan H. Zagzoug/1/	47,543	6,250	41,293	0	0	0	0	0
Torben Duer/1/	26,750	18,750	8,000	0	0	0	0	0
Thomas Fr. Duer/1/	62,500	62,500	0	0	0	0	0	0
Darier Hentsch & Cie /1/	312,500	312,500	0	0	0	0	0	0
Finn Trunk Black/1/	3,750	3,750	0	0	0	0	0	0
MM Pictet & Cie/1/	750,000	750,000	0	0	0	0	0	0
Nicris Limited/1//16/	1,360,644	1,050,644	310,000	0	0	0	0	0
Raji Abou Hadar/1/	62,500	62,500	0	0	0	0	0	0
Intercity Ltd./1/	2,216,000	1,875,000	341,666	0	0	0	0	0
Clapham Investments Ltd./1/	125,500	125,000	500	0	0	0	0	0
LGT Bank in Liechtenstein AG/1/	312,500	312,500	0	0	0	0	0	0
Participations Besancon/1/	125,000	125,000	0	0	0	0	0	0
Loxhall Limited/1/	62,500	62,500	0	0	0	0	0	0
MicroTech Software a/s/1/	33,000	31,250	11,750	0	0	0	0	0
JSP Holdings ApS/1/	24,500	12,500	12,000	0	0	0	0	0
Jan Poulson/1/	18,750	18,750	0	0	0	0	0	0
Mr. Mohamad Hassan Abdul Ghani/2/	67,717	67,717	0	0	0	0	0	0
Dr. Khaled M.R. Abdul Ghani/2/	135,435	135,435	0	0	0	0	0	0
Mr. Imad Mustapha Mansour/2/	67,717	67,717	0	0	0	0	0	0
Mr. Malek Salam/2/	88,023	88,023	0	0	0	0	0	0

Name of Selling Securityholder	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Number of Shares of Common Stock Offered Hereby	Number of Shares of Common Stock Beneficially Owned After Offering	Percentage of Shares of Common Stock Beneficially Owned After Offering	Number of Shares of Series A Convertible Preferred Beneficially Owned Prior to Offering	Number of Shares of Series A Convertible Preferred Offered Hereby	Number of Shares of Series A Convertible Preferred Beneficially Owned After Offering	Percentage of Shares of Series A Convertible Preferred Beneficially Owned After Offering
Faisal Finance (Switzerland) S.A./2/	1,043,113	1,009,779	33,334	0	0	0	0	0
Darier Hentsch & Cie/2/	338,588	338,588	0	0	0	0	0	0
Mr. Guy Semon/2/	22,149	22,149	0	0	0	0	0	0
Mrs. Francoise Semon/2/	22,149	22,149	0	0	0	0	0	0
Mr. Le Pelley Dumanoir/2/	22,149	22,149	0	0	0	0	0	0
Mr. Moh'd Abdo	67,119	67,119	0	0	0	0	0	0

Sweidan/2/								
Mr. Isam Moh'd Khairy Kabbani/2/	67,119	67,119	0	0	0	0	0	0
Dr. Essam Ahmad Jawadm Alamdar/2/	201,357	201,357	0	0	0	0	0	0
Arab Islamic Bank (E.C.)/2/	503,394	503,394	0	0	0	0	0	0
Mr. Sobbi Adra/2/	23,492	23,492	0	0	0	0	0	0
Mr. Mansour S.M.A. Al-Sharif/2/	65,972	65,972	0	0	0	0	0	0
Mr. Nafez M.M. Al-Jindi/2/	65,972	65,972	0	0	0	0	0	0
Solter Corporation /2/ /17/	217,345	196,047	21,298	0	0	0	0	0
Carset Overseas Corporation/2/	176,375	176,375	0	0	0	0	0	0
Mr. Ali A. Bajrai/2/	163,310	163,310	0	0	0	0	0	0
Pillar Investment Limited/3/	1,317,173	1,299,130	18,043	0	0		0	0
Bioreliance Corporation/4/	16,697	16,697	0	0	0	0	0	0
Chestnut Partners/4/	62,500	62,500	0	0	0	0	0	0
Datamonitor/4/	62,500	62,500	0	0	0	0	0	0
Finova Technology Finance, Inc./5/	896,875	896,875	0	0	0	0	0	0
HPC America, Inc./4/	218,750	218,750	0	0	0	0	0	0
Hyal Pharmaceutical /1/ Corporation/4/	17,500	17,500	0	0	0	0	0	0
SEIF Foundation2/4/	119,725	119,725	0	0	0	0	0	0
Janitronics/4/	45,724	45,725	0	0	0	0	0	0
Kinetic Systems,Inc. /4/	163,238	163,238	0	0	0	0	0	0

Name of Selling Securityholder	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Number of Shares of Common Stock Offered Hereby	Number of Shares of Common Stock Beneficially Owned After Offering	Percentage of Shares of Common Stock Beneficially Owned After Offering	Number of Shares of Series A Convertible Preferred Beneficially Owned Prior to Offering	Number of Shares of Series A Convertible Preferred Offered Hereby	Number of Shares of Series A Convertible Preferred Beneficially Owned After Offering	Percentage of Shares of Series A Convertible Preferred Beneficially Owned After Offering
Massachusetts Eye & Ear Infirmary/4/	62,500	62,500	0	0	0	0	0	0
Norwegian Radium Hospital Research Foundation/4/	37,500	37,500	0	0	0	0	0	0
Susan and Anthony Russo/4/	62,500	62,500	0	0	0	0	0	0
Pharmakinetics Laboratories, Inc./4/	55,803	55,803	0	0	0	0	0	0
The Perkin Elmer Corporation/4/	205,377	205,377	0	0	0	0	0	0
Primedica Corporation/4/	364,418	364,418	0	0	0	0	0	0
Quintiles Transnational Corp./4/	379,175	379,175	0	0	0	0	0	0
Siena Construction Corporation/4/	31,250	31,250	0	0	0	0	0	0
Sierra Biomedical, Inc./4/	189,203	189,203	0	0	0	0	0	0
SP Pharmaceuticals LLC/4/	115,985	115,985	0	0	0	0	0	0
Southern Research Institute/4/	68,860	68,860	0	0	0	0	0	0
Transamerica Business Credit Corporation/4/	468,750	468,750	0	0	0	0	0	0
Triumvirate Enviornmental, Inc./4/	19,138	19,138	0	0	0	0	0	0
University of Kansas	29,260	29,260	0	0	0	0	0	0
University of Massachusetts/4/	84,450	84,450	0	0	0	0	0	0
Paul C. Zamecnik and Mary V. Zamecnik, JTWROS/6/	284,670	156,250	128,420	0	0	0	0	0
Allstate Insurance Company	0	92,977/7/	0	0	16,223	16,223	0	0
Angelo Gordon & Co., L.P.	0	21,695/7/	0	0	3,785	3,785	0	0
Michael Angelo, L.P.	0	58,886/7/	0	0	10,275	10,275	0	0
Ramius Fund Ltd.	0	43,390/7/	0	0	7,570	7,570	0	0
Raphael, L.P.	0	58,886/7/	0	0	10,257	10,257	0	0
Medici Partners, L.P.	0	18,596/7/	0	0	3,244	3,244	0	0
CNA Income Shares, Inc.	0	92,977/7/	0	0	16,223	16,223	0	0

Name of Selling	Number of Shares of Common Stock Beneficially Owned Prior to	Number of Shares of Common Stock Offered	Number of Shares of Common Stock Beneficially Owned After	Percentage of Shares of Common Stock Beneficially Owned After	Number of Shares of Series A Convertible Preferred Beneficially Owned Prior	Number of Shares of Series A Convertible Preferred Offered	Number of Shares of Series A Convertible Preferred Beneficially Owned After	Percentage of Shares of Series A Convertible Preferred Beneficially Owned After

Securityholder	Offering	Hereby	Offering	Offering	to Offering	Hereby	Offering	Offering
Forest Alternative Strategies Fund II, L.P. Series A5I	0	4,959/8/	0	0	865	865	0	0
Forest Alternative Strategies Fund II, L.P. Series A5M	0	2,479/8/	0	0	433	433	0	0
Forest Alternative Strategies Fund II, L.P. Series B-3	0	744/8/	0	0	131	131	0	0
Forest Fulcrum Ltd.	0	20,145/8/	0	0	3,515	3,515	0	0
Forest Global Convertible Fund2 Series A5	0	24,794/8/	0	0	4,326	4,326	0	0
Forest Global2 Convertible Fund Series B1	0	6,199/8/	0	0	1,082	1,082	0	0
Forest Greyhound	0	6,199/8/	0	0	1,082	1,082	0	0
Forest Performance Fund	0	3,905/8/	0	0	682	682	0	0
LLT Ltd.	0	4,959/8/	0	0	865	865	0	0
Forum Capital Markets LLC	2,192,840	2,192,840/9/	0	0	69,044	69,044	0	0
Providian Life & Health	0	148,345/7/	0	0	25,884	25,884	0	0
Commonwealth Life Insurance Co.	0	148,345/7/	0	0	25,884	25,884	0	0
The Guardian Pension Trust Fund	0	18,596/7/	0	0	3,244	3,244	0	0
Harris Investment Management	0	17,206/7/	0	0	3,002	3,002	0	0
Offshore Strategies Ltd.	0	61,989/7/	0	0	10,816	10,816	0	0
Libertyview Plus Fund	0	30,993/7/	0	0	5,408	5,408	0	0
Libertyview Fund LLC	0	15,496/7/	0	0	2,704	2,704	0	0
CPR (USA)	0	77,482/7/	0	0	13,519	13,519	0	0
Lincoln National Life Insurance Co.	0	238,023/7/	0	0	41,531	41,531	0	0
Lincoln National Convertible Securities Fund	0	92,359/7/	0	0	16,115	16,115	0	0
Weirton Trust	0	26,965/7/	0	0	4,705	4,705	0	0
Walker Art Center	0	10,230/7/	0	0	1,785	1,785	0	0

Name of Selling Securityholder	Number of Shares of Common Stock Beneficially Owned Prior to Offering	Number of Shares of Common Stock Offered Hereby	Number of Shares of Common Stock Beneficially Owned After Offering	Percentage of Shares of Common Stock Beneficially Owned After Offering	Number of Shares of Series A Convertible Preferred Beneficially Owned Prior to Offering	Number of Shares of Series A Convertible Preferred Offered Hereby	Number of Shares of Series A Convertible Preferred Beneficially Owned After Offering	Percentage of Shares of Series A Convertible Preferred Beneficially Owned After Offering
United National Insurance Co.	0	4,342/7/	0	0	757	757	0	0
Equi Select Growth & Income Fund	0	30,995/7/	0	0	5,394	5,394	0	0
Zazove Convertible Fund, L.P.	0	29,761/7/	0	0	5,177	5,177	0	0
Lois Wilkens	0	1,189/7/	0	0	207	207	0	0
Winchester Convertible Plus Ltd.	0	24,176/7/	0	0	4,218	4,218	0	0
Foundation Account No. 1	0	13,018/7/	0	0	2,271	2,271	0	0
LLC Account No. 1	0	6,199/7/	0	0	1,082	1,082	0	0
GPS Fund Limited	0	18,594/7/	0	0	3,244	3,244	0	0
Telefix (First Delta)	0	3,100/7/	0	0	541	541	0	0
Guardian Life Insurance Co. of America	0	605,417/10/	0	0	105,634	105,634	0	0
Declaration of Trust for the Defined Benefits Plan of ICI America Holdings, Inc.	0	116,418/11/	0	0	20,313	20,313	0	0
J.W. McConnell Family Foundation	0	53,706/12/	0	0	9,372	9,372	0	0
Delaware State Employees Retirement Fund	0	408,189/13/	0	0	71,221	71,221	0	0
General Motors Employees Domestic Group Trust	0	492,783/14/	0	0	85,982	85,982	0	0
Zeneca Holdings	0	78,642/15/	0	0	13,720	13,720	0	0
Hillside Capital Incorporated	0	12,400/14/	0	0	2,164	2,164	0	0
Thermo Electron Balanced Investment Fund	0	32,853/14/	0	0	5,732	5,732	0	0

/1/ 20% of the Common Stock represented here are issuable upon exercise of Class B Warrants. To calculate the exact number of Warrants, divide the given number by 5. The quotient is equal to the number of Warrants that a given security holder owns.

/2/ 23% of the Common Stock represented here are issuable upon the exercise of Class B Warrants. To calculate the exact number of Warrants, divide the given number by 4.33. The quotient is equal to the number of Warrants that a given security holder owns.

/3/ Includes 37,500 shares issuable upon exercise of Class B Warrants, 473,598 shares issuable upon exercise of Advisory Warrants and 638,032 shares issuable upon exercise of Placement Warrants. Mr. Nasser Menhall and Mr. Youssef El-Zein, Hybridon Directors, are principals of Pillar Investment Limited.

/4/ 25% of the Common represented here are issuable upon exercise of Class C Warrants. To calculate the exact number of Warrants, divide the given number by 5. The quotient is equal to the number of Warrants that a given security holder owns.

/5/ Includes 259,375 shares issuable upon exercise of Class C Warrants.

/6/ Includes 31,250 shares issuable upon exercise of Class C Warrants. Dr. Zamecnik is a Director of and consultant to Hybridon.

/7/ All shares of Common Stock represented here are issuable upon exercise of Class A Warrants, which are not exercisable until May 5, 1999.

/8/ All shares of Common Stock represented here are issuable upon exercise of Class A Warrants, which are not exercisable until May 5, 1999. Mr. Purkey, a Hybridon director, is an affiliate of this stockholder.

/9/ Includes 397,712 shares issuable upon exercise of Class A Warrants, 328,677 shares issuable upon exercise of Class B Warrants and 280,517 shares issuable upon exercise of Class C Warrants. Class A Warrants are not exercisable until May 5, 1999. Also includes 588,235 shares issuable upon the exercise of additional warrants held by Forum; those warrants are not exerciasable until May 5, 1999. Mr. Purkey, a Hybridon director, is the President and a 10% owner of Forum Capital Markets.

/10/ Includes 353,316 shares issuable upon exercise of Class A Warrants and 252,101 shares issuable upon exercise of Class D Warrants. The Class A Warrants and the Class D Warrants are not exercisable until May 5, 1999.

/11/ Includes 42,153 shares issuable upon exercise of Class A Warrants and 74,265 shares issuable upon exercise of Class D Warrants. The Class A Warrants and the Class D Warrants are not exercisable until May 5, 1999. Arthur W. Berry, a Hybridon director, serves as investment advisor to ICI American.

/12/ Includes 27,894 shares issuable upon exercise of Class A Warrants and 25,812 shares issuable upon exercise of Class D Warrants. The Class A Warrants and the Class D Warrants are not exercisable until May 5, 1999. Arthur W. Berry, a Hybridon director, serves as investment advisor to the J.W. McConnell Family Foundation.

/13/ Includes 137,918 shares issuable upon exercise of Class A Warrants and 270,271 shares issuable upon exercise of Class D Warrants. The Class A Warrants and the Class D Warrants are not exercisable until May 5,

1999. Arthur W. Berry, a Hybridon director, serves as investment advisor to the Delaware State Employees Retirement Fund.

/14/ All shares of Common Stock represented here are issuable upon exercise of Class A Warrants, which are not exercisable until May 5, 1999. Arthur W. Berry, a Hybridon director, serves as investment advisor to this stockholder.

/15/ Includes 28,824 shares issuable upon exercise of Class A Warrants and

49,818 shares issuable upon exercise of Class D Warrants. The Class A Warrants and the Class D Warrants are not exercisable until May 5, 1999. Arthur W. Berry, a Hybridon director, serves as investment advisor to Zeneca Holdings.

/16/ Includes 234,764 shares issuable upon exercise of Class B Warrants.

/17/ Mohamed El-Khereiji is a controlling stockholder of Solter Corporation and a Hybridon director.

DESCRIPTION OF CAPITAL STOCK AND INDEBTEDNESS

CAPITAL STOCK

The authorized capital stock of the Company consists of 100,000,000 shares of Common Stock and 5,000,000 shares of preferred stock, par value $.01 per share (the "Preferred Stock"), of which 1,500,000 have been designated as Series A Convertible Preferred Stock. As of the date hereof there are 15,256,825 shares of Common Stock and 641,259 shares of Convertible Preferred Stock issued and outstanding.

The following descriptions of the Common Stock and the Convertible Preferred Stock do not purport to be complete and are qualified in their entirety by reference to the Restated Certificate of Incorporation of the Company, including the Certificate of Designation for the Series A Convertible Preferred Stock (the "Certificate of Designation"), which is filed as an exhibit to the Registration Statement.

Common Stock

Holders of Common Stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. Accordingly, holders of a majority of the shares of Common Stock entitled to vote in any election of directors may elect all of the directors standing for election. Holders of Common Stock are entitled to receive ratably such dividends, if any, as may be declared by the Board of Directors out of funds legally available therefor, subject to any preferential dividend rights of outstanding Preferred Stock or other securities. Upon the liquidation, dissolution or winding up of the Company, the holders of Common Stock are entitled to receive ratably the net assets of the Company available after the payment of all debts and other liabilities and subject to the prior rights of any outstanding Preferred Stock and to the Liquidation Put Right described in the next paragraph. Holders of Common Stock have no preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of holders of Common Stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock which the Company may designate and issue in the future and the rights of creditors of the Company.

Pursuant to the terms of the Unit Purchase Agreement, the initial purchasers (the "Liquidation Put Holders") of certain of the shares (the "Put Shares") of Common Stock sold in the Regulation S and the Regulation D Offerings have the right to put (the "Liquidation Put") those shares back to the Company upon the liquidation of the Company, but only after all other indebtedness and obligations of the Company and all rights of any holders of any capital stock ranking prior and senior to the Common Stock with respect to liquidation have been satisfied in full. The Liquidation Put is not transferrable, however. Purchasers of Common Stock pursuant to this Prospectus will therefore not be able to exercise the Liquidation Put with respect to those shares. Any Liquidation Put Holders that have not sold or otherwise transferred any Put Shares will, however, be able to exercise the Liquidation Put with respect to those Put Shares upon a liquidation of the Company. In such circumstances, holders of shares of the Company's Common Stock that are not subject to the Liquidation Put right may receive smaller liquidation distributions per share than they would have had no Liquidation Put Holders exercised the Liquidation Put. As of December 1, 1998, there were 9,597,476 Put Shares outstanding.

Preferred Stock

The Restated Certificate of Incorporation authorizes the issuance of up to 5,000,000 shares of Preferred Stock. Under the terms of the Restated Certificate of Incorporation, the Board of Directors is authorized, subject to any limitations prescribed by law, without stockholder approval, to issue such shares of Preferred Stock in one or more series. Each such series of preferred stock shall have such rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, as shall be determined by the Board of Directors. 1,500,000 shares of Preferred Stock have been designated Series A Convertible Preferred Stock.

Convertible Preferred Stock

1. Definitions. As used in this description of the Convertible Preferred Stock, except as otherwise provided in Subsection 4(c), the following terms shall have the following meanings:

(a) 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.

(b) "Fair Market Value" of any asset (including any security) means the fair market value thereof as mutually determined by the Company and the holders of a majority of the Convertible Preferred Stock then outstanding. If the Company and the holders of a majority of the Convertible 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 Convertible 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 Company.

(c) "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.

(d) "Registered Holders" shall mean, at any time, the holders of record of the Convertible Preferred Stock.

(e) 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 Company for that purpose.

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

2. Dividends. The holders, as of the Dividend Record Date (as defined below), of the Convertible Preferred Stock shall be entitled to receive semi-annual dividends on their respective shares of Convertible Preferred Stock (aggregating, for this purpose, all shares of Convertible Preferred Stock held of record or, to the Company's knowledge, beneficially by such holder), payable, at the option of the Company, in cash or additional shares of Convertible 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 Company, either in cash or additional duly authorized, fully paid and non assessable shares of Convertible Preferred Stock. In calculating the number of shares of Convertible Preferred Stock to be paid with respect to each dividend, the Convertible 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 Convertible Preferred Stock). Notwithstanding the foregoing, the Company shall not be required to issue fractional shares of Convertible Preferred Stock; the Company 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 Convertible 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 Convertible 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.

3. Liquidation Preference. (a) In the event of a (i) liquidation, dissolution or winding up of the Company, whether voluntary or involuntary, (ii) a sale or other disposition of all or substantially all of the assets of the Company or (iii) any consolidation, merger, combination, reorganization or other transaction in which the Company is not the surviving entity or shares of Common Stock constituting in excess of 50% of the voting power of the Company 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 Company, the holders of the Convertible Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Company 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 Company, 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 Company and the holders of a majority of the Convertible Preferred Stock then outstanding. If upon any Liquidation Event, whether voluntary or involuntary, the assets to be distributed to the holders of the Convertible 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 Company to be distributed shall be so distributed ratably to the holders of the Convertible Preferred Stock on the basis of the number of shares of Convertible 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 Company is not the surviving entity but the stockholders of the Company 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 the Certificate of Designation survive any such transaction. All shares of Convertible 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 Company's preferred stock.

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

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

(1) 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.

(2) 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 May 6, 1999, but not prior thereto, the shares of Convertible Preferred Stock shall be convertible, in whole or in part, at the option of the holder thereof and upon notice to the Company as set forth herein, 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 $4.25, and shall be subject to adjustment as provided herein. The rate at which each share of Convertible 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 herewith, including the last paragraph hereof) into the Dividend Base Amount.

(b) Conversion Procedures. Any holder of shares of Convertible Preferred Stock desiring to convert such shares into Common Stock shall surrender the certificate or certificates evidencing such shares of Convertible Preferred Stock at the office of the transfer agent for the Convertible Preferred Stock, which certificate or certificates, if the Company shall so require, shall be duly endorsed to the Company or in blank, or accompanied by proper instruments of transfer to the Company or in blank, accompanied by irrevocable written notice to the Company that the holder elects so to convert such shares of Convertible 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 Company need not deem a notice of conversion to be received unless the holder complies with all the provisions hereof. The Company will instruct the transfer agent (which may be the Company) 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 Company shall, as soon as practicable after such deposit of certificates evidencing shares of Convertible Preferred Stock accompanied by 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 Convertible 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 Convertible Preferred Stock to be converted, and the person or persons entitled to receive the Common Stock deliverable upon conversion of such Convertible 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 Convertible Preferred Stock while the stock transfer books of the Corporation are closed for any purpose, but the surrender of Convertible 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 Convertible Preferred Stock.

The Company 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 Convertible 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 Convertible Preferred Stock.

All notices of conversion shall be irrevocable; provided, however, that if the Company has sent notice of an event pursuant to Section 4(g), a holder of Convertible Preferred Stock may, at its election, provide in its notice of conversion that the conversion of its shares of Convertible 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 Company 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 paragraph (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 Company;

"Common Stock" of any Person other than the Company 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 Company means the Common Stock, par value $.001 per share, of the Company, any successor class or classes of common equity (however designated) of the Company 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 Company 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 Company;

"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 Company. 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 Company;

"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 Company.

(ii) If the Company shall (i) pay a dividend or other distribution, in Common Stock, on any class of Capital Stock of the Company, (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 Convertible 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 Convertible 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 (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 Company 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 (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 Company 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 Company 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 Company 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 Subsection (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 Company 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 anything contained in the Certificate of Designation to the contrary, options, rights or warrants issued or distributed by the Company, including options, rights or warrants distributed prior to the date of filing of the 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 Convertible 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 Convertible 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 Convertible Preferred Stock, an adjustment (if any is required) to the Conversion Price shall be made in accordance with this paragraph (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 the 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 (c)(vi) or this paragraph) an adjustment to the Conversion Price under this paragraph (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 Company 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 Company, any Subsidiary or any other Person, cash or Capital Stock or other securities of the Company, any Subsidiary or any other Person, but excluding payments and distributions as described in Subsections 4(c)(ii) or 4(c)(iii), dividends and distributions in connection with a Liquidation Event and distributions consisting solely of cash

described in Subsection 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 Subsection 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, 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 Company shall, by dividend or otherwise, make a distribution (other than in connection with the liquidation, dissolution or winding up of the Company 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 stockholders entitled to receive such distribution with respect to which no adjustment has been made to the Conversion Price pursuant to this paragraph (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 Convertible Preferred Stock been converted immediately prior to such record date\. In no event shall the Conversion Price be increased pursuant to this paragraph (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 Subsection 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 in the Certificate of Designation 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 Subsection 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 shall be made by the Company 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 Company 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 Company 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 in the Certificate of Designation 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 Company may defer until the occurrence of such event (i) issuing to the Registered Holder of any Convertible 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 of the Certificate of Designation, 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 Convertible 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 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 Convertible Preferred Stock issued in the Offering, (6) any Capital Stock issued or cash paid as dividends on the Convertible Preferred Stock or (7) any Capital Stock issued or cash paid upon the mandatory conversion or redemption of any Convertible Preferred Stock in accordance with Section 5 of the Certificate of Designation.

(d) No Fractional Shares. No fractional shares or scrip representing fractional shares of Common Stock shall be issued upon conversion of Convertible Preferred Stock. If more than one certificate evidencing shares of Convertible 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 Convertible 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 Convertible Preferred Stock, the Company 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 Company 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 Convertible 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 Convertible Preferred Stock from time to time

outstanding. The Company 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 Convertible Preferred Stock.

The Company 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 Convertible Preferred Stock. The Company 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 Convertible 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 Company the amount of such tax or has established, to the satisfaction of the Company, that such tax has been paid or need not be paid.

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

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

ii. the Company 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 Company is a party and for which approval of any stockholders of the Company shall be required, or of the sale or transfer of all or substantially all of the assets of the Company 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 Company shall cause to be filed with the transfer agent for the Convertible 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 Company, 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 Company 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 Company 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 Company 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 in the Certificate of Designation, 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 Convertible Preferred Stock is convertible.

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

5. Mandatory Conversion and Redemption. (a) At any time after May 6, 1998, the Company at its option, may cause the Convertible 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 $4.00 (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 Convertible 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 Company, at its option, may redeem the Convertible 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 Convertible

Preferred Stock to be converted or redeemed, addressed to such holders at their last addresses as shown on the stock transfer books of the Company. Each such notice shall specify the date fixed for conversion or redemption, the place or places for surrender of shares of Convertible Preferred Stock and the then effective Conversion Rate pursuant to Section 4.

Any notice which is mailed as provided in the Certificate of Designation shall be conclusively presumed to have been duly given by the Company on the date deposited in the mail, whether or not the holder of the Convertible 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 Convertible 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 Company 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. A share of Convertible Preferred Stock, when issued, shall be deemed outstanding except (i) from the date, or the deemed date, of surrender of certificates evidencing shares of Convertible Preferred Stock, all shares of Convertible Preferred Stock converted into Common Stock or redeemed pursuant to Section 5 and (ii) from the date of registration of transfer, all shares of Convertible Preferred Stock held of record by the Company or any subsidiary of the Company.

7. Class Voting Rights. The Company shall not, without the affirmative vote or consent of the holders of at least 50% of all outstanding Convertible Preferred Stock, voting separately as a class, (i) amend, alter or repeal any provision of the Certificate of Incorporation or the Bylaws of the Company so as adversely to affect the relative rights, preferences, qualifications, limitations or restrictions of the Convertible Preferred Stock (it being understood that the issuance of securities ranking prior to, or pari passu with, the Convertible 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, Convertible Preferred Stock, other than Convertible Preferred Stock issuable as dividends on Convertible Preferred Stock.

8. Status of Acquired Shares. Shares of Convertible Preferred Stock received upon conversion or redemption pursuant to Section 4 or Section 5 or otherwise acquired by the Company 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 Convertible Preferred Stock.

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

10. Restrictions on Change of Control. Notwithstanding anything to the contrary contained in the Certificate of Designation, without the prior written consent of the Company, 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 Convertible Preferred Stock shall have voting rights granted hereunder, be entitled to receive any voting securities of the Company pursuant hereto or be entitled to exercise any of the conversion rights set forth in the Certificate of Designation (each, a "Restricted Event"), to the extent that any such Restricted Event could, in the Company's reasonable

judgment, either alone or in conjunction with other issuances or holdings of capital stock, warrants or convertible securities of the Company, result in a Change of Control (as defined in the Indenture).

WARRANTS AND OPTIONS

Warrants

The Company has the following exercisable warrants outstanding for the purchase of common stock at September 30, 1998:

Expiration Date	Shares	Exercise Price Per Share
November 2, 1998-October 25, 2000	503,001	$50.00
February 28, 2000	20,000	37.50
December 31, 2001	13,000	34.49
April 2, 2002-May 4, 2003	8,641,510	2.40-4.25
Average per share exercise price	9,227,511	$3.13

As a component of the sale of Preferred Stock in 1994 and 1995, the Company issued to the investors in such offering warrants for the purchase of 585,425 shares of Common Stock at $40.00 to $50.00 per share.

Warrants to purchase 331,382 shares of Common Stock at an exercise price of $50.00 per share expired on March 31, 1998, and the remaining warrants for the purchase of 254,043 shares of Common Stock at an exercise price of $40.00 per share expired on October 25, 1997.

Five-year warrants to purchase 368,620 shares of common stock at $50.00 per share were issued in 1994 and 1995 as a component of the compensation for services of several placement agents of the Company's convertible preferred stock. Of these warrants, 304,335 were issued to a company that is controlled by two directors of the Company. The remaining 64,285 warrants were issued to various other companies that acted as placement agents.

Certain Terms of the Warrants

The following descriptions of certain of the terms of the Class A Warrants, Class B Warrants, Class C Warrants, Class D Warrants, Forum Warrants and Pillar Warrants do not purport to be complete and are qualified in their entirety by the terms of the agreements pursuant to which they were issued, each of which is filed as an exhibit to this Registration Statement.

Class A Warrants

As of December 1, 1998, there were 3,002,958 Class A Warrants issued and outstanding. The Class A Warrants were issued, together with shares of the Convertible Preferred Stock, in the Exchange Offer. Each Class A Warrant initially entitles the holder to purchase one (1) share of Common Stock at an exercise price of $4.25 per share. By their terms, the Class A Warrants are exercisable from May 5, 1999 until May 4, 2003, subject to any additional restrictions on transfer that the holders thereof have agreed to. See "Certain Restrictions on Transfer --Convertible Preferred Stockholders."

The number of shares of Common Stock issuable upon exercise of the Class A Warrants, the purchase price to be paid upon such exercise, and the number of Class A Warrants outstanding are subject to anti-dilution adjustment for stock splits, stock dividends, and certain other events.

Class B Warrants

As of December 1, 1998, there were 1,752,945 Class B Warrants issued and outstanding. The Class B Warrants were issued, together with shares of Common Stock, in the 1998 Regulation S Offering. Each Class B Warrant initially entitles the holder to purchase one (1) share of Common Stock at an exercise price of $2.40 per share. By their terms, the Class B Warrants were immediately

exercisable from May 5, 1998 until May 4, 2003, subject to any additional restrictions on transfer that the holders thereof have agreed to. See "Certain Restrictions on Transfer -- Regulation S Offering."

The number of shares of Common Stock issuable upon exercise of the Class B Warrants, the purchase price to be paid upon such exercise, and the number of Class B Warrants outstanding are subject to anti-dilution adjustment for stock splits, stock dividends, and certain other events.

Class C Warrants

As of December 1, 1998, there were 904,274 Class C Warrants issued and outstanding. The Class C Warrants were issued, together with shares of Common Stock, in the 1998 Regulation D Offering. Each Class C Warrant initially entitled the holder to purchase one (1) share of Common Stock at an exercise price of $2.40 per share. By their terms, the Class C Warrants were immediately exercisable from May 5, 1998 until May 4, 2003, subject to any additional restrictions on transfer that the holders thereof have agreed to. See "Certain Restrictions on Transfer -- Regulation D Offering."

The number of shares of Common Stock issuable upon exercise of the Class C Warrants, the purchase price to be paid upon such exercise, and the number of Class C Warrants outstanding are subject to anti-dilution adjustment for stock splits, stock dividends, and certain other events.

Class D Warrants

As of December 1, 1998, there were 672,267 Class D Warrants issued and outstanding. The Class D Warrants were issued, together with shares of the Convertible Preferred Stock, in the Regulation D Preferred Offering. Each Class D Warrant initially entitles the holder to purchase one (1) share of Common Stock at an exercise price of $2.40. By their terms, the Class D Warrants are exercisable from May 5, 1999 until May 4, 2003, subject to any additional restrictions on transfer that the holders thereof have agreed to. See "Certain Restrictions on Transfer -- Convertible Preferred Stockholders."

The number of shares of Common Stock issuable upon exercise of the Class D Warrants, the purchase price to be paid upon such exercise, and the number of Class D Warrants outstanding are subject to anti-dilution adjustment for stock splits, stock dividends, and certain other events.

Forum

The Company retained Forum as a placement agent of the Company in connection with the Regulation D Offering in the United States. As of the date hereof, Forum has received as compensation for its services as placement agent with regard to the Regulation D Offering and its assistance with the Exchange Offer, 597,699 shares of Common Stock and Forum Warrants to purchase 609,195 shares of Common Stock exercisable at $2.40 per share, in each case subject to adjustment, until May 4, 2003. In addition, in consideration of the agreements made by Forum consenting to the Company's 1998 private placements and waiving certain obligations of the Company to Forum, the Company agreed to amend the 1997 Forum Warrant to purchase up to 71,301 shares of Common Stock of the Company so that the exercise price will be equal to $4.25 per share, and the number of shares of Common Stock purchasable upon exercise thereof will be increased to 588,235, in each case subject to adjustment; provided, however, that such warrant will also be amended to provide that such warrant may not be exercised until May 5, 1999 and the transactions contemplated by such private placements and by the Exchange Offer will not trigger any anti-dilution adjustments to the exercise price thereof or the number of shares of Common Stock subject thereto.

Pillar Investments

The Company retained Pillar Investments as a placement agent of the Company in connection with the private placements of securities of the Company in the Regulation S Offerings. Pillar Investments is entitled to receive fees consisting of (i) 9% of the gross proceeds of each Regulation S Offering, (ii) a non-accountable expense allowance equal to 4% of such gross proceeds, (iii) the right to purchase, for nominal consideration, warrants to purchase 473,598 shares of Common Stock, at an exercise price of $2.40 per share, (iv) the right

to purchase, for nominal consideration, warrants to purchase such number of shares of Common Stock of the Company equal to 10% of the aggregate number of shares of Common Stock sold by the Company for which Pillar Investments acted as placement agent, exercisable at 120% of the relevant Common Stock offering price, for a period of five years (resulting, as of the date hereof, in the right to receive warrants to purchase 638,032 shares at $2.40 per share, subject to adjustment), and (v) a consulting/restructuring fee of $960,000 payable in Common Stock of the Company valued at the market price and payable in three equal installments as net proceeds of $25,000,000, $30,000,000 and $35,000,000 are received in the aggregate from private placements effected by the Company in 1998 to the extent contemplated by the Consent dated as of January 12, 1998 given by certain 9% Noteholders of the Company, or otherwise to the extent contemplated by the Placement Agency Agreement between the Company and Pillar Investments, subject to the Company's receipt of a fairness opinion with regard thereto, provided however, that in no event shall Pillar Investments be permitted to receive compensation in excess of the level which was approved by the holders of the 9% Notes. Through the date hereof, Pillar Investments has received $1,635,400 in cash pursuant to these arrangements and Pillar Warrants to purchase 1,111,630 shares of Common Stock.

The Company and Pillar Investments have entered into an advisory agreement pursuant to which Pillar Investments acts as the Company's non-exclusive financial advisor, which agreement provided that an affiliate of Pillar Investments receive a monthly retainer of $5,000 (with a minimum engagement of 24 months beginning on May 5, 1998), and further provides that Pillar Investments is entitled to receive (i) out-of pocket expenses, (ii)

subject to the Company's receipt of a fairness opinion with respect thereto, 300,000 shares of Common Stock in connection with Pillar Investments' efforts in assisting the Company in restructuring its balance sheet, and (iii) certain cash and equity success fees in the event Pillar Investments assists the Company in connection with certain financial and strategic transactions.

Purchasers of the Warrants are also bound by certain contractual restrictions on their ability to transfer those Warrants and the shares of Common Stock issuable upon exercise thereof. See "Certain Restrictions on Transfer."

Stock Option Plans

In 1990 and 1995, the Company established the 1990 Stock Option Plan (the 1990 Option Plan) and the 1995 Stock Option Plan (the 1995 Option Plan), respectively, which provide for the grant of incentive stock options and nonqualified stock options. Options granted under these plans vest over various periods and expire no later than 10 years from the date of grant. However, under the 1990 Option Plan in the event of a change in control (as defined in the 1990 Plan), the exercise dates of all options then outstanding shall be accelerated in full and any restrictions on exercising outstanding options issued pursuant to the 1990 Option Plan shall terminate. In October 1995, the Company terminated the issuance of additional options under the 1990 Option Plan. As of September 30, 1998, options to purchase a total of 529,414 shares of common stock remained outstanding under the 1990 Option Plan.

A total of 700,000 shares of common stock may be issued upon the exercise of options granted under the 1995 Option Plan. The maximum number of shares with respect to which options may be granted to any employee under the 1995 Option Plan shall not exceed 500,000 shares of common stock during any calendar year. The Compensation Committee of the Board of Directors has the authority to select the employees to whom options are granted and determine the terms of each option, including (i) the number of shares of common stock subject to the option; (ii) when the option becomes exercisable; (iii) the option exercise price, which, in the case of incentive stock options, must be at least 100% (110% in the case of incentive stock options granted to a stockholder owning in excess of 10% of the Company's common stock) of the fair market value of the common stock as of the date of grant; and (iv) the duration of the option (which, in the case of incentive stock options, may not exceed 10 years). As of September 30, 1998, options to purchase a total of 573,418 shares of common stock remained outstanding under the 1995 Option Plan.

In October 1995, the Company adopted the 1995 Director Stock Option Plan (the Director Plan). A total of 50,000 shares of common stock may be issued

upon the exercise of options granted under the Director Plan. Under the terms of the Director Plan, options to purchase 1,000 shares of common stock were granted to eligible directors upon the closing of the Company's initial public offering at the fair market value of the common stock on the date of the closing. Thereafter, options to purchase 1,000 shares of common stock will be granted to each eligible director on May 1 of each year commencing in 1997. All options will vest on the first anniversary of the date of grant or, in the case of annual options, on April 30 of each year with respect to options granted in the previous year. As of September 30, 1998, options to purchase a total of 21,000 shares of common stock remained outstanding under the Director Plan.

In May 1997, the Company adopted the 1997 Stock Option Plan (the 1997 Option Plan), which provides for the grant of incentive and non-qualified stock options. A total of 600,000 shares of common stock may be issued upon the exercise of options granted to any employee under the 1997 Option Plan. The maximum number of shares with respect to which options may be granted to any employee under the 1997 Option Plan shall not exceed 500,000 shares of common stock during any calendar year. The Compensation Committee of the Board of Directors has the authority to select the employees to whom options are granted and determine the terms of each option, including (i) the number of shares of common stock subject to the option; (ii) when the option becomes exercisable; (iii) the option exercise price, which, in the case of incentive stock options, must be at least 100% (110% in the case of incentive stock) of the fair market value of the common stock as of the date of grant; and (iv) the duration of the option (which, in the case of incentive stock options, may not exceed ten years). As of September 30, 1998, options to purchase a total of 2,216,800 shares of common stock remained outstanding under the 1997 Option Plan.

INDEBTEDNESS

The following descriptions of the 9% Notes and the Bank Facility do not purport to be complete and are qualified in their entirety by reference to the Indenture and the Loan and Security Agreement, each of which is filed as an exhibit to the Registration Statement.

9% CONVERTIBLE SUBORDINATED NOTES DUE 2004

On April 2, 1997, the Company sold $50.0 million principal amount of its 9% Notes pursuant to the Indenture. The 9% Notes bear interest at a rate of 9% per annum and have a maturity date of April 1, 2004. Under the 9% Notes, the Company is required to make semi-annual interest payments on the outstanding principal balance through the maturity date of April 1, 2004. The Indenture contains various covenants on the part of the Company and Events of Default, which should be carefully reviewed by prospective investors. The 9% Notes are unsecured and subordinated to "Senior Indebtedness" (as defined in Section 1.1 of the Indenture), which includes substantially all of the Company's existing indebtedness. The 9% Notes are convertible at the option of the holder into the Company's Common Stock at any time prior to maturity, unless previously redeemed or repurchased by the Company under certain specified circumstances, at a conversion price of $35.0625 per share (subject to adjustment). Upon a Change of Control of the Company (as defined in the Indenture), the Company would be required to offer to repurchase the 9% Notes at 150% of the principal amount thereof plus accrued and unpaid interest to the date of repurchase. Potential purchasers are urged to review carefully the definition of Change of Control set forth in Section 1.1 of the Indenture, which includes, inter alia, any person or entity (including a "person" or "group" within the meaning of Section 13(d) or 14(d) of the Exchange Act) becoming the direct or indirect beneficial owner of shares of Capital Stock (as defined therein and which includes preferred stock) representing greater than 50% of the combined voting power of all outstanding shares of Capital Stock entitled to vote in the election of directors under ordinary circumstances.

In the first quarter of 1998, the Company commenced an exchange offer (the "Exchange Offer") to all of the holders of 9% Notes whereby the Company offered to exchange shares of Convertible Preferred Stock and warrants to purchase Common Stock for the 9% Notes. On May 5, 1998, the Company accepted approximately $48.7 million in principal amount of 9% Notes tendered in the Exchange Offer in exchange for approximately 510,000 shares of Convertible Preferred Stock and warrants to purchase approximately 3,000,000 shares of Common Stock at $4.25 per share. As a result of the Exchange Offer, there is approximately $1.3 million in principal amount of 9% Notes outstanding.

BANK CREDIT FACILITY

In December 1996, the Company entered into a five-year $7.5 million credit facility with Silicon Valley Bank (the "Bank") to finance the leasehold improvements of the Company's manufacturing facility the outstanding principal balance of which was approximately $2.8 million at November 15, 1998. The Bank Credit Facility, as amended, contains certain financial covenants that require the Company to maintain minimum tangible net worth (as defined) and minimum liquidity (as defined) and prohibits the payment of dividends. The Company has secured its obligations with a lien on all of its assets. If, at specified times, the Company's Minimum Liquidity (as defined) is less than $4.0 million, or its tangible net worth (as defined) is less than $6 million, the Company is required to prepay the Bank Credit Facility in full.

In November 1998, Forum and Pecks, affiliates of two members of the Company's Board of Directors, purchased the loan made by the Bank. In connection with the purchase of the Bank Credit Facility, the purchasers (the "Lender") have advanced an additional amount to the Company so as to increase the outstanding principal amount of the Loan to $6,000,000. In addition, the Lender has agreed to amend the terms of the Loan as follows: (i) the maturity will be extended to November 30, 2003; (ii) the interest rate will be decreased to 8%; (iii) interest will be payable monthly in arrears, with the principal due in full at maturity of the Loan; (iv) the Loan will be convertible, at the Lender's option, in whole or in part, into shares of common stock, par value $.001 per share, of the Company ("Common Stock") at a rate equal to $2.40 per share; (v) the threshold of the Minimum Liquidity

covenant will be reduced from $4,000,000 to $2,000,000; and (vi) the Loan may not be prepaid, in whole or in part, at any time prior to December 1, 2000.

In connection with the purchase of the Loan, Forum will receive certain fees. See "Certain Relationships and Related Transactions." For additional description of the Bank Credit Facility see Notes 6(a) and 19(h) of "Notes to Consolidated Financial Statements."

TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar for the Common Stock is ChaseMellon Shareholder Services LLC.

DELAWARE LAW AND CERTAIN PROVISIONS OF THE COMPANY'S RESTATED CERTIFICATE OF INCORPORATION, BY-LAWS AND INDEBTEDNESS

The Company is subject to the provisions of Section 203 of the Delaware General Corporation Law. Section 203 prohibits a publicly-held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. A "business combination" includes mergers, asset sales and other transactions resulting in a financial benefit to the interested stockholder. Subject to certain exceptions, an "interested stockholder" is a person who, together with affiliates and associates, owns, or within three years did own, 15% or more of the corporation's voting stock. The existence of this provision can be expected to deter certain business combinations, including transactions that might otherwise result in holders of voting stock being paid a premium over the market price for their shares.

The Restated Certificate of Incorporation provides for the division of the Board of Directors into three classes as nearly equal in size as possible with staggered three-year terms. In addition, the Restated Certificate of Incorporation provides that directors may be removed only for cause by the affirmative vote of the holders of at least two-thirds of the shares of capital stock of the corporation entitled to vote. Under the Restated Certificate of Incorporation, any vacancy on the Board of Directors, however occurring, including a vacancy resulting from an enlargement of the Board, may filled only by vote of a majority of the directors then in office. The classification of the

Board of Directors and the limitations on the removal of directors and filling of vacancies could have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from acquiring, control of the Company.

The Restated Certificate of Incorporation also requires that any action required or permitted to be taken by the stockholders of the Company at an annual meeting or special meeting of stockholders may be taken only if it is properly brought before such meeting and may not be taken by written action in lieu of a meeting and will require reasonable advance notice by a stockholder of a proposal or director nomination which such stockholder desires to present at any annual or special meeting of stockholders. The Restated Certificate of Incorporation further provides that special meetings of the stockholders may be called only by the Chief Executive Officer or, if none, the President of the Company or by the Board of Directors. Under the Company's By-Laws (the "By-Laws"), in order for any matter to be considered "properly brought" before a meeting, a stockholder must comply with certain requirements regarding advance notice to the Company. The foregoing provisions could have the effect of delaying until the next stockholders meeting stockholder actions which are favored by the holders of a majority of the outstanding voting securities of the Company. These provisions may also discourage another person or entity from making a tender offer for the Company's Common Stock, because such person or entity, even if it acquired a majority of the outstanding voting securities of the Company, would be able to take action as a stockholder (such as electing new directors or approving a merger) only at a duly called stockholders meeting, and not by written consent.

The Delaware General Corporation Law provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's certificate of incorporation or by-laws,

unless a corporation's certificate of incorporation or by-laws, as the case may be, requires a greater percentage. The Restated Certificate of Incorporation and the By-Laws require the affirmative vote of the holders of at least 75% of the shares of capital stock of the Company issued and outstanding and entitled to vote to amend or repeal any of the provisions described in the prior two paragraphs. Moreover, the Board of Directors has the authority, without further action by the stockholders, to fix the rights and preferences of, and to issue shares of, Preferred Stock.

In addition to these provisions of Delaware law, the Restated Certificate of Incorporation and the By-Laws, the terms of the Company's outstanding 9% Notes, which were issued in the aggregate original principal amount of $50.0 million and of which approximately $1.3 million in principal amount remains outstanding, require the Company, upon a Change of Control of the Company (as defined in the indenture for the 9% Notes), to offer to repurchase the 9% Notes at a repurchase price equal to 150% of the principal amount thereof, plus accrued and unpaid interest to the date of repurchase. This provision, together with the provisions of the Restated Certificate of Incorporation described above and other provisions of the Restated Certificate of Incorporation, may have the effect of deterring hostile takeovers or delaying or preventing changes in control or management of the Company, including transactions in which stockholders might otherwise receive a premium for their shares over then current market prices. In addition, these provisions may limit the ability of stockholders to approve transactions that they may deem to be in their best interests.

CERTAIN U.S. FEDERAL INCOME TAX CONSIDERATIONS

The following is a discussion of certain U.S. federal income tax consequences to purchasers of Securities from Selling Securityholders of owning Securities as capital assets. The discussion is based on the provisions of the Internal Revenue Code of 1986, as amended (the "Code"), final, temporary and proposed Treasury Regulations thereunder, and administrative and judicial interpretations thereof, all as in effect as of the date hereof, and all of which are subject to change (perhaps retroactively) by legislation, administrative action or judicial decision. There can be no assurance that the Internal Revenue Service (the "Service") will not challenge one or more of the

tax consequences described herein, and no opinion of counsel or ruling from the Service has been or will be requested as to any of such tax consequences. The following discussion does not include all matters that may be relevant to any particular holder in light of such holder's particular circumstances. Certain holders, including financial institutions, broker-dealers, tax-exempt entities and insurance companies, may be subject to special treatment not described below.

For purposes of this discussion, a "U.S. Holder" means a purchaser of Securities from Selling Securityholders that is, for U.S. federal income tax purposes, a citizen or resident of the United States, a corporation, partnership or other entity (other than a trust) created or organized in or under the laws of the United States or any political subdivision thereof, an estate whose income is subject to U.S. federal income tax regardless of its source or a trust if, in general, a court within the United States is able to exercise primary supervision over its administration and one or more U.S. persons have authority to control all of its substantial decisions. As used in this section, a non-U.S. Holder is a purchaser of Securities from Selling Securityholders that is not a U.S. Holder.

THE FEDERAL INCOME TAX CONSEQUENCES OF OWNING SECURITIES ARE COMPLEX. ALL HOLDERS OF SECURITIES ARE URGED TO CONSULT WITH THEIR OWN TAX ADVISORS AS TO THE PARTICULAR TAX CONSEQUENCES TO THEM OF THE OWNERSHIP AND DISPOSITION OF SECURITIES, INCLUDING THE APPLICATION AND EFFECT OF ANY STATE, LOCAL AND FOREIGN TAX LAWS.

U.S. Holders

Dividends. Dividends paid on Preferred Stock or on Common Stock (whether in cash or in kind) should be taxable to a U.S. Holder as ordinary income, to the extent paid out of the Company's current or accumulated earnings and profits. Any amounts distributed in excess of such earnings and profits should be treated first as a

nontaxable return of capital that reduces the U.S. Holder's basis in the stock to the extent thereof and then as capital gain from the sale or exchange of property. Any such gain should be long-term capital gain if the U.S. Holder's holding period for the stock was more than one year.

Subject to certain restrictions, dividends received by a corporate U.S. Holder generally should be eligible for the 70% dividends-received-deduction, provided the stock is held for more than 45 days (not counting days in which the U.S. Holder's risk of loss is diminished) during the 90 day period beginning 45 days before the applicable ex-dividend date and various other conditions are met. Special holding period requirements apply with respect to dividends on Preferred Stock attributable to periods aggregating in excess of 366 days. The aggregate dividends-received-deductions allowed may not exceed 70% of a corporate U.S. Holder's taxable income (with certain adjustments). In addition, the dividends-received-deduction is proportionately reduced to the extent that a corporate U.S. Holder incurs indebtedness directly attributable to an investment in the Preferred Stock or Common Stock. Special rules may apply to corporate U.S. Holders upon the receipt of any "extraordinary dividends" with respect to the Preferred Stock or Common Stock.

Sale. A U.S. Holder of Preferred Stock or Common Stock who sells or otherwise disposes of such stock in a taxable transaction should recognize capital gain or loss equal to the difference between the cash and the fair market value of any property received on such sale or disposition and the U.S. Holder's tax basis in such stock. Such gain or loss should be long term gain or loss if the holding period for such stock was more than one year.

Redemption. A redemption by the Company of some or all of a U.S. Holder's Preferred Stock or Common Stock should be treated as a dividend to the redeeming U.S. Holder to the extent of the Company's current or accumulated earnings and profits unless the redemption meets one of the tests under Section 302(b) of the Code. If one of the tests under Section 302(b) of the Code is met, the redemption should be treated as an exchange giving rise to capital gain or loss as described above, except to the extent of declared but unpaid dividends. U.S. Holders should consult their tax advisors as to the application of Section 302(b) of the Code to their particular circumstances.

Conversion of Preferred Stock. A U.S. Holder generally should not recognize gain or loss upon the conversion of Preferred Stock into Common Stock (except to the extent that any cash paid in lieu of a fractional share exceeds the U.S. Holder's tax basis in the Preferred Stock allocable to such fractional share). A U.S. Holder's tax basis in the Common Stock received upon the conversion should be the same as the U.S. Holder's adjusted tax basis in the Preferred Stock converted (reduced by the portion of such basis allocable to any fractional shares for which the U.S. Holder receives a cash payment from the Company). The holding period of Common Stock received in the conversion should include the holding period of the Preferred Stock converted.

Adjustments to Conversion Price. Pursuant to Treasury Regulations promulgated under Section 305 of the Code, a U.S. Holder of Preferred Stock may be treated as having received a constructive distribution from the Company upon an adjustment in the conversion price of the Preferred Stock if (i) as a result of such adjustment, the proportionate interest of such U.S. Holder in the assets or earnings and profits of the Company is increased and (ii) the adjustment is not made pursuant to a bona fide, reasonable, anti-dilution formula. An adjustment to compensate for certain taxable distributions with respect to the Common Stock is not made pursuant to such a formula. Thus, under certain circumstances, a decrease in the conversion price of the Preferred Stock may be taxable to a holder of Preferred Stock as a dividend to the extent of the current or accumulated earnings and profits of the Company. In addition, the failure to adjust fully the conversion (or exercise) price of the Preferred Stock (or the Exchange Warrants) to reflect distributions of stock dividends with respect to the Common Stock may result in a taxable dividend to the holders of Common Stock.

Non-U.S. Holders

Dividends. In general, dividends paid to a non-U.S. Holder of Preferred Stock or Common Stock should be subject to U.S. federal income tax withholding at a 30% rate unless such rate is reduced by an applicable income tax treaty. Dividends received that are effectively connected with the conduct by the non-U.S. Holder of a trade or business within the United States or, if a tax treaty applies, attributable to a permanent establishment or a fixed base of such non-U.S. Holder in the United States ("United States trade or business income") generally should be

subject to U.S. federal income tax at regular U.S. income tax rates, but generally should not be subject to the 30% withholding tax if the non-U.S. Holder files an appropriate form with the payer. Any U.S. trade or business income received by a non-U.S. Holder that is a corporation may also, under certain circumstances, be subject to a "branch profits tax" at a 30% rate, or such lower rate as may be applicable under an income tax treaty.

Dividends paid to an address in a foreign country are presumed (absent actual knowledge to the contrary) to be paid to a resident of such country for purposes of the withholding tax discussed above and, under the current interpretation of Treasury Regulations, for purposes of determining the applicability of a tax treaty rate. Under new Treasury Regulations, however, for payments made after December 31, 1999, a non-U.S. Holder who wishes to claim the benefit of an applicable tax treaty rate would be required to satisfy applicable certification and other requirements, which would include filing a form that contains the non-U.S. Holder's name and address and an official statement by the competent authority in the foreign country (as designated in the applicable tax treaty) attesting to the non-U.S. Holder's status as a resident thereof. A non-U.S. Holder of the Preferred Stock or Common Stock that is eligible for a reduced rate of U.S. federal withholding tax pursuant to an income tax treaty may obtain a refund of any excess amounts withheld by filing an appropriate claim for refund with the Service.

Sale or Redemption. A non-U.S. Holder generally should not be subject to U.S. federal withholding or income tax on any gain or income realized in connection with the sale, exchange, redemption (other than a redemption that is treated as a dividend under Section 302 of the Code, as discussed above) or other disposition of Preferred Stock or Common Stock, unless (i) the gain is U.S. trade or business income, (ii) the non-U.S. Holder is an individual who is present in the United States for 183 days or more in the taxable year of the

disposition and certain other requirements are met or (iii) the non-U.S. Holder is subject to tax pursuant to the provisions of U.S.tax law applicable to certain U.S. expatriates.

Information Reporting and Backup Withholding

The Company will, where required, report to holders and to the Service the amount of any dividends paid (and other reportable payments, if any) and the amount of taxes withheld, if any, with respect to such payments.

A holder of Preferred Stock or Common Stock may, under certain circumstances, be subject to "backup withholding" at the rate of 31% with respect to dividends, the proceeds of a sale, exchange or redemption or cash payments received in lieu of fractional shares of Common Stock upon conversion of Preferred Stock, unless such holder (i) is a corporation or a non-U.S. Holder or comes within certain other exempt categories and, when required, demonstrates this fact or (ii) provides a correct taxpayer identification number, certifies that such holder is not subject to backup withholding and otherwise complies with applicable requirements of the backup withholding provisions. A holder who does not, when required, provide a correct taxpayer identification number may be subject to penalties imposed by the Service. Any amount withheld under these rules will be creditable against the holder's federal income tax liability.

PLAN OF DISTRIBUTION

The Securities offered hereby may be sold from time to time by the Selling Shareholders or their pledgees, donees, transferees or other successors in interest. Such sales may be effected on NASD OTC Electronic Bulletin Board or any national securities exchange or automated quotation system upon which the Securities are then listed or traded, in negotiated transactions or otherwise, at prices then prevailing or related to the then current market price, or at negotiated prices. The Securities may be sold directly or through brokers or dealers. The methods by which the sales may be sold include: (i) block trades in which the broker or dealer so engaged will attempt to sell shares as agent but may position and resell a portion of the block as principal to facilitate the transaction; (ii) purchases by a broker or dealer as principal and resales by such broker or dealer for its own account pursuant to this Prospectus; (iii) ordinary brokerage transactions and transactions in which the broker solicits purchasers; and (iv) privately negotiated transactions. In effecting sales, brokers and dealers engaged by Selling Securityholders may arrange for other brokers or dealers to participate. Brokers or dealers may receive commissions or discounts

from Selling Securityholders (or, if any such broker or dealer acts as agent for the purchaser of such Securities, from such purchaser) in amounts to be negotiated. Broker-dealers may agree with the Selling Securityholders to sell a specified number of such Securities at a stipulated price per share, and, to the extent such broker-dealer is unable to do so acting as agent for a Selling Securityholder, to purchase as principal any unsold Securities at the price required to fulfill the broker-dealer commitment to such Selling Securityholder. Broker-dealers who acquire Securities as principal may thereafter resell such Securities in transactions from time to time in transactions (which may involve crosses and block transactions and sales to and through other broker-dealers, including transactions of the nature described above) in the over-the-counter market or otherwise at prices and on terms then prevailing at the time of sale, at prices related to the then-current market price or in negotiated transactions and, in connection with such resales, may pay to or receive from the purchasers of such Securities Commissions as described above.

The Selling Securityholders and any broker-dealers participating in the distributions of the Securities may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act and any profit on the sale of Securities by the Selling Securityholders and any commissions or discounts given to any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. In addition, any of the Securities covered by this Prospectus which qualify for sale pursuant to Rule 144 may be sold under Rule 144 rather than pursuant to this Prospectus.

The Company has agreed to indemnify certain of the Selling

Securityholders, each underwriter of certain of the Securities, and each person controlling certain of the Selling Securityholders within the meaning of Section 15 of the Securities Act, against certain liabilities in connection with the offer and sale of the Securities, including liabilities under the Securities Act, and to contribute to payments such persons may be required to make in respect thereof. Certain of the Selling Securityholders have agreed to indemnify in certain circumstances the Company against certain liabilities in connection with the offer and sale of the Securities, including liabilities under the Securities Act, and to contribute to payments such persons may be required to make in respect thereof.

CERTAIN RESTRICTIONS ON TRANSFER

Sales of the Securities offered hereby are restricted by certain contractual obligations entered into by the purchasers of those Securities in the different transactions whereby such Securities were purchased. (The summary of such restrictions that is set forth below does not purport to be complete and is qualified in its entirety by reference to the agreements pursuant to which such restrictions are created, copies of which have been filed as exhibits to the Registration Statement.) Such restrictions are as follows:

Regulation S Offering. Selling Securityholders who participated in the Regulation S Offering agreed that for a period of nine (9) months after , 1998 (the effective date of this Registration Statement, the "Effective Date") they shall not, without the prior written consent of the Placement Agent, offer, sell, contract to sell, grant any option for the sale of, or otherwise dispose of, directly or indirectly, 75% of the Common Stock they purchased in the Regulation S Offering or 75% of the Common Stock issuable upon exercise of the Class B Warrants they purchased in the Regulation S Offering; provided, however, that following each three month period after the Effective Date, an amount of such securities equal to 25% of the total amount purchased by each purchaser in the Regulation S Offering shall become exempt from the lock-up provisions contained in this sentence. Thus, 25% of such securities are not subject to any such restriction, and another 25% of such securities may be sold free from such restrictions on each of _____, 1998, _____, 1998, and _____, 1999. All such securities are also subject to certain restrictions on transfer related to Regulation S, which restrictions terminated on the Effective Date.

Furthermore, each such Selling Securityholder has agreed that such Selling Securityholder shall not, until the last date upon which such Selling Securityholder holds any of the securities such Selling Securityholder purchased in the Regulation S Offering, including the Common Stock and Class B Warrants that made up the Units purchased in such offering and the Common Stock

issuable upon exercise of those Class B Warrants, (i) sell "short" or "short against the box" (as those terms are generally understood) any equity security of the Company or (ii) otherwise engage in any transaction which involves hedging of such Selling Securityholder's position in the securities of the Company.

Regulation D Offering. Selling Securityholders who purchased Common Stock and Class C Warrants in the Regulation D Offering agreed that the Common Stock they purchased and the Common Stock underlying the Class C Warrants they purchased (collectively, the "Lock-up Securities") will be subject to a "lock-up" for a period ending on May 5, 1999 (the one-year anniversary of the closing date of such offering), except to the extent such securities are sold or transferred pursuant to the Registration Statement. In addition, such purchasers agreed that for a period of nine (9) months after , 1998 (the effective date of the Registration Statement, the "Effective Date") they shall not, offer, sell, contract to sell, grant any option for the sale of, or otherwise dispose of, directly or indirectly, 75% of the Common Stock they purchased in the Regulation D Offering or 75% of the Common Stock

issuable upon exercise of the Class C Warrants they purchased in the Regulation D Offering; provided, however that following each three month period after the Effective Date, an amount of such Securities equal to 25% of the total amount purchased by each purchaser in the Regulation D Offering shall become exempt from the lock-up provisions contained in this sentence. Thus, 25% of such securities are not subject to any such restriction, and another 25% of such securities may be sold free from such restrictions on each of _____, 1998, _____, 1998, and _____, 1999.

Furthermore, each such Selling Securityholder has agreed that such Selling Securityholder shall not, until the last date upon which such Selling Securityholder holds any of the securities such Selling Securityholder purchased in the Creditor Offering, including the Common Stock and Class C Warrants that made up the Units purchased in such offering and the Common Stock issuable upon exercise of those Class C Warrants, (i) sell "short" or "short against the box" (as those terms are generally understood) any equity security of the Company or (ii) otherwise engage in any transaction which involves hedging of such Selling Securityholder's position in the securities of the Company.

Convertible Preferred Stockholders. Pursuant to Section 4(a) of the Certificate of Designations, the Convertible Preferred Stock is not convertible into Common Stock until May 5, 1999 (twelve months after the Closing Date). The shares of Common Stock underlying such Convertible Preferred Stock that are being registered on the Registration Statement will therefore not be issued before that date. Moreover, pursuant to Section 11 of the Certificate of Designation, without the prior written consent of the Company, 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 the Convertible Preferred Stock shall be entitled to exercise any of the conversion rights set forth in the Certificate of Designation, to the extent that such conversion could, in the Company's reasonable judgment, either alone or in conjunction with other issuances or holdings of capital stock, warrants or convertible securities of the Company, result in a Change of Control (as defined in the Indenture).

Pursuant to the terms of the Class A Warrant Agreement and the Class D Warrant Agreement, the Class A and Class D Warrants may not be exercised until May 5, 1999 (twelve months after the Closing Date). Furthermore, each Selling Securityholder that received shares of Convertible Preferred Stock and Class D Warrants in the Regulation D Preferred Offering, has agreed that such Selling Securityholder shall not, until the last date upon which such Selling Securityholder holds any of the securities such Selling Securityholder purchased in the Regulation D Preferred Offering, including the Convertible Preferred Stock and Class D Warrants that made up the Units purchased in such offering and the Common Stock issuable upon conversion of the Convertible Preferred Stock or upon exercise of those Class D Warrants, (i) sell "short" or "short against the box" (as those terms are generally understood) any equity security of the Company or

(ii) otherwise engage in any transaction which involves hedging of such Selling Securityholder's position in the securities of the Company; provided, however, that such Selling Shareholder may have an aggregate short position covering any number of shares of the Company's Common Stock fewer than the quotient of (a) the product of (x) the number of shares of Convertible Preferred Stock held by such Selling Securityholder multiplied by (y) the Dividend Base Amount (as defined in the Certificate of Designation), divided by (b) the conversion price of the Convertible Preferred Stock as in effect from time to time.

Furthermore, each Selling Securityholder that received

Convertible Preferred Stock and Class A Warrants in the Exchange Offer has agreed that such Selling Securityholder shall not, (i) sell "short" or "short against the box" (as those terms are generally understood) any security of the Company or (ii) otherwise engage in any transaction which involves hedging of such Selling Securityholder's position in the securities of the Company; provided, however, that such Selling Shareholder may have an aggregate short position covering any number of shares of the Company's Common Stock fewer than the quotient of (a) the product of (x) the number of shares of Convertible Preferred Stock held by such Selling Securityholder multiplied by (y) the Dividend Base Amount (as defined in the Certificate of Designation), divided by (b) the conversion price of the Convertible Preferred Stock as in effect from time to time.

Forum Warrants. Forum has agreed that it will not exercise the 1997 Forum Warrant before May 5, 1999 (one year after the Closing Date).

Furthermore, Forum has agreed that it shall not (i) sell "short" or "short against the box" (as those terms are generally understood) any security of the Company or (ii) otherwise engage in any transaction, except for a transaction approved by the Company in writing, that involves hedging Forum's position in any security of the Company; provided, however, that at any time that the 1997 Forum Warrant is exercisable, Forum may have an aggregate short position covering any number of shares of Common Stock fewer than the number of shares of Common Stock for which such Warrant is exercisable at such time.

Pillar Warrants. There are no lock-up provisions or restrictions on transfer of the Pillar Warrants.

LEGAL MATTERS

The validity of the Securities offered by this Prospectus will be passed upon for the Company by Kramer Levin Naftalis & Frankel LLP, New York, New York.

EXPERTS

The consolidated financial statements of the Company as of December 31, 1996 and 1997 and for each of the three years ended December 31, 1997 included in this Prospectus and elsewhere in the Registration Statement have been audited by Arthur Andersen LLP, independent public accountants, as indicated in their report included herein, which report includes a paragraph stating that there is substantial doubt about the Company's ability to continue as a going concern, and are included herein in reliance on the authority of said firm as experts giving said reports.

HYBRIDON, INC. AND SUBSIDIARIES

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REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

To Hybridon, Inc.:

We have audited the accompanying consolidated balance sheets of Hybridon, Inc. (a Delaware corporation in the development stage) and subsidiaries as of December 31, 1996 and 1997, and the related consolidated statements of operations, stockholders' equity (deficit) and cash flows for each of the three years in the period ended December 31, 1997. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Hybridon, Inc. and subsidiaries as of December 31, 1996 and 1997 and the results of their operations and their cash flows for each of the three years in the period ended December 31, 1997, in conformity with generally accepted accounting principles.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. Since inception, the Company has incurred significant losses which it has funded through the issuance of equity securities, debt issuances and through research and development collaborations and licensing agreements. As of December 31, 1997, the Company had a working capital deficit of $24.1 million and a stockholders' deficit of $46.0 million. Subsequent to December 31, 1997, the Company has raised $4.8 million through the equity financing discussed in Note 1, as of March 30, 1998. There is substantial doubt about the Company's ability to continue as a going concern. The financial statements do not include any adjustments that might result from the outcome of this uncertainty. See Note 1 for management's plans.

Boston, Massachusetts
March 18, 1998 (except with respect to
the matters discussed in Note 1 and
Note 6(a) as to which the date is
March 30, 1998)

ARTHUR ANDERSEN LLP

	DECEMBER 31, 1996	DECEMBER 31, 1997	SEPTEMBER 30, 1998
			(UNAUDITED)
ASSETS			
CURRENT ASSETS:			
CASH AND CASH EQUIVALENTS	$ 12,633,742	$ 2,202,202	$ 882,875
SHORT-TERM INVESTMENTS	3,785,146	-	-
ACCOUNTS RECEIVABLE	573,896	529,702	825,668
ACCOUNTS RECEIVABLE RELATED TO REAL ESTATE LIMITED PARTNERSHIP	-	-	5,450,000
PREPAID EXPENSES AND OTHER CURRENT ASSETS	1,545,324	1,005,825	448,372
TOTAL CURRENT ASSETS	18,538,108	3,737,729	7,606,865
PROPERTY AND EQUIPMENT AT COST:			
LEASEHOLD IMPROVEMENTS	9,257,516	16,027,734	11,422,505
LABORATORY EQUIPMENT	5,884,861	6,770,402	7,721,239
EQUIPMENT UNDER CAPITAL LEASES	2,904,688	4,879,190	1,460,326
OFFICE EQUIPMENT	1,496,639	1,947,818	1,466,259
FURNITURE AND FIXTURES	499,957	645,264	809,449
CONSTRUCTION IN PROGRESS	2,193,400	45,409	45,409
	22,237,061	30,315,817	22,925,187
LESS - ACCUMULATED DEPRECIATION AND AMORTIZATION	6,596,293	11,085,013	13,972,070
	15,640,768	19,230,804	8,953,117
OTHER ASSETS:			
RESTRICTED CASH	437,714	3,050,982	659,618
NOTES RECEIVABLE FROM OFFICERS	317,978	247,250	255,800
DEFERRED FINANCING COSTS AND OTHER ASSETS	1,152,034	3,354,767	923,162
INVESTMENT IN REAL ESTATE PARTNERSHIP	5,450,000	5,450,000	-
	7,357,726	12,102,999	1,838,580
	$ 41,536,602	$ 35,071,532	$18,398,562
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)			
CURRENT LIABILITIES:			
CURRENT PORTION OF LONG-TERM DEBT AND CAPITAL LEASE OBLIGATIONS	$ 1,308,511	$ 7,868,474	$ 3,030,981
ACCOUNTS PAYABLE	4,064,419	8,051,817	4,387,353
ACCRUED EXPENSES	4,190,766	11,917,298	3,003,934
DEFERRED REVENUE	86,250	-	-
TOTAL CURRENT LIABILITIES	9,649,946	27,837,589	10,422,268
LONG-TERM DEBT AND CAPITAL LEASE OBLIGATIONS, NET OF CURRENT PORTION	9,031,852	3,282,123	573,017
9% CONVERTIBLE SUBORDINATED NOTES PAYABLE	-	50,000,000	1,306,000
COMMITMENTS (NOTES 10 AND 15 and 19(m))			
(STOCKHOLDERS' EQUITY (DEFICIT):			
PREFERRED STOCK, $.01 PAR VALUE - AUTHORIZED - 5,000,000 SHARES ISSUED AND OUTSTANDING - NONE	-	-	-
SERIES A CONVERTIBLE PREFERRED STOCK, $.01 PAR VALUE - AUTHORIZED - 5,000,000 SHARES ISSUED AND OUTSTANDING - 624,790 SHARES AT SEPTEMBER 30, 1998	-	-	6,248
COMMON STOCK, $.001 PAR VALUE - AUTHORIZED - 100,000,000 SHARES ISSUED AND OUTSTANDING - 5,029,315, 5,059,650 AND 15,254,825 SHARES AT DECEMBER 31, 1996 AND 1997 AND SEPTEMBER 30, 1998, RESPECTIVELY	5,029	5,060	15,255
ADDITIONAL PAID-IN CAPITAL	173,247,476	173,695,698	240,301,274
DEFICIT ACCUMULATED DURING THE DEVELOPMENT STAGE	(149,193,775)	(218,655,101)	(233,294,707)
DEFERRED COMPENSATION	(1,203,926)	(1,093,837)	(930,793)
Total stockholders' equity (deficit)	22,854,804	(46,048,180)	6,097,277
	$ 41,536,602	$ 35,071,532	$18,398,562

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

Consolidated Statements of Operations
HYBRIDON, INC. AND SUBSIDIARIES (A DEVELOPMENT STAGE COMPANY)

	YEARS ENDED DECEMBER 31,			NINE MONTHS ENDED SEPTEMBER 30,		CUMULATIVE FROM INCEPTION (MAY 25, 1989) TO SEPTEMBER 30,
	1995	1996	1997	1997	1998	1998
				(UNAUDITED)		(UNAUDITED)

Revenues:						
Research and development	$ 1,186,124	$ 1,419,389	$ 945,000	$ 980,150	$ 949,915	$6,449,178
Product and service revenue	-	1,080,175	1,876,862	1,231,226	2,353,435	5,310,472
Royalty income	-	62,321	48,000	33,218	-	110,321
Interest income	218,749	1,446,762	1,079,122	898,160	106,457	3,327,196
Total revenue	1,404,873	4,008,647	3,948,984	3,142,754	3,409,807	15,197,167
Operating expenses:						
Research and development	29,684,707	39,390,525	46,827,915	37,784,718	17,180,927	182,640,742
General and administrative	6,094,085	11,346,670	11,026,748	9,011,879	5,217,864	53,034,480
Interest	172,757	124,052	4,535,647	3,223,473	2,880,307	9,026,337
Restructuring	-	-	11,020,000	3,100,000	-	11,020,000
Total operating expenses	35,951,549	50,861,247	73,410,310	53,120,070	25,279,098	255,721,559
Loss from operations	(34,546,676)	(46,852,600)	(69,461,326)	(49,977,316)	(21,869,291)	(240,524,392)
Extraordinary Item:						
Gain on conversion of 9% convertible subordinated notes payable	-	-	-	-	8,876,685	8,876,685
Net Loss	$(34,546,676)	$(46,852,600)	$(69,461,326)	$(49,977,316)	$(12,992,606)	$(231,647,707)
Accretion of preferred stock dividends	-	-	-	-	(1,647,000)	(1,647,000)
Net loss to common stockholders	$(34,546,676)	$(46,852,600)	$(69,461,326)	$(49,977,316)	$(14,639,606)	$(233,294,707)
Basic and diluted net loss per common share from:						
Net loss from operations including accretion of preferred stock	$(94.70)	$(10.24)	$(13.76)	$(9.90)	$(2.21)	
Extraordinary gain	-	-	-	-	0.83	
NET LOSS	$(94.70)	$(10.24)	$(13.76)	$(9.90)	$(1.37)	
SHARES USED IN COMPUTING BASIC AND DILUTED NET LOSS PER COMMON SHARE	364,810	4,575,555	5,049,840	5,046,806	10,648,116	

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

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)

HYBRIDON, INC. AND SUBSIDIARIES (A DEVELOPMENT STAGE COMPANY)

	CONVERTIBLE PREFERRED STOCK		SERIES A CONVERTIBLE PREFERRED STOCK		COMMON STOCK	
	NUMBER OF SHARES	$.01 PAR VALUE	NUMBER OF SHARES	$.01 PAR VALUE	NUMBER OF SHARES	$.001 PAR VALUE
Initial Issuance of Common Stock	-	$ -	-	$ -	$ 133,700	$ 134
Issuance of Series A convertible preferred stock, net of cash issuance costs of $18,000	175,000	1,750	-	-	-	-
Issuance of Series B convertible preferred stock, net of cash issuance costs of $11,900	129,629	1,296	-	-	-	-
Issuance of common stock	-	-	-	-	133,460	133
Net loss	-	-	-	-	-	-
Balance, December 31, 1990	304,629	3,046	-	-	267,160	267
Issuance of Series C convertible preferred stock, net of cash issuance costs of $23,197	104,000	1,040	-	-	-	-
Repurchase of common stock	-	-	-	-	(52,500)	(53)
Deferred compensation related to restricted stock awards	-	-	-	-	-	-
Amortization of deferred compensation	-	-	-	-	-	-
Compensation expense related to stock option grants	-	-	-	-	-	-
Net loss	-	-	-	-	-	-
Balance, December 31, 1991	408,629	4,086	-	-	214,660	214
Issuance of Series C convertible preferred stock, net of cash issuance costs of $20,291	184,000	1,840	-	-	-	-
Issuance of common stock related to restricted stock awards	-	-	-	-	100,053	100
Issuance of common stock related to the exercise of						

stock options	-	-	-	-	34,615	35
Issuance of warrants	-	-	-	-	-	-
Deferred compensation related to stock options and restricted stock awards	-	-	-	-	-	-
Amortization of deferred compensation	-	-	-	-	-	-
Net loss	-	-	-	-	-	-
Balance, December 31, 1992	592,629	5,926	-	-	349,328	349
Issuance of Series D convertible preferred stock in exchange for convertible promissory notes payable, including accrued interest, net of cash issuance costs of $113,955	378,351	3,784	-	-	-	-
Issuance of Series E convertible preferred stock, net of cash issuance costs of $61,251	275,862	2,759	-	-	-	-
Issuance of Series F convertible preferred stock, net of cash issuance costs of $2,097,604	407,800	4,078	-	-	-	-
Issuance of common stock related to the exercise of stock options	-	-	-	-	8,725	9
Reduction in deferred compensation due to stock option termination prior to vesting	-	-	-	-	-	-
Amortization of deferred compensation	-	-	-	-	-	-
Net loss	-	-	-	-	-	-

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)

HYBRIDON, INC. AND SUBSIDIARIES (A DEVELOPMENT STAGE COMPANY)

	ADDITIONAL PAID-IN CAPITAL	DEFICIT ACCUMULATED DURING THE DEVELOPMENT STAGE	DEFERRED COMPENSATION	TOTAL STOCKHOLDERS' EQUITY (DEFICIT)
Initial Issuance of Common Stock	$ 535	$ -	$ -	$ 669
Issuance of Series A convertible preferred stock, net of cash issuance costs of $18,000	855,250	-	-	857,000
Issuance of Series B convertible preferred stock, net of cash issuance costs of $11,900	1,736,801	-	-	1,738,097
Issuance of common stock	534	-	-	667
Net loss	-	(1,110,381)	-	(1,110,381)
Balance, December 31, 1990	2,593,120	(1,110,381)	-	1,486,052
Issuance of Series C convertible preferred stock, net of cash issuance costs of $23,197	2,575,763	-	-	2,576,803
Repurchase of common stock	(210)	-	-	(263)
Deferred compensation related to restricted stock awards	2,328,764	-	(2,328,764)	-
Amortization of deferred compensation	-	-	727,738	727,738
Compensation expense related to stock option grants	669,433	-	-	669,433
Net loss	-	(6,648,899)	-	(6,648,899)
Balance, December 31, 1991	8,166,870	(7,759,280)	(1,601,026)	(1,189,136)
Issuance of Series C convertible preferred stock, net of cash issuance costs of $20,291	4,577,869	-	-	4,579,709
Issuance of common stock related to restricted stock awards	122,644	-	-	122,744
Issuance of common stock related to the exercise of stock options	3,303	-	-	3,338
Issuance of warrants	2,776,130	-	-	2,776,130
Deferred compensation related to stock options and restricted stock awards	2,249,428	-	(2,249,428)	-
Amortization of deferred compensation	-	-	1,332,864	1,332,864
Net loss	-	(14,694,693)	-	(14,694,693)
Balance, December 31, 1992	17,896,244	(22,453,973)	(2,517,590)	(7,069,044)
Issuance of Series D convertible preferred stock in exchange for convertible promissory notes payable, including accrued interest, net of cash issuance costs of $113,955	9,596,767	-	-	9,600,551
Issuance of Series E convertible preferred stock, net of cash issuance costs of $61,251	9,935,988	-	-	9,938,747
Issuance of Series F convertible preferred stock, net of cash issuance costs of $2,097,604	18,288,318	-	-	18,292,396
Issuance of common stock related to the exercise of stock options	26,679	-	-	26,688
Reduction in deferred compensation due to stock option termination prior to vesting	(290,287)	-	290,287	-
Amortization of deferred compensation	-	-	1,124,839	1,124,839
Net loss	-	(19,736,365)	-	(19,736,365)

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

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)

HYBRIDON, INC. AND SUBSIDIARIES (A DEVELOPMENT STAGE COMPANY)

	CONVERTIBLE PREFERRED STOCK		SERIES A CONVERTIBLE PREFERRED STOCK	
	NUMBER OF SHARES	$.01 PAR VALUE	NUMBER OF SHARES	$.01 PAR VALUE
Balance, December 31, 1993	1,654,642	$ 16,547	--	$ --
Issuance of Series F convertible preferred stock, net of cash issuance costs of $79,677	116,900	1,169	--	--
Issuance of Series G convertible preferred stock, net of cash issuance costs of $1,006,841	318,302	3,183	--	--
Issuance of common stock related to the exercise of stock options	--	--	--	--
Cancellation of warrants	--	--	--	--
Reduction in deferred compensation due to stock option termination prior to vesting	--	--	--	--
Amortization of deferred compensation	--	--	--	--
Net loss	--	--	--	--
Balance, December 31, 1994	2,089,844	20,899	--	--
Issuance of Series G convertible preferred stock, net of cash issuance costs of $2,409,926	1,106,591	11,066	--	--
Issuance of common stock related to the exercise of stock options	--	--	--	--
Amortization of deferred compensation	--	--	--	--
Net loss	--	--	--	--
Balance December 31, 1995	3,196,435	31,965	--	--
Issuance of common stock related to initial public offering, net of issuance costs of $5,268,756	--	--	--	--
Conversion of convertible preferred stock to common stock	(3,196,435)	(31,965)	--	--
Issuance of common stock related to the exercise of stock options	--	--	--	--
Issuance of common stock related to the exercise of warrants	--	--	--	--
Deferred compensation related to grants of common stock options to nonemployees	--	--	--	--
Amortization of deferred compensation relating to grants of common stock options to nonemployees	--	--	--	--
Net loss	--	--	--	--
Balance, December 31, 1996	--	--	--	--
Issuance of common stock related to the exercise of stock options	--	--	--	--
Issuance of common stock related to the exercise of warrants	--	--	--	--
Issuance of common stock for services rendered	--	--	--	--
Deferred compensation related to grants of common stock options to nonemployees	--	--	--	--
Amortization of deferred compensation relating to grants of common stock options to nonemployees	--	--	--	--
Net loss	--	--	--	--

	COMMON STOCK	
	NUMBER OF SHARES	$.001 PAR VALUE
Balance, December 31, 1993	358,053	$ 358
Issuance of Series F convertible preferred stock, net of cash issuance costs of $79,677	--	--
Issuance of Series G convertible preferred stock, net of cash issuance costs of $1,006,841	--	--
Issuance of common stock related to the exercise of stock options	4,800	5
Cancellation of warrants	--	--
Reduction in deferred compensation due to stock option termination prior to vesting	--	--
Amortization of deferred compensation	--	--
Net loss	--	--
Balance, December 31, 1994	362,853	363
Issuance of Series G convertible preferred stock, net of cash issuance costs of $2,409,926	--	--
Issuance of common stock related to the exercise of stock options	5,880	6
Amortization of deferred compensation	--	--
Net loss	--	--
Balance December 31, 1995	368,733	369
Issuance of common stock related to initial public offering, net of issuance costs of $5,268,756	1,150,000	1,150
Conversion of convertible preferred stock to common stock	3,371,330	3,371
Issuance of common stock related to the exercise of		

stock options	57,740	58
Issuance of common stock related to the exercise of warrants	81,512	81
Deferred compensation related to grants of common stock options to nonemployees	--	--
Amortization of deferred compensation relating to grants of common stock options to nonemployees	--	--
Net loss	--	--
Balance, December 31, 1996	5,029,315	5,029
Issuance of common stock related to the exercise of stock options	25,005	26
Issuance of common stock related to the exercise of warrants	330	--
Issuance of common stock for services rendered	5,000	5
Deferred compensation related to grants of common stock options to nonemployees	--	--
Amortization of deferred compensation relating to grants of common stock options to nonemployees	--	--
Net loss	--	--

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
HYBRIDON, INC. AND SUBSIDIARIES (A DEVELOPMENT STAGE COMPANY)

	ADDITIONAL PAID-IN CAPITAL	DEFICIT ACCUMULATED DURING THE DEVELOPMENT STAGE
Balance, December 31, 1993	55,453,709	(42,190,338)
Issuance of Series F convertible preferred stock, net of cash issuance costs of $79,677	5,764,154	--
Issuance of Series G convertible preferred stock, net of cash issuance costs of $1,006,841	11,722,072	--
Issuance of common stock related to the exercise of stock options	13,395	--
Cancellation of warrants	(68,000)	--
Reduction in deferred compensation due to stock option termination prior to vesting	(14,062)	--
Amortization of deferred compensation	--	--
Net loss	--	(25,604,161)
Balance, December 31, 1994	72,871,268	(67,794,499)
Issuance of Series G convertible preferred stock, net of cash issuance costs of $2,409,926	41,842,632	--
Issuance of common stock related to the exercise of stock options	41,944	--
Amortization of deferred compensation	--	--
Net loss	--	(34,546,676)
Balance, December 31, 1995	114,755,394	(102,341,175)
Issuance of common stock related to initial public offering, net of issuance costs of $5,268,756	52,230,094	--
Conversion of convertible preferred stock to common stock	28,594	--
Issuance of common stock related to the exercise of stock options	1,089,618	--
Issuance of common stock related to the exercise of warrants	3,176,660	--
Deferred compensation related to grants of common stock options to nonemployees	1,967,116	--
Amortization of deferred compensation relating to grants of common stock options to nonemployees	--	--
Net loss	--	(46,852,600)
Balance, December 31, 1996	173,247,476	(149,193,775)
Issuance of common stock related to the exercise of stock options	86,300	--
Issuance of common stock related to the exercise of warrants	9,075	--
Issuance of common stock for services rendered	146,869	--
Deferred compensation related to grants of common stock options to nonemployees	205,978	--
Amortization of deferred compensation relating to grants of common stock options to nonemployees	--	
Net loss	--	(69,461,326)

	DEFERRED COMPENSATION	TOTAL STOCKHOLDERS' EQUITY (DEFICIT)
Balance, December 31, 1993	(1,102,464)	12,177,812
Issuance of Series F convertible preferred stock, net of cash issuance costs of $79,677	--	5,765,323
Issuance of Series G convertible preferred stock, net of cash issuance costs of $1,006,841	--	11,725,255
Issuance of common stock related to the exercise of stock options	--	13,400
Cancellation of warrants	--	(68,000)
Reduction in deferred compensation due to stock option termination prior to vesting	14,062	--

Amortization of deferred compensation	764,228	764,228
Net loss	--	(25,604,161)
Balance, December 31, 1994	(324,174)	4,773,857
Issuance of Series G convertible preferred stock, net of cash issuance costs of $2,409,926	--	41,853,698
Issuance of common stock related to the exercise of stock options	--	41,500
Amortization of deferred compensation	324,174	324,174
Net loss	--	(34,546,676)
Balance, December 31, 1995	--	12,446,553
Issuance of common stock related to initial public offering, net of issuance costs of $5,268,756	--	52,231,244
Conversion of convertible preferred stock to common stock	--	-
Issuance of common stock related to the exercise of stock options		1,089,676
Issuance of common stock related to the exercise of warrants	--	3,176,741
Deferred compensation related to grants of common stock options to nonemployees	--	--
Amortization of deferred compensation relating to grants of common stock options to nonemployees	763,190	763,190
Net loss	--	(46,852,600)
Balance, December 31, 1996	(1,203,926)	22,854,804
Issuance of common stock related to the exercise of stock options	--	86,326
Issuance of common stock related to the exercise of warrants	--	9,075
Issuance of common stock for services rendered	--	146,874
Deferred compensation related to grants of common stock options to nonemployees	(205,978)	--
Amortization of deferred compensation relating to grants of common stock options to nonemployees	316,067	316,067
Net loss	--	(69,461,326)

Balance, December 31, 1997					5,059,650
Issuance of Series A Convertible Preferred Stock and attached warrants in exchange for conversion of 9% convertible subordinated notes payable	--	--	510,505	5,105	
Issuance of common stock and attached warrants in exchange for conversion of accounts payable and other lease obligations	--	--	--	--	
Issuance of Series A Convertible Preferred Stock, net of issuance costs of $1,761,656	--	--	114,285	1,143	
Issuance of common stock, net issuance costs of $1,069,970	--	--	--	--	
Issuance of common stock to placement agents	--	--	--	--	
Accretion of Series A convertible preferred stock dividends	--	--	--	--	
Amortization of deferred compensation	--	--	--	--	
Net loss	--	--	--	--	
Balance, September 30, 1998 (Unaudited)	--	$ --	624,790	$6,248	

Balance, December 31, 1997	5,060	
Issuance of Series A Convertible Preferred Stock and attached warrants in exchange for conversion of 9% convertible subordinated notes payable	--	--
Issuance of common stock and attached warrants in exchange for conversion of accounts payable and other lease obligations	3,217,154	3,217
Issuance of Series A Convertible Preferred Stock, net of issuance costs of $1,761,656	-	--
Issuance of common stock, net issuance costs of $1,069,970	6,380,322	6,380
Issuance of common stock to placement agents	597,699	598
Accretion of Series A convertible preferred stock dividends	--	
Amortization of deferred compensation	--	--
Net loss	--	--
Balance, September 30, 1998 (Unaudited)	15,254,825	$15,255

Balance, December 31, 1997	173,695,698	(218,655,101)	(1,093,837)	(46,048,180)
Issuance of Series A Convertible Preferred Stock and attached warrants in exchange for conversion of 9% convertible subordinated notes payable	39,924,887	--	--	39,929,992
Issuance of common stock and attached warrants in exchange for conversion of accounts payable and other lease obligations				
Issuance of Series A Convertible Preferred Stock, net of issuance costs of $1,761,565	5,931,341	--	--	5,934,538

	6,237,252	--	--	6,238,395
Issuance of common stock, net of issuance of cost of $1,069,970	11,670,296	--	--	11,676,676
Issuance of common stock to placement agents	1,194,800	--	--	1,195,398
Accretion of Series A convertible preferred stock dividends	1,687,000	(1,647,000)	--	-
Amortization of deferred compensation	--	--	163,044	168,044
Net loss	--	12,992,600)	-	(12,992,606
Balance, September 30, 1998 (Unaudited)	$240,301,274	$233,294,707)	($930,793))	$ 6,097,277

CONSOLIDATED STATEMENTS OF CASH FLOWS

HYBRIDON, INC. AND SUBSIDIARIES (A DEVELOPMENT STAGE COMPANY)

	Years Ended December 31,		
	1995	1996	1997
Cash flows from operating activities:			
Net loss	$ (34,546,676)	$ (46,852,600)	$ (69,461,326)
Adjustments to reconcile net loss to net cash used in operating activities -			
Extraordinary gain on conversion of 9% convertible subordinated notes payable	--	--	--
Depreciation and amortization	2,023,553	2,393,751	4,488,719
Loss on disposal of fixed assets	--	--	--
Issuance of common stock for services rendered	--	--	146,874
Compensation on grant of stock options, warrants and restricted stock	324,174	763,190	316,067
Amortization of discount on convertible promissory notes payable	--	--	--
Amortization of deferred financing costs	--	--	479,737
Write-down of assets related to restructuring	--	--	600,000
Noncash interest on convertible promissory notes payable	--	--	--
Changes in assets and liabilities -			
Accounts receivable	--	(573,896)	44,194
Prepaid expenses and other current assets	(769,562)	(593,797)	539,499
Notes receivable from officers	8,446	(9,845)	70,728
Accounts payable and accrued expenses	483,585	2,747,122	11,713,930
Deferred revenue	--	--	(86,250)
Amounts payable to related parties	(80,351)	(12,500)	--
Net cash used in operating activities	(32,556,831)	(42,138,575)	(51,147,828)
Cash flows from investing activities:			
(Increase) decrease in short-term investments	--	(3,785,146)	3,785,146
Purchases of property and equipment	(4,889,624)	(8,902,989)	(7,509,755)
Proceeds from sale of fixed assets	--	--	--
Investment in real estate partnership	(1,698,448)	(3,751,552)	--
Net cash (used in) provided by investing activities	(6,588,072)	(16,439,687)	(3,724,609)
Cash flows from financing activities:			
Proceeds from issuance of convertible preferred stock	41,853,698	--	--
Proceeds from issuance of common stock related to stock options and restricted stock grants	41,500	1,089,676	86,326
Net proceeds from issuance of common stock	--	52,231,244	--
Repurchase of common stock	--	--	--
Proceeds from notes payable	--	7,500,000	--
Proceeds from issuance of convertible promissory notes payable	--	--	50,000,000
Proceeds from long-term debt	--	--	--
Proceeds from issuance of common stock related to stock warrants	--	3,176,741	9,075
Proceeds from sale/leaseback of fixed assets	--	1,722,333	1,205,502
Payments on long-term debt and capital Leases	(537,977)	(446,163)	(1,564,268)
(Increase) decrease in restricted cash and other assets	(44,912)	401,990	(2,474,948)
(Increase) decrease in deferred financing costs	(278,927)	251,921	(2,820,790)
Net cash provided by financing activities	41,033,382	65,927,742	44,440,897
Net increase (decrease) in cash and cash Equivalents	1,888,479	7,349,480	(10,431,540)
Cash and cash equivalents, beginning of Period	3,395,783	5,284,262	12,633,742

Cash and cash equivalents, end of period	$ 5,284,262	$ 12,633,742	$ 2,202,202

	Nine Months Ended September 30,		Cumulative from Inception (May 25, 1989) to September 30,
	1997	1998	1998
	(UNAUDITED)		(UNAUDITED)
Cash flows from operating activities:			
Net loss	$ (49,977,316)	$ (12,992,606)	$ (231,647,707)
Adjustments to reconcile net loss to net cash used in operating activities -			
Extraordinary gain on conversion of 9% convertible subordinated notes payable	--	(8,876,685)	(8,876,685)
Depreciation and amortization	4,081,720	2,419,269	13,605,723
Loss on disposal of fixed assets	--	424,675	424,675
Issuance of common stock for services rendered	146,875	1,195,398	1,342,273
Compensation on grant of stock options, warrants and restricted stock	261,519	163,044	8,286,842
Amortization of discount on convertible promissory notes payable	--	--	690,157
Amortization of deferred financing costs	358,904	240,611	937,080
Write-down of assets related to restructuring	331,000	6,600,000	7,200,000
Noncash interest on convertible promissory notes payable	--	--	260,799
Changes in assets and liabilities -			
Accounts receivable	276,545	(295,966)	(825,668)
Prepaid expenses and other current assets	(541,718)	557,703	(448,122)
Notes receivable from officers	55,952	(8,550)	(255,800)
Accounts payable and accrued expenses	3,349,962	(6,871,326)	13,097,789
Deferred revenue	(86,250)	--	--
Amounts payable to related parties	--	--	(200,000)
Net cash used in operating activities	(41,742,807)	(17,444,433)	(196,708,644)
Cash flows from investing activities:			
(Increase) decrease in short-term investments	(5,113,569)	--	--
Purchases of property and equipment	(6,645,439)	(340,507)	(29,652,972)
Proceeds from sale of fixed assets	--	460,000	460,000
Investment in real estate partnership	--	--	(5,450,000)
Net cash (used in) provided by investing activities	(11,759,008)	119,493	(34,642,972)
Cash flows from financing activities:			
Proceeds from issuance of convertible preferred stock	--	6,804,562	103,388,716
Proceeds from issuance of common stock related to stock options and restricted stock grants	83,327	--	1,260,928
Net proceeds from issuance of common stock	--	6,876,676	59,232,000
Repurchase of common stock	--	--	(263)
Proceeds from notes payable	--	--	9,450,000
Proceeds from issuance of convertible promissory notes payable	50,000,000	4,233,832	63,425,576
Proceeds from long-term debt	--	--	662,107
Proceeds from issuance of common stock related to stock warrants	9,075	--	3,185,816
Proceeds from sale/leaseback of fixed assets	1,165,236	--	4,001,018
Payments on long-term debt and capital Leases	(1,169,656)	(4,236,693)	(7,602,573)
(Increase) decrease in restricted cash and other assets	(626,985)	2,327,186	(1,811,945)
(Increase) decrease in deferred financing costs	(2,699,957)	--	(3,256,939)
Net cash provided by financing activities	46,761,040	16,005,563	231,934,441
Net increase (decrease) in cash and cash Equivalents	(6,740,775)	(1,319,377)	882,825
Cash and cash equivalents, beginning of Period	2,633,742	2,202,202	--
Cash and cash equivalents, end of period	$ 5,892,967	$ 882,825	$ 882,825

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

HYBRIDON, INC. AND SUBSIDIARIES (A DEVELOPMENT STAGE COMPANY)
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Including Data Applicable to Unaudited Periods)

(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 genetic medicines based primarily on antisense technology.

The Company is in the development stage. Since inception, the Company has devoted substantially all of its efforts toward product research and development and raising capital. Management anticipates that substantially all future revenues will be derived from the sale of proprietary biopharmaceutical products under development or to be developed in the future, and custom contract manufacturing of synthetic DNA products and reagent products (by the Hybridon Specialty Products Division (HSPD)), as well as from research and development revenues and fees and royalties derived from licensing of the Company's technology. Accordingly, although the Company has begun to generate revenues from its custom contract manufacturing business, the Company is dependent on the proceeds from possible future sales of equity securities, debt financings and research and development collaborations in order to fund future operations.

On December 3, 1997, the Company was delisted from the Nasdaq Stock Market, Inc. (NASDAQ) because the Company was not in compliance with the continued listing requirements of the NASDAQ National Market. The Company is currently trading on the NASDAQ OTC Bulletin Board.

As of December 31, 1997, the Company had a working capital deficit of $24.1 million and a stockholders' deficit of $46.0 million. Although the Company has raised approximately $4.8 million in gross proceeds from the 1998 Unit Financing, subsequent to December 31, 1997, the Company continues to have very limited cash resources and substantial obligations to lenders. The Company's ability to continue operations in 1998 depends on its success in raising new funds. There is substantial doubt concerning the Company's ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty. If the Company is unable to obtain a substantial amount of additional funding in April 1998, it will be required to terminate its operations of seek relief under applicable bankruptcy law by the end of April 1998. Management's plans to obtain additional financing are described below. (See Note 19 for subsequent financings and status of operations).

On January 22, 1998, the Company commenced a private placement (the 1998 Unit Financing) of units consisting of notes (the 1998 Unit Notes) and warrants to issue common stock. The 1998 Unit Financing is being offered through Pillar Investments Ltd., an entity with which two directors of the Company are affiliated and which is a significant shareholder of the Company (the placement agent), as the Company's placement agent, on a best effort basis. As consideration for these services, Pillar Investments Ltd., will receive fees consisting of 9% of the gross proceeds of the 1998 Unit Financing, a non-accountable expense allowance equal to 4% of the gross proceeds of the 1998 Unit Financing and warrants to purchase common stock. The 1998 Unit Notes bear interest at a rate of 14% per annum; provided that if the 1998 Unit Financing is terminated before the Mandatory Conversion Event (as defined below) has occurred, the interest rate shall increase to 18% per annum. The Company is required to make semi-annual interest payments on the outstanding principal balance of the 1998 Unit Notes on April 1 and October 1 of each year during which such 1998 Unit Notes are outstanding, with the first such payment being due on April 1, 1998, which interest payment obligation may be satisfied through the issuance of additional 1998 Unit Notes valued at their principal amount. The Company plans to satisfy the interest payment due April 1, 1998 by issuing 1998 Unit Notes. The outstanding principal balance of the 1998 Unit Notes will become due on December 31, 2007. The 1998 Unit Notes are secured by substantially all of the Company's assets, subject to the lien on the Company's assets held by the Bank, are subordinate to the Company's existing indebtedness to the Bank, are senior to approximately 80% of the 9.0% Convertible Subordinated Notes (the 9% Notes), see Note 6(d) to the extent provided in a subordination agreement executed by certain holders of the 9% Notes and, except as otherwise provided in this sentence, rank on a parity with the 9% Notes.

The 1998 Unit Notes are not convertible at the option of the holder, but will automatically convert into a new issue of Series B Convertible Preferred Stock of the Company if the aggregate net proceeds from the 1998 Unit Financing exceeds $20.0 million and the holders of at least 80% of the aggregate

principal amount of the 9% Notes have exchanged such Notes described in the following paragraph (such two conditions, the Mandatory Conversion Event). The Series B Convertible Preferred Stock underlying the 1998 Unit Notes would rank as to liquidation junior to the Series A Convertible Preferred Stock issuable in the Exchange Offer.

Each Unit includes warrants to purchase 15% (or, in certain circumstances, 20%) of the number of shares of common stock underlying the Series B Convertible Preferred Stock underlying the 1998 Unit Notes included in such Unit and may include additional warrants in certain circumstances described below. The Series B Convertible Preferred Stock, if issued, and warrants are convertible into, and exercisable for, common stock at a conversion or exercise price equal to the lowest of (i) 80% of the average closing bid price of the Company's common stock for the 30 consecutive trading days immediately preceding any closing in the 1998 Unit Financing or (ii) 80% of the average closing bid price of the Company's common stock for the five consecutive trading dates immediately preceding any closing in the 1998 Unit Financing; provided, however, that if on the termination date of the 1998 Unit Financing the Company has not received at least $20,000,000 in net proceeds from the 1998 Unit Financing or the holders of less than $40,000,000 in principal amount of the 9% Notes accept the Exchange Offer, holders of Units will be entitled to receive additional warrants to purchase, at an exercise price of $.001 per share, a number of shares of common stock equal to 100% of the common stock then issuable upon conversion of the Series B Convertible Preferred Stock then issuable upon conversion of the 1998 Unit Notes purchased by such investors, in which case the 1998 Unit Notes will not be convertible into equity securities. If the market price of the common stock is less than 125% of the conversion price of the Series B Convertible Preferred Stock will be further adjusted (the Series B Reset) to the greater of (a) the market price of the common stock at such time divided by 1.25 and (b) 50% of the conversion price of the Series B Convertible Preferred Stock at such time, and holders of the Series B Convertible Preferred Stock will also be entitled to receive additional warrants to purchase a number of shares of common stock equal to 50% of the additional number of shares of common stock issuable upon conversion of the Series B Convertible Preferred Stock following the Series B Reset. As of March 30, 1998, the Company has received $4.8 million of gross proceeds from the 1998 Unit Financing.

On February 6, 1998, the Company commenced an Exchange Offer to the holders of the 9% Notes to exchange the 9% Notes for Series A Convertible Preferred Stock and certain warrants of the Company. In the Exchange Offer, each $1,000 of principal amount and accrued but unpaid interest on the 9% Notes may be exchanged, upon the terms and subject to the conditions set forth in the Exchange Offer documents, for 10 shares of Series A Convertible Preferred Stock, stated value $100 per share, and warrants to purchase such a number of shares of common stock of the Company equal to 15% of the number shares of common stock into which such Series A Convertible Preferred Stock would be convertible at 212.5% of the initial conversion price of the Series B Convertible Preferred Stock (the Stated Price). Such Series A Convertible Preferred Stock would have a liquidation preference of $100 per share plus accrued but unpaid dividends and would bear a dividend of 6.5% per annum, payable on April 1 and October 1 of each year in cash or additional Series A Preferred Stock , at the option of the Company. The conversion price would be $35 per share of common stock through April 1, 2000 and the Stated Price thereafter, which conversion price would be reset upon the occurrence of any Series B Reset to 212.5% of the reset Series B conversion price. Exchange holders of the 9% Notes will be granted the right to designate the nominee to the Board of Directors of the Company (the Designated Director). As part of the Exchange Offer, approximately 82% of the 9% Note holders have consented as of March 30, 1998 to defer the interest payment due on April 1, 1998 to October 1, 1998. There can be no assurance that the Exchange Offer will be successful.

On March 30, 1998, the Company amended its Exchange Offer to provide that the terms of the Series A Convertible Preferred Stock and warrants issuable in the Exchange Offer would be revised as described below if the following conditions (the Equity Conditions) had been met no later than the date the

Company accepts for exchange in the Exchange Offer at least $40 million principal amount of the 9% Notes: (i) the Company consummates an offering, the size of which is acceptable to the Designated Director, of units consisting of common stock priced (the Common Stock Offering Price) at the greater of $2.00 and 85% of the Market Price (as defined below) of the common and warrants to purchase a number of shares of common stock equal to 25% of such Common Stock sold at an exercise price equal to 120% of the Common Stock Offering Price (the 120% Exercise Price); (ii) the Company consummates an offering, with gross proceeds of at least $10 million, of Units consisting of shares of preferred stock having the same terms as the preferred stock issuable in the amended Exchange Offer, and warrants with the same 25% coverage as the warrants issuable in the amended Exchange Offer, as described in the following paragraph, but at the 120% Exercise Price (which shares are expected to be sold at a 30% discount from stated value); and (iii) all 1998 Note Units previously sold and accrued interest thereon are exchanged for common stock and warrants to purchase a number of shares of common stock equal to 30% of the common stock issued in such 1998 Note Unit exchange, such common stock and warrants to be valued, and to have the terms, described in clause (i) above. Market Price means the average reported closing bid price of the common stock for the five consecutive trading days immediately preceding the closing date.

The amended Exchange Offer provides that if the Equity Conditions are met, (a) the conversion terms of the Series A Convertible Preferred will be revised as follows: (i) the conversion price will be 212.5% of the Common Stock Offering Price described above; (ii) such Series A Convertible Preferred Stock will not be

convertible for one year following the closing; and (iii) such Series A Convertible Preferred Stock will have no conversion price reset mechanism and (b) the warrant coverage will increase from 15% to 25% of the number of shares of common stock underlying the Series A Convertible Preferred Stock (such warrants being exercisable at 212.5% of the Common Stock Offering Price) and will not have any conversion price reset provisions.

See Note 19 for subsequent events relevant to the 1998 Unit Financing and the Exchange Offer.

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Use of Estimates in the Preparation of Financial Statements

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and 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. Actual results could differ from those estimates.

(b) Net Loss per Common Share

Effective December 31, 1997 the Company adopted SFAS No 128, Earnings per Share. Under SFAS No. 128, basic net loss per common share is computed using the weighted average number of shares of common stock outstanding during the period. 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. The Company has applied the provisions of SFAS No. 128 retroactively to all periods presented. In accordance with Staff Accounting Bulletin (SAB) No. 98, the Company has determined that there were no nominal issuances of capital in the period prior to the Company's initial public offering (IPO). Antidilutive securities which consist of stock options and warrants that are not included in diluted net loss per common share were 2,441,436, 2,595,496, and 2,404,561 for 1995, 1996, and 1997, respectively. Calculations of net loss per common share and potential common shares are as follows:

December 31,	1995	1996	1997
Net loss	$ (34,546,676)	$(46,852,600)	$ (69,461,326)
Weighted average shares outstanding	364,810	4,575,555	5,049,840
Basic and diluted net loss per share	$ (94.70)	$ (10.24)	$ (13.76)

(c) Principles of Consolidation

The accompanying consolidated financial statements include the results of the Company and its subsidiaries, Hybridon S.A. (Europe), a French corporation and Hybridon Canada, Inc. (an inactive majority-owned subsidiary). The consolidated financial statements also reflect the Company's 49% interest in MethylGene, Inc. (MethylGene), a Canadian corporation which is accounted for under the equity method (see Note 13 and 19(i). All material intercompany balances and transactions have been eliminated in consolidation.

(d) Cash Equivalents and ShortTerm Investments

The Company applies SFAS No. 115, Accounting for Certain Investments in Debt and Equity Securities. Under SFAS No. 115, debt securities that the Company has the positive intent and ability to hold to maturity are reported at amortized cost and are classified as held-to-maturity securities. These securities include cash equivalents, short term investments and restricted cash. At December 31, 1996 and 1997, the Company has

classified all investments as held-to-maturity. The Company considers all highly liquid investments with maturities of three months or less when purchased to be cash equivalents. Short-term investments mature within one year of the balance sheet date. Cash and cash equivalents, short-term investments and restricted cash at December 31, 1996 and 1997, consisted of the following (at amortized cost, which approximates fair market value):

December 31,	1996	1997
Cash and cash equivalents -		
Cash and money market funds	$10,144,367	$1,702,272
Corporate bond	-	499,930
U.S. government securities	2,489,375	-
Total cash and cash equivalents	$12,633,742	$2,202,202
Short-term investments -		
U.S. government securities	$ 3,785,146	$ -
Restricted cash (Note 5) -		
Certificates of deposit	$ 437,714	$2,016,364
Savings account	-	1,034,618
	$ 437,714	$3,050,982

(e) Depreciation and Amortization

Depreciation and amortization are computed using the straight-line method based on the estimated useful lives of the related assets as follows:

Asset Classification	Estimated Useful Life
Leasehold improvements	Life of lease
Laboratory equipment	5 years
Equipment under capital lease	5 years
Office equipment	3-5 years
Furniture and fixtures	5 years

(f) Accrued Expenses

Accrued expenses on the accompanying consolidated balance sheets consist of the following:

December 31,	1996	1997
Restructuring	$ -	$ 8,316,148
Interest	-	1,125,000
Payroll and related costs	1,593,451	742,452
Outside research and clinical costs	1,381,124	1,231,818
Professional fees	390,440	150,000
Other	825,751	351,880
	$4,190,766	$11,917,298

(g) Revenue Recognition

The Company has recorded research and development revenue under the consulting and research agreements discussed in Notes 7 and 8. Revenue is recognized as earned on a straightline basis over the term of the agreement, which approximates when work is performed and costs are incurred. Revenues from product sales are recognized when the products are shipped. Product revenue during 1996 and 1997 represents revenues from the sale of oligonucleotides manufactured on a custom contract basis by HSPD.

(h) Research and Development Expenses

The Company charges research and development expenses to operations as incurred.

(i) Patent Costs

The Company charges patent expenses to operations as incurred.

(j) Reclassifications

Certain amounts in the prior periods consolidated financial statements have been reclassified to conform with the current periods presentation.

(k) New Accounting Standards

In June 1997, the Financial Accounting Standards Board (FASB) issued SFAS No. 130, Reporting Comprehensive Income. SFAS No. 130 requires disclosure of all components of comprehensive income on an annual basis and interim basis. Comprehensive income is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from nonowner sources. SFAS No. 130 is effective for fiscal years beginning after December 15, 1997. For all periods presented in the accompanying consolidated statements of operations, comprehensive income (loss) did not differ from reported net loss.

In July 1997, the FASB issued SFAS No. 131, Disclosures About Segments of an Enterprise and Related Information. SFAS No. 131 requires certain financial and supplementary information to be disclosed on an annual and interim basis for each reportable segment of an enterprise. SFAS No. 131 is effective for fiscal years beginning after December 15, 1997. Unless impracticable, companies would be required to restate prior period information upon adoption. The Company does not expect this accounting pronouncement to materially effect its financial statements.

(3) RESTRUCTURING

Beginning in July 1997, the Company implemented a restructuring plan to reduce expenditures on a phased basis over the balance of 1997 in an effort to conserve its cash resources. As part of this restructuring plan, in addition to terminating the clinical development of GEM 91, the Company's first generation antisense drug for the treatment of AIDS and HIV infection, the Company reduced or suspended selected programs unrelated to its core advanced

chemistry antisense drug development programs, including its ribozyme program. In connection with the reduction in programs, the Company has accrued termination fees related to research contracts and has incurred restructuring charges related to programs that have been suspended or cancelled. As part of the restructuring, all outside testing, public relations, travel and entertainment and consulting arrangements were reviewed and where appropriate the terms were renegotiated, contracts cancelled or the terms were significantly reduced. In addition, the Company terminated the employment of 84 employees at its Cambridge and Milford, Massachusetts facilities since July of 1997 and substantially reduced operations at its Paris, France office and terminated 10 employees at that location in August 1997.

In connection with the restructuring the Company entered into two different subleasing arrangements. The Company has sub-leased one facility in Cambridge, Massachusetts and a portion of its headquarters located at 620 Memorial Drive, Cambridge, Massachusetts. The Company incurred expenses relating to these sub-leases for broker fees and renovation expenses incurred in preparing the Memorial Drive space for the new tenant. In addition, the Company has accrued the estimated lease loss of subleasing 620 Memorial Drive. The Company has accrued the remaining lease costs of its Paris, France office prior to terminating the lease effective March 31, 1998.
See Notes 19(e and g) for subsequent events.

The following are the significant components of the charge for restructuring:

Year Ended December 31, 1997	
Estimated loss on facility leases	$ 6,930,000
Employee severance, benefits and related costs	2,579,000
Writedown of assets to net realizable value	600,000
Termination costs of certain development programs	911,000
	$11,020,000

(4) NOTES RECEIVABLE FROM OFFICERS

At December 31, 1996 and 1997, the Company had notes receivable, including accrued interest, from officers of $317,978 and $247,250, respectively. As of December 31, 1997 one note remains outstanding with an interest rate of 6.0% per annum and matures in April 2001.

(5) RESTRICTED CASH

Restricted cash on the accompanying consolidated balance sheets consist of the following:

December 31,	1996	1997
Capital lease obligations (Note 6(c))	$437,714	$ 257,822
Note payable to a bank (Note 6(a))	-	1,758,542
Foreign bank account	-	1,034,618
	$437,714	$3,050,982

In November 1997, the Company was notified by Bank Fur Vermogensanlagen Und Handel AG (BVH) that the Federal Banking Supervisory Office (BAKred) in Germany had imposed a moratorium, effective as of August 19, 1997 on

BVH and had closed BVH for business. Accordingly, the Company classified its deposit with BVH as restricted cash. The Company has contacted BVH and is actively pursuing the release of its deposit or sale of the deposit to a third party, including possibly an entity affiliated with a director of the Company. The Company expects to recover substantially all of its deposit in BVH through such means. However, the timing of recovery may be over a period of up to one year. There can be no assurance that the Company will be able to recover all of its deposit or that the Company will not be required to write off a portion of the $1,034,618. Through March 18, 1998, the Company had recovered $250,000 of the BVH deposit. See Note 19(d) and (e) for subsequent events.

(6) LONG-TERM DEBT AND CAPITAL LEASE OBLIGATIONS

(a) Note Payable to a Bank

In December 1996, the Company entered into a five year $7,500,000 note payable with a bank. The note contains certain financial covenants that require the Company to maintain minimum tangible net worth and minimum liquidity and prohibits the payment of dividends. On January 15, 1998 and March 30, 1998, the Company received waivers from the bank which included the following terms: (i) a waiver of any event of default that would otherwise arise as a result of the 1998 Unit Financing discussed in Note 1 and Note 19; (ii) a requirement that the Company deposit at least 50% of its unencumbered cash with the bank, including proceeds raised from the 1998 Unit Financing discussed in Note 1; (iii) in an event of default, a requirement that all net cash proceeds of any dispositions of assets of the Company permitted by the bank, as defined, shall be applied as a prepayment against the note (if the Company is not in default, only 50% of the net proceeds will be applied against the note); (iv) a waiver of covenants of non-compliance through March 31, 1998 and (v) an increase in the interest rate to the bank's prime rate plus 5%. Prior to the amendment the note bore interest at either the bank's prime rate plus 1% or LIBOR plus 3.5% (9.5% at December 31, 1997), at the Company's election. The Company has secured the obligations under the note with a lien on all of its assets, including intellectual property. The note is payable in 59 equal installments of $62,500 commencing on February 1, 1997 with a balloon payment of the then remaining outstanding balance, due on January 1, 2002. Prior to the amendments discussed above, if at specified times, the Company's minimum liquidity is less than $15,000,000, $10,000,000 or $5,000,000, the Company is required to pledge cash collateral to the bank equal to 25%, 50% or 100%, respectively, of the then outstanding balance under the note, pursuant to a cash pledge agreement. During 1997, the Company's minimum liquidity had fallen below

$15,000,000 and the Company deposited $1,758,542 as collateral under the cash pledge agreement. The Company has classified the outstanding balance of $6,873,332 at December 31, 1997, as a current liability in the accompanying balance sheet as it does not currently have the financing to remain in compliance with the financial covenants. Also, in connection with the note, the Company issued 5 year warrants to purchase 13,000 shares of common stock at an exercise price of $34.49 per share. These warrants are fully exercisable at December 31,1997. See Note 19(h) for subsequent events.

(b) Note Payable to Landlord

In December 1994, the Company issued a $750,000 promissory note to its landlord to fund specific construction costs associated with the development of its manufacturing plant in Milford, Massachusetts. The promissory note bears interest at 13% per annum and is to be paid in equal monthly installments of principal and interest over the remainder of the 10-year lease term.

(c) Capital Lease Obligations

The Company has entered into various capital leases for equipment. In 1994, the Company received $1,073,000 as a part of a sale/leaseback transaction with a leasing company. These lease amounts are subject to interest at an effective rate of 4.29% and are being paid in equal installments of

approximately $24,000 over 48 months through June 1998. In connection with this lease agreement, the Company is required to maintain a certain amount of cash in escrow as collateral. At December 31, 1997, the Company had $257,822 in escrow related to the agreement.

In December 1996, the Company sold certain laboratory equipment to a leasing company, at its original cost of $1,722,333. In connection with this transaction, the Company entered into a capital lease to lease the equipment from this leasing company for 48 monthly payments ranging from $36,000 to $50,000. The sale of the equipment resulted in a gain of $291,960 which has been offset against the cost of the asset in the accompanying consolidated balance sheet and is being amortized over the life of the lease. In June 1997, the Company sold additional laboratory equipment to the leasing company, at its original cost of $1,205,502. In connection with this transaction, the Company entered into a capital lease to lease the equipment from this leasing company for 24 monthly payments ranging from $24,000 to $34,000. The sale of the equipment resulted in a gain of $127,378, which has been offset against the cost of the asset in the accompanying consolidated balance sheet and is being amortized over the life of the lease.

In January 1997, the Company entered into a five year $1,169,000 lease with a leasing company to finance certain furniture and fixtures in the Cambridge facility. The lease bears interest at a rate of 13.7% and is payable in 60 equal monthly installments of approximately $26,000 through February 2002.

Future minimum payments due under various notes payable and capital lease obligations, excluding the 9% Notes due April 1, 2004, are as follows at December 31, 1997:

Years Ended December 31,	Amount
1998	$ 8,206,684
1999	1,404,777
2000	1,324,184
2001	601,038
2002	136,000
Thereafter	195,881
Total long-term debt and capital lease obligations	11,868,564
Less - amount representing interest	717,967
Principal obligations	11,150,597
Less - current portion	7,868,474
	$ 3,282,123

(d) 9.0% Convertible Subordinated Notes

On April 2, 1997, the Company issued $50,000,000 of the 9% Notes. Under the terms of the 9% Notes, the Company must make semiannual interest payments on the outstanding principal balance through the maturity date of April 1, 2004. If the 9% Notes are converted prior to April 1, 2000, the Noteholders are entitled to receive accrued interest from the date of the most recent interest payment through the conversion date. The 9% Notes are subordinate to substantially all of the Company's existing indebtedness. The 9% Notes are subordinate to substantially all of the Company's existing indebtedness. The 9% Notes are convertible at any time prior to the maturity date at a conversion price equal to $35.0625 per share, subject to adjustment under certain circumstances, as defined.

Beginning April 1, 2000, the Company may redeem the 9% Notes at its option for a 4.5% premium over the original issuance price, provided that from April 1, 2000 to March 31, 2001, the 9% Notes may not be redeemed unless the closing price of the common stock equals or exceeds 150% of the conversion price for a period of at least 20 out of 30 consecutive trading days and the 9% Notes redeemed within 60 days after such trading period. The premium decreases by 1.5% each year through March 31, 2003. Upon a change of control of the Company, as

defined, the Company will be required to offer to repurchase the 9% Notes at 150% of the original issuance price. See Note 19(f) for subsequent events.

(7) G.D. SEARLE & CO. AGREEMENT

In January 1996, the Company and G.D. Searle & Co. (Searle) entered into a collaboration relating to research and development of therapeutic antisense compounds directed at up to eight molecular targets in the field of inflammation/immunomodulation (the Searle Field).

Pursuant to the collaboration, the parties are conducting research and development relating to a compound directed at a molecular target in the Searle Field designated by Searle. In this project, Searle is funding certain research and development efforts by the Company, and each of Searle and the Company have committed certain of its own personnel to the collaboration. The initial phase of research and development activities relating to the initial target will be conducted through the earlier of (i) the achievement of certain product candidate milestones or (ii) 36 months after commencement of the collaboration, subject to early termination by Searle (although in any event Searle is required to pay 18 months of research and development funding). The parties may extend the initial collaboration by mutual agreement, including agreement as to additional research funding by Searle.

In addition, Searle has the right, at its option, to designate up to six additional molecular targets in the Searle Field (the Additional Targets) for collaborative research and development with the Company on terms substantially consistent with the terms of the collaboration applicable to the initial molecular target. This right is exercisable by Searle with respect to each of the Additional Targets upon the payment by Searle of certain research payments (beyond the projectspecific payments relating to the particular Additional Target) and the purchase of additional common stock from the Company by Searle (at the then fair market value). The aggregate amount to be paid by Searle for such research payments and equity investment in order to designate each of the Additional Targets is $10,000,000 per Additional Target. In the event that Searle designates all of the Additional Targets, the aggregate amount to be paid by Searle for research payments will be $24,000,000, and the aggregate amount to be paid by Searle in equity investment will be $36,000,000. If Searle has not designated all of the Additional Targets by the time it advances the product candidate for the initial molecular target to certain stages of preclinical development, Searle will be required to purchase an additional $10,000,000 of common stock (at the then fair market value) on specified dates in order to maintain its right to designate any of the Additional Targets that it has not yet designated. The payment for any such common stock will be creditable against the equity investment portion of the payments to be made by Searle with respect to the designation of any of the Additional Targets that Searle has not yet designated.

Searle has exclusive rights to commercialize any products resulting from the collaboration. If Searle determines, in its sole discretion, to commercialize a product, Searle will fund and perform preclinical tests and clinical trials of the product candidate and will be responsible for regulatory approvals for and marketing of the product. In certain instances and for specified periods of time, the Company has agreed to perform research and development work in the Searle Field exclusively with Searle. In addition, as to each product candidate, the Company will be entitled to milestone payments from Searle totaling up to an aggregate of $10,000,000 upon the achievement of certain development benchmarks. The Company also will be entitled to royalties from net sales of products resulting from the collaboration. Subject to satisfying certain conditions relating to its manufacturing

capacities and capabilities, the Company will retain manufacturing rights, and Searle will be required to purchase its requirements of products from the Company on an exclusive basis at specified transfer prices. Upon a change in control of the Company, Searle would have the right to terminate the Company's manufacturing rights, although the royalty payable would be increased in such event.

Under the collaboration, in the event that Searle designates (and makes the required payments and equity investments for) all of the Additional Targets or in certain other instances relating to Hybridon's failure to satisfy certain requirements relating to its manufacturing capacities and capabilities, Searle will have the right, exercisable in its sole discretion, to require Hybridon to form a joint venture with Searle for the development of products in the Searle Field (other than products relating to molecular targets that have already been designated by Searle) to which each party will contribute $50,000,000 in cash, although the Company's cash contribution would be reduced by the value of the technology and other rights contributed by the Company to the joint venture. The Company and Searle would each own 50% of the joint venture, although Searle's ownership interest in the joint venture would increase based upon a formula to up to a maximum of 75% if the joint venture is established in certain instances relating to the Company's failure to satisfy certain requirements relating to its manufacturing capacities and capabilities.

During 1996 and 1997, the Company earned $400,000 and $600,000, respectively, in research and development revenues from Searle. Under the collaboration, Searle also purchased 200,000 shares of common stock in the Company's initial public offering of common stock at the initial public offering price as discussed in Note 14(b).

(8) F. HOFFMANN-LA ROCHE LTD. COLLABORATION

In December 1992, the Company and Roche entered into a collaboration involving the application of Hybridon's antisense oligonucleotide chemistry to the development of compounds for the treatment of hepatitis B, hepatitis C and human papilloma virus.

Under this collaboration, Roche funded research and development efforts relating to the collaboration and committed personnel of its own to the collaboration. In 1995, Roche notified the Company that it had selected an antisense oligonucleotide directed at hepatitis C as a lead compound for further development and made a milestone payment to the Company in connection with such designation. In the third quarter of 1996, Roche notified the Company that it had selected an antisense oligonucleotide directed at human papilloma virus as a lead compound for further development, and in the fourth quarter of 1996, made a milestone payment to the Company in connection with such designation. At such time, Roche also notified the Company that Roche had elected not to continue the hepatitis B program under the research and development collaboration. In addition, Roche notified the Company that Roche was exercising its option to terminate the entire research and development phase of the collaboration as of March 31, 1997. On September 3, 1997, Roche notified the Company that it had decided not to pursue further collaboration with the Company and was terminating the collaboration effective February 28, 1998.

The Company has recorded $1,186,124, $1,019,389 and $345,000 of research and development revenue related to this collaboration in 1995, 1996 and 1997, respectively.

In conjunction with the Roche Collaboration, Roche purchased 163,678 shares of common stock for $6,000,000. Roche was also issued five year warrants for the purchase of 110,345 shares of common stock at an initial price of $57.50 per share, such exercise price increases commencing on August 12, 1995 on an annual basis at a compound rate of 25%. The warrants expired on February 12, 1998.

(9) MEDTRONIC, INC. COLLABORATIVE STUDY AGREEMENT

In May 1994, the Company and Medtronic, Inc. (Medtronic) entered into a collaborative study agreement (the Medtronic Agreement) involving the development of antisense compounds for the treatment of Alzheimer's disease and a drug delivery system to deliver such compounds into the central nervous system. The Company will be responsible for the development of, and hold all rights to, any drug developed pursuant to this collaboration, and Medtronic will be responsible for the development of, and hold all rights to, any delivery system developed pursuant to this collaboration. The parties may extend this collaboration by mutual agreement to other neurodegenerative disease targets. The research and development to be conducted is determined and supervised by a committee

comprised of an equal number of designees of the Company and Medtronic. As part of the Medtronic Agreement, Medtronic purchased 131,667 shares of common stock for $5,000,000.

(10) LICENSING AGREEMENT

The Company has entered into a licensing agreement with the Worcester Foundation for Biomedical Research, Inc., which merged in 1997 into the University of Massachusetts Medical Center (the Foundation License), under which the Company has received exclusive licenses to technology in certain patents and patent applications. The Company is required to make royalty payments based on future sales of products employing the technology or falling under claims of a patent, as well as a specified percentage of sublicense income received related to the licensed technology. Additionally, the Company is required to pay an annual maintenance fee through the life of the patents.

(11) PHARMACIA BIOTECH, INC. AGREEMENT

In December 1994, the Company and Pharmacia Biotech, Inc. (Pharmacia) entered into a collaboration involving the design and development of a largescale oligonucleotide synthesis machine. Following completion of the machine, the collaboration expired in December 1996, and Pharmacia retained the right to sell the machine to third parties, subject to an obligation to pay the Company royalties on such third party sales. During 1996 and 1997, the Company has received $62,321 and $48,000, respectively, of royalty income related to such third party sales.

(12) PERKIN-ELMER CORPORATION SUPPLY AGREEMENT

In September 1996 the Company and the Applied Biosystems Division of Perkin-Elmer signed a four year sales and supply agreement under which Perkin-Elmer agreed to refer potential customers to HSPD for the manufacture of custom oligonucleotides and the Company agreed that amidites for the manufacture of these oligonucleotides would be purchased from Perkin-Elmer and a percentage of the sales price would be paid to Perkin-Elmer. In addition, Perkin-Elmer licensed to the Company its oligonucleotide synthesis patents.

(13) INVESTMENT IN METHYLGENE, INC.

In January 1996, the Company and certain institutional investors formed a Quebec company, MethylGene, Inc. (MethylGene) to develop and market certain compounds and procedures to be agreed upon by the Company and MethylGene.

The Company has granted to MethylGene exclusive worldwide licenses and sublicenses in respect of certain technology relating to the methylgene fields. These fields are defined as (i) antisense compounds to inhibit DNA methyltransferase for the treatment of cancers, (ii) other methods of inhibiting DNA methyltransferase for the treatment of any indications, and (iii) antisense compounds to inhibit a second molecular target other than DNA methyltransferase for the treatment of cancers, to be agreed upon by the Company and MethylGene. In December 1997, the Company and MethylGene expanded the methylgene fields to include (a) antisense compounds to inhibit DNA methyltransferase for any indication and (b) antisense compounds to inhibit a second and third molecular target for any indications, as may be selected by MethylGene, so long as such molecular targets are not already targeted by the Company. In addition, the Company and MethylGene have entered into a supply agreement pursuant to which MethylGene is obligated to purchase from the Company all required formulated bulk oligonucleotides at specified transfer prices.

The Company acquired a 49% interest in MethylGene for approximately $734,000, and the Canadian investors acquired a 51% interest in MethylGene for a total of approximately $5,500,000 (the Institutional Investors). The Institutional Investors have the right to exchange (the MethylGene Exchange) all (but not less than all) of their shares of stock in MethylGene for an aggregate of 100,000 shares of Hybridon common stock (subject to adjustment for stock

splits, stock dividends and the like). This option is exercisable only during a 90-day period commencing on the earlier of the date five years after the closing of the Institutional Investors' investment in MethylGene or the date on which MethylGene ceases operations. This option terminates sooner if MethylGene raises certain additional amounts of equity or debt financing or if MethylGene enters into a corporate collaboration

that meets certain requirements. Subsequent to December 31, 1997, MethylGene raised additional proceeds from outside investors that decreased the Company's interest to 30%, which did not terminate the MethylGene Exchange available to the Institutional Investors. The Company is accounting for its investment in MethylGene under the equity method and, due to the existence of the investors exchange rights, the Company has recorded, up to its original investment, 100% of MethylGene's losses in the accompanying consolidated statement of operations. See Note 19(i) for subsequent events.

(14) STOCKHOLDERS' EQUITY (DEFICIT)

(a) Common Stock

The Company has 100,000,000 authorized shares of common stock, $.001 par value, of which 5,059,650 and 15,254,825 shares were issued and outstanding at December 31, 1997 and September 30, 1998, respectively.

(b) Initial Public Offering

On February 2, 1996, the Company completed its initial public offering of 1,150,000 shares of common stock at $50.00 per share. The sale of common stock resulted in net proceeds to the Company of approximately $52,231,000 after deducting expenses related to the offering.

(c) Reverse Stock Split

On December 10, 1997, the Board of Directors declared a one-for-five reverse split of its common stock. Share quantities and related per share amounts have been retroactively restated to reflect the stock split.

(d) Warrants

The Company has the following exercisable warrants outstanding for the purchase of common stock at December 31, 1997:

Expiration Date	Shares	Exercise Price Per Share
February 12, 1998	110,345	$112.30
March 31, 1998 - October 25, 2000	953,936	50.00
February 28, 2000	20,000	37.50
December 31, 2001	13,000	34.49
April 2, 2002	71,301	35.06
Average per share exercise price	1,168,582	$54.59

As a component of the sale of preferred stock in 1994 and 1995, the Company issued to the investors in such offering warrants for the purchase of 585,425 shares of common stock at $40.00 to $50.00 per share. Warrants to purchase 331,382 shares of common stock at an exercise price of $50.00 per share expired on March 31, 1998, and the remaining warrants for the purchase of 254,043 shares of common stock at an exercise price of $40.00 per share expired on October 25, 1997.

Five year warrants to purchase 368,620 shares of common stock at

$50.00 per share were issued in 1994 and 1995 as a component of the compensation for services of several placement agents of the Company's convertible preferred stock. Of these warrants, 304,335 were issued to a company that is controlled by two directors of the Company (see Note 15(a)). The remaining 64,285 warrants were issued to various other companies that acted as placement agents.

(e) Stock Options

In 1990 and 1995, the Company established the 1990 Stock Option Plan (the 1990 Option Plan) and the 1995 Stock Option Plan (the 1995 Option Plan), respectively, which provide for the grant of incentive stock options and nonqualified stock options. Options granted under these plans vest over various periods and expire no later than

10 years from the date of grant. However, under the 1990 Option Plan in the event of a change in control (as defined in the 1990 Plan), the exercise dates of all options then outstanding shall be accelerated in full and any restrictions on exercising outstanding options issued pursuant to the 1990 Option Plan shall terminate. In October 1995, the Company terminated the issuance of additional options under the 1990 Option Plan. As of December 31, 1997 options to purchase a total of 604,863 shares of common stock remained outstanding under the 1990 Option Plan.

A total of 700,000 shares of common stock may be issued upon the exercise of options granted under the 1995 Option Plan. The maximum number of shares with respect to which options may be granted to any employee under the 1995 Option Plan shall not exceed 500,000 shares of common stock during any calendar year. The Compensation Committee of the Board of Directors has the authority to select the employees to whom options are granted and determine the terms of each option, including (i) the number of shares of common stock subject to the option; (ii) when the option becomes exercisable; (iii) the option exercise price, which, in the case of incentive stock options, must be at least 100% (110% in the case of incentive stock options granted to a stockholder owning in excess of 10% of the Company's common stock) of the fair market value of the common stock as of the date of grant; and (iv) the duration of the option (which, in the case of incentive stock options, may not exceed 10 years). As of December 31, 1997, options to purchase a total of 534,914 shares of common stock remained outstanding under the 1995 Option Plan.

In October 1995, the Company adopted the 1995 Director Stock Option Plan (the Director Plan). A total of 50,000 shares of common stock may be issued upon the exercise of options granted under the Director Plan. Under the terms of the Director Plan, options to purchase 1,000 shares of common stock were granted to eligible directors upon the closing of the Company's initial public offering at the fair market value of the common stock on the date of the closing. Thereafter, options to purchase 1,000 shares of common stock will be granted to each eligible director on May 1 of each year commencing in 1997. All options will vest on the first anniversary of the date of grant or, in the case of annual options, on April 30 of each year with respect to options granted in the previous year. As of December 31, 1997, options to purchase a total of 14,000 shares of common stock remained outstanding under the Director Plan.

In May 1997, the Company adopted the 1997 Stock Option Plan (the 1997 Option Plan), which provides for the grant of incentive and nonqualified stock options. A total of 600,000 shares of common stock may be issued upon the exercise of options granted to any employee under the 1997 Option Plan. The maximum number of shares with respect to which options may be granted to any employee under the 1997 Option Plan shall not exceed 500,000 shares of common stock during any calendar year. The Compensation Committee of the Board of Directors has the authority to select the employees to whom options are granted and determine the terms of each option, including (i) the number of shares of common stock subject to the option; (ii) when the option becomes exercisable; (iii) the option exercise price, which, in the case of incentive stock options, must be at least 100% (110% in the case of incentive stock) of the fair market value of the common stock as of the date of grant; and (iv) the duration of the option (which, in the case of incentive stock options, may not exceed ten years). As of December 31, 1997, options to purchase a total of 36,720 shares of

common stock remained outstanding under the 1997 Option Plan.

All stock option activity since inception is summarized as follows:

	Number of Shares	Exercise Price Per Share	Weighted Average Per Share
Options granted	66,940	$ .01	$ .01
Options exercised	(33,460)	.01	.01
Outstanding, December 31, 1990	33,480	.01	.01
Options granted	1,700	.01	.01
Options terminated	(540)	.01	.01
Outstanding, December 31, 1991	34,640	.01	.01
Options granted	192,540	1.25 - 25.00	9.90
Options exercised	(34,615)	.01 - 5.00	.10
Options terminated	(4,865)	2.50 - 5.00	2.80
Outstanding, December 31, 1992	187,700	.01 - 25.00	10.05
Options granted	288,108	17.50 - 62.50	41.90
Options exercised	(8,725)	.01 - 5.00	3.05
Options terminated	(25,275)	.01 - 50.00	3.95
Outstanding, December 31, 1993	441,808	.01 - 62.50	31.30
Options granted	134,500	25.00 - 35.00	26.65
Options exercised	(4,800)	.01 - 5.00	2.80
Options terminated	(15,000)	.01 - 25.00	19.15
Outstanding, December 31, 1994	556,508	.01 - 62.50	30.50
Options granted	407,108	37.50 - 50.00	37.75
Options exercised	(5,880)	2.50 - 25.00	7.05
Options terminated	(219,528)	2.50 - 62.50	49.10
Outstanding, December 31, 1995	738,208	.01 - 50.00	29.15
Options granted	476,020	25.00 - 65.60	49.55
Options exercised	(57,740)	.01 - 37.50	18.85
Options terminated	(20,100)	25.00 - 57.85	40.20
Outstanding, December 31, 1996	1,136,388	1.25 - 65.60	38.05
Options granted	315,675	27.50 - 32.50	30.75
Options exercised	(25,005)	1.25 - 40.00	12.60
Options terminated	(236,561)	2.50 - 65.60	40.35
Outstanding, December 31, 1997	1,190,497	$1.25 - $65.60	$36.38
Exercisable, December 31, 1997	740,780	$1.25 - $65.60	$35.10

The range of exercise prices for options outstanding and options excercisable at December 31, 1997 are as follows:

	Outstanding			Exercisable	
Exercise Prices	Number of Shares	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price
$1.25 - 2.50	28,000	4.18	$2.05	28,000	$2.05
5.00	5,600	4.75	5.00	5,600	5.00
17.50 - 27.50	214,481	4.80	23.42	193,581	23.16
28.10 - 40.60	699,561	6.72	35.29	386,110	36.84
43.75 - 65.63	242,855	6.77	55.64	127,489	56.54
	1,190,497		$36.38	740,780	$35.10

In October 1995, the FASB issued SFAS No. 123, Accounting for Stock-Based Compensation. SFAS No. 123 requires the measurement of the fair value of stock options or warrants to be included in the statement of operations or disclosed in the notes to financial statements. The Company has determined that it will continue to account for stock-based compensation for employees

under Accounting Principles Board Opinion No. 25 and elect the disclosure only alternative under SFAS No. 123.

In 1996 and 1997, the Company recorded $1,967,116 and $205,978 of deferred compensation related to grants to nonemployees which will be amortized over the vesting period of the options. The Company has recorded compensation expense of $763,190 and $316,067 in 1996 and 1997, respectively.

The Company has computed the pro forma disclosures required by SFAS No. 123 for all stock options and warrants granted after January 1, 1995 using the Black-Scholes option pricing model. The assumptions used are as follows:

December 31,	1995	1996	1997
Risk free interest rate	6.41%	6.14%	6.22%
Expected dividend yield	-	-	-
Expected lives	6 years	6 years	6 years
Expected volatility	60%	60%	60%

The Black-Scholes option-pricing model was developed for use in estimating the fair value of traded options which have no vesting restrictions and are fully transferable. In addition, option pricing models require the input of highly subjective assumptions including expected stock price volatility. Because the Company's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options.

The effect of applying SFAS No. 123 would be as follows:

December 31,	1995	1996	1997
Net loss, as reported:	$(34,546,676)	$(46,852,600)	$(69,461,326)
Pro forma net loss:	$(41,447,381)	$(52,890,455)	$(73,402,170)
Basic and diluted net loss			
As reported	$(94.70)	$(10.24)	$(13.76)
Pro forma	$(113.61)	$(11.56)	$(14.54)

(f) Employee Stock Purchase Plan

In October 1995, the Company adopted the 1995 Employee Stock Purchase Plan (the Purchase Plan), under which up to 100,000 shares of common stock may be issued to participating employees of the Company or its subsidiaries. All full-time employees of the Company, except those who would immediately after the grant own 5% or more of the total combined voting power or value of the stock of the Company or any subsidiary, are eligible to participate.

On the first day of a designated payroll deduction period (the Offering Period), the Company will grant to each eligible employee who has elected to participate in the Purchase Plan an option to purchase shares of common stock as follows: the employee may authorize an amount (a whole percentage from 1% to 10% of such employee's regular pay) to be deducted by the Company from such pay during the Offering Period. On the last day of the Offering Period, the employee is deemed to have exercised the option, at the option exercise price, to the extent of accumulated payroll deductions. Under the terms of the Purchase Plan, the option price is an amount equal to 85% of the fair market value per share of the common stock on either the first day or the last day of the Offering Period, whichever is lower. In no event may an employee purchase in any one Offering Period a number of shares which is more than 15% of the employee's annualized base pay divided by 85% of the market

value of a share of common stock on the commencement date of the Offering Period. The Compensation Committee may, in its discretion, choose an Offering Period of 12 months or less for each of the Offerings and choose a different Offering Period for each Offering. No shares have been issued under the Plan.

(g) Preferred Stock

The Certificate of Incorporation of the Company permits its Board of Directors to issue up to 5,000,000 shares of preferred stock, par value $ .01 per share (the Preferred Stock), in one or more series, to designate the number of shares constituting such series, and fix by resolution, the powers, privileges, preferences and relative, optional or special rights thereof, including liquidation preferences and dividends, and conversion and redemption rights of each such series. No shares of Preferred Stock are currently outstanding.

(15) COMMITMENTS

The Company has entered into a lease for a production plant in Milford, Massachusetts. The lease has a 10-year term, which commenced on July 1, 1994, with certain extension options.

On February 4, 1994, the Company entered into a lease for an approximately 91,500 square foot building in Cambridge, Massachusetts (the Cambridge Lease). The Cambridge Lease is with a partnership that is affiliated with three directors of the Company. The Cambridge Lease has a term of 15 years, commencing February 1, 1997, and may be extended for three additional five-year terms at the option of the Company. The Cambridge Lease provides for annual rent of $37.79 per year per square foot for the first five years, $42.73 per year per square foot for the second five years and $47.00 per year per square foot for the third five years. As compensation for arranging this lease, the Company issued Pillar Limited (see Note 15 (a)) five year warrants for the purchase of 100,000 shares of the Company's common stock at an exercise price of $50.00 per share. These warrants are exercisable through February 4, 1999.

Under the terms of the Cambridge Lease, the Company elected to treat $5,450,000 of its payments for a portion of the costs of the construction of the leased premises (primarily relating to tenant improvements) as contributions to the capital of the Cambridge landlord in exchange for a limited partnership interest in the Cambridge landlord (the Partnership Interest). The Company's Partnership Interest represents a 32.15% interest in the Cambridge Landlord. The Company's right to receive distributions of cash generated from operations or from any sale or refinancing of the property would be subordinate to the distribution to certain other limited partners of priority amounts currently totaling approximately $6,500,000 (approximately $3,500,000 of which is subject to annual increase at a rate of between 12% and 15% as a result of a cumulative return to one of the limited partners of the Cambridge Landlord). In the case of a sale or refinancing of the property, after payment of the priorities described in the preceding sentence, the Company would be entitled to a return of its capital contribution and, thereafter, to its pro rata share of the remaining funds available for distribution. The Company has the right, at any time prior to February 2000 to sell the Partnership Interest back to certain limited partners of the Cambridge Landlord for a price equal to the greater of (i) the total paid for the Partnership Interest ($5,450,000) or (ii) the fair market value of the Partnership Interest at the time. The assets of these limited partners are limited to their investment in the Cambridge Landlord. See Note 19(e) for subsequent events.

Future approximate minimum rent payments as of December 31, 1997, under the lease agreements through 2012 discussed above, net of sublease agreements are as follows:

Years Ended December 31,	Amount
1998	$ 2,275,000
1999	2,831,000
2000	4,248,000
2001	4,677,000
2002	4,991,000
Thereafter	40,586,000
	$59,608,000

During 1995, 1996 and 1997, facility rent expense, net of sublease revenue, was approximately $2,142,000, $2,352,000 and $4,613,000, respectively.

(a) Consulting Agreements with Affiliates of Stockholders and Directors

The Company has entered into consulting agreements, stock placement agreements and an advisory agreement with several companies that are controlled by two shareholders and directors of the Company. The terms of the agreements with the affiliated companies, S.A. Pillar Investment N.V. (Pillar Investment), Pillar S.A. (formerly Commerce Consult S.A.) and Pillar Investment Limited (formerly Ash Properties Limited) (Pillar Limited), are described below.

In March 1994, the Company entered into a consulting agreement with Pillar S.A., which was amended in March 1995 (the 1994 Pillar Consulting Agreement). Under the 1994 Pillar Consulting Agreement, the Company agreed to pay to Pillar S.A. cash compensation for financial advisory and managerial services in connection with the Company's overseas operations, including support services in connection with contracts, agreements and arrangements with the Agence Nationale de Recherches sur le SIDA (ANRS), and for overhead costs and reimbursement of certain authorized out-of-pocket expenditures. The Company is committed to pay Pillar S.A. a monthly fee of approximately $96,000 with respect to this agreement. The agreement expired on February 28, 1998, as amended. During 1995, 1996 and 1997, the Company had expensed $1,226,000, $1,106,000, $998,000 under this consulting agreement, respectively.

In connection with the 1994 Pillar Consulting Agreement, the Company issued to Pillar S.A. two, fiveyear warrants to purchase up to 40,000 shares of the Company's common stock. The first warrant was issued on March 1, 1994 at an exercise price of $50.00 per share and will expire on February 28, 1999 and is fully exercisable as of December 31, 1997. The second warrant was issued on March 1, 1995 at an exercise price of $37.50 per share and will expire on February 28, 2000 and is fully exercisable as of December 31, 1997.

All of the warrants issued to Pillar S.A. under the 1994 Pillar Consulting Agreements and certain other warrants previously issued to Pillar S.A. provide that within 15 days after the date of any exercise, in full or in part, Pillar S.A. will pay to the Company an amount in cash equal to the lesser of (i) 50% of all amounts paid to Pillar S.A. as compensation under the various Pillar S.A. consulting agreements and (ii) the positive difference, if any, between the aggregate fair market value of the shares of common stock purchased upon such exercise and the aggregate exercise price for such shares.

On September 9, 1994, the Company entered into modifications to its arrangements with Pillar S.A. and its affiliates, including: (i) a reduction in the exercise price of certain warrants previously issued to $50.00 per share; (ii) an amendment to the terms of each of the warrants issued to Pillar S.A. and its affiliates described above to provide for cashless exercise in connection with a sale or change in control of the Company; (iii) a grant of additional five-year warrants (the Additional Pillar Warrants) to purchase 22,800 shares of Common Stock at an exercise price of $50.00 per share; and a right of first negotiation for Pillar S.A. to provide seed financing for any spin-offs by the Company which do not involve or relate to antisense therapeutic compounds.

On July 8, 1995, the Company entered into an agreement (the Pillar Europe Agreement) with Pillar S.A. pursuant to which Pillar S.A. agreed to provide to the Company certain consulting, advisory and related services and serve as the Company's exclusive agent in connection with potential corporate partnerships in Europe and as a nonexclusive placement agent of the Company in connection with future private placements of securities of the Company for a period of two years. As discussed below, the Pillar Europe Agreement was significantly amended on November 1, 1995.

The Company and Pillar S.A. agreed to modify the Pillar Europe Agreement to provide that (i) Pillar would cease to serve as the Company's exclusive agent in connection with potential corporate partnerships in Europe but would continue to serve as a nonexclusive agent in such respect; (ii) Pillar would receive a retainer of $26,470 per month for the balance of the term of the Pillar Europe Agreement; (iii) certain fees to be received by Pillar in connection with European license or collaboration agreements would only be payable to Pillar in connection with potential collaborations with five specified French pharmaceutical companies; and (iv) any compensation payable to Pillar S.A. in connection with its services with respect to other corporate collaborations or any placements of securities would be negotiated on a case-by-case basis and would be subject to the approval of the independent members of the Board of Directors of the Company. In consideration of such modification, the Company paid Pillar in 1995 a fee totaling $300,000.

Pillar Limited acted as a placement agent for the Company for certain sales of convertible preferred stock outside the United States and, in addition, provided the Company with certain financial advisory services with respect to the sale of such preferred stock outside the United States. In connection with such services, Pillar earned fees of $492,604 and $2,020,751 during 1994 and 1995, respectively. Pillar received payment for such fees through $2,435,883 of cash payments and through the issuance of five-year warrants for the purchase of 438,267 shares of common stock at $50.00 per share, expiring on various dates beginning on July 14, 1998 through October 25, 2000.

Pillar also received compensation for its role as a placement agent for the Offshore Offering, which is described in Note 1. See Note 19(b) for terms and subsequent events.

(b) Other Research and Development Agreements

The Company has entered into consulting and research agreements with the universities, research and testing organizations and individuals, under which consulting and research support is provided to the Company. These agreements are for varying terms through and provide for certain minimum annual or per diem fees plus reimbursable expenses to be paid during the contract periods. Future minimum fees payable under these contracts as of December 31, 1997 are approximately as follows:

Years Ended December 31,	Amount
1998	$253,000
1999	129,000
	$382,000

Total fees and expenses under these contracts were approximately $5,470,000, $7,171,000 and $9,372,000 during 1995, 1996 and 1997, respectively.

(c) Employment Agreements

The Company has entered into employment agreements with certain of its executive officers which provide for, among other things, each officer's annual salary, cash bonus, fringe benefits, and vacation and severance arrangements. Under the agreements, the officers are generally entitled to receive severance payments of two to three years' base salary.

(16) INCOME TAXES

The Company applies SFAS No. 109, Accounting for Income Taxes. At December 31, 1997, the Company had net operating loss and tax credit carryforwards for income tax purposes of approximately $205,997,000 and $3,436,000, respectively, available to reduce federal taxable income and federal income taxes, respectively. The Tax Reform Act of 1986 (the Act), enacted in October 1986, limits the amount of net operating loss and credit carryforwards that companies may utilize in any one year in the event of cumulative changes in ownership over a three-year period in excess of 50%. The Company has completed several financings since the effective date of the Act, which, as of December 31, 1997, have resulted in ownership changes in excess of 50%, as defined under the Act. Ownership changes in future periods may limit the Company's ability to utilize net operating loss and tax credit carryforwards.

The federal net operating loss carryforwards and tax credit carryforwards expire approximately as follows:

Expiration Date	Net Operating Loss Carryforwards	Tax Credit Carryforwards
December 31,		
2005	$ 666,000	$ 15,000
2006	3,040,000	88,000
2007	7,897,000	278,000
2008	18,300,000	627,000
2009	25,670,000	689,000
2010	36,134,000	496,000
2011	44,947,000	493,000
2012	69,343,000	750,000
	$205,997,000	$3,436,000

The components of the deferred tax amounts, carryforwards and the valuation allowance are approximately as follows:

December 31,	1996	1997
Operating loss carryforwards	$54,661,000	$82,399,000
Temporary differences	1,325,000	5,243,000
Tax credit carryforwards	2,686,000	3,436,000
	58,672,000	91,078,000
Valuation allowance	(58,672,000)	(91,078,000)
	$ -	$ -

A valuation allowance has been provided, as it is uncertain if the Company will realize the deferred tax asset. The net change in the total valuation allowance during 1997 was an increase of approximately $32,406,000.

(17) EMPLOYEE BENEFIT PLAN

On October 10, 1991, the Company adopted an employee benefit plan under Section 401(k) of the Internal Revenue Code. The plan allows employees to make contributions up to a specified percentage of their compensation. Under the plan, the Company may, but is not obligated to, match a portion of the employees' contributions up to a defined maximum. The Company is currently matching 50% of employee contributions to the plan, up to 6% of the employee's annual base salary, and charged to operations approximately $125,000, $224,000 and $253,000 during 1995, 1996 and 1997, respectively.

(18) SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION

The accompanying consolidated financial statements include the following cash flow information:

	Years Ended December 31, 1995	1996	1997
Supplemental disclosure of cash flow information:			
Cash paid during the period for interest	$172,757	$ 124,052	$3,264,596
Supplemental disclosure of noncash investing activities:			
Purchase of property and equipment under capital leases	$ 90,562	$1,722,333	$2,374,502
Supplemental disclosure of noncash financing activities:			
Issuance of Series C convertible preferred stock in exchange for convertible promissory notes	$ -	$ -	$ -
Issuance of Series D convertible preferred stock in exchange for convertible promissory notes and accrued interest	-	-	-
Issuance of Series E convertible preferred stock in exchange for subscriptions receivable	-	-	-
Issuance of Series F convertible preferred stock in exchange for subscriptions receivable	-	-	-
Issuance of Series G convertible preferred stock in exchange for subscriptions receivable			
Issuance of convertible promissory notes in exchange for subscriptions receivable	-	-	-
Issuance of stock warrants in exchange for deferred financing costs	-	-	
Cancellation of warrants and reduction of deferred financing costs	-	-	
Conversion of preferred stock into common stock	-	159,822	-
Issuance of common stock for services rendered	-	-	146,874
Deferred compensation related to restricted stock awards and grant of stock options	-	1,967,116	205,978
Issuance of Series A convertible preferred stock in exchange for conversion of 9% convertible subordinated notes payable and accrued interest	-	-	
Issuance of common stock in exchange for conversion of convertible subordinated notes payable	-	-	
Issuance of common stock in exchange for conversion of accounts payable, capital lease obligations and accrued interest	-	-	

(19) INTERIM PERIOD AND SUBSEQUENT EVENTS (Unaudited)

(a) Unaudited Interim Financial Statements

The accompanying consolidated balance sheet as of September 30, 1998, and the consolidated statements of operations, stockholders' equity (deficit) and cash flows for the nine months ended September 30, 1997 and 1998 and the period from inception (May 25, 1989) to September 30, 1998 are unaudited, but, in the opinion of management, have been prepared on a basis substantially consistent with audited financial statements and include all adjustments, consisting of only normal recurring adjustments, necessary for a fair presentation of the results of these interim periods. The results for the period ended September 30, 1998 presented are not necessarily indicative of results to be expected for the full fiscal year.

At September 30, 1998, the Company had cash and cash equivalents of approximately $.8 million and a working capital deficit of approximately $2.8 million. Subsequent to September 30, 1998, the Company received (i) $3.2 million of net proceeds from the Forum and Peck loan (see note 19(k)), (ii) approximately $6.2 million from the sale of the investment in the real estate limited partnership, repayment of restricted cash and refund of security deposit (see note 19e), and (iii) approximately $.3 million from the sale of certain furniture and equipment. As a result, the Company has cash and cash equivalents of approximately $6.0 million at December 15, 1998, which the Company anticipates will last into the first quarter of

1999. The Company continues to seek additional financing to fund operations. The working capital deficit at December 15, 1998, was approximately $800,000.

(b) 1998 Unit Financing

On May 5, 1998, the Company completed a private offering of equity securities raising total gross proceeds of approximately $27.3 million from the issuance of 9,597,476 shares of common stock, 114,285 shares of Series A convertible preferred stock and warrants to purchase 3,329,486 shares of common stock at $2.40 per share. The Company has allocated the proceeds to each security based on their respective fair market value. The gross proceeds include the conversion of approximately $6.2 million of accounts payable, capital lease obligations and other obligations into common stock. The Company incurred approximately $2.6 million of cash expenses related to the private offering and issued 597,699 shares of common stock and warrants to purchase 1,720,825 shares of common stock at $2.40 per share to the placement agents. The compensation received by Pillar, a company affiliated with certain directors of the Company, with respect to the offshore component of the private offering (Offshore Offering) consisted of (i) 9% of gross proceeds of such Offshore Offering and (ii) a non-accountable expense allowance equal to 4% of gross proceeds of such Offshore Offering. Pillar received approximately $1.6 million and warrants to purchase 1,111,630 shares of common stock at $2.40 per share.

On February 6, 1998, the Company commenced an exchange offer to the holders of the 9% Notes (see Notes 6(d) and 19(f)) to exchange the 9% Notes for Series A convertible preferred stock and certain warrants of the Company. On May 5, 1998, noteholders holding $48.7 million of principal and $2,361,850 of accrued interest tendered such principal and accrued interest to the Company for 510,505 shares of Series A convertible preferred stock and warrants to purchase 3,002,958 shares of common stock with an exercise price of $4.25 per share. In accordance with SFAS No. 15, Accounting by Debtors and Creditors for Troubled Debt Restructurings, the Company recorded an extraordinary gain of approximately $8.9 million related to the conversion. The extraordinary gain represents the difference between the carrying value of the 9% Notes and the fair value of (i) the Series A convertible preferred stock, as determined by the per share sales price of Series A convertible preferred stock sold in the private offering described above, and (ii) warrants to purchase common stock issued by the Company, which were valued using the Black-Scholes option pricing model.

(c) Net Loss per Common Share

The Company applies SFAS No. 128, Earnings per Share, in calculating earnings per share. Basic net loss per share is computed by dividing net loss applicable to common stockholders (net loss plus cumulative preferred stock dividends) by the weighted average number of common shares outstanding during the period. Diluted net loss per share for the periods presented is the same as basic net loss per share as the inclusion of the potential common stock equivalents would be antidilutive. Antidilutive securities which consist of stock options and warrants that are not included in diluted net loss per common share were 2,686,863 and 12,568,143 for the nine month periods ended September 30, 1997 and 1998, respectively.

(d) Cash Equivalents

The Company applies SFAS No. 115, Accounting for Certain Investments in Debt and Equity Securities. Under SFAS No. 115, debt securities that the Company has the positive intent and ability to hold to maturity are recorded at amortized cost and are classified as held-to-maturity securities. These securities include cash equivalents and restricted cash. Cash equivalents have original maturities of less than three months. Cash and cash equivalents at December 31, 1997 and September 30, 1998 consisted of the following:

	December 31, 1997	September 30, 1998
Cash and cash equivalents-		
Cash and money market funds	$1,702,272	$400,949
Corporate bond	499,930	481,876
	$2,202,202	$882,825
Restricted cash - long-term		
Certificates of deposit	$2,016,364	$ -
Savings account	1,034,618	659,618
	$3,050,982	$659,618

(e) Accounts Receivable Related to Real Estate Limited Partnership

Under the terms of the Cambridge Lease, the Company accounted for $5,450,000 of its payments for a portion of the costs of construction of the leased premises as contributions to the capital of the Cambridge landlord in exchange for a limited partnership interest in the Cambridge landlord (the Partnership Interest). Under the terms of the Partnership Interest, the Company has the right at any time prior to February 2000 to sell the Partnership Interest back to the other limited partners of the landlord. In April 1998, the Company exercised its right to sell back the Partnership Interest and accordingly the contribution to the real estate partnership has been classified as a current asset at September 30, 1998. Subsequent to September 30, 1998, the sale of the building was finalized and the Company received payment of approximately $6.2 million, which included the recovery of a portion of the security deposit on the building and the repayment of restricted cash.

(f) 9.0% Convertible Subordinated Notes

On April 2, 1997, the Company issued $50,000,000 of the 9% Notes. As discussed in Note 19(b), on May 5, 1998 noteholders holding $48.7 million of principal value of the 9% Notes tendered such notes in exchange for Series A convertible preferred stock and warrants to purchase common stock. In addition, $2,361,850 of accrued interest thereon was converted into shares of Series A convertible preferred stock and warrants to purchase common stock. As of September 30, 1998, there is $1.3 million of 9% Notes outstanding. Under the terms of the 9% Notes, the Company must make semi-annual interest payments on the outstanding principal balance through the maturity date of April 1, 2004. If the 9% Notes are converted prior to April 1, 2000,

the Noteholders are entitled to receive accrued interest from the date of the most recent interest payment through the conversion date. The 9% Notes are subordinate to substantially all of the Company's existing indebtedness. The 9% Notes are convertible at any time at the option of the holder prior to the maturity date at a conversion price equal to $35.0625 per share, subject to adjustment under certain circumstances, as defined.

Beginning April 1, 2000, the Company may redeem the 9% Notes at its option for a 4.5% premium over the original issuance price, provided that from April 1, 2000 to March 31, 2001, the 9% Notes may not be redeemed unless the closing price of the common stock equals or exceeds 150% of the conversion price for a period of at least 20 out of 30 consecutive trading days and the 9% Notes redeemed within 60 days after such trading period. The premium decreases by 1.5% each year through March 31, 2003. Upon a change of control of the Company, as defined, the Company will be required to offer to repurchase the 9% Notes at 150% of the original issuance price.

(g) Restructuring

Beginning in July 1997, the Company implemented a restructuring plan to reduce expenditures on a phased basis over the balance of 1997 in an effort to conserve its cash resources. As a part of this restructuring plan, the Company recorded an $11,020,000 restructuring charge in 1997 to provide for (i) the termination of certain research programs, (ii) the abandonment of certain leased facilities (net of sublease income and related disposal of fixed assets), (iii) severance obligations to nearly 100 terminated employees and (iv) the cancellation of certain other contracts. During the third quarter of 1998, the Company completed its restructuring plan, utilizing the entire reserve, after moving its corporate headquarters to Milford, MA. As a result of the Company having vacated the Cambridge, Massachusetts facility, the Company significantly reduced its future operating lease commitments (see Note 15).

(h) Note Payable to a Bank

In December 1996, the Company entered into a five year $7,500,000 note payable with a bank (see Note 6(a)). The note contains certain financial covenants that require the Company to maintain minimum tangible net worth and minimum liquidity and prohibits the payment of dividends. As of September 30, 1998, approximately $2,895,000 was outstanding under the note, which is classified as a current liability in the accompanying September 30, 1998 consolidated balance sheet. The note, as amended, contains certain financial covenants that require the Company to maintain minimum tangible net worth (as defined) and minimum liquidity (as defined) and prohibits the payment of dividends. The Company has secured its obligations with a lien on all of its assets. If, at specified times, the Company's Minimum Liquidity (as defined) is less than $4.0 million, or its tangible net worth (as defined) is less than $6 million, the Company is required to prepay the note in full.

In November 1998, Forum and Pecks, the Lenders, affiliates of two members of the Company's Board of Directors, purchased the note payble to the Bank. In connection with the purchase of the note, the Lenders have advanced an

additional amount to the Company so as to increase the outstanding principal amount of the Loan to $6,000,000. In addition, the Lenders have agreed to amend the terms of the Loan as follows: (i) the maturity will be extended to November 30, 2003; (ii) the interest rate will be decreased to 8%; (iii) interest will be payable monthly in arrears, with the principal due in full at maturity of the Loan; (iv) the Loan will be convertible, at the Lender's option, in whole or in part, into shares of common stock, par value $.001 per share, of the Company ("Common Stock") at a rate equal to $2.40 per share; (v) the threshold of the Minimum Liquidity covenant will be reduced from $4,000,000 to $2,000,000; and (vi) the Loan may not be prepaid, in whole or in part, at any time prior to December 1, 2000.

In connection with the purchase of the note, Forum will receive a fee of $400,000, which will be reinvested by Forum by purchasing from the Company common or preferred stock and warrants. Forum will also receive warrants to purchase $400,000 of shares of common stock of the Company at the per-share valuation of the next financing, or $3.00 per share if the financing is not completed by May 1, 1999.

(i) Methylgene, Inc. Licensing Agreement

In January 1996, the Company and MethylGene, Inc. (MethylGene) (a Canadian company which is 30% owned by the Company) entered into a licensing agreement for the purpose of researching and developing compounds for the treatment of cancer and other indications. (See Note 13) In May 1998, this agreement was amended to grant MethylGene a non-exclusive right to use all and any antisense chemistries discovered by the Company or any of its affiliates for a period commencing on May 5, 1998 and ending on the earlier of (i) the effective date of termination by MethylGene of its contract for development services to be provided by the Company, (ii) May 5, 1999, unless MethylGene exercises its option to continue contracting for development services

provided by, or (iii) May 5, 2000. As additional consideration for this non-exclusive right, MethylGene is required to pay the Company certain milestone amounts, as defined, and transfered 300,000 shares of MethylGene's class B shares to the Company. The Company has placed no value on these shares. During the nine month period ended September 30, 1998, the Company recognized $500,000 of service revenue related to this agreement.

(j) Units Issued to Primedica Corporation (Primedica)

In May 1998, the Company has issued 250,000 shares of common stock and 62,500 warrants to purchase common stock to Primedica for future services to be provided. The services shall commence upon the Company's request after (i) the Company securities are listed on a nationally recognized exchange, and (ii) the average closing price of the Company's common stock is at least $2.00 per share for the twenty day trading period preceding the contract commencement date. In the event that the Company does not use these services as a result of the failure to meet the contract conditions, Primedica shall forfeit to the Company all or part of the units held by Primedica. The Company has recorded these shares as issued and outstanding at September 30, 1998 at par value. The

Company will record the value of these services as the services are rendered.

(k) Supplemental Disclosure of Cash Flow Information

The accompanying consolidated financial statements include the following information:

	Nine Months Ended September 30,		Cumulative from May 25, 1989 (Inception) to September 30,
	1997	1998	1998
Supplemental Disclosure of Cash Flow Information:			
Cash paid during the period for interest	$786,005	$1,494,323	$5,124,773
SUPPLEMENTAL DISCLOSURE OF NONCASH INVESTING ACTIVITIES:			
Purchase of property and equipment under capital leases	$2,412,276	$ -	$5,604,370
SUPPLEMENTAL DISCLOSURE OF NONCASH FINANCING ACTIVITIES:			
Issuance of Series C convertible preferred stock in exchange for convertible promissory notes	$ -	$ -	$1,700,000
Issuance of Series D convertible preferred stock in exchange for convertible promissory notes and accrued interest	$ -	$ -	$9,382,384
Issuance of Series E convertible preferred stock in exchange for subscriptions receivable	$ -	$ -	$ 555,117
Issuance of Series F convertible preferred stock in exchange for subscriptions receivable	$ -	$ -	$2,535,000

Issuance of Series G convertible preferred stock in exchange for subscriptions receivable	$ -	$ -	$ 906,016
Issuance of convertible promissory notes in exchange for subscriptions receivable	$ -	$ -	$ 937,000
Issuance of stock warrants in exchange for deferred financing costs	$ -	$ -	$ 238,000
Cancellation of warrants and reduction of deferred financing costs	$ -	$ -	$ 68,000
Conversion of preferred stock into common stock	$ -	$ -	$ 159,822
Deferred compensation related to restricted stock awards and grant of stock options	$ 205,978	$ 163,044	$ 6,751,286
Issuance of Series A convertible preferred stock in exchange for conversion of 9% convertible subordinated notes payable and accrued interest	$ -	$ 51,061,850	$51,061,850
Accretion of Series A convertible preferred stock dividends	$ -	$ 1,647,000	$ 1,647,000
Issuance of common stock in exchange for conversion of convertible subordinated notes payable	$ -	$ 4,800,000	$ 4,800,000
Issuance of common stock in exchange for conversion of accounts payable, capital lease obligations and accrued interest	$ -	$ 6,434,308	$ 6,434,308
Issuance of common stock for services rendered	$ 146,874	$ 1,195,398	$ 1,342,272

(l) Accrued Expenses

Accrued expenses as of September 30, 1998 consist of the following:

Restructuring	$ -
Interest -	52,750
Payroll and related costs	1,142,608
Outside research and clinical costs	978,565
Professional fees	159,691
Other	670,320
	$ 3,003,934

(m) Commitments

The Company is currently undergoing a sales and use tax audit by the Massachusetts Department of Revenue. The amount of the final assesment, while currently unknown, may be material.

No person has been authorized to give any information or to make any representations other than those contained in this Prospectus, and, if given or made, such information or representations must not be relied upon as having been authorized. This Prospectus does not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities to which it relates or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. Neither the delivery of this Prospectus nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the Company since the date hereof or that the information contained herein is correct as of any time subsequent to its date.

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HYBRIDON, INC.

641,259 SHARES

SERIES A CONVERTIBLE PREFERRED STOCK
($.01 par value per share)

33,924,878 SHARES

COMMON STOCK
($.001 par value per share)

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

Estimated expenses (other than underwriting discounts and commissions) payable in connection with the sale of the shares of Series A convertible preferred stock, $.01 par value per share (the "Convertible Preferred Stock") and shares of common stock, $.001 par value per share (the "Common Stock" and, together with the Convertible Preferred Stock, the "Securities") offered hereby are as follows:

SEC Registration fee	
Printing and engraving expenses	
Legal fees and expenses	
Accounting fees and expenses	
Blue Sky fees and expenses (including legal fees)	
Transfer agent and registrar fees and expenses	
Miscellaneous	
Total	

The Registrant will bear all expenses shown above.

Item 14. Indemnification of Directors and Officers.

Article EIGHTH of the Registrant's Restated Certificate of Incorporation provides that no director of the Registrant shall be personally liable for any monetary damages for any breach of fiduciary duty as a director, except to the extent that the Delaware General Corporation law prohibits the elimination or limitation of liability of directors for breach of fiduciary duty.

Article NINTH of the Registrant's Restated Certificate of Incorporation provides that a director or officer of the Registrant (a) shall be indemnified by the Registrant against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement incurred in connection with any litigation or other legal proceeding (other than an action by or in the right of the Registrant) brought against him by virtue of his position as a director or officer of the Registrant 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 Registrant, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful and (b) shall be indemnified by the Registrant against all expenses (including attorneys' fees) and amounts paid in settlement incurred in connection with any action by or in the right of the Registrant brought against him by virtue of his position as a director or officer of the Registrant 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 Registrant, except that no indemnification shall be made with respect to any matter as to which such person shall have been adjudged to be liable to the Registrant, unless a court determines that, despite such adjudication but in view of all of the circumstances, he is entitled to indemnification of such

expenses. Notwithstanding the foregoing, to the extent that a director or officer has been successful, on the merits or otherwise, including, without limitation, the dismissal of an action without prejudice, he is required to be indemnified by the Registrant against all expenses (including attorneys' fees) incurred in connection therewith. Expenses shall be advanced to a director or officer at his request, provided that he undertakes to repay the amount advanced if it is ultimately determined that he is not entitled to indemnification for such expenses.

Indemnification is required to be made unless the Registrant determines that the applicable standard of conduct required for indemnification has not been met. In the event of a determination by the Registrant that the director or officer did not meet the applicable standard of conduct required for indemnification, or if the Registrant

fails to make an indemnification payment within 60 days after such payment is claimed by such person, such person is permitted to petition the court to make an independent determination as to whether such person is entitled to indemnification. As a condition precedent to the right of indemnification, the director or officer must give the Registrant notice of the action for which indemnity is sought and the Registrant has the right to participate in such action or assume the defense thereof.

Article NINTH of the Registrant's Restated Certificate of Incorporation further provides that the indemnification provided therein is not exclusive, and provides that in the event that the Delaware General Corporation Law is amended to expand the indemnification permitted to directors or officers the Registrant must indemnify those persons to the full extent permitted by such law as so amended.

Section 145 of the Delaware General Corporation Law provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against amounts paid and expenses incurred in connection with an action or proceeding to which he is or is threatened to be made a party by reason of such position, if such person shall have 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, in any criminal proceeding, if such person had no reasonable cause to believe his conduct was unlawful; provided that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the adjudicating court determines that such indemnification is proper under the circumstances.

The Company is a party to an indemnification agreement with Mr. Grinstead. Such agreement provides that Mr. Grinstead shall be indemnified by the Registrant (a) against all expenses (as defined in the agreement), judgments, fines, penalties and amounts paid in settlement actually and reasonably incurred in connection with any legal proceeding (other than one brought by or on behalf of the Registrant) if Mr. Grinstead acted in good faith and in a manner which he reasonably believed to be in, or not opposed to, the best interests of the Registrant, and with respect to any criminal proceeding, had no reasonable cause to believe that his conduct was unlawful and (b) against all expenses and amounts paid in settlement actually and reasonably incurred in connection with a legal proceeding brought by or on behalf of the Registrant if he acted in good faith and in a manner which he reasonably believed to be in, or not opposed to, the best interests of the Registrant, except that no indemnification shall be made in respect of any claim, issue or matter as to which Mr. Grinstead has been adjudged to be liable. If, with respect to such proceedings, Mr. Grinstead is successful on the merits or otherwise, he shall be reimbursed for all expenses. Mr. Grinstead is required to provide notice to the Registrant of any threatened or pending litigation, and the Registrant has the right to participate in such action or assume the defense thereof.

The Company has obtained directors and officers insurance for the benefit of its directors and its officers.

Item 15. Recent Sales of Unregistered Securities.

In the three years preceding the filing of this registration statement, the Company has issued and sold its Common Stock, warrants to purchase its Common Stock, Convertible Subordinated Notes and Series A Convertible Preferred Stock, to certain investors in transactions that were not registered under the Securities Act of 1933, as amended (the "Securities Act"):

Unregistered Offerings Pursuant to Section 4(2) Under the 1933 Act

The securities issued in each of the following transactions (items (1) through (10)) were offered and sold in reliance upon the exemption from registration under Section 4(2) of the Securities Act, relating to sales by an issuer not involving a public offering. The securities issued in each of the following transactions were offered and sold solely to persons who were "accredited investors" as that term is defined in Regulation D promulgated under the Securities Act.

(1) On January 20, 1997, the Company issued 25,000 shares of Common Stock to an investment bank as compensation under a financial advisory services agreement dated that date. These shares were offered and sold to an "accredited investor" (as that term is defined in Regulation D promulgated under the Securities Act) in reliance upon the exemption from registration under Section 4(2) of the Securities Act, relating to sales by an issuer not involving any public offering.

(2) On January 25, 1997, the Company sold 1,650 shares of Common Stock to one investor upon exercise by such investor of warrants to purchase Common Stock for an aggregate purchase price of $9,075 . These shares were offered and sold to an "accredited investor" (as that term is defined in Regulation D promulgated under the Securities Act) in reliance upon the exemption from registration under Section 4(2) of the Securities Act, relating to sales by an issuer not involving any public offering.

(3) On April 2, 1997, the Company issued to an investment bank $50,000,000 of its 9% Notes. These 9% Notes were offered and sold to an "accredited investor" (as that term is defined in Regulation D promulgated under the Securities Act) in reliance upon the exemption from registration under Section 4(2) of the Securities Act, relating to sales by an issuer not involving any public offering.

(4) On April 2, 1997, the Company issued to an investment bank warrants to purchase 71,301 shares of Common Stock at an exercise price of $35.0625 per share. These warrants were offered and sold to an "accredited investor" (as that term is defined in Regulation D promulgated under the Securities Act) in reliance upon the exemption from registration under Section 4(2) of the Securities Act, relating to sales by an issuer not involving any public offering.

(5) On December 10, 1997, the Company issued to Dr. Paul Zamecnik, a Director of the Company, 50,000 shares of Common Stock of the Company.

(6) On May 5, 1998, the Company accepted $48,694,000 principal amount of its 9% Notes tendered to the Company in exchange for 510,505 shares of series A preferred stock (the "Series A Preferred Stock") and warrants (the "Class A Warrants") to purchase 3,002,958 shares of common stock, par value $.001 per share (the "Common Stock"), of the Company (the "Exchange Offer"). As a result of the Exchange Offer, there is approximately $1.3 million principal amount of the 9% Notes outstanding.

Pursuant to the Exchange Offer, which commenced on February 6, 1998, all tendering Noteholders received per $1,000 principal amount of the 9% Notes (including accrued but unpaid interest on the 9% Notes) (i) 10 shares of Series A Preferred Stock and (ii) Class A Warrants to purchase such number of shares of Common Stock equal to 25% of the number of shares of the Company's Common Stock into which the Series A Preferred Stock issued to such Noteholder pursuant to the Exchange Offer would be convertible.

The Convertible Preferred Stock ranks, as to dividends and liquidation preference, senior to the Company's Common Stock. The Convertible Preferred Stock issued in the Exchange Offer and in the Regulation D Offering,

as defined below, as well as the Convertible Preferred Stock that was issued as a dividend on September 30, 1998, will be convertible into an aggregate of 15,088,200 shares of Common Stock, subject to adjustment, beginning May 5, 1999.

The Class A Warrants will be exercisable commencing on May 5, 1999 for a period of four years thereafter at $4.25 per share of Common Stock, subject to adjustment. The Class A Warrants are not subject to redemption at the option of the Company under any circumstances.

The Exchange Offer was undertaken by the Company as part of the Company's new business plan contemplating a restructuring of its capital structure to reduce debt service obligations, a significant reduction in its burn rate and an infusion of additional equity capital.

(7) On May 5, 1998, the Company closed a private placement (the "Regulation D Offering") of (i) 114,285 shares of Series A Preferred Stock, which sold at $70 per share, and (ii) class D warrants (the "Class D

Warrants") to purchase 672,273 shares of the Company's Common Stock, subject to adjustment, for an aggregate amount of approximately $8 million.

The Class D Warrants will be exercisable commencing on May 5, 1999 until May 4, 2003 at $2.40 per share of Common Stock, subject to adjustment.

The net proceeds to the Company from the Regulation D Offering are presently used for general corporate purposes, primarily research and product development activities, including costs of preparing investigational new drug applications and conducting preclinical studies and clinical trials, the payment of payroll and other accounts payable and for debt service required under the Company's debt obligations. The amounts actually expended by the Company and the purposes of such expenditures may vary significantly depending upon numerous factors, including the progress of the Company's research, drug discovery and development programs, the results of preclinical studies and clinical trials, the timing of regulatory approvals, sales of DNA products and reagents to third parties manufactured on a custom contract basis by the HSP Division and margins on such sales, technological advances, determinations as to the commercial potential of the Company's compounds and the status of competitive products. In addition, expenditures will also depend upon the establishment of collaborative research arrangements with other companies, the availability of other financing and other factors. Under certain circumstances, the Company may be required to use net proceeds to repay indebtedness under the Bank Credit Facility.

(8) On May 5, 1998, the Company closed a private placement of units (the "Unit Offering") consisting of (i) 2,754,654 shares of Common Stock, and (ii) class C warrants (the "Class C Warrants") to purchase 788,649 shares of Common Stock, subject to adjustment, which securities were issued in consideration of the cancellation (or reduction) of accounts payable, capital lease and other obligations aggregating $5,509,308.

The Class C Warrants are exercisable at $2.40 per share, subject to adjustment from time to time, until May 4, 2003.

The Common Stock issued pursuant to the Unit Offering and the Common Stock underlying the Class C Warrants are subject to a "lock-up" period ending on May 5, 1999, except to the extent such securities are sold or transferred pursuant to a Registration Statement. After the Company files a Registration Statement under the Securities Act, 75% of each holder's Units and the underlying securities will be subject to an additional "lockup" for the first three months following the effective date of the Registration Statement (the "Effective Date"); thereafter, 50% of such securities will be subject to an additional "lock-up" until six months following the Effective Date; and the remaining 25% of such securities will be "locked-up" until nine months following the Effective Date.

(9) On May 5, 1998, the Company sold to Dr. Paul Zamecnik 100,000 shares

of Common Stock and Class C Warrants to purchase 25,000 shares of Common Stock, subject to adjustment, for a purchase price of $200,000.

The net proceeds of this offering were used to reduce accounts payable, capital lease and other obligations.

(10) On May 5, 1998, the Company issued to certain suppliers a total of 362,500 shares of Common Stock and Class C Warrants to purchase a total of 90,625 shares of Common Stock. These issuances were in consideration of (i) payment to the Company of a total of $362.50, the par value of all such issued Common Stock, and (ii) the subsequent furnishing of specified services to the Company by each supplier. The extent to which the suppliers have completed performing the specified services varies.

The Common Stock issued to Dr. Paul Zamecnik and to the certain suppliers and the Common Stock underlying the Class C Warrants issued to such persons are subject to a "lock-up" period ending on May 5, 1999, except to the extent such securities are sold or transferred pursuant to a Registration Statement. After the Company files a Registration Statement under the Securities Act, 75% of each holder's Units and the underlying securities will be subject to an additional "lock-up" for the first three months following the Effective Date;

thereafter, 50% of such securities will be subject to an additional "lock-up" until six months following the Effective Date; and the remaining 25% of such securities will be "locked-up" until nine months following the Effective Date.

Unregistered Offerings Pursuant to Regulation S Under the Securities Act

The securities issued by the Company in the each of the following transactions were offered and sold in reliance upon an exemption from registration under Regulation S promulgated under the Securities Act, relating to sales by an issuer in offshore transactions (the "Regulation S Offerings"). The securities issued in each of the following Regulation S Offerings were offered and sold solely to persons who were "accredited investors" as that term is defined in Regulation D promulgated under the Securities Act.

(11) On January 15, 1998, the Company commenced a private placement of units (the "Units"), each Unit consisting of 14% Convertible Subordinated Notes Due 2007 (the "14% Notes") and warrants (the "Equity Warrants") to purchase shares of the Company's Common Stock (the "14% Note Offering"). The 14% Notes were subject to both mandatory and optional conversion into shares of series B preferred stock, under certain circumstances which, in turn, were convertible into Common Stock (the "Series B Preferred Stock").

On January 23, 1998, as part of the 14% Note Offering, the Company sold $2,230,000 in principal amount of 14% Notes and Equity Warrants.

On February 9, 1998, as part of the 14% Note Offering, the Company sold $2,384,000 in principal amount of 14% Notes and Equity Warrants.

On March 27, 1998, as part of the 14% Note Offering, the Company sold $200,000 in principal amount of 14% Notes and Equity Warrants.

On April 21, 1998, as part of the 14% Note Offering, the Company sold $300,000 in principal amount of 14% Notes and Equity Warrants.

On April 24, 1998, as part of the 14% Note Offering, the Company sold $1,020,000 in principal amount of 14% Notes and Equity Warrants.

In each of the above closings, the 14% Notes were issued at face value.

(12) On May 5, 1998, the Company closed a private placement of 3,223,000 shares of Common Stock and class B warrants (the "Class B Warrants") to purchase 805,750 shares of the Company's Common Stock, subject to adjustment, for aggregate gross proceeds of $6,446,000.

The Class B Warrants are exercisable for a period of five years at $2.40 per share of Common Stock, subject to adjustment from time to time.

The Common Stock issued in such private placement and the Common Stock underlying the Class B Warrants issued in such private placement are subject to a "lock-up" for a period ending on May 5, 1999, except to the extent such securities are sold or transferred pursuant to a Registration Statement filed by the Company under the Securities Act. After the Company files a Registration Statement under the Securities Act, 75% of each holder's Common Stock, including the Common Stock underlying the Class B Warrants, will be subject to an additional "lock-up" for the first three months following the Effective Date; thereafter, 50% of such securities will be subject to an additional "lock-up" until six months following the Effective Date; and the remaining 25% of such securities will be "locked-up" until nine months following the Effective Date.

(13) The Company has exchanged all of the 14% Notes issued, including any right to interest thereon, and all Equity Warrants issued together with the 14% Notes, for 3,157,322 shares of Common Stock and Class B Warrants to purchase 947,195 shares of Common Stock.

The net proceeds to the Company from the Regulation S Offerings are presently used for general corporate purposes, primarily research and product development activities, including costs of preparing investigational new drug applications and conducting preclinical studies and clinical trials, the payment of payroll and other accounts payable and for debt service required under the Company's debt obligations. The amounts actually expended by the Company and the purposes of such expenditures may vary significantly depending upon numerous factors, including the progress of the Company's research, drug discovery and development programs, the results of preclinical studies and clinical trials, the timing of regulatory approvals, sales of DNA products and reagents to third parties manufactured on a custom contract basis by the HSP Division and margins on such sales, technological advances, determinations as to the commercial potential of the Company's compounds and the status of competitive products. In addition, expenditures will also depend upon the establishment of collaborative research arrangements with other companies, the availability of other financing and other factors. Under certain circumstances, the Company may be required to use net proceeds to repay indebtedness under the Bank Credit Facility.

Item 16. Exhibits and Financial Statement Schedules

(a) Exhibits:

EXHIBIT INDEX

Exhibit Number	Description
3.1(1)	Restated Certificate of Incorporation of the Registrant, as amended.
3.2(2)	Amended and Restated By-Laws of the Registrant.
3.3(3)	Form of Certificate of Designation of Series A Preferred Stock.
3.4(3)	Form of Certificate of Designation of Series B Preferred Stock.
4.1(2)	Specimen Certificate for shares of Common Stock, $.001 par value, of the Registrant.
4.2(4)	Indenture dated as of March 26, 1997 between Forum Capital Markets LLC and the Registrant.
4.3(7)	Certificate of Designation of Series A Preferred Stock, par value $.01 per share, dated May 5, 1998.
4.4(7)	Form of 14% Note Due 2007.
4.5(7)	Class A Warrant Agreement dated May 5, 1998.

4.6(7)	Class B Warrant Agreement dated May 5, 1998.
4.7(7)	Class C Warrant Agreement dated May 5, 1998.
4.8(7)	Class D Warrant Agreement dated May 5, 1998.
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10.9(2)	Lease dated February 4, 1994 between the Registrant and Charles River Building Limited Partnership for space located at 620 Memorial Drive, Cambridge, Massachusetts.

10.10(2)	Series G Convertible Preferred Stock and Warrant Purchase Agreement dated as of September 9, 1994 among the Registrant and certain Purchasers, as amended (the "Series G Agreement").
10.11(2)	Registration Rights Agreement dated as of February 21, 1990 between the Registrant, the Worcester Foundation for Biomedical Research, Inc. and Paul C. Zamecnik.
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10.13(2)	Registration Rights Agreement dated as of February 6, 1992 between the Registrant and E. Andrews Grinstead III.
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++10.15(2)	1990 Stock Option Plan, as amended.
++10.16(2)	1995 Stock Option Plan.
++10.17(2)	1995 Director Stock Plan.
++10.18(2)	1995 Employee Stock Purchase Plan.
10.19(2)	Form of Warrant to purchase shares of Series C Convertible Preferred Stock originally issued to Pillar Investment Limited (formerly known as Ash Properties Limited), as amended.
10.20(2)	Form of Warrant to purchase shares of Common Stock issued in connection with the issuance of the Registrant's series of notes known as its 10% Convertible Subordinated Notes due September 16, 1993 and the Registrant's 10% Convertible Subordinated Note Due March 19, 1993, as amended.
10.21(2)	Warrant issued to Pillar S.A. to purchase up to 175,000 shares of Common Stock dated as of December 1, 1992, as amended.
10.22(2)	Form of Warrant originally issued to Pillar Investment Limited to purchase 427,126 shares of Common Stock dated as of February 15, 1993, as amended.
10.23(2)	Form of Warrant originally issued to Pillar Investment Limited to purchase 350,000 shares of Common Stock dated as of February 15, 1993, as amended.
10.24(2)	Warrant issued to Pillar Investment Limited to purchase 500,000 shares of Common Stock dated as of February 4, 1994, as amended.

10.25(2)	Form of Warrant originally issued to Pillar Investment Limited to purchase shares of Common Stock issued as placement commissions in connection with the sale of shares of Series F Convertible Preferred Stock and in consideration of financial advisory service, as amended.
10.26(2)	Warrant issued to Pillar S.A. to purchase 100,000 shares of Common Stock dated as of March 1, 1994, as amended.
10.27(2)	Form of Warrant to purchase shares of Common Stock issued as part of the Units (as defined in the Series G Agreement) issued and sold to investors pursuant to the Series G Agreement on or prior to March 31, 1995, as amended.
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10.42(6)	Second Amendment to Lease dated as of February 23, 1996 between the Registrant and Charles River Building Limited Partnership for space located at 620 Memorial Drive, Cambridge, Massachusetts.
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10.46(5)	Loan and Security Agreement dated as of December 31, 1996 between the Registrant and Silicon Valley Bank.

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10.49(9)	Third Amendment to Loan and Security Agreement dated September 18, 1998 between Hybridon, Inc. and Silicon Valley Bank.
10.50(9)	Fourth Amendment to Loan and Security Agreement dated October 30, 1998, effective as of September 29, 1998 between Hybridon, Inc. and Silicon Valley Bank.
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10.58(10)	Letter Agreement dated May 12, 1997 between the Registrant and Pillar S.A. amending the Consulting Agreement dated as of March 1, 1994 between the Registrant and Pillar S.A.
10.59(10)	Amendment dated July 15, 1997 to the Series G Convertible Preferred Stock and Warrant Purchase Agreement dated as of September 9, 1994 among the Registrant and certain purchasers, as amended.
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10.61(1)	Consent Agreement dated January 15, 1998 between Silicon Valley Bank and the Registrant relating to the Silicon Agreement.
10.62(3)	Form of Unit Purchase Agreement (the "Unit Purchase Agreement") in connection with the sale of Notes due 2007 by and among the Registrant and certain purchasers.
10.63(3)	Form of Notes due 2007 of the Registrant issued to or issuable pursuant to the Unit Purchase Agreement.
10.64(3)	Form of Warrants of the Registrant issued or issuable pursuant to the Unit Purchase Agreement.
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23.1	Consent of Arthur Andersen LLP.
23.2	Consent of McDonnell Boehnen Hulbert & Berghoff.
27.1(1)	Financial Data Schedule [EDGAR] - Year Ended December 31, 1997.
27.2(1)	Financial Data Schedule [EDGAR] - Year Ended December 31, 1996.

27.3(7)	Financial Data Schedule [EDGAR] - for period ended March 31, 1998.
27.4(8)	Financial Data Schedule [EDGAR] - for period ended June 30, 1998.
27.5(9)	Financial Data Schedule [EDGAR] - for period ended September 30, 1998.
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99.2(7)	Financial Advisory Agreement between Registrant and Pillar Investments Ltd. dated May 5, 1998.
99.3(7)	Placement Agency Agreement between Registrant and Pillar Investments Ltd. dated as of January 15, 1998.

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* To be filed by Amendment

(1)	Incorporated by reference to Exhibits to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1997.
(2)	Incorporated by reference to Exhibits to the Registrant's Registration Statement on Form S-1 (File No. 33-99024).
(3)	Incorporated by reference to Exhibit 9(a)(1) to the Registrant's Schedule 13E-4 dated February 6, 1998.
(4)	Incorporated by reference to Exhibits to the Registrant's Current Report on Form 8-K dated April 2, 1997.
(5)	Incorporated by reference to Exhibits to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1996.
(6)	Incorporated by reference to Exhibits to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1995.
(7)	Incorporated by reference to Exhibits to the Registrant's Quarterly Report on Form 10-Q for the period ended March 31, 1998.
(8)	Incorporated by reference to Exhibits to the Registrant's Quarterly Report on Form 10-Q for the period ended June 30, 1998.
(9)	Incorporated by reference to Exhibits to the Registrant's Quarterly Report on Form 10-Q for the period ended September 30, 1998.
(10)	Incorporated by reference to Exhibits to the Registrant's Quarterly Report on Form 10-Q for the period ended June 30, 1997.

+ Confidential treatment granted as to certain portions, which portions are omitted and filed separately with the Commission.

++ Management contract or compensatory plan or arrangement required to be filed as an Exhibit to the Annual Report on Form 10-K for the year ended December 31, 1997.

+++ Confidential treatment requested as to certain portions, which portions are omitted and filed separately with the Commission.

Item 17. Undertakings.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to provisions described in Item 14 above, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities

Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any Prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the Prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of Securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new Registration Statement relating to the Securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the Securities being registered which remain unsold at the termination of the offering.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, on December 18, 1998

HYBRIDON, INC.

By:/s/ E. ANDREWS GRINSTEAD III

E. Andrews Grinstead III
Chairman, Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of Hybridon, Inc., hereby severally constitute and appoint E. Andrews Grinstead III and Robert G. Andersen and each of them singly, our true and lawful attorneys, with full power to them and each of them singly, to sign for us in our names in the capacities

indicated below, all pre-effective and post-effective amendments to thisRregistration Statement and any related subsequent Registration Statement pursuant to Rule 462(b) of the Securities Act of 1933, as amended, and generally to do all things in our names and on our behalf in such capacities to enable Hybridon, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signatures	Title(s)	Date
/s/ E. ANDREWS GRINSTEAD III - ---------- E. Andrews Grinstead III	Chairman, Chief Executive Officer and Director	December 18, 1998
/s/ SUDHIR AGRAWAL - ---------- Dr. Sudhir Agrawal	Senior Vice President and Director	December 18, 1998
/s/ JAMES B. WYNGAARDEN - ---------- Dr. James B. Wyngaarden	Director	December 17, 1998
/s/ NASSER MENHALL - ---------- Mr. Nasser Menhall	Director	December 18, 1998
/s/ PAUL C. ZAMENCNIK - ---------- Dr. Paul C. Zamecnik	Director	December 17, 1998
/s/ YOUSSEF EL-ZEIN - ---------- Mr. Youssef El-Zein	Director	December 18, 1998
- ---------- Mr. Art Berry	Director	December __, 1998
- ----------S Sheikh Mohamed El-Khereiji	Director	December __, 1998
/s/ HAROLD L. PURKEY - ---------- Mr. Harold L. Purkey	Director	December 17, 1998

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* To be filed by Amendment

(1) Incorporated by reference to Exhibits to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1997.

(2) Incorporated by reference to Exhibits to the Registrant's Registration Statement on Form S-1 (File No. 33-99024).

(3) Incorporated by reference to Exhibit 9(a)(1) to the Registrant's Schedule 13E-4 dated February 6, 1998.

(4) Incorporated by reference to Exhibits to the Registrant's Current Report on Form 8-K dated April 2, 1997.

(5) Incorporated by reference to Exhibits to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1996.

(6) Incorporated by reference to Exhibits to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1995.

(7) Incorporated by reference to Exhibits to the Registrant's Quarterly Report on Form 10-Q for the period ended March 31, 1998.

(8) Incorporated by reference to Exhibits to the Registrant's Quarterly Report on Form 10-Q for the period ended June 30, 1998.

(9) Incorporated by reference to Exhibits to the Registrant's Quarterly Report on Form 10-Q for the period ended September 30, 1998.

(10) Incorporated by reference to Exhibits to the Registrant's Quarterly Report on Form 10-Q for the period ended June 30, 1997.

+ Confidential treatment granted as to certain portions, which portions are omitted and filed separately with the Commission.

++ Management contract or compensatory plan or arrangement required to be filed as an Exhibit to the Annual Report on Form 10-K for the year ended December 31, 1997.

+++ Confidential treatment requested as to certain portions, which portions are omitted and filed separately with the Commission.

EXHIBIT 23.1

CONSENT OF INDEPENDENT PUBLIC ACCOUNTANTS

As independent public accounts, we hereby consent to the use of our report (and to all references to our Firm) included in or made a part of this Registration Statement.

/s/ARTHUR ANDERSEN LLP

Boston, Massachusetts
December 22, 1998

[LETTERHEAD OF MCDONNELL, BOEHNEN, HULBERT & BERGHOFF]

December 21, 1998

Hybridon, Inc.
155 Fortune Blvd.
Milford, MA 01757

RE: Hybridon, Inc. -- Registration Statement on Form S-1

Dear Sirs:

McDonnell, Boehnen, Hulbert & Berghoff hereby consents to the reference to our firm under the section "The Company - Patents, Trade Secrets and Licenses" included in this Registration Statement on Form S-1 of Hybridon, Inc.

Very truly yours,

/s/ John J. McDonnell

John J. McDonnell

November 13, 1998

Forum Capital Markets LLC
53 Forest Avenue
Old Greenwich, CT 06870
Attention: Mr. C. Keith Hartley

Pecks Management Partners Ltd.
100 Rockefeller Plaza, Suite 900
New York, NY 10020
Attention: Mr. Arthur Berry

Dear Sirs:

This letter sets forth our agreement in respect of the purchase by Forum Capital Markets, LLC ("Forum") and Pecks Management Partners Ltd. ("Pecks"; Forum and Pecks collectively, the "Lender") of the loan made by Silicon Valley Bank to Hybridon, Inc. ("Hybridon") pursuant to the Loan and Security Agreement dated December 31, 1996, as amended (the "Loan"). The terms of the purchase of the Loan are as follows:

1. The Lender will purchase the Loan as soon as practicable.

2. The Lender will lend an additional amount to Hybridon as soon as practicable so that the outstanding principal amount of the Loan is increased to $6,000,000.

3. The terms of the Loan will be amended as follows:

   (a) Maturity: November 30, 2003.

   (b) Interest Rate: 8% for the term of the Loan.

   (c) Amortization: Interest is payable monthly in arrears; the principal is due in full at maturity of the Loan.

   (d) Conversion: The Loan will be convertible, at the Lender's option, in whole or in part, into shares of common stock, par value $.001 per share, of Hybridon ("Common Stock") at a rate equal to the mid-point between the bid and ask price on the date of closing of the purchase of the Loan.

   (e) Covenants: The threshold of the Minimum Liquidity covenant will be reduced from $4,000,000 to $2,000,000.

   (f) Prepayment: The Loan may not be prepaid, in whole or in part, at any time prior to December 1, 2000.

4. The other terms of the Loan will remain unchanged.

5. Forum will receive a fee of $400,000, which will be reinvested by Forum by purchasing from Hybridon either (a) shares of Hybridon stock (either Common Stock or Preferred Stock) and accompanying warrants on the same terms as are sold to investors in Hybridon's next equity offering to occur after the date of this letter (the "Placement Price") or (b) if no equity offering is consummated prior to May 1, 1999, 160,000 shares of Hybridon Common Stock and warrants to purchase an additional 40,000 shares of Hybridon Stock at $3.00 per share. In addition, Forum will receive warrants exercisable until maturity of the Loan to purchase $400,000 of shares of Common Stock priced at the Placement Price, or if

no equity offering is consummated prior to May 1, 1999, at $3.00 per share. These shares and warrants will be issued as soon as practicable following satisfaction of Section 4.10 of the Indenture dated as of March 26, 1997, governing Hybridon's 9% Convertible Subordinated Notes due 2004.

If this letter correctly sets forth our agreement, please so acknowledge by signing in the space indicated below and returning a copy of this letter to the undersigned by telecopier. Counterparts are, of course, acceptable.

Very truly yours,

HYBRIDON, INC.

By: /s/ E. A. Grinstead III

Name: E. Andrews Grinstead III
Title: President, CEO and Chairman

AGREED AND ACCEPTED
as of November 16, 1998:

FORUM CAPITAL MARKETS, LLC

By: /s/ C. Keith Hartley

Name: C. Keith Hartley
Title: Senior Managing Partner

AGREED AND ACCEPTED
as of November 16, 1998:

PECKS MANAGEMENT PARTNERS LTD.

By: /s/ Arthur W. Berry

Name: Arthur W. Berry
Title: Chairman